

## The Context of the Carnelian Beads from Bonto-Bontoa, Bantaeng, South Sulawesi

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### Introduction

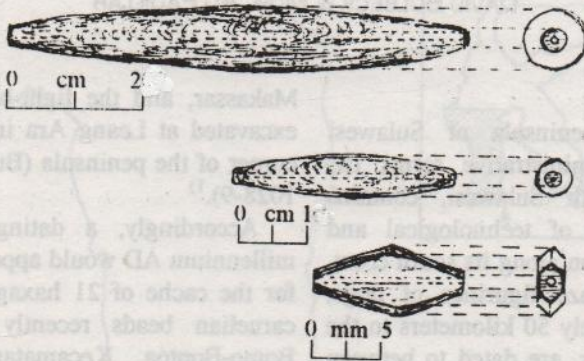
The southwest peninsula of Sulawesi [Celebes], in administrative terms the province of South Sulawesi, contains prehistoric traces of technological and social sophistication along its south coast. Two unique bronze figurines of dogs, found approximately 50 kilometers to the south of Makassar, are dated to between 155 BC and AD 330, and between AD 230 and 580, on carbon recovered from their core (Glover, 1997). Along with the equally unique « Makassar flask » from the same area (Belwood, 1997: 281, Fig. 9.8), these bronze dogs may suggest the early establishment of a local bronze industry. Farther to the east, three bronze Buddhist figurines all similar to each other were collected in the village of Bontonompo in Kabupaten Bantaeng. Stylistically dated to the seventh or eighth Century AD, these unusual figurines would have been manufactured in Kalimantan, Java, Sumatra, or some fourth location (Scheurleer and Klokke, 1988: 111-13; see Dupont, 1957: 121-125). Andrews and Glover (1986) suggest a dating in the early centuries AD for the assemblage of 171 glass beads recovered from the mortuary cave of Ulu Leang 2 in Maros, a short distance north of Makassar. A burials at Galesong, south of

Makassar, and the light-blue glass bead excavated at Leang Ara in the southeast corner of the peninsula (Bulbeck, 1996-7: 1028-9).<sup>1)</sup>

Accordingly, a dating in the first millennium AD would appear conceivable for the cache of 21 hexagonally shaped, carnelian beads recently excavated at Bonto-Bontoa, Kecamatan Tompobulu, Kabupaten Bantaeng. These beads were recovered in 1998 when a joint team of archaeologists from Balai Arkeologi Ujung Pandang and Pusat Penelitian Arkeologi Nasional excavated six test pits at the Bonto-Bontoa site which lies at an altitude of approximately 375 meters above sea-level, more or less 20 kilometers from the coast. The site, a garden of coffee bushes and clove trees belonging to Haji Arsyad, had previously been looted, suggesting the presence of objects of archaeological interest. Four of the six one-meter squares produced little in the way of artifacts and only one, Test Pit 5, produced any carnelian beads or metal artifacts. The contents of this test pit included three bronze objects, two iron fragments, the 21 carnelian beads that are the focus of this paper, and 103 earthenware sherds (Fadillah et. al., 1998/99)



Figure 1. Carnelian Beads from Bonto-Bontoa



### Carnelian beads in comparison

The beads, which technically are faceted hexagonal bicones, comprise 19 shorter specimens measuring 11 mm in length, and two large specimens that measure 34 mm and 69 mm in length (see Figure 1). Ali Fadillah (1999) reviewed the literature on finds of similar carnelian beads in Indonesia, and recorded instances at Gunung Kidul [Yogyakarta, Java], Demak [East Java], Subang and Banten Girang [West Java], Air Sugihan [Palembang, South Sumatra], and Barus [Southeast Sumatra]. The associated assemblages variably date to the late first millennium AD and early second millennium AD, suggesting a circa tenth century AD dating for the Bonto-Bontoa specimens. Moreover, both the Bonto-Bontoa excavations, and the survey of Kiling-Kiling which lies approximately three kilometers away, recovered pottery with decorations similar to those found at Batu Ejaya. Kabupaten Bantaeng (Fadillah, 1999). The Batu Ejaya pottery occurs with

a radiocarbon date calibrated to AD 850-1280 at one standard deviation (Bulbeck, 1996-7: 1027), which supports the circa tenth century dating proposed for Bonto-Bontoa. Accordingly, Ali Fadillah (1999: 28) inferred that the carnelian beads, and their associated metals, would be considerably earlier than the imported ceramics, dated between the thirteenth and the sixteenth centuries, which looters have usually recovered in association with pre-Islamic burials in the vicinity of Bantaeng.

### Radiocarbon Date

In 1999 Ali Fadillah passed the charcoal samples from Bonto-Bontoa to Bulbeck, in order to obtain a radiocarbon age estimate for the carnelian beads. The only excavated charcoal from Test Pit 5 was a 2 gram sample from spit 3, at the boundary between the layer with brown sediments and the underlying layer with yellow sediments (see Figure 2). Actually, a charcoal sample from spit 4 would have



been preferable, as this spit produced 19 of the carnelian beads and one of the three bronze artifacts, whereas spit 3 produced any one carnelian bead and the two iron fragments. Quite likely, all of the carnelian beads belong to the unit with yellow sediments, while the charcoal sample refers to the bottom of the brown sediments (see Figure 2). Hence the determination from the charcoal should provide a *terminus ante quem* or minimum possible age for the beads. A result in the second millennium AD would be consistent with the antiquity Ali Fadillah posit: for the beads, while a result in the first millennium AD would indicate that Fadillah's estimate is too conservative.

The radiocarbon date should also enlighten us as to the possibility of cremations at Bonto-Bontoa. Along the south coast, at least in the vicinity of Makassar and Bantaeng, cremations has been practices between approximately the eleventh and thirteenth centuries AD (Bulbeck, 1996-7: 1030-32). Therefore, a coeval or slightly earlier dating for the Bonto-Bontoa charcoal sample would suggest it derives from a cremated burial, one that included carnelian beads and metals as grave goods.

A very different age determination, however, would indicate the absence in Test Pit 5 of any charcoal from a human cremation. As noted by Fadillah (1999: 28), the concentration of valuable items in this test pit does point to their interment as grave goods. As an ensemble which features 21 carnelian beads and the fragments from a bronze bowl, a decorated bronze and an iron knife, they resemble the concentration of two multi-

faceted carnelian beads, three bronze rings, two bronze bracelets and an iron cleaver dated between AD 410 and 660 at Pontanoa Bangka, Lake Matano, at the far northeast of South Sulawesi (Bulbeck & Prasetyo, in press). It should be noted that the Pontanoa Bangka grave good were associated with a cremated burial, which is why the charcoal from the burial could be dated by the radiocarbon method. But in the case of Bonto-Bontoa, the lack of any recorded human bone would presumably reflect post-depositional dissolution in the sediments [a reasonable inference given that lack of any observed bone in the Bonto-Bontoa test pit].

On account of its small size, the charcoal sample was submitted to the Physics Division of the Australian Nuclear Science and Technology Organization, in Sydney, for an Accelerator Mass Spectrometry radiocarbon date. The result is  $170 \pm 55$  BP (OZE130). When submitted to the CALIB 3.03 computer software (Stuiver and Reimer, 1993), this determination intersects the tree-ring calibration curve at seven calendrical dates between AD 1680 and 1954, and corresponds to 1665-1954 at one standard deviation, or 1647-1954 at two standard deviations. Therefore, the charcoal sample definitely dates to the Islamic period along South Sulawesi's south coast. It probably refers to Islamic period farming practices, specifically, burning off the forest at the site to clear the land for gardening. Accordingly, the brown sediments in Test Pit 5, which extend downwards 50 to 60 cm beneath the surface, may be interpreted as the tillage zone in Haji Arsyad's garden.

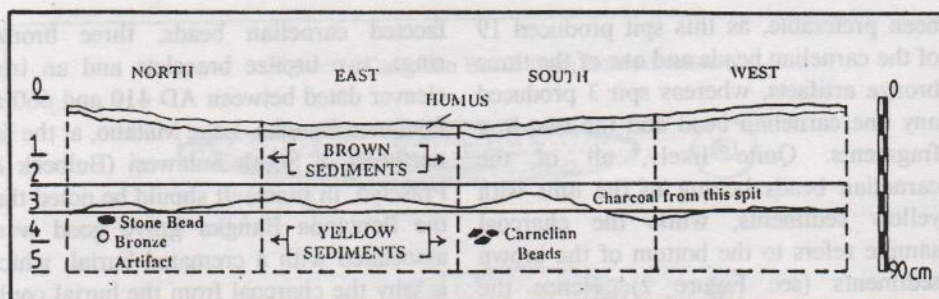
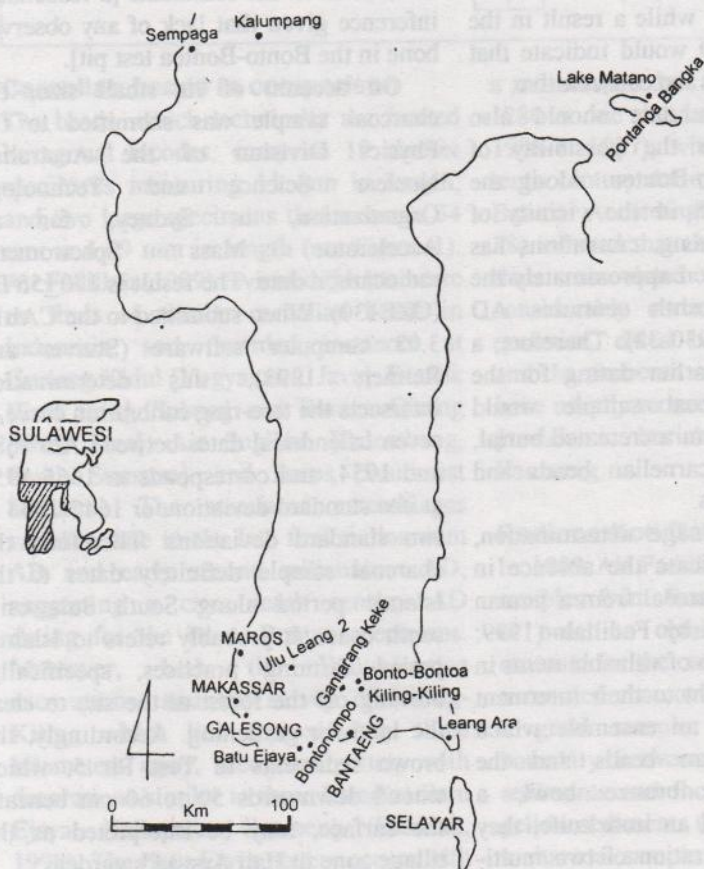


Figure 2. Bonto-Bontoa Test Pit V showing relationship of the radiocarbon sample to the beads





The accelerator Mass Spectrometry date from Bonto-Bontoa is consistent with the circa tenth century dating assigned to the carnelian beads by Ali Fadillah (1999). The result further disqualifies any association of the charcoal with a cremated pre-Islamic human burial [which should date between the eleventh and thirteenth centuries]. A thirteenth to sixteenth century dating for the beads is also very unlikely given their lack of association with any imported ceramics. Comparisons with other finds along the south coast of South Sulawesi, and with the cremated human burial excavated from the base of the test pit at Pontanoa Bangka at the far northeast of South Sulawesi, suggest that the Bonto-Bontoa beads date to some time in the first millennium AD. Hence, the tenth century AD may be considered a conservative estimate of the beads' antiquity. Future artifactual comparisons may suggest this estimate could be set a little earlier.

## Conclusion

In sum, Test Pit 5 at Bonto-Bontoa appears to have unearthed the grave goods from a burial, one which did not involve cremation, and which dates to the first millennium AD, probably late in the millennium. As another instance of exotic goods of prehistoric antiquity in the vicinity of Bantaeng, the faceted hexagonal biconical beads at Bonto-Bontoa highlight the apparent importance of the Bantaeng area for early interinsular trade passing along the south coast of South Sulawesi. This coastline appears to have served as an important way station for the Paleometallic trade between Java

[and/or South Sumatra] in the west and the Spices Islands in the east, taking into account the numerous Paleometallic antiquities that have been found along the south coast. Although Indianization as such does not seem to have taken a grip anywhere within South Sulawesi (e.g. Caldwell, 1995), the communities along the peninsula's south coast would appear to have been in contact with Java and other developed areas throughout the last millennia.

<sup>1)</sup> Pelras (1996: 26) claims that « many glass beads of Indian origin have been found in nearby Ara, pointing to the existence there of maritime trade as early as 300-100 BC ». There would appear to be some confusion with the single glass bead excavated by Van Heekeren from Leang Ara. As the claim by Pelras is unreferenced, we have been unable to follow it up, but the chronological estimate sounds like it may have come from Van Stein Callenfels. It is most unlikely that any present-day archaeologist would be brave enough to propose such an early dating on the basis of a single bead.

## Acknowledgment

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