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MATERIALS

Numbers of Pit Dwellings in Early Jomon Moroiso Stage Sites

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Abstract The objective of this paper is to illustrate a method for estimating the number of simultaneously occupied dwellings in a site, and to test it by applying it to Jomon settlement data. Data are taken from 51 Early Jomon sites of the Moroiso pottery stage (ca 5000 B.P.) in the Kanto district. All the Moroiso stage dwellings in each site are divided into six sub-stages based upon Moroiso pottery sub-types. 88 percent of all the cases analyzed in the paper are found to be composed of between one to four dwellings per sub-stage. The dominance of small occupations is apparent in all six of the Moroiso sub-stages. This has important consequences for studies of Jomon population and sedentism.

Keywords Jomon, Pit dwellings, Moroiso pottery, Settlement pattern, Site population

Introduction

There has been much discussion among archaeologists about the function of different sized Jomon sites. (e.g., KOBAYASHI 1973, 1980, 1986; ISHII 1977). The size of habitation sites is often defined by using the number of pit dwellings in each site. It is known that there are both sites with numerous dwellings and sites with a few dwellings or even only a single dwelling. The relative date of each dwelling is usually estimated by using types of pottery excavated from the dwelling. It has been pointed out that all of the dwellings in one site did not always have the same type of pottery. Rather, dwellings with different temporally sequential types of pottery often exist in one site. In more recent chronologies, assemblages which were originally grouped as one temporal type have been further divided into several sub-types, each of which represent shorter time periods than did the earlier type groupings. The fact that dwellings with the same sub-type of pottery often overlapped each other must also be considered when estimating the actual occupation size.

It is thus apparent that the total number of dwellings in each site does not always reflect the number of dwellings that were simultaneously occupied. The total number

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of dwellings may be the result of several occupations. If we assume that each pottery sub-type is temporally distinctive, and that the pottery from a dwelling reflects the occupation period of that dwelling, then we can separate the dwellings in one site into different time periods. From these data, the maximum number of dwellings per period can be calculated. Such information will be very helpful in the reconstruction of settlement patterns, population size and the size of co-operative groups during the Jomon period.

The objective of this paper is to illustrate this method for estimating the number of simultaneously occupied dwellings in a site, and to test it by applying it to Jomon settlement data. Data are taken from sites of the Moroiso stage of the Early Jomon in the Kanto district.

Chronology and Settlement of the Moroiso Stage

Moroiso pottery is a type of Early Jomon pottery which is distributed through the south and northwest Kanto district and part of the Chubu district, Honshu, Japan. Radiocarbon dating indicates that this type of pottery was used around 5000 B. P. (Table 1).

YAMANOUCHI (1939) originally divided the Moroiso type into three categories: Moroiso-a, Moroiso-b and Moroiso-c. However, recent chronological studies suggest that further sub-division is possible. IMAMURA (1980, 1982), SUZUKI (1980a, b) and HABU (1983) together have described sub-divisions of the Moroiso stage that are used here to define six temporal "sub-stages": Moroiso-a_1, a_2, b_1, b_2, b_3 and c. They are used as the basic time units for separating different occupations from each other. The Moroiso-c sub-type has been further sub-divided (IMAMURA 1980), but the distinction is not used here because the total site sample size for the Moroiso-c sub-stage is very small. Fig. 1 shows typical examples of each pottery sub-type.

The first excavation of an entire occupation site of this stage was that of the Minamibori site, Kanagawa Prefecture, carried out by Seichi WAJIMA in 1955 (WAJIMA 1958). He excavated an entire hill top, and found 48 pit dwellings from the Kurohama (a pottery type previous to the Moroiso type) to the Moroiso-a stages. These dwellings formed a semi-circular configuration around the edge of the hill top. The center of the hill had no features. WAJIMA estimated the

Table 1. Carbon 14 data from Moroiso stage sites. (from KEALLY and MUTO 1982)

Laboratory	Date (B. P.)	Types of pottery associated	Site name
TK-1	4970± 80	Moroiso-a	Minamibori
M-240	5100±400	Moroiso-a	Kamo
N-38b	5290±138	Moroiso-a	Kamo
Gak-5368	5260±110	Moroiso-a	Hazamahigashi
Gak-379a	4730± 90	Moroiso-a, b	Orimoto
Gak-379c	4760± 90	Moroiso-a, b	Orimoto
Gak-1158	4380±100	Moroiso	Nakakokubumachi
Gak-1417	4770±170	Moroiso	Kitadai

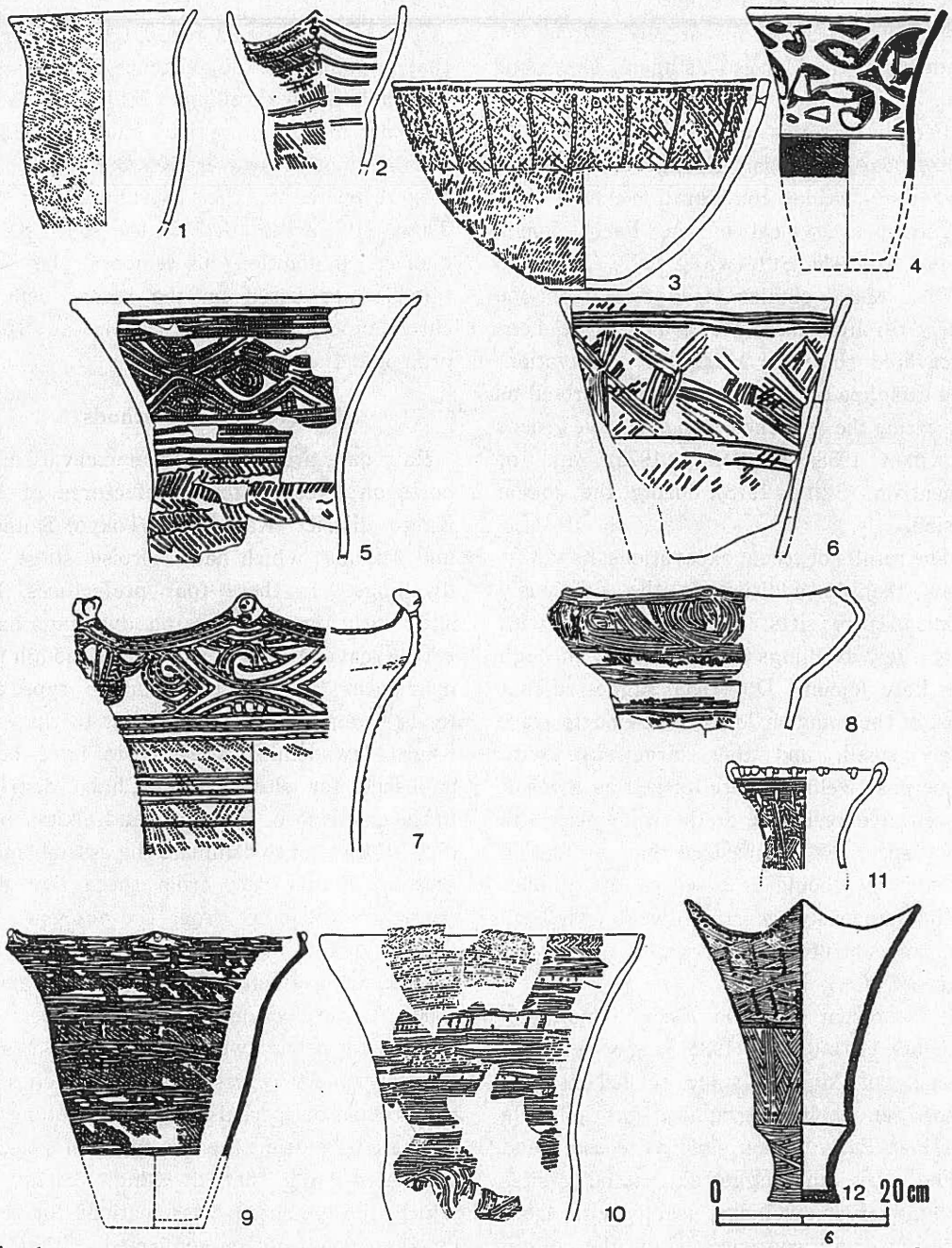

Fig. 1. Examples of each pottery sub-type (Moroiso-a_1 to c). 1, 2: a_1; 3, 4: a_2; 5, 7: b_1; 7, 8: b_2; 9, 10: b_3; 11, 12: c; (compiled from; HABU 1986: Fig. 1, MURATA *et al.* 1979: Fig. 19, MUTO 1963: Fig. 3, OBUCHI *et al.* 1983: Fig. 27, SASAZAWA (ed.) 1982: Fig. 140, 143, Site report No. 2: Fig. 28, No. 25b: Fig. 157, No. 34: Fig. 23, No. 42: Fig. 38, No. 44: Fig. 41).

average number of dwellings for the Kurohama stage to be six or seven, and the number for the Moroiso-a stage to be around ten.

Because of this excavation, sites with numerous dwellings, arranged in circular and semi-circular configurations, have been regarded as typical of the Early Jomon (TSUKADA 1966, SUGAWARA 1972, OKAMOTO 1975). Many similar sized sites from the Early through the Late Jomon have been excavated since the Minamibori excavation, and this type of site has been interpreted as indicating the existence of co-operative groups (WAJIMA 1958, OKAMOTO 1975), and of sedentism (SEIDO 1978) during the Jomon period.

The results of recent excavations, however, show that in addition to the previously studied large sites, there are many with only a few dwellings from the Early through the Late Jomon. DOI (1985) suggested that most of the common Jomon settlements were fairly small, and that large sites with numerous dwellings were formed as a result of repeated residence at the same place. In that paper, DOI emphasized that estimation of site size should be based on the number of simultaneously occurring dwellings in each site, and not on the total number of dwellings per site.

In his recent paper on Early Jomon settlements, KOGUSURI (1985) suggested that the size of Moroiso stage settlements depended on their geographical location. He classified Early Jomon sites as coastal and inland types, and suggested that large sites with numerous dwellings, usually with shell-middens, were concentrated in the coastal area whereas small sites were found only inland. He inferred that this was the result of different subsistence activities in each area.

The significance of KOGUSURI's paper is that it points out the existence of small sites with only a few dwellings. This observation had been missed in previous studies of Early Jomon sites. However, KOGUSURI's sample was restricted to the Tsurumi River and Tama Hill areas, both in the south Kanto district. In addition, his temporal classification is not based on the recent detailed chronologies. Problems such as these prompted the present paper.

Materials and Methods

Raw data are derived from excavation reports on sites in four prefectures of the Kanto district (Kanagawa, Tokyo, Saitama and Gumma) which had Moroiso stage pit dwellings. In these four prefectures, 101 sites with Moroiso stage pit dwellings have been excavated and reported. Although the distribution area of the Moroiso type extends from the Chubu district to the east Kanto, few detailed site reports have been published for sites in the Chubu district. In the east Kanto, Ukishima and Okitsu pottery types tend to dominate the assemblages. Because of this, data from these two districts are excluded from the analysis. In addition, sites in which only a small proportion of the site area (less than about 1000 m^2) was excavated are excluded because the number of pit dwellings in these sites is probably under represented. For each site, the occupation period of each dwelling is estimated by using the sub-types of pottery excavated from that dwelling. Sites for which the potsherd classifications for each dwelling could not be confirmed, either by examining the materials or by using figures from the site reports, are also excluded, since estimation of the time stages for each

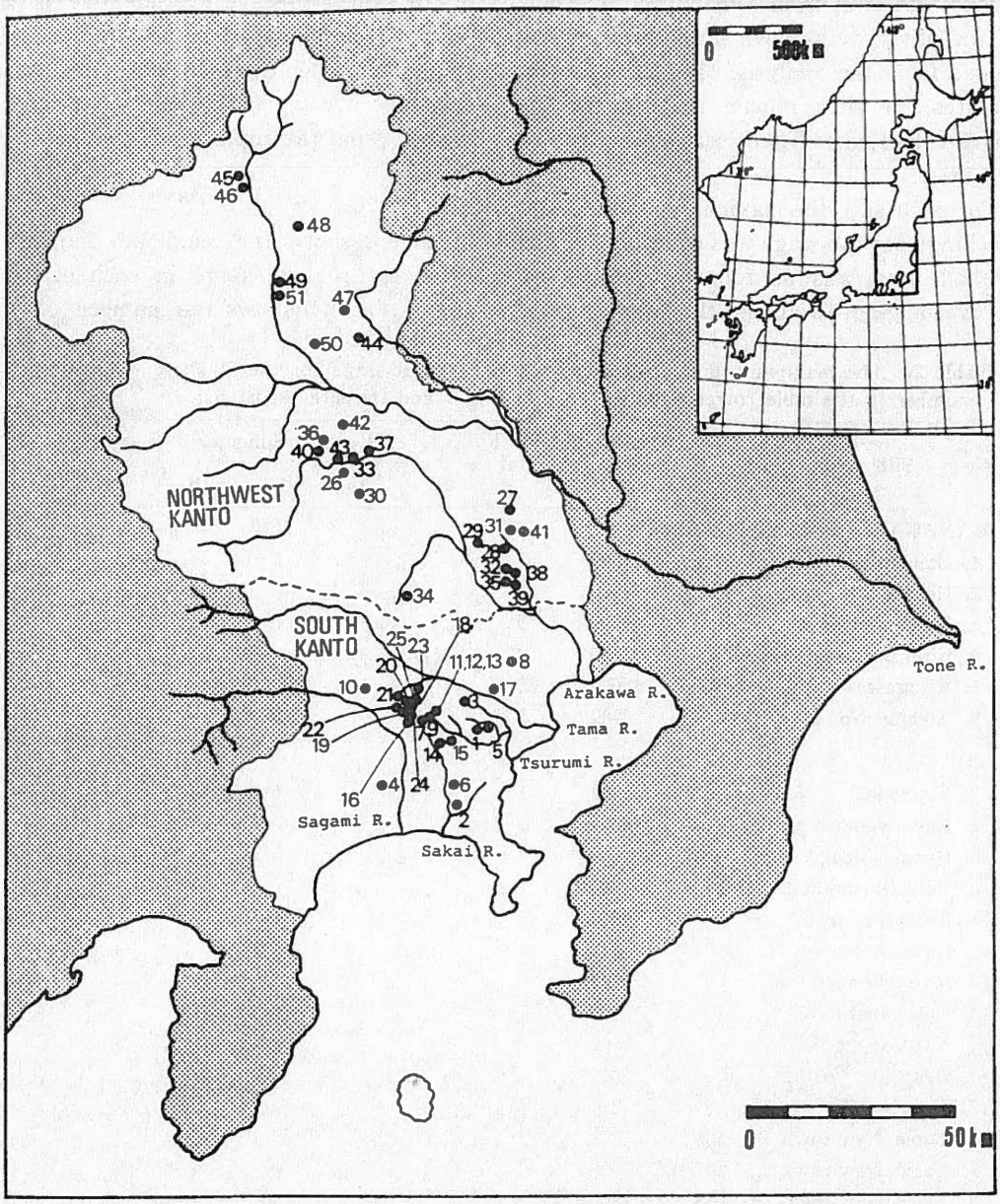

Fig. 2. Distribution of sites mentioned in the text. The site number in the figure corresponds to those in Table 2 and the site report list. The shaded area lies outside the 4 pefectures studied.

dwelling is impossible. This last condition means that data from Minamibori and some of the other well-known large sites are excluded from the analysis. In the four prefectures, 51 sites remain that satisfy the above conditions. Their locations are shown in Fig. 2.

For each site, the maximum number of pit dwellings per sub-stage was calculated. The method used was as follows: if there are no overlapping dwellings, the total number of dwellings is counted; when two dwellings of the same sub-stage overlap, one is subtracted from the total number for that sub-stage; and when three dwellings of the same sub-stage overlap each other, two is subtracted from the total.

Results

Table 2 shows the maximum number of dwellings per sub-stage in each of the 51 sites. Table 3 shows the number of sites

Table 2. The maximum number of dwellings in each sub-stage for the 51 sites. The site number in the table corresponds to those in Fig. 1 and the site report list.

No. Site name	Excavated area (m^2)	Total	Sub-stages					
			a_1	a_2	b_1	b_2	b_3	c
KANAGAWA PREFECTURE								
1. Gondaike-higashi	*1500	1	—	—	1	—	—	—
2. Hosoda	*4000	4	—	—	—	4	—	—
3. Kamenokoyama	*2000	3	2	—	1	—	—	—
4. Kamifurusawa-minami	*1100	4	3(4)	—	—	—	—	—
5. Kitagawa	10000	25	4(5)	1	11(19)	—	—	—
6. Nishida No. 1	2400	1	—	—	1	—	—	—
TOKYO								
7. Fujinodai	5069	1	—	—	1	—	—	—
8. Heiwanomorikoen-kita	*6000	1	—	—	1	—	—	—
9. Honmachida A	2668	4	—	—	3	—	—	1
10. Houdaitamakochi A-1	5000	1	—	—	1	—	—	—
11. Kawashimadani No. 2	5800	4	—	—	4	—	—	—
12. Kawashimadani No. 10	7600	4	—	—	4	—	—	—
13. Kawashimadani No. 11	2740	4	—	—	4	—	—	—
14. Nasunahara No. 1	17500	1	—	—	1	—	—	—
15. Nasunahara No. 3	8000	1	1	—	—	—	—	—
16. Oyamada No. 12	3050	3	—	—	3	—	—	—
17. Shimoyama	*4200	1	—	—	—	1	—	—
18. Tama New-town No. 122	2100	1	—	—	1	—	—	—
19. Tama New-town No. 207	6936	1	—	—	—	—	—	1
20. Tama New-town No. 358	3800	5	—	—	4	—	—	1
21. Tama New-town No. 359	6200	2	—	1	1	—	—	—
22. Tama New-town No. 406	9800	3	—	—	3	—	—	—
23. Tama New-town No. 457	7500	3	—	1	2	—	—	—
24. Tama New-town No. 699	6010	2	—	—	2	—	—	—
25. Tama New-town No. 740	57000	2	—	—	2	—	—	—

Table 2. Continued

No. Site name	Excavated area (m^2)	Total	Sub-stages					
			a_1	a_2	b_1	b_2	b_3	c
SAITAMA PREFECTURE								
26. Amakasubara	*5800	1	—	—	—	1	—	—
27. Chaya	1400	1	—	—	—	1	—	—
28. Fukasakutobu	*5300	4	1	1	1	—	—	1
29. Hikawa	3900	4	3	1	—	—	—	—
30. Hiramatsudai	*4000	1	—	—	—	1	—	—
31. Kake	3000	4	—	2(4)	—	—	—	—
32. Kamakura-koen	4500	1	—	—	—	1	—	—
33. Kamiminamihara	3700	11	—	—	3	8	—	—
34. Kanahorizawa	2500	2	—	1	1	—	—	—
35. Kitabukuro	4300	1	—	—	1	—	—	—
36. Kitakaido	4163	3	2(3)	—	—	—	—	—
37. Miyabayashi	6240	3	2	1	—	—	—	—
38. Obusato	14000	3	3	—	—	—	—	—
39. Ooyaba	6900	1	1	—	—	—	—	—
40. Shiroishijoshinai	6500	1	—	—	—	1	—	—
41. Suwayama	*2000	3	—	—	3	—	—	—
42. Tokoojiura	1800	3	—	—	—	2	1	—
43. Tsukaya	22000	23	5	6	4	7(8)	—	—
GUMMA PREFECTURE								
44. Inariyama	1600	8	—	6	—	—	2	—
45. Konita A	11410	8	1	—	3	3	1	—
46. Konita D	4200	9	—	—	—	7	1(2)	—
47. Kumano	12558	2	—	1	—	1	—	—
48. Nakadana	4800	14	4	—	3	5(7)	—	—
49. Nakaune	5600	3	1	—	—	—	2	—
50. Ninoseki	15000	7	—	—	—	—	6(7)	—
51. Suwa-nishi	7170	1	1	—	—	—	—	—

Numbers in brackets indicate total numbers of dwellings for that sub-stage but with each overlapping dwelling counted separately. Total means the number of all Moroiso stage dwellings in each site. Excavated areas of each site are also shown in this table, as recorded in site reports. * means that the value is broadly calculated from maps in site reports, since precise data were unavailable.

per sub-stage that have a given number of dwellings. Since the same site often includes two or more sub-stages, the total in Table 3 does not coincide with the number of analyzed sites, the 51 sites being sub-divided into 78 hypothetical occupations.

The results show that in 69 cases (88 percent of the total) the maximum number of dwellings per sub-stage was from one to four (Group A), with a mean number of dwellings per sub-stage of 1.8 ($\pm$1.1). It is significant that in all six sub-stages

Table 3. Number of sites having a given number of dwellings in each sub-stage.

Group	Number of dwellings	Sub-stages						Total (n=78)
		a_1 (n=15)	a_2 (n=11)	b_1 (n=28)	b_2 (n=14)	b_3 (n=6)	c (n=4)	
A	1	6(40.0)	8(72.7)	12(42.9)	7(50.0)	3(50.0)	4(100.0)	40(51.2)
	2	3(20.0)	1(9.1)	3(10.7)	1(7.1)	2(33.3)		10(12.8)
	3	3(20.0)		7(25.0)	1(7.1)			11(14.1)
	4	2(13.3)		5(17.9)	1(7.1)			8(10.3)
B	5	1(6.7)			1(7.1)			2(2.6)
	6		2(18.2)			1(16.7)		3(3.8)
	7				2(14.3)			2(2.6)
	8				1(7.1)			1(1.3)
	9							
	10							
	11			1(3.6)				1(1.3)
mean		2.3	2.0	2.5	3.1	2.2	1.0	2.4
S.D.		1.3	1.9	2.0	2.5	1.8	0.0	2.0

The total in the table does not coincide with the number of analyzed sites, since two or more sub-stages are often present in the same site.

The percentage was added in parentheses.

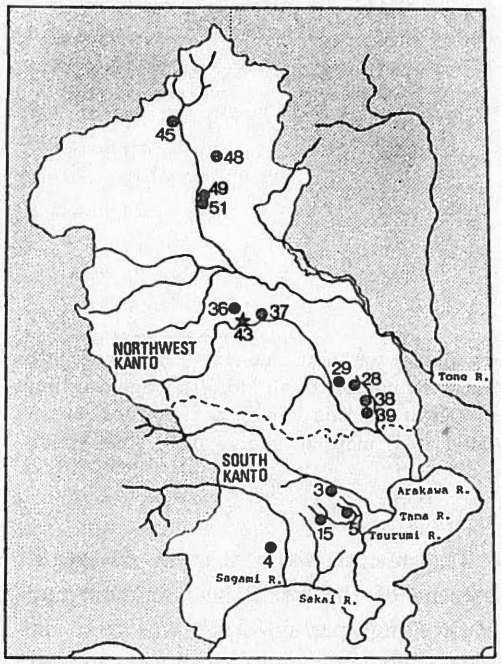

Fig. 3. Distribution of sites in the Moroiso a_1 sub-stage. ● indicates Group A sites. ★ indicates Group B sites.

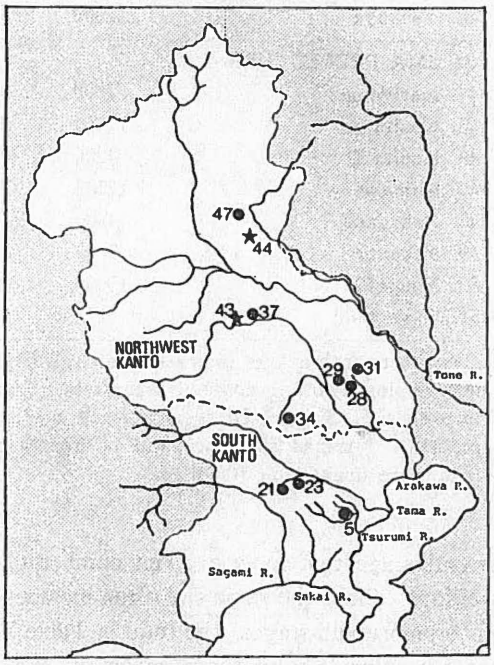

Fig. 4. Distribution of sites in the Moroiso a_2 sub-stage.

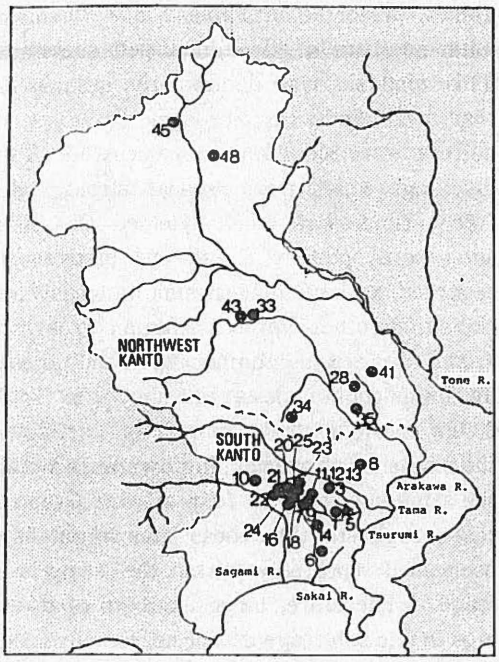

Fig. 5. Distribution of sites in the Moroiso b_1 sub-stage.

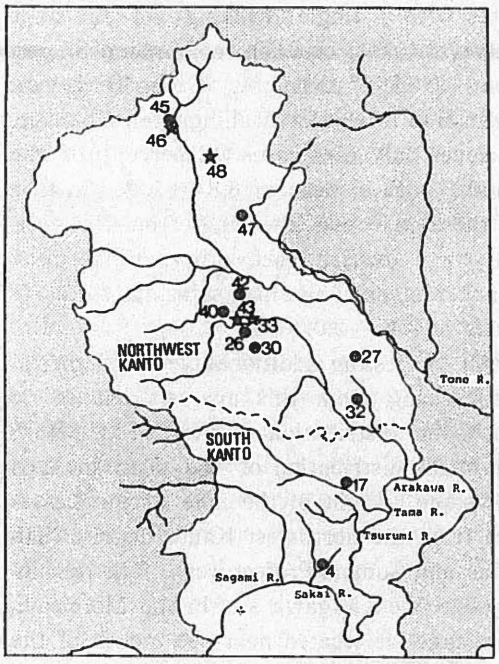

Fig. 6. Distribution of sites in the Moroiso b_2 sub-stage.

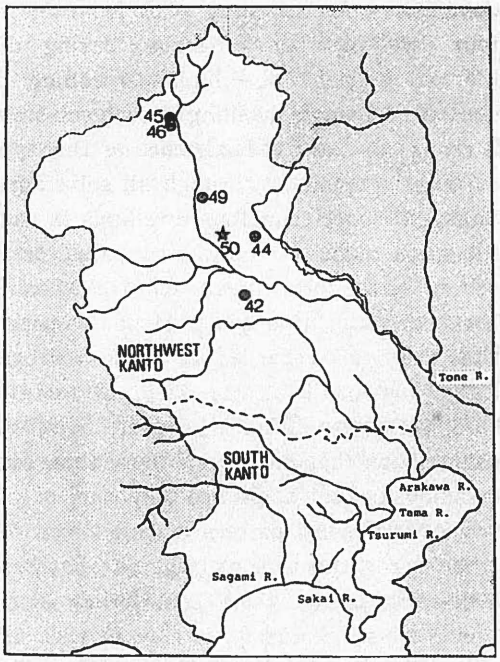

Fig. 7. Distribution of sites in the Moroiso b_3 sub-stage.

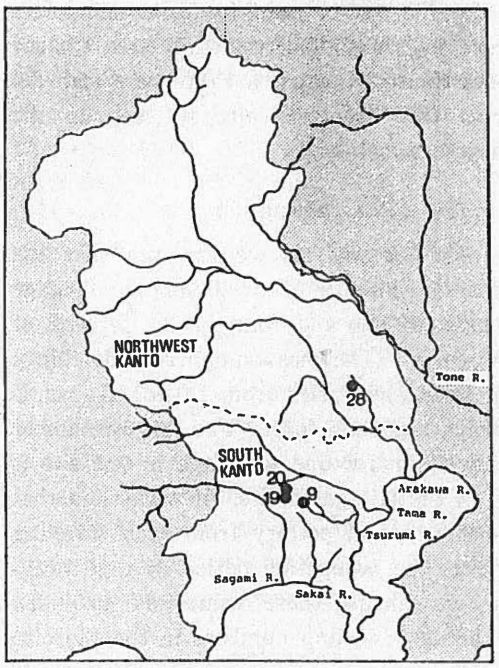

Fig. 8. Distribution of sites in the Moroiso c sub-stage.

sites with a single dwelling per sub-stage were the most common, comprising 57 percent (40/69) of Group A. Group B, having from five to eleven dwellings per sub-stage, includes only nine cases (12 percent of the total), with a mean of 6.8 (±1.7). In four of these nine cases, dwellings from the same sub-stage overlap each other. The mean number of dwellings per sub-stage for all 78 cases is 2.4 (±2.0).

An interesting additional piece of information arising from this analysis has to do with the distribution of sites. Fig. 3 to 8 show the distribution of the sites in each sub-stage. Eight of the nine Group B cases are from the northwest Kanto district (Saitama and Gumma Prefectures). The remaining one (the Kitagawa site in the Moroiso-b_1 sub-stage) is located near the mouth of the Tsurumi River in the south Kanto. These figures also show that the number of sites in the Moroiso-b_3 and Moroiso-c sub-stages decreased throughout the study area. In the south Kanto (Kanagawa Prefecture and Tokyo), this trend is already seen in the Moroiso-b_2 sub-stage.

Discussion

From this analysis we can see that the maximum number of dwellings per sub-stage is between one and four in 88 percent of the cases. The mean number of dwellings per sub-stage varies from 1.0 to 3.1, but is always less than four. The largest number of dwellings for one sub-stage in one site is 11, in the Kitagawa site. If we assume that the sub-type of pottery from each dwelling reflects the occupation period of that dwelling, we can use these values as an index of actual dwelling numbers in the Moroiso stage.

It should also be remembered that these values, presented in Table 2, are the maximum numbers of dwellings per sub-stage. This analysis was done on the assumption that dwellings with the same sub-type of pottery were simultaneously occupied. Two dwellings which were used at slightly different times but which yielded the same sub-type of pottery, might be erroneously regarded as having been simultaneously occupied. In other words, within an excavated area, the actual number of simultaneous dwellings could be less than shown in Table 2, but it could not be more. In particular, the existence of overlapping dwellings within the same sub-stage in four of nine Group B cases suggests that these sites might have been used repeatedly within the same sub-stage. Therefore, large numbers of dwellings in one sub-stage do not necessarily mean large occupations at one time.

The data presented here indicate the dominance of small sites, with from one to four dwellings per sub-stage, during the Moroiso stage. The high percentage of sites with a single dwelling in each sub-stage is remarkable, and the existence of this type of site is apparent through all sub-stages. Sites with more than four dwellings in each sub-stage make up only nine cases, or 12 percent of the total. Because of the Minamibori excavation this type of large occupation sites has been regarded as typical of the Early Jomon (TSUKADA 1966, SUGAWARA 1972, OKAMOTO 1975). However, these results show that sites with more than four dwellings per sub-stage are only part of the whole settlement pattern of this stage. In other words, this type of large site has been over-emphasized when considering Early Jomon sites. Similarly, it may be that the conventional view of Jomon sedentism, which is based on the existence of large sites, has

here was incomplete, there are a number of useful observations to be made:

1) The data presented here indicate the dominance of small occupation sites during the Moroiso stage. 88 percent of those analyzed in this paper were found to be containing between one to four dwellings per sub-stage, and 57 percent of these small cases had only one dwelling per sub-stage. Clearly, large sites, which are only one part of the whole settlement pattern of this stage, have been over-emphasized when considering the Early Jomon sites,

2) the dominance of small sites must be considered before using site size data when making population size estimations,

3) the presence of large inland sites in the northwest Kanto district shows that such large sites were not restricted to just the coastal areas around Tokyo Bay,

4) the number of dwelling sites of all sizes decreased in the Moroiso-b_3 and Moroiso-c sub-stages.

These observations could not have been made if the sites had not been sub-divided into different occupation stages on the basis of detailed pottery chronology. Further, it has become apparent from this short study that careful evaluation of site function, particularly for small sites, is necessary if we are to obtain reasonable census estimates and to make any reasonable interpretations that are based on site counts and site size data.

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抄　録

縄文時代前期諸磯式期の遺跡における竪穴住居の数

羽生淳子

本稿の目的は，縄文時代の遺跡における実際の住居の数を復元することである．縄文時代の遺跡では，通常，複数の竪穴住居址が発見されるが，現在の自然科学的な年代測定方式等をもってしても，同時に存在した住居の数を推定することは困難である．一方，縄文時代の考古学では，非常に精緻な土器の分類学的編年研究が行われている．分類の最小単位は，土器の細分型式であり，これに基づいて設定された細分型式期は，現時点で使用可能な最小の時間単位である．この研究の成果を用いて，遺跡を構成する複数の竪穴住居址を，各細分型式期にグルーピングする．もし，この基準でグルーピングされた住居址は同時に存在していたと仮定するならば，各細分型式期における住居の数を推定することができる．このような研究は，縄文時代における居住形態や集落人口などの人類学的な問題を考えるための基礎的な資料となる．ここでは，関東地方の一都三県（東京・神奈川・埼玉・群馬）に分布する，縄文時代前期後半諸磯式期（約5000年前）の遺跡を対象として，同時に存在したと考えられる住居の数の推定を試みた．

分析に用いた資料は，諸磯式期の竪穴住居址が検出された遺跡のうち，(1) 発掘面積が1,000平方メートル以上であり，(2) 報告書等から各住居址の時期を推定し得る，という2点の基準を満たす51の遺跡である (Fig. 2)．分析方法は，以下の通りである．

各遺跡の竪穴住居址を，出土土器の細分型式に基づき，諸磯 a_1 式期，a_2 式期，b_1 式期，b_2 式期，b_3 式期，c式期の6つの細分型式期に分類する．そして，各遺跡における同一の細分型式期の住居址数を，その時期のその遺跡における最大住居址数とする．なお，同一細分型式期の住居址が重複している場合には，1軒として計算する．

Table 2 は，以上の方法を用いて，各遺跡における各細分型式期の最大住居址数を算出した結果である．Table 3 は，細分型式期毎に，遺跡毎の最大住居址数の頻度分布を示したものである．51の遺跡は，各細分

型式期を1回の居住と仮定した場合，78回の居住に分類される．分析結果の中で，特筆に値する点を下記に要約する．

分析対象となった78事例の全体の平均値は，2.4(±2.0)であった．このうち，69例(88%)は，最大住居址数が4以下のグループ（グループA）に分類された．このグループにおける最大住居址数の平均は，1.8(±1.1)である．このうちの40例（グループAの57%）は，最大住居址数が1の例であった．一方，最大住居址数が5以上の例（グループB）は，78例中9例（12%）を占めるに過ぎない．グループBの最大住居址数の平均は6.8(±1.7)であり，最大値は11である．

諸磯式期の集落遺跡としては，神奈川県南堀貝塚が有名であり，しばしば，縄文時代前期の遺跡の典型例として引用されている（塚田 1966，菅原 1972，岡本 1975）．南堀貝塚では，48軒の住居址が台地上に馬蹄形に分布しており，一時期の住居の数は，6，7軒から10軒と推定されている（和島 1958）．小山修三は，このようなタイプの大規模な遺跡の住居址数を，縄文時代前期から後期の遺跡における住居の数の典型として，縄文時代の人口推定を試みている(Koyama 1978)．しかしながら，上記の分析結果は，このような大規模な遺跡が，この時期の住居址を伴う遺跡の中では，低い割合を占めるにすぎないことを示すものである．定型的な大規模集落の出現は，縄文時代前期以降の，集落規模の拡大と各遺跡に対する定住性の強化を推定する一つの根拠とされてきたが，今回の分析結果は，縄文時代の居住形態の復元を試みる際に，小規模な遺跡の存在を考慮にいれる必要性を示すものである．今後，住居址数以外の考古学的資料を用いて，小規模な遺跡が，季節的ないし一時的な居住の跡で，大規模な遺跡とは異なる性格のものであったのか，あるいは，基本的には大規模な遺跡と同等な機能を有していたのかを検討する必要がある．

各細分型式期における分析資料の分布の時間的変化を調べた結果，分析対象とした地域内では，諸磯b_3式期と諸磯c式期の遺跡数が著しく減少していることがわかった（Fig. 3～8）．縄文時代における遺跡数の減少に関して，今村啓爾（1977）は，後期初頭の称名寺式期（約4000年前）における関東地方の遺跡数の減少と遺跡規模の縮小を指摘し，これを人口の減少と考えた上で，縄文時代の人口は，何度も増減を繰り返していたのではないか，とする考えを示した．称名寺期において認められた，遺跡の密度と遺跡の規模との関係が，縄文時代一般に当てはまるならば，諸磯式期に小規模な遺跡が非常に高い割合で存在するという事実は，この時期の遺跡数の減少と関連している可能性がある．

縄文時代前期後半における遺跡の規模と地理的分布との関連に関して，小薬一夫（1985）は，大規模な集落が海浜部に分布し，小規模な集落が内陸部に分布すると指摘している．Fig. 3～8には，グループBの遺跡を★印で示している．グループBに属する9例のうち，8例までは，内陸部（関東地方北東部）に分布する．すなわち，今回の分析の結果は，小薬の指摘とは一致しなかった．諸磯式期には，貝塚と多数の住居址を伴ういくつかの遺跡が，鶴見川下流域や，荒川下流域に分布することが知られている．これらの多くは，発掘報告書が未刊行であったり，調査面積が1000平方メートル以下であるため，今回の分析対象には含まれていない．したがって，今回の分析結果は，今後さらに例数をふやして再検討する必要がある．

以上の分析の結果，諸磯式期の住居址を伴う遺跡に関しては，一時期の住居の数が4軒以下と考えられる資料が大部分を占めることが明らかになった．多数の住居址を伴う大規模な遺跡は，縄文前期遺跡のひとつの典型とみなされてきた．しかし，今回の分析の結果では，このような遺跡は，諸磯式期のセトルメント・パターン全体の一断面を示すにすぎないということになる．

今回の分析で，時間単位の基準とした，土器の細分型式に関する詳細な研究は，日本の考古学に独自のものである．今回の研究は，このような土器の分類学的な研究の成果が，編年学的な研究にとどまらず，遺跡の規模や構造という考古学上の基本問題を検討する素材としても有効であることを示している．

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(Each number corresponds to a site number used in Fig. 1 and Table 2.)

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