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Modern reuse of ringstones: a case study from Eastern India

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This study addresses issues related to the modern reuse of prehistoric ringstones in the Bargarh district, Odisha, India. Drawing on ancestral knowledge, ringstones are today used in a medicinal context by some agro-pastoral communities to heal cattle. Surveys of ten villages in a study area, which also includes two archaeological surface sites (Dekhulia and Kumbho), allowed investigations of the properties of ringstones and the ritualised context of their modern reuse.

Keywords: Eastern India, ringstone, modern reuse

Introduction

The phenomenon of the reuse of artefacts has a long history, including manifold behavioural patterns in past communities. Reuse processes are defined by Schiffer (2010: 32) as changes occurring in both the usage and the user of an artefact. Studies from around the world have demonstrated multiple ways in which artefacts were reused (e.g. Gillett 2012; Delfino 2014; Amick 2015; Raczek *et al.* 2018; Ota *et al.* 2020). In the South Asian context, while the reuse of artefacts is widespread and ongoing, few studies have specifically focused on the reuse of artefacts as related to pre- and protohistory. Focus has instead been on reuse in historical contexts or as incidental to larger studies (Patel 2009).

This study aims to address issues relating to reuse in prehistory, specifically the reuse of ringstones. In the Indian context, a 'ringstone' is a tool defined by its morphological and purported functional attributes; different terminologies exist for particular cultural phases ranging from the Upper Palaeolithic (Raju 1985) to historical periods (Allchin 1995). Here, I follow Sankalia's (1964: 85) definition: thick, small, round or rectangular stones with a central hole and surfaces smoothed by pecking and grinding. The range of potential functions for these artefacts (as weights in digging sticks, mace-heads and so on) remains sparsely studied in India.

This article considers the reuse of ringstones in the Bargarh district, Odisha, Eastern India (Figure 1). Field investigations were carried out in the upland plains in the north-eastern region, where ringstones were observed to be reused within contemporary communities specifically in connection with cattle and associated medicinal purposes (Bhattacharya 2019).

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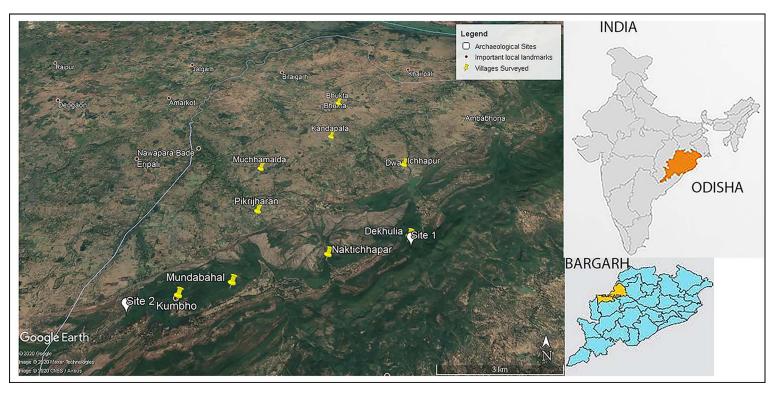


Figure 1. Location of the study region Bargarh, India, showing the villages studied and neighbouring archaeological sites in the region (Google Earth Pro, 15 January 2020, 21° 34' 48.45" north, 83°24' 16.69" east, Maxar Technologies).

Reuse of ringstones

Surveys were conducted on households from ten villages (n = 295 households out of approximately 475; figures from Census of India 2011 (Office of the Registrar General & Census Commissioner 2019); Table 1). Of the ten villages, eight had evidence for the reuse of ringstones (25 ringstones in total), with the remaining two villages not practising reuse, but aware of its perceived value. Interviews were conducted in instances where ringstone reuse was discovered. The respondents were all men, as designated 'heads of the household'. The villages were primarily agro-pastoral comprising Binjhals, Bhuyan, Nishad and Yadav communities (Census of India 2011, Office of the Registrar General & Census Commissioner 2019).

The reuse of ringstones in the Bargarh region is based on a myth that, during the monsoon, 'flying snakes' (*Chrysopelea* sp.) may cast their shadow on cattle, leading them to fall ill with fits. Afflicted animals are brought indoors and the ringstone or 'Parkipadhor' is tied around the neck for seven days; this being the sole treatment administered (Figure 2). In some instances, these beliefs are transferred to goats, with smaller or broken ringstones being used. The ringstones are not associated with any spiritual powers, but are used as a physical remedy, tested and proven by ancestral use. The community believes that they know the exact cause of the disease, its recovery period and the efficacy of the ringstone treatment. The origin of the tradition is uncertain; it appears to be handed down as a family tradition.

Most ringstones were reportedly recovered from forests adjoining villages at distances of around 5km, probably collected while grazing cattle or goats. There is no correlation between ringstone counts and cattle wealth or family size in the study region. Nor do they have any economic or prestige value; the artefacts are loaned and borrowed without any sort of exchange, monetary or otherwise. It is important to note that local communities believe that ringstones are naturally occurring objects and lacking any cultural affinities. Despite this, their unique morphology may have influenced their choice as objects with healing properties.

Ringstones recorded in the study (complete, n = 18; broken, n = 7) were primarily made from charnockite, which was potentially sourced locally (Table 2). Shapes were oval, circular, oblong, flat, elliptical and square (Figures 3–4). Some were weathered and abraded owing to

Table 1. Villages and houses sampled for this study recording details of the ringstones studied.

Serial no.	Name of village	No. of houses sampled	No. of houses with ringstones
1.	Pikrijharan	40	0
2.	Naktichhapar	30	1
3.	Muchhamalda (locality 1)	10	1
4.	Mundabahal	30	6
5.	Dekhulia	30	5
6.	Ichhapur	35	7
7.	Kumbho (locality 1)	30	1
8.	Jampali (locality 1)	30	2
9.	Kandapala (locality 1)	30	2
10.	Bhukta (locality 1)	30	0



Figure 2. An example of ringstone reuse; the ringstone is tied around the neck of a sick cow (photograph by S. Bhattacharya).

either natural weathering processes prior to collection or subsequent modes of storage (left outdoors exposed to the elements).

Two archaeological surface sites (Dekhulia and Kumbho) with blade- and flake-based assemblages, whose chronology is as yet unclear, were noted in areas coinciding with the find-spots of the ringstones. Prehistoric sites reported in the region appear to be microlithic (Deep 2018), with the nearest reported Neolithic sites being at ranges of 60–80km from the villages in the study area (Sharma *et al.* 1990–1991: 40; Behera 2013; Padhan 2018).

Table 2. Measurements of complete ringstones from the study area.

Dimensions	Range	Mean
Length (cm)	6–16	10.22
Breadth (cm)	4.7–12.8	9.05
Thickness (cm)	1–4.5	3.75
Diameter (cm)	1.3–4.3	2.61
Weight (g)	200–1300	626.66

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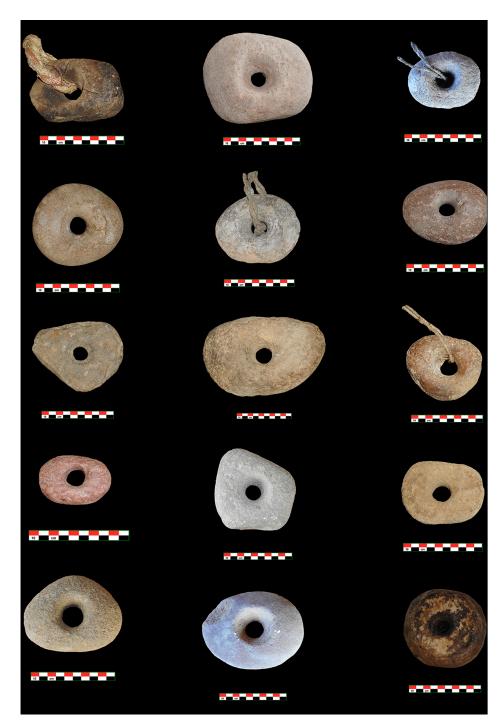


Figure 3. Complete ringstones from the study area (scales in centimetres; photographs by S. Bhattacharya).



Figure 4. Broken ringstones from the study area (scales in centimetres; photographs by S. Bhattacharya).

Discussion

The reuse of older artefacts in archaeological records is largely related to resource procurement (Amick 2015). In the Indian context, evidence comes from Budihal where ashmounds (accumulations of vitrified ash in the context of parts of the South Indian Neolithic) were reused by later Neolithic populations and subsequently by historical communities (Paddayya 2019). This is also noted in the case of reuse of Neolithic celts (stone tools) in Tamil Nadu (Selvakumar 2008) and in Bengal (Chattopadhyay *et al.* 2013). In Odisha, ringstones are reused in the Mayurbhanj for religio-medicinal purposes (Mohanta 2013). In all these cases, the resources from an archaeological setting are readily available and thus are reused to meet different needs. A study from Rajasthan (Raczek *et al.* 2018) showed how the residents of a village recycle modern and ancient items in the same way, in part because they do not fully understand the antiquity and archaeological significance of the artefacts.

The case from Bargarh is not very different. Communities collected ringstones from archaeological sites attributing them natural origins and, not recognising their cultural heritage, utilised them in particular ways. The villages firmly believe they are collecting natural stones; in their view they are not progressively disturbing archaeological sites, but continuing ancestral practices passed down the generations through oral traditions. At present the archaeological context of the ringstones is unclear and remains a subject for future studies. In the Indian context, such studies have the potential to explore concepts of the modern reuse of archaeological artefacts, of changing behaviour through time and to contribute to the assessment of patterns of site-disturbance through these practices.

Acknowledgements

This study was conducted as part of my MA dissertation at the Pandit D.D.U Institute of Archaeology. I thank V.N. Prabhakar, director of the institute for permitting me to conduct the study, and Shanti Pappu, my guide. I thank Ramesh Bhuyan and Jagdeesh Naik for their help in the fieldwork, K.K. Basa for his insights into Odisha archaeology, Kumar Akhilesh for his valuable suggestions while drafting the article, and Paromita Bose, Prachi Joshi, Sharodiya Bhattacharya and Ritabrata Dobe for helping with the maps, data presentation, and the economic and geological insights, respectively.

Funding statement

This research received no specific grant from any funding agency or from commercial and not-for-profit sectors.

References

ALICHIN, F.R. 1995. The archaeology of Early Historic South Asia: the emergence of cities and states.

Cambridge: Cambridge University Press.

AMICK, D.S. 2015. The recycling of material culture today and during the Paleolithic. Quaternary International 361: 4–20.

https://doi.org/10.1016/j.quaint.2014.08.059

Behera, P.K. 2013. New light on the Neolithic and Chalcolithic evidence from the Middle Mahanadi Valley, Orissa. *Neolithic–Chalcolithic cultures of Eastern India*: 184–208. New Delhi: The Indian Archaeological Society.

Bhattacharya, S. 2019. Modern reuse of ringstones: a case study from Eastern India.

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- Unpublished PGDA dissertation, Pandit Deen Dayal Upadhayaya Institute of Archaeology, Archaeological Survey of India.
- Chattopadhyay, R.K., P. Bose, D. Acharya & K. Bandyopadhyay. 2013. Ground/polished stone tool industries of Eastern India: a reappraisal of sites, contents and contexts, in K.N. Dikshit (ed.) *Neolithic–Chalcolithic cultures of Eastern India*: 119–72. New Delhi: Indian Archaeological Society.
- Deep, S. 2018. A study of microlithic industries in the Bargarh Upland, District Bargarh, Orissa: with special reference to the River Jira. Unpublished PhD dissertation, Sambalpur University.
- Delfino, D. 2014. Bronze recycling during the Bronze Age: some consideration about two metallurgical regions. *Antrope l*: 120–43.
- GILLETT, A. 2012. Communication in late antiquity: use and reuse, in S.F. Johnson (ed.) *The Oxford handbook of late antiquity*: 815–48. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780195336931.013.0025
- Mohanta, B. 2013. Neolithic and post-Neolithic cultures of Odisha. Delhi: Pratibha Prakashan.
- Office of the Registrar General & Census Commissioner, India. 2019. *District census* handbook. Available at: http://censusindia.gov.in/2011census/dchb/ Odisha.html (accessed 26 March 2021).
- Ota, S.B., N. Srivastava & S. Pandey. 2020. An early case of lithic recycling in India: evidence from the Acheulian site at Damdongri, Madhya Pradesh. *Current Science* 118: 132–39.

- Paddayya, K. 2019. *Neolithic ashmounds of the Deccan*. New Delhi: Aryan Books International.
- Padhan, T. 2018. Prehistory of Jonk River in Chhattisgarh: an overview. *Puränveshaëa* 1: 43.
- Patel, A. 2009. The historiography of reuse in South Asia. *Archives of Asian Art* 59: 4–11. https://doi.org/10.1353/aaa.0.0006
- RACZEK, T.P., N. SUGANDHI, P. SHIRVALKAR & L. PANDEY. 2018. Artifact reuse and mixed archaeological contexts at Chatrikhera, Rajasthan, in D. Frenez, G.M. Jamison, R.W. Law, M. Vidale & R.H. Meadow (ed.) Walking with the unicorn: social organization and material culture in ancient South Asia: 486–94. Oxford: Archaeopress.
 - https://doi.org/10.2307/j.ctv19vbgkc.36
- RAJU, D.R. 1985. The Upper Palaeolithic industries of Cuddapah District, Andhra Pradesh, in V.N. Mishra & P. Bellwood (ed.) Recent advances in Indo-Pacific prehistory: 147–56. New Delhi & Oxford: IBH.
- Sankalia, H. 1964. Stone Age tools: their techniques, names and probable functions. Poona: Deccan College.
- Schiffer, M.B. 2010. *Behavioral archaeology:* principles and practice. London: Equinox.
- Selvakumar, V. 2008. Prehistoric and historical archaeology of the Lower Kaviri Valley and Pudukottai Region, Tamil Nadu. *Proceedings of the Indian History Congress* 69: 1015–23.
- SHARMA, A.K., S.B. OTA, N.K. NIMJE, C.L. YADAV & P.C. DOGRA. 1990–1991. *IAR: Indian archaeology—a review*: 40. New Delhi: Archaeological Survey of India.