

Appendix A. *Keramik* recorded in Luwu

Unless otherwise stated, the *keramik* or imported, high-fired ceramic specimens from Luwu were identified jointly by Bulbeck and Karaeng Demmanari at the Makassar Archaeology Office, using standard references, notably Guy (1986) and Harrison (1990, 1995). Most of the 1,910 identifications reported here are taken directly from Bulbeck and Bagyo Praseyo's (1999) report to the Indonesian Institute of Sciences. Two sites near Malili, Kawasule and Warau, are reported here for the first time (Table A-2). Minor additions are made to the recorded finds at Rahampu'u 1 and Pinanto, following Bulbeck's inspection of the excavated materials. John Miksic (National University of Singapore) provided the identification of the *Ding* body fragment from the latter site. He also identified the two Pegu monochrome vessels represented in the Utti Batue *keramik* cache.

The analysis of the Utti Batue *keramik* cache was carried out by Bulbeck and Demmanari in February 2000 and is reported here for the first time. This very large cache is a mound of broken tradewares assembled by a local looter after he came upon them in the southern sector of the Utti Batue site. The OXIS survey archaeologists were permitted to carry away what they could carry of the cache; we estimate this to have been roughly one half. Hence the 29 grams of glass vessel and 31.4 kilograms of tradewares collected would correspond to an original mass of about 60 grams of glass and about 60 kilograms of *keramik*. The looter informed the OXIS archaeologists that the sherdage had all been recovered from a single locality. Several test bores in abutting localities at the site supported the looter's statement that these localities produced no sherdage except earthenwares. The concentration of *keramik* encountered by the looter could correspond to a designated secondary refuse location; an alternative explanation would be a single dumping event in the wake of a catastrophe, or at a time when the inhabitants laid plans to abandon the site. In either case, many of the vessels would be represented by multiple sherds. Bulbeck and Karaeng Demmanari thus decided to assign all the sherds to potentially distinct vessels, allowing estimation of the minimum number of represented vessels. This decision ensured that the vessel frequencies in the Utti Batue cache would not overwhelm the frequencies calculated for Malangke, and indeed for Luwu generally, due to the very large size of the sample. The estimated minimum numbers of vessels in the Utti Batue cache are listed in Table A-5.

In the interests of streamlining the data, the remaining *keramik* observed by OXIS members in Malangke are aggregated into (looted) vessels in the possession of villagers, pieces collected during the surface survey of (looted cemetery) sites, and sherds excavated from Pattimang Tua, Utti Batue and Dadekoe 2. The single twelfth to thirteenth century sherd was recovered during the surface survey of Tampung Jawa, where a thirteenth to fourteenth century *Dehua* whiteware sherd was also retrieved. Other particularly early tradewares include the three thirteenth to fourteenth century whitewares and the one similarly dated celadon from the small cemetery at Tompe, and the three sherds of thirteenth to fourteenth century *Dehua* whitewares collected during surface survey at Lindrunge and Pincang Pute. All other finds provenanced to a particular site date to the fourteenth century or later.

Tables A-6 and A-7 summarize the total identifications from the 1998 and 1999 field seasons in Luwu, plus a few sherds that had been collected by Willems at Sabbang Loang in 1938 and identified by Orsoy de Flines. The total counts are aggregated by 100-year interval between the thirteenth and fifteenth centuries, and by half-century intervals between the sixteenth and twentieth centuries. This is achieved by splitting every sherd evenly between each interval to which the sherd is dated, e.g., a fifteenth to sixteenth century Vietnamese blue-and-white sherd would be considered to represent half of a fifteenth century sherd, a quarter of a sherd dated to 1500-1550, and a quarter of a sherd dated to 1550-1600.

The aggregate counts conform to a pattern of exponential increase throughout the pre-Islamic period, and a sharp drop during the Islamic period. Figure A-1, which groups the counts by century interval, illustrates the pattern graphically. The exponential increase in *keramik* identifications between the thirteenth and sixteenth centuries evidently results from two factors. One is the growing availability of imported ceramics in Indonesia during the period (Guy 1986). The second is the growth in the economy of Luwu, as discussed in the text. The sharp reduction in *keramik* counts after the shift of the capital to Palopo should not, however, be interpreted as evidence of a collapse in the economy of Luwu, or a diminution of the authority of its palace centre. Rather, it reflects the success of the OXIS program in identifying and investigating pre-Islamic sites. One thousand one hundred and thirty six of the grand total of 1,910 identified *keramik* pieces (i.e. 59.5%) occurred in three sites and site complexes that were effectively abandoned at around 1600 or shortly afterwards, namely Malangke, Tambu-Tambu and Pinanto. A focus on predominantly Islamic-period sites, such as Benteng Tompottikka in Palopo, would have yielded a very different pattern of sherdage.

The aggregate counts per interval should not be treated as representing the pattern of long-term importation of high-fired ceramics into Luwu, even with respect to the pre-Islamic period (which constituted the focus of our research activities). However, they can be treated as the background against which to compare the sherdage frequencies from each site and site complex. For instance, the identifications from Lake Matano sites (Table A-1) suggest remarkably little pre-Islamic *keramik*, and an increasingly healthy representation of pieces between the seventeenth and twentieth centuries. The point is clearly illustrated by comparing the Lake Matano counts per interval (either a 100 or a 50 year period) with those recorded from the Luwu sites in general (Main text: Figure 2-1). These standardized chronological histograms demonstrate that very little of the *keramik* that arrived in Luwu in pre-Islamic times reached as far as Lake Matano. The Lake Matano histograms suggest an eighteenth century boom, but otherwise indicate that the communities based on the lake may have never been more populous, or enjoyed greater prosperity, than do the communities which live there today.

Table A-1. *Keramik* Recorded at Lake Matano

<i>Keramik</i> Category	Matano test pits	Matano survey	Pa'ang- kaburu	Pontanao Bangka/Sukoyu	Total
Guangdong martavan undateable	3	0	0	0	3
Coarse Red martavan 15 th -16 th centuries	1	0	0	0	1
Sawankhalok martavan 15 th -16 th centuries	0	1	0	0	1
Sawankhalok black-and-white 15 th -16 th c.	0	3	0	0	3
Ming blue-and-white 16 th century	0	4	0	0	4
Ming Swatow blue-and-white 16 th century	0	3	1	1	5
Ming Swatow red-green overglaze 16 th c.	0	1	0	0	1
Ming Swatow plainware 16 th century	0	0	0	1	1
Wanli red-green overglaze	1	0	0	0	1
Vietnam Brittleware <i>tempayan</i> 16 th -17 th c.	1	0	0	0	1
Swatow blue-and-white	0	9	0	2	11
Swatow red-green overglaze	0	2	2	0	4
Swatow monochrome	0	2	0	1	3
Transitional blue-and-white 17 th century	1	8	1	0	10
Transitional whiteware 17 th century	0	2	0	0	2
Transitional red-green overglaze 17 th century	0	1	0	0	1
Thai Coarse Brownware 17 th century	0	1	0	0	1
Qing plain 17 th -18 th centuries	1	0	0	0	1
Qing blue-and-white 17 th -18 th centuries	2	5	2	0	9
Vietnam red-green overglaze 17 th -18 th c.	0	0	1	0	1
Qing Kangxi blue-and-white	1	5	4	0	10
Qing blue-and-white 18 th century	1	8	0	0	9
Qing <i>famille rose</i> 18 th century	0	2	0	1	3
Qing blue-and-white 18 th -19 th centuries	0	4	0	0	4
Qing plainware 18 th -19 th centuries	1	4	0	0	5
Qing celadon 18 th -19 th centuries	0	1	0	0	1
Kitchen Qing blue-and-white 19 th century	1	2	0	0	3
Qing plainware 19 th century	0	4	0	0	4
European transferware 19 th century	0	1	0	0	1
European cream-coloured ware 19 th century	0	12	0	2	14
Chinese whiteware/plainware 19 th -20 th c.	0	2	0	0	2
Chinese whiteware 20 th century	0	23	0	0	23
Chinese <i>famille rose</i> 20 th century	0	2	0	0	2
Chinese decalware 20 th century	0	2	0	0	2
European transferware 20 th century	0	3	0	0	3
European stamped blue-and-white 20 th c.	0	1	0	0	1

European decalware 20 th century	0	3	0	0	3
European whiteware 20 th century	0	1	0	0	1
Indonesian <i>keramik</i> 20 th century	0	3	0	0	3
Total	14	125	11	8	158

Table A-2. *Keramik* Recorded at Ussu, Cerekang and Malili

<i>Keramik</i> Category	Ussu/ Cerekang			Balambano/		Total
	Taipa/ Malaulu	Katue/ Poloe	Turunan Damar	Salabu/ Patande	Kawasule/ Warau	
Chinese/Vietnam <i>gusi</i> 10 th -12 th c. (?)	0	0	0	1	0	1
Chinese/Vietnam plate 11 th -17 th c. (?)	0	0	1	0	0	1
<i>Dehua</i> whiteware 14 th century	1	0	0	0	0	1
Ming blue-and-white 15 th century	0	0	0	1	0	1
Ming blue-and-white 15 th -16 th centuries	1	0	0	0	0	1
Vietnam red-green overglaze 15 th -16 th c.	2	0	0	0	0	2
Vietnam blue-and-white 15 th -16 th c.	0	0	0	2	0	2
Sawankhalok celadon 15 th -16 th centuries	0	0	0	1	0	1
Sawankhalok black-and-white 15 th -16 th c.	0	0	0	3	0	3
Sawankhalok martavan 15 th -16 th centuries	0	0	0	1	0	1
Ming blue-and-white 16 th century	1	0	0	0	0	1
Ming red-green overglaze 16 th century	1	0	0	0	0	1
Ming Swatow blue-and-white 16 th century	1	0	0	2	0	3
Ming Swatow plainware 16 th century	1	0	0	2	0	3
Vietnam underglaze green 16 th -17 th c.	1	0	0	0	0	1
Vietnam oliveware 16 th -17 th centuries	1	0	0	1	0	2
Swatow blue-and-white	1	0	0	1	0	2
Swatow red-green overglaze	0	1	0	0	0	1
Swatow whiteware	0	0	0	1	0	1
Wanli blue-and-white	0	0	0	0	1	1
Transitional blue-and-white 17 th century	1	0	0	3	0	4
Transitional red-green overglaze 17 th c.	0	0	0	0	1	1
Guangdong brownware martavan 17 th c.	0	0	0	1	0	1
Coarse Brown martavan 17 th -18 th c.	0	1	0	0	0	1
Qing greyware 17 th -18 th centuries	0	0	0	2	0	2
Qing Kangxi blue-and-white	1	0	2	0	0	3
Qing blue-and-white 18 th century	1	0	0	0	0	1
Qing blue-and-white 18 th -19 th centuries	1	0	0	2	0	3
European transferware 19 th century	2	4	0	1	2	9
European decal/painted ware 19 th century	0	1	1	0	0	2
European cream-coloured ware 19 th c.	0	1	0	5	4	10
Qing red-green overglaze 19 th century	0	1	0	1	0	2
Kitchen Qing blue-and-white 19 th century	0	1	0	1	0	2
Qing celadon 19 th century	0	1	0	2	0	3
Guangdong brownware martavan 19 th c.	0	1	0	0	0	1

Qing whiteware 19 th century	0	0	0	0	3	3
Qing <i>famille rose</i> 19 th -20 th centuries	1	0	0	1	0	2
Japanese stamped blue-&-white 19 th -20 th c.	1	0	0	1	0	2
Qing whiteware 19 th -20 th centuries	0	0	0	3	1	4
European decal/transferware 20 th century	0	1	0	1	1	3
European painted polychrome 20 th c.	0	1	0	0	0	1
European whiteware 20 th century	0	0	0	5	1	6
Chinese red-green overglaze 20 th c.	0	0	1	0	0	1
Chinese whiteware 20 th century	7	0	0	11	5	23
Total	26	14	5	56	19	120

Table A-3. *Keramik* Recorded at Wotu and Tampinna

<i>Keramik</i> Category	Tambu- Tambu	Wotu township	Kande Api	Tampinna	Total
Guangdong unglazed 12 th -14 th centuries	1	0	0	0	1
Vietnam brownware 13 th -14 th centuries	1	0	0	0	1
<i>Qingbai</i> whiteware 13 th -14 th centuries	2	0	0	0	2
<i>Dehua</i> whiteware 13 th -14 th centuries	17	0	0	0	17
Yuan celadon 13 th -14 th centuries	10	1	0	0	11
<i>Qingbai</i> whiteware 14 th century	2	0	0	0	2
Yuan celadon 14 th century	3	0	0	0	3
<i>Dehua</i> /Ming whiteware 14 th -15 th c.	19	0	0	0	19
Ming celadon/oliveware 14 th -15 th c.	3	1	0	0	4
Vietnam monochrome 14 th -15 th centuries	12	0	0	0	12
Vietnam unglazed 14 th -15 th centuries	6	0	0	0	6
Go Sanh Red martavan 14 th -15 th centuries	6	0	0	0	6
Vietnam Coarse red martavan 14 th -15 th c.	1	0	0	0	1
Vietnamese blue-and-white 15 th century	0	0	0	1	1
Sawankhalok black-and-white 15 th century	1	0	0	0	1
Ming whiteware 15 th century	0	0	0	1	1
Ming whiteware 15 th -16 th centuries	4	0	0	1	5
Sawankhalok black-and-white 15 th -16 th c.	3	1	0	1	5
Sawankhalok celadon 15 th -16 th centuries	15	6	0	0	21
Sawankhalok martavan 15 th -16 th centuries	10	11	0	0	21
Thai Coarse Brownware 15 th -16 th centuries	2	1	0	0	3
Vietnam monochrome 15 th -16 th centuries	4	1	0	0	5
Go Sanh Red martavan 15 th -16 th centuries	1	0	0	0	1
Vietnam Coarse red martavan 15 th -16 th c.	8	1	0	0	9
Vietnam blue-and-white 15 th -16 th centuries	5	3	0	0	8
Ming celadon/oliveware 15 th -16 th centuries	9	6	0	0	15
Ming blue-and-white 15 th -16 th centuries	4	1	0	1	6
Vietnam blue-and-white 16 th centuries	0	2	0	0	2
Ming blue-and-white 16 th century	14	31	3	1	49
Ming red-green overglaze 16 th century	0	0	1	0	1
Ming Swatow blue-and-white 16 th century	6	9	0	7	22
Ming Swatow red-green overglaze 16 th c.	1	0	0	0	1
Ming Swatow plain 16 th century	2	1	0	3	6
Ming whiteware 16 th century	1	6	0	0	7
Ming celadon/oliveware 16 th century	1	0	0	0	1
Wanli whiteware	3	0	0	2	5

Wanli blue-and-white	2	28	2	4	36
Ming plain 16 th -17 th centuries	3	0	0	0	3
Ming celadon 16 th -17 th centuries	0	1	0	0	1
Vietnam unglazed/monochrome 16 th -17 th c.	1	2	0	1	4
Thai Coarse Brownware 16 th -17 th centuries	0	1	0	0	1
Swatow red-green overglaze	1	5	0	1	7
Swatow plainware	1	6	0	0	7
Swatow blue-and-white	0	17	3	12	32
Transitional whiteware 17 th century	1	1	0	0	2
Transitional blue-and-white 17 th century	0	19	0	4	23
17 th century	0	1	0	0	1
Qing Kangxi blue-and-white	0	26	1	1	28
Qing Kangxi red-green overglaze	0	2	0	0	2
Qing plain 17 th -18 th century	0	2	0	0	2
Qing celadon 17 th -18 th century	0	2	0	0	2
Qing blueware 18 th century	0	1	0	0	1
Qing blue-and-white 18 th century	0	12	0	0	12
Qing red-green overglaze 18 th century	0	1	0	0	1
Qing celadon 18 th century	0	3	0	0	3
Qing red-green overglaze 18 th -19 th centuries	0	1	0	0	1
Qing blue-and-white 18 th -19 th centuries	0	4	0	0	4
Qing whiteware 18 th -19 th centuries	0	6	0	0	6
Qing celadon 18 th -19 th centuries	0	1	0	0	1
Qing <i>famille rose</i> 18 th -19 th centuries	0	1	0	0	1
Kitchen Qing blue-and-white 19 th century	0	7	1	0	8
Qing celadon 19 th century	0	5	0	0	5
Qing whiteware 19 th century	0	1	0	0	1
European cream-coloured ware 19 th century	0	29	0	0	29
European transferware 19 th century	0	6	0	0	6
European greyware/greenware 19 th century	0	5	0	0	5
European painted late 19 th /early 20 th c.	0	1	0	0	1
European transferware late 19 th /early 20 th c.	0	9	0	0	9
Kitchen Qing late 19 th /early 20 th century	0	1	0	0	1
Qing celadon 19 th -20 th centuries	0	1	0	0	1
Japanese stamped blue-and-white 19 th -20 th c.	0	8	0	0	8
Chinese blue-and-white 20 th century	0	1	0	0	1
European plainware 20 th century	0	4	0	0	4
European decalware 20 th century	0	1	0	0	1
Chinese decalware 20 th century	0	2	0	0	2
Chinese whiteware 20 th century	1	9	0	0	10

Guangdong martavan undateable	33	5	0	0	38
Britteware martavan undateable	2	6	0	0	8
Total	222	326	11	41	600

Table A-4. *Keramik* Recorded at the Baebunta sites

<i>Keramik</i> Category	Puang		Tirosoe/ Sabbang		Benteng	Total
	Mattene	Balubu	Pinanto	Loang	Baebunta	
<i>Dehua</i> whiteware 13 th -14 th centuries	1	0	0	0	0	1
Yuan celadon 13 th -14 th centuries	1	0	0	0	0	1
<i>Dehua</i> whiteware 14 th century	0	1	0	0	0	1
<i>Ding</i> body fragment 14 th century	0	0	1	0	0	1
Vietnam oliveware 14 th -15 th century	3	0	2	0	1	6
Vietnam oliveware 15 th century	1	0	0	0	0	1
Vietnam blue-and-white 15 th century	2	0	3	0	0	5
Ming Sancai 15 th century	0	0	1	0	0	1
Ming whiteware 15 th century	0	0	2	0	0	2
Sawankhalok black-and-white 15 th c.	1	0	0	0	0	1
Ming blue-and-white 15 th century	0	0	11	1	0	12
Ming blue-and-white 15 th -16 th centuries	0	1	6	0	1	8
Ming whiteware 15 th -16 th centuries	0	0	3	0	0	3
Ming celadon 15 th -16 th centuries	0	0	2	0	0	2
Vietnam monochrome 15 th -16 th centuries	3	1	8	0	0	12
Vietnam blue-and-white 15 th -16 th centuries	2	0	6	2	0	10
Go-Sanh Red martavan 15 th -16 th centuries	0	0	1	0	0	1
Sawankhalok whiteware 15 th -16 th centuries	1	0	0	0	0	1
Sawankhalok celadon 15 th -16 th c.	1	1	6	1	1	10
Sawankhalok black-and-white 15 th -16 th c.	6	0	6	0	0	12
Sawankhalok martavan 15 th -16 th centuries	0	0	4	1	0	5
Sukothai black-and-white 15 th -16 th c.	0	0	0	1	0	1
Thai Coarse Brown martavan 15 th -16 th c.	0	0	1	0	0	1
Vietnam blue-and-white 16 th century	1	0	0	0	1	2
Vietnam red-green overglaze 16 th century	0	0	1	0	0	1
Ming Swatow plain 16 th century	0	0	5	0	0	5
Ming Swatow blue-and-white 16 th century	0	0	12	0	0	12
Ming blue-and-white 16 th century	5	1	13	0	0	19
Ming whiteware 16 th century	3	0	0	0	0	3
Wanli blue-and-white	0	0	2	1	1	4
Wanli whiteware	0	0	1	0	0	1
Swatow blue-and-white	0	0	3	0	1	4
Swatow red-green overglaze	0	0	4	0	0	4
Swatow plain/monochrome	0	0	3	0	1	4
Ming <i>Dehua</i> whiteware 16 th -17 th centuries	0	0	1	0	0	1
Transitional whiteware 17 th century	0	0	2	0	0	2

Transitional blue-and-white 17 th c.	0	0	3	1	0	4
Qing Kangxi blue-and-white	0	0	6	0	1	7
Qing celadon 18 th century	0	0	0	0	2	2
Qing blue-and-white 18 th -19 th centuries	0	0	0	0	1	1
Kitchen Qing blue-and-white 19 th century	0	0	0	0	1	1
Qing <i>famille rose</i> 19 th century	0	0	0	2	0	2
European creamware 19 th century	0	0	0	4	3	7
European whiteware 19 th -20 th centuries	0	0	0	1	0	1
Qing whiteware 19 th -20 th centuries	0	0	0	1	1	2
European transferware late 19 th /early 20 th c.	0	0	0	1	0	1
European decalware 20 th century	0	0	0	1	0	1
European whiteware 20 th century	0	0	0	1	0	1
Japanese blue-and-white 20 th century	0	0	0	1	0	1
Chinese decalware 20 th century	0	0	0	2	0	2
Chinese enamelled overglaze 20 th century	0	0	0	2	0	2
Chinese whiteware 20 th century	0	0	0	15	1	16
Guangdong martavan undated	0	0	5	0	0	5
Total	31	5	124	39	17	215

Table A-5. *Keramik* Recorded at Malangke

<i>Keramik</i> Category	Utti Batue cache	Villagers' possession	Surface survey	Test pits	Total
Guangdong unglazed 12 th -13 th centuries	0	0	1	0	1
<i>Qingbai</i> whiteware 13 th -14 th centuries	0	3	0	0	3
<i>Dehua</i> whiteware 13 th -14 th centuries	0	1	4	0	5
Yuan celadon 13 th -14 th centuries	0	1	0	0	1
<i>Dehua</i> whiteware 14 th century	1	0	2	0	3
Yuan celadon 14 th century	0	0	3	0	3
Jizhou iron-painted 14 th -15 th centuries	3	1	1	2	7
Vietnam monochrome 14 th -15 th centuries	0	3	9	0	12
Vietnam unglazed 14 th -15 th centuries	0	0	2	0	2
Vietnam black-and-white 14 th -15 th centuries	0	0	4	1	5
Vietnam blue-and-white 14 th -15 th centuries	0	1	2	0	3
Go Sanh Red martavan 14 th -15 th centuries	0	0	3	0	3
Guangdong brownware 14 th -15 th centuries	0	0	1	0	1
Ming celadon 14 th -15 th centuries	0	0	1	1	2
Ming whiteware 14 th -15 th centuries	1	0	0	0	1
Ming blue-and-white 14 th -15 th centuries	2	0	2	0	4
Ming blue-and-white 15 th century	0	0	3	4	7
Vietnam blue-and-white 15 th century	0	1	3	0	4
Ming whiteware 15 th century	0	0	1	0	1
Ming greyware/celadon 15 th century	1	0	2	0	3
Ming Sancai 15 th century	2	1	0	0	3
Sawankhalok black-and-white 15 th century	0	1	3	0	4
Sawankhalok celadon 15 th century	0	0	2	0	2
Sawankhalok whiteware 15 th -16 th centuries	1	0	0	0	1
Sawankhalok celadon 15 th -16 th centuries	3	2	7	11	23
Sawankhalok black-and-white 15 th -16 th c.	6	8	6	0	20
Sawankhalok martavan 15 th -16 th centuries	2	6	5	1	14
Sukothai 15 th -16 th centuries	2	1	0	0	3
Thai Coarse Brown martavan 15 th -16 th c.	0	0	0	3	3
Coarse Red martavan 15 th -16 th centuries	1	0	3	1	5
Vietnam monochrome 15 th -16 th centuries	4	8	3	3	18
Vietnam blue-and-white 15 th -16 th centuries	38	22	14	10	84
Ming blue-and-white 15 th -16 th centuries	2	2	3	4	11
Ming celadon 15 th -16 th centuries	7	3	4	3	17
Ming whiteware 15 th -16 th centuries	9	2	4	3	18
Ming monochrome 15 th -16 th centuries	4	0	0	0	4

Pegu (Burma) monochrome 15 th -18 th c.	2	0	0	0	2
Ming monochrome 16 th century	2	0	3	0	5
Ming Swatow plainware 16 th century	8	0	0	0	8
Ming celadon 16 th century	0	0	0	2	2
Ming whiteware 16 th century	17	1	0	0	18
Ming blueware 16 th century	1	0	0	0	1
Ming blue-and-white 16 th century	222	17	17	4	260
Ming red-green overglaze 16 th century	14	2	3	0	19
Ming Swatow blue-and-white 16 th century	10	8	2	7	27
Ming Swatow red-green overglaze 16 th c.	2	0	1	2	5
Vietnam blue-and-white 16 th century	37	1	0	1	39
Vietnam red-green overglaze 16 th century	2	1	0	0	3
Vietnam monochrome 16 th century	1	2	0	0	3
Guangdong brownware 16 th century	1	0	0	0	1
Vietnam Brittleware martavan 16 th -17 th c.	0	0	1	0	1
Thai celadon 16 th -17 th centuries	0	1	0	0	1
Late Ming blue-and-white 16 th -17 th centuries	0	0	1	0	1
Wanli blue-and-white	6	12	11	0	29
Wanli whiteware	0	0	2	0	2
Swatow blue-and-white	1	4	9	5	19
Swatow red-green overglaze	3	1	0	0	4
Swatow whiteware/monochrome	16	0	3	0	19
Transitional blue-and-white 17 th century	0	3	0	0	3
Kitchen Qing blue-and-white 19 th c.	0	0	1	0	1
Guangdong martavan undateable	0	0	10	4	14
Brittleware martavan undateable	0	0	0	2	2
Total	434	120	162	74	790

Table A-6. Total Luwu Mainly Pre-Islamic *Keramik*

<i>Keramik</i> Category	No.	<i>Keramik</i> Category	No.	Period	Counts
Chinese/Vietnam <i>gusi</i> 10 th -12 th c. (?)	1	Chinese/Vietnam plate 11 th -17 th c. (?)	1		
Guangdong unglazed 12 th -13 th c.	1	Guangdong unglazed 12 th -14 th c.	1		
Vietnam brownware 13 th -14 th c.	1	<i>Qingbai</i> whiteware 13 th -14 th c.	5		
<i>Dehua</i> whiteware 13 th -14 th centuries	23	Yuan celadon 13 th -14 th centuries	13	13 th c.	22.5
<i>Dehua</i> whiteware 14 th century	5	Yuan celadon 14 th century	6		
<i>Qingbai</i> whiteware 14 th century	2	<i>Ding</i> body fragment 14 th century	1		
<i>Dehua</i> /Ming whiteware 14 th -15 th c.	20	Jizhou iron-painted 14 th -15 th c.	7		
Ming celadon/oliveware 14 th -15 th c.	6	Vietnam black-&-white 14 th -15 th c.	5		
Vietnam monochrome 14 th -15 th c.	30	Vietnam blue-&-white 14 th -15 th c.	3		
Vietnam unglazed 14 th -15 th c.	8	Ming blue-and-white 14 th -15 th c.	4		
Go Sanh Red martavan 14 th -15 th c.	9	Guangdong brownware 14 th -15 th c.	1	14 th c.	82.5
Vietnam Coarse Red 14 th -15 th c.	1	Ming Sancai 15 th century	4		
Vietnam oliveware 15 th century	1	Ming whiteware 15 th century	4		
Vietnam blue-and-white 15 th c.	10	Ming blue-and-white 15 th century	20		
Sawankhalok black-&-white 15 th c.	6	Ming greyware/celadon 15 th c.	3		
Sawankhalok celadon 15 th century	2	Sawankhalok whiteware 15 th -16 th c.	2		
Sawankhalok celadon 15 th -16 th c.	55	Sawankhalok martavan 15 th -16 th c.	42		
Sawank. black-&-white 15 th -16 th c.	43	Sukothai 15 th -16 th centuries	4		
Thai Coarse Brown 15 th -16 th c.	7	Coarse Red martavan 15 th -16 th c.	15		
Go Sanh Red martavan 15 th -16 th c.	2	Vietnam monochrome 15 th -16 th c.	35		
Vietnam blue-&-white 15 th -16 th c.	104	Vietnam overglaze 15 th -16 th c.	2		
Ming blue-and-white 15 th -16 th c.	26	Ming whiteware 15 th -16 th centuries	26		
Ming celadon 15 th -16 th centuries	34	Ming monochrome 15 th -16 th c.	4	15 th c.	298
Pegu monochromes 15 th -18 th c.	2	Ming monochrome 16 th century	5		
Ming whiteware 16 th century	28	Ming celadon 16 th century	3		
Ming blueware 16 th century	1	Ming blue-and-white 16 th century	333		
Ming red-green overglaze 16 th c.	21	Ming Swatow blue-&-white 16 th c.	69		
Ming Swatow overglaze 16 th c.	7	Ming Swatow plainware 16 th c.	23		
Vietnam red-green overglaze 16 th c.	4	Vietnam monochrome 16 th century	3		
Vietnam blue-and-white 16 th c.	43	Guangdong brownware 16 th century	1		
Viet. underglaze green 16 th -17 th c.	1	Vietnam Brittleware 16 th -17 th c.	2		
Vietnam monochrome 16 th -17 th	6	Thai Coarse Brown 16 th -17 th c.	1		
Thai celadon 16 th -17 th centuries	1	Ming monochrome 16 th -17 th c.	4		
Late Ming blue-&-white 16 th -17 th c.	1	Ming <i>Dehua</i> whiteware 16 th -17 th c.	1		
				1500-50	375.25

Plus sherdage chronological counts carried forward to the Table A-7 totals:
1550-1600 – 375.5; 1600-1650 – 4.75; 1650-1700 – 4.75; 1700-1750 – 0.25; 1750-1800 – 0.25.

Note: 12th century (and earlier) ignored owing to small number of identifications, hence also the 12th-13th century Guangdong sherd treated as 13th century, and the 12th-14th century Guangdong sherd treated as 13th-14th centuries.

Table A-7. Total Luwu Mainly Islamic Period *Keramik*

<i>Keramik</i> Category	North Luwu	Palopo	Total	Period	Count
Wanli blue-and-white 1550-1650	70	4	74		
Wanli red-green overglaze 1550-1650	1	0	1		
Wanli whiteware 1550-1650	8	0	8		
Swatow blue-and-white 1550-1700	68	1	69		
Swatow red-green overglaze 1550-1700	20	0	20		
Swatow plainware 1550-1700	34	0	34	1550-1600	457.75
Transitional blue-and-white 17 th century	44	1	45		
Transitional blueware 17 th century	1	0	1		
Transitional whiteware 17 th century	6	0	6		
Transitional red-green overglaze 17 th c.	2	0	2		
Guangdong brownware martavan 17 th c.	1	0	1		
Thai Coarse brownware martavan 17 th c.	1	0	1		
Thai Coarse brownware martavan 17 th -18 th c.	1	0	1		
Vietnam red-green overglaze 17 th -18 th c.	1	0	1		
Qing blue-and-white 17 th -18 th centuries	9	3	12		
Qing red-green overglaze 17 th -18 th centuries	0	1	1		
Qing celadon 17 th -18 th centuries	2	0	2		
Qing plainware 17 th -18 th centuries	5	2	7	1600-1650	121
Qing Kangxi blue-and-white 1650-1750	48	0	48		
Qing Kangxi red-green overglaze 1650-1750	2	0	2	1650-1700	104.5
Qing blue-and-white 18 th century	22	1	23		
Qing blueware 18 th century	1	0	1		
Qing red-green overglaze 18 th century	1	0	1		
Qing <i>famille rose</i> 18 th century	3	0	3		
Qing celadon 18 th century	5	0	5		
Qing blue-and-white 18 th -19 th centuries	12	2	14		
Qing red-green overglaze 18 th -19 th centuries	1	0	1		
Qing <i>famille rose</i> 18 th -19 th centuries	1	3	4		
Qing whiteware 18 th -19 th centuries	11	3	14	1700-1750	56.5
Qing celadon 18 th -19 th centuries	2	0	2	1750-1800	31.5
Kitchen Qing blue-and-white 19 th century	15	1	16		
Qing red-green overglaze 19 th century	2	0	2		
Qing <i>famille rose</i> 19 th century	2	0	2		
Qing whiteware 19 th century	8	0	8		
Qing celadon/monochrome 19 th century	8	1	9		
Guangdong brownware martavan 19 th c.	1	0	1		

European cream-coloured ware 19 th century	60	2	62		
European transferware 19 th century	14	0	14		
European greyware/greenware 19 th century	5	0	5		
European painted/decalware 19 th c.	4	0	4		
European whiteware/transferware 19 th -20 th c.	1	2	3		
Qing whiteware 19 th -20 th centuries	8	0	8		
Qing <i>famille rose</i> 19 th -20 th century	2	0	2		
Qing celadon 19 th -20 th centuries	1	0	1		
Japanese stamped blue-and-white 19 th -20 th c.	10	0	10	1800-1850	76.25
Kitchen Qing blue-and-white 1850-1950	1	0	1		
European transferware 1850-1950	10	0	10		
European painted ware 1850-1950	1	0	1	1850-1900	82.25
European plainware 20 th century	12	0	12		
European decalware/transferware 20 th c.	11	0	11		
European painted/stamped 20 th century	2	0	2		
Japanese blue-and-white 20 th century	1	0	1		
Chinese decalware 20 th century	6	0	6		
Chinese enamelled overglaze 20 th century	5	0	5		
Chinese blue-and-white 20 th century	1	0	1		
Chinese whiteware 20 th century	72	0	72	1900-1950	68.5
Indonesian <i>keramik</i> 20 th century	3	0	3	1950-2000	62.5

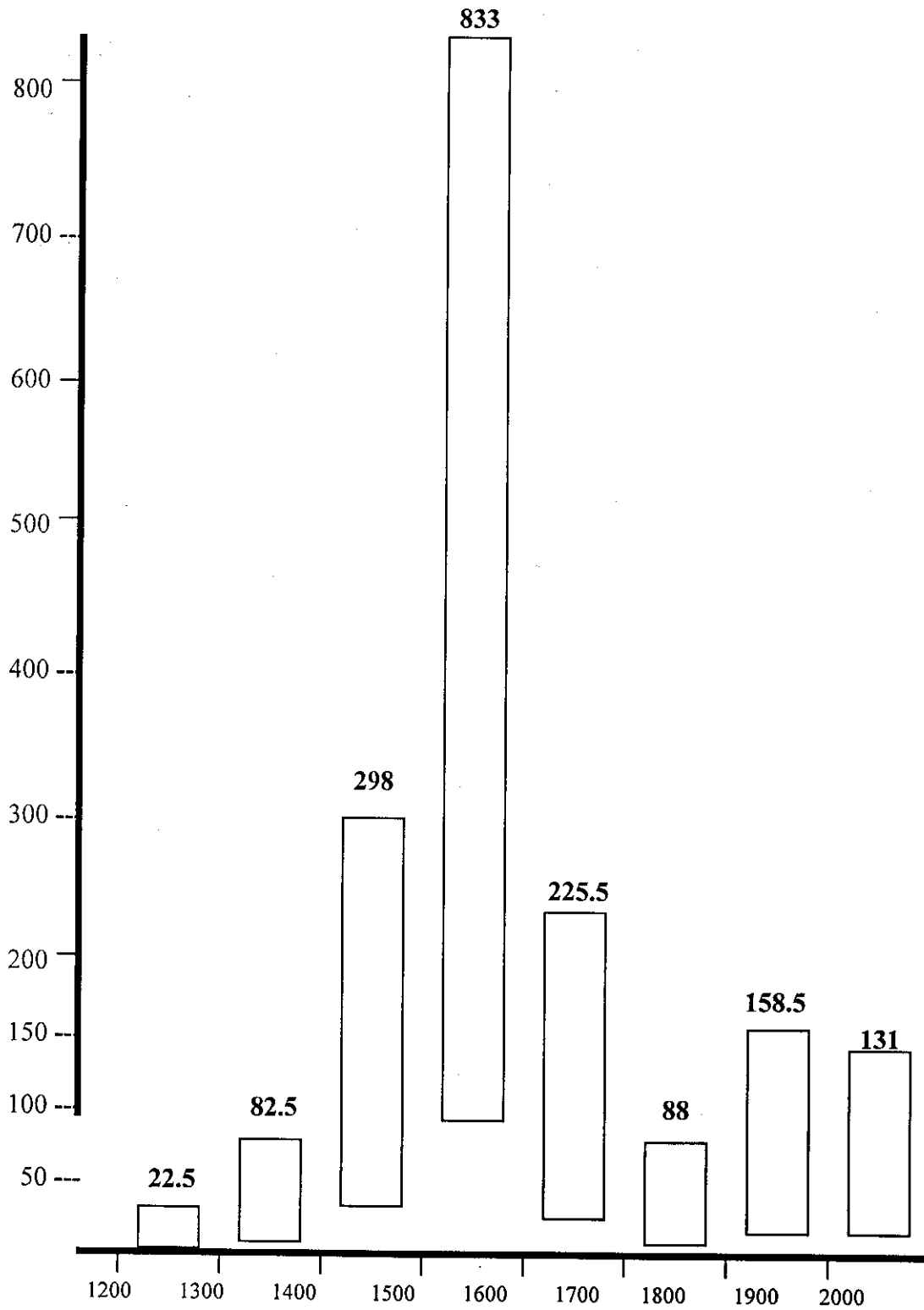


Figure A-1. Histogram distribution of the recorded Luwu *keramik* by century intervals