

Contents lists available at ScienceDirect

### **Quaternary International**

journal homepage: www.elsevier.com/locate/quaint



# A new approach to prehistoric family systems from the viewpoint of pottery usage: Expanding the potential of archaeological information through contextual analysis



Makoto Tomii

Centre for Cultural Heritage Studies, Kyoto University, Yoshida-honmachi, Sakyo, Kyoto, 606-8501, Japan

#### ARTICLE INFO

Article history:
Received 27 September 2017
Received in revised form
7 January 2018
Accepted 31 January 2018
Available online 13 March 2018

Keywords:
Pottery deposition
Contextual analysis
Usage
Life-history
Matrilocal
Iomon

#### ABSTRACT

Many studies analysing various artefacts to investigate prehistoric residence and descent rules have focused both on stages of production and final disposal. The stage of usage within artefact life-history has not received much attention. This study develops the methodology for elucidating habitual attitudes to ceramics during their use-life by analysing their depositional contexts in the Jomon period of prehistoric Japan. The ultimate aim is to contribute to the argument about prehistoric family systems. My research materials are the intentionally deposited pottery embedded within house floors from Middle Jomon settlements in the central part of Japan. To understand the context of deposition in detail, precise in-situ contextual information was acquired through collating pottery photographs from all directions taken after post-excavation cleaning with the existing context photographs taken during excavation. The results showed that (i) pottery function was converted from a utilitarian to a ritual constituent during its life-history; (ii) one of the large settlements showed a unique preference in orientation of the deposited pottery, determined by focusing on the originally discoloured part on its surface. These results allowed me to confirm that the preference emerged at the stage of usage prior to functional conversion. Then, based on the fact that several houses within the settlement overlapped each other, and also on the longstanding interpretation of Jomon housing in general that house extension would often follow childbirth, I suggested that (i) coeval houses numbered around five; (ii) the preference in orientation of pottery in daily life was transmitted within a household. I finally proposed the tentative hypotheses that (i) the residents of the settlement with such a unique orientation preference was matrilocal; (ii) inhabitants having the orientation preference in the settlement were relatives of the inhabitants of the house at other settlements who kept the same preference in orientation of the intentionally deposited pottery. This study contributes to the re-evaluation of the existing archaeological remains to elucidate a highresolution event, as well as to discussions about family systems of the Jomon period in its culmination. © 2018 Elsevier Ltd and INQUA. All rights reserved.

#### 1. Introduction

The social organisation of prehistoric communities has long been discussed in archaeology as well as anthropology. In the case of the Palaeolithic, precise analysis of the organisation of both technology and space for lithic production has proved essential for reconstructing a high-resolution image of past social organisation (e.g. Karlin et al., 1993). This is mainly because lithic scatters can be equated with the locale of production; in-situ information of discarded lithics represents almost precisely the scene of production.

For prehistoric community that used pottery, however, similar approaches focusing on pottery production have long been attempted, but many of them seem to have failed to make good use of spatial information of the archaeological context. This is even the case with the landmark achievements by James Hill and William Longacre, which argued for matrilocal post-marital residence with matrilineal descent by analysing pottery design (e.g. Hill, 1966, 1970; Longacre, 1968, 1970). These works try to support their argument by investigating the context of discarded pots; but it has been pointed out overtly or covertly (e.g. Dumond, 1977; Plog, 1980) that discard was remote from the moment of decision-making in decorating pottery during the stage of production within the lifehistory. To solve this dilemma whether to approach the problem

from the stage of production or from that of disposal, this study focuses on past habitual practice: a stage of usage in life-history.

In prehistoric archaeology, meanwhile, the habitual practices associated with artefact usage have long been thought to be far more difficult to elucidate than those concerned with their production; as Irving Rouse stated in 1930s, "it is impossible for an archaeologist to obtain reliable data on the [former practices]" (Rouse, 1939, p.16, my insertion). From the 1960s onwards, awareness of aspects of artefact usage became explicit, particularly in Palaeolithic studies, taking the form of debates. Lewis Binford, through the debate with Francois Bordes (e.g. Bordes and Sonneville-Bordes, 1970), invoked the behavioural variability due to usage rather than production, though the assumption of behaviour was based on ethnographical observation of spatial organisation and on typological analysis of tools without traceology (i.e. use-wear analysis) (e.g. Binford and Binford, 1966; Binford, 1973). Sergei Semenov, also through the debate with Bordes (e.g. Bordes, 1969), demonstrated the potential of use-wear analysis, including a microscopic method for functional interpretations (Semenov, 1964, 1970), about "how the artefacts were used, and on what material" (Keely, 1974, p.328). This traceological approach has been developed by Lawrence Keely's clarification of the verification strategy for microwear interpretations (Keely, 1974). Keely and his colleagues were then able to reconstruct a high-resolution image of human activity at the site of Meer, through consideration of individual tool life-histories by bringing together Binford's behavioural pattern approach, Semenov's traceological approach, and refitting analysis with in-site information (Cahen et al., 1979). The lifehistorical approach seems suitable for the analysis of stone implements: not only lithic tools but also ground ones like vessels (e.g. Rosenberg and Chasan, 2017).

In ceramic investigations, however, awareness of the usage stage seems to have been insufficient. At most, it has been slowly increasing as long as it is connected with the question of materials, such as residue analyses. The question of how the pottery was used has been far less examined. Recently, Masashi Kobayashi argued from the viewpoint of usage that changes in pot attributes during the shift from the final hunting-and-gathering period to the initial farming period in Japanese prehistory reflected adaptive preference in shape and thickness related to methods of cooking rather than technological advances in production. This argument is based on observations of soot and scorched residue positions, aided by both ethnographic research and experimentation, as well as consideration of physical properties (Kobayashi, 2011). However, pottery usage has hardly ever been exploited for reconstruction of the past in general, unless it related to cooking, and even less for reconstructing social organisation, for which this study is intended.

To reveal habitual attitudes to pottery, I analysed precise contextual information concerning intentional depositing of prehistoric pots, which had previously had utilitarian functions in the domestic space. The methodological approach in this study was identification of the orientation of particular surface features of intentionally deposited pottery, by collating existing contextual photographic evidence of the pot in its depositional location with photographs of the pot from all directions after post-excavation processing. It was vital to acquire in-situ information of artefacts in the archaeological context, or "single context recording" (Carver, 2005, p.108), to precisely reconstruct the past event that happened at the locale. The more precisely such contextual information is obtained, the higher the resolution of the reconstructed image of the past.

The research materials were from Japanese prehistory. A huge number of pit-dwellings with pottery embedded into the house floor have been excavated from many sites dating to the Jomon period (ca. 15700—2300 Cal BP; Kobayashi, 2008). By the time of the

beginning of the Initial Jomon period (ca. 10000 Cal BP), sedentary hunter-gatherers had well adapted to, and had successfully exploited, the post-Pleistocene environment of the middle-latitude temperate zone in the Japanese Archipelago. While Jomon pottery embedment in a house floor was essentially ritual in nature, many scholars have pointed out that embedded pots were converted from cooking because they have organic residue inside and/or carbon-absorption on the outer surface of the lower half of the body (e.g. Kirihara, 1983). In the life-history of such embedded pottery, the end of utilitarian usage was directly connected with the moment of intentional deposition. Thus, if the traces of daily usage persists on the surface of embedded pottery in many cases, the information on the way of treating such pottery – which part of it to hold, which direction to orient it, how to put it down, and so forth – at the very moment of embedding will be able to expand our insight into the habitual patterns of treating pottery for everyday use. Even among many works on pottery embedment (e.g. Sueki, 1999; Sasaki, 2008b), this viewpoint on user's habitual attitude to the pottery prior to its conversion to an essential constituent of ritual embedment is unique.

Jomon culture reached its culmination in Eastern Japan at the Middle Jomon period (abbreviated to MJ; dated to ca. 5500–4000 Cal BP), with its high-population density as well as its highly decorative pottery (e.g. Habu, 2004; Kobayashi, 2004). The latter half of MJ (abbreviated to LMJ; dated to ca. 4500-4000 Cal BP) was the most prosperous. Many typological studies of LMJ Jomon pottery have revealed socio-cultural diversification (e.g. Kobayashi, 1994). There are also many studies on the Iomon socio-cultural system in terms of social organisation, especially family systems. The debate on such family systems has a long history: whether matrilocal or patrilocal, whether unilineal or double-unilineal, and so forth. The evidence provided for the argument varies from archaeological sites and features such as cemetery (e.g. Harunari, 2002; Takahashi, 2007) and settlement (e.g. Niwa, 2006; Taniguchi, 2008) through artefacts such as embedded pottery (Sasaki, 1998) and stone phalluses (Taniguchi, 2006), to physical characteristics such as tooth deformation (Harunari, 1973) and mt-DNA (Shinoda and Kanai, 1999; Nishimoto, 2008).

Although it is likely that family systems were fluctuating throughout the Jomon period from the Incipient through Initial, Early, Middle, Late, to Final Jomon period, many archaeologists have mainly referred to those of MJ. One reason is the poor preservation of bones for physical anthropological research due to the acid soil condition of Japanese geology in general, while the main reason is the abundance of material culture in MJ such as stone phalluses, pit-dwellings, and embedded pottery.

In this study, with the ultimate aim of proposing a tentative hypothesis about the family system of the Jomon period at its culmination by drawing an "inference of residence and descent rules from archaeological data" (Deetz, 1968, p.41), I examined several characteristics of LMJ pottery embedment within a small valley system in Eastern Japan. The main focus was on similarities and differences in orientation of the discoloured part of embedded pottery among houses in various settlements, to provide a new perspective into habitual attitudes to pottery in daily life. Since inhabitants usually shared habitual manners within a house as domestic space, another insight into the family systems of the Jomon period could be garnered.

#### 2. Regional setting

The study area is in and around the upper Miya valley, mainly in the drainage of the main stream of Miya river at the northern part of Gifu prefecture in the Chubu region, located in the central part of the main land of the Japanese Archipelago (Figs. 1 and 2). There are

#### Download English Version:

## https://daneshyari.com/en/article/7449747

Download Persian Version:

https://daneshyari.com/article/7449747

<u>Daneshyari.com</u>