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# Ancient Jomon of Japan

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Junko Habu      2004

# 1 Introduction

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## Goals and scope of this book

The “fire-flame” pottery shown on the cover of this book represents the apogee of a truly remarkable artistic tradition. It was made by a Middle Jomon potter who lived on the Japanese archipelago more than 4,000 years ago. The tradition of Jomon pottery production goes back much further in time, to approximately 16,500 years ago (13,780 uncalibrated bp). It makes the Jomon people the first in the world to have mastered the technology of transforming pliable clay into hard and durable containers.

“Jomon” is the name of a prehistoric culture and period that flourished on the Japanese archipelago for more than 10,000 years. The Jomon period follows the Palaeolithic period, and precedes the agricultural Yayoi period. Unlike most prehistoric pottery-using peoples, the people of the Jomon period are thought to have been mainly hunter-gatherer-fishers.

Artistic sophistication of pottery is only one aspect of this complex hunter-gatherer culture. From many excavations, we know that some Jomon settlements were enormous, as large as modern baseball stadiums: in fact, one such settlement was discovered in northern Japan in the process of building a baseball stadium (fig. 1.1; see also chapter 4). Jomon people also engaged in extensive trade networks that included artifacts of obsidian and jade. These findings are extraordinary for early prehistoric hunter-gatherer cultures, and they provide invaluable information for our understanding of the development of cultural complexity in human history.

This book is about the life and culture of the Jomon people, including food, houses, burials, art, and crafts. Its publication is especially timely, given the large number of recent excavations. Over the past several decades, tens of thousands of Jomon sites have been excavated with systematic financial support from various levels of government. The results of these excavations are commonly available in the form of published reports. Many of these rescue excavations are also quite large in scale,



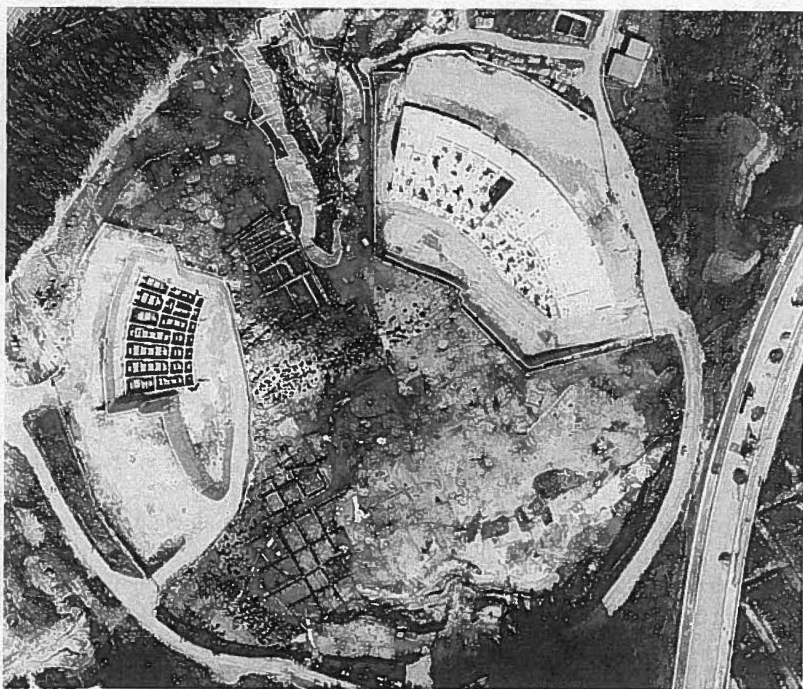


Figure 1.1 Excavation of the Early and Middle Jomon Sannai Maruyama site, Aomori Prefecture (from Aomori-ken Kyoiku-cho Bunka-ka 1996b: ii; permission for reproduction obtained from Aomori-ken Kyoiku-cho Bunka-ka)

and often cover an area of tens of thousands of square meters. Because these excavations are salvage projects, they are often conducted under restricted research strategies; typically, time and funding constraints are major problems. Nevertheless, the advantages of having this enormous body of data far exceed the disadvantages of these limitations. It should be noted, for example, that Japan is one of the few countries in the world where regional settlement pattern analyses can be conducted through archival research of published site reports.

Despite these exciting aspects, and despite strong interest in the Jomon culture among Anglo-American archaeologists (i.e., archaeologists in English-speaking countries including the United States, Canada, England, Australia, and New Zealand), relatively little of Jomon archaeology has been introduced to the English-speaking audience. This is

because most of the archaeological literature about the Jomon is written in Japanese.

My goal in this book is to bridge this gap between the academic traditions of Japanese archaeology and Anglo-American archaeology. As a Japanese archaeologist trained first in Japan and then in North America, I believe that studies of the Jomon period can contribute significantly to our understanding of hunter-gatherer behavior and variability in world prehistory. At the same time, I am convinced that active interaction between Japanese and other archaeological traditions is critical to enhance our understanding of the Jomon culture. To achieve this goal, examinations of the conditions, causes, and consequences of the development of the Jomon culture will be presented through analyses of various components of the Jomon culture, including subsistence, settlement, ritual, crafts, and exchange.

Although many of the theoretical and methodological approaches applied to Jomon data in this book have their origins in Anglo-American archaeology, it is not my intention to suggest that these theoretical and methodological approaches are superior to those of Japanese archaeology. Rather, throughout the book I will argue that the adoption of different approaches can reveal different aspects of the Jomon culture. This may then lead to new interpretations of old data, and to the discussion of the advantages and limitations of various approaches adopted by archaeologists from each of the two academic traditions.

The geographic areas covered in this book include the four main islands of the Japanese archipelago (Hokkaido, Honshu, Shikoku, and Kyushu) and smaller islands in the vicinity of these four islands (fig. 1.2). Although the four islands correspond to the principal part of the present territory of Japan, throughout this book I have tried as much as possible to avoid the words "Japan" or "Japanese" when describing the Jomon period. This is because the Jomon period was the time prior to the formation of the ancient Japanese state (for critical discussions on the concepts of "Japan" and "the Japanese," see, for example, Amino 1997). The relationship between the culture/people of the Jomon period and the contemporary Japanese culture/people will be discussed in the last section of the second chapter. The word "Japan" is retained in the title of this book "Ancient Jomon of Japan" only for the sake of simplicity.

The word "Japan" is also retained when I talk about "eastern Japan" and "western Japan" as regional units. Following the Japanese convention, "eastern Japan" refers to the northeastern half of the Japanese archipelago (Hokkaido, Tohoku, Kanto, Chubu, Hokuriku, and Tokai regions), whereas "western Japan" refers to the southwestern half (Kinki, Chugoku, Shikoku, and Kyushu regions).

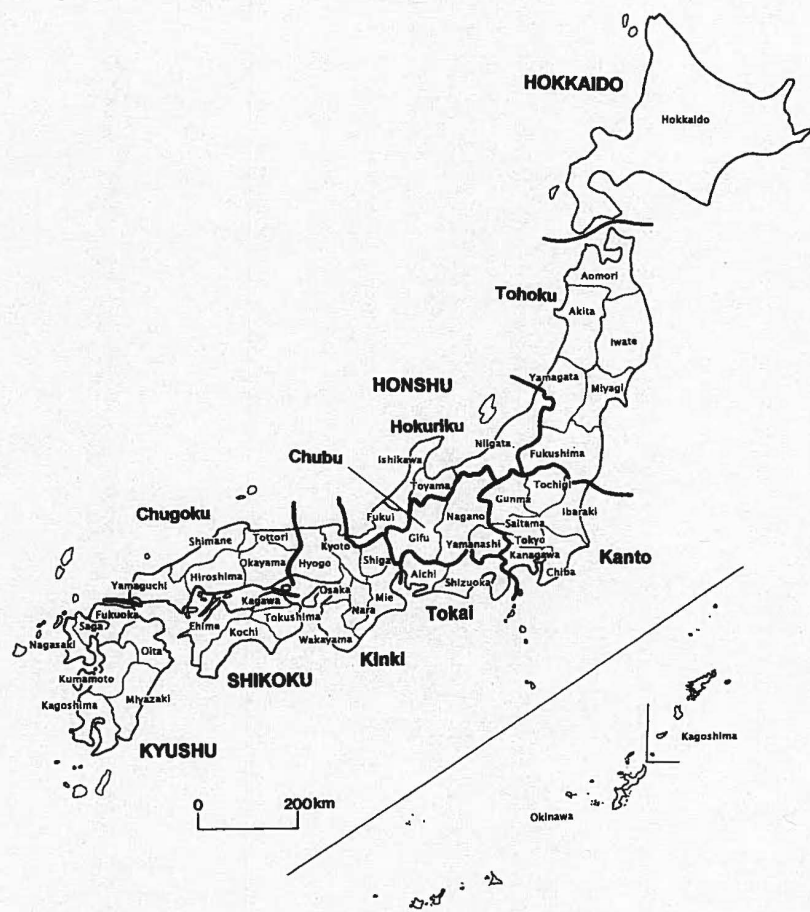


Figure 1.2 Prefectures and regions of Japan

**BOX 1: English publications on Jomon archaeology**

Very few English-language publications provide comprehensive coverage of the current status of Jomon studies. While a fair number of books have been published on Japanese archaeology (e.g., Aikens and Higuchi 1982; Aikens and Rhee 1992; Akazawa and Aikens 1986; Barnes 1993; Chard 1974; Groot 1951; Hudson 1999; Kidder 1968; Mizoguchi 2002; Pearson 1992; Pearson et al. 1986a), most of them were written either during or before the 1980s, or have only a limited number of chapters on the Jomon

**BOX 1: (cont.)**

period. One of the few exceptions is Keiji Imamura's (1996) *Prehistoric Japan*. In this book, Imamura does an excellent job of summarizing the recent results of prehistoric Japanese archaeology with an emphasis on Jomon studies (see Habu 1999). However, despite its strengths, the book contains only a limited discussion of the theoretical and methodological implications of Jomon studies in the context of world archaeology.

Part of this isolation of Jomon studies in the context of world archaeology comes from the fact that the results of Jomon archaeology are published primarily within Japan and in Japanese. Even before the 1970s, when the amount of available data was relatively small, presenting the results of Jomon archaeology in non-Japanese languages was a difficult task. Today, with an overwhelming number of excavation records published in both academic and popular forms, it seems almost impossible to summarize succinctly the results of Jomon archaeology. At the same time, differences in theoretical and methodological approaches make the active interaction between Japanese and other archaeological traditions difficult (Habu 1989a). On the one hand, many Japanese archaeologists, who have been trained in the tradition of "archaeology as history," feel that Japanese prehistoric cultures, including Jomon, are historically unique. Consequently, they believe that direct comparisons with other prehistoric cultures will provide little help in interpreting Jomon data (e.g., Anazawa 1985). On the other hand, many of the non-Japanese archaeologists who are interested in Jomon archaeology are frustrated by the overemphasis on pottery typologies created by Japanese researchers, as well as by their culture-historical and/or empiricist research orientation. This frustration is particularly noticeable in the writings published by North American and British archaeologists (see, e.g., Barnes and Okita 1999; see also Bleed 1989).

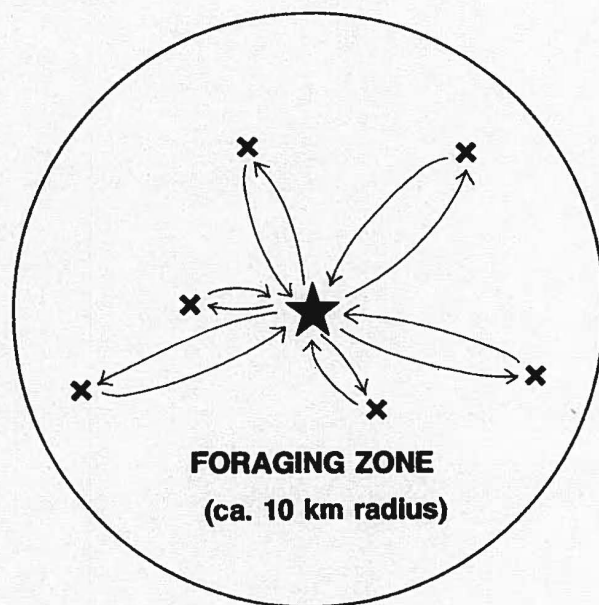
**Theoretical approaches**

This book uses two different theoretical perspectives to achieve the goal described above. First, it analyzes hunter-gatherer cultural complexity from the perspective of an ecological model. Second, it recognizes that no archaeological practice is separate from the social contexts in which it is conducted.

*An ecological approach to hunter-gatherer cultural complexity: the collector-forager model*

The first theoretical perspective adopted in this book is derived from ecological anthropology, which can be briefly defined as "the study of cultural behavior in its natural and social environment, in terms of its relationship to this environment" (Jochim 1979: 77–78). Specifically, this book uses the collector-forager model, an ecologically based model developed by Binford (1980; 1982; 1983; 1990). This model posits the existence of a direct relationship between resource distribution, subsistence activities,





★ = RESIDENTIAL BASE  
 x = RESOURCE EXTRACTION LOCATION

Figure 1.3 Characterization of a forager system

and settlement patterns. According to this model, subsistence-settlement systems of hunter-gatherers can be divided into two basic types: (1) forager systems, which are characterized by high residential mobility, and (2) collector systems, which are characterized by relatively low residential mobility.

Figure 1.3 illustrates key characteristics of the forager system. In an environment where resource distribution is homogeneous, hunter-gatherers tend to acquire food and other necessary resources on a day-to-day basis near their residential base. The daily resource acquisition area is called the *foraging zone*. The radius of the foraging zone is about 10 kilometers, or two hours' walk. In this model, it is expected that when foragers exhaust food within the foraging zone, they move their residential base to a new place. Absence of food storage characterizes forager systems. Figure 1.4 illustrates an example of foragers' annual residential moves, using the data of the G/wi San of the Kalahari Desert. In this

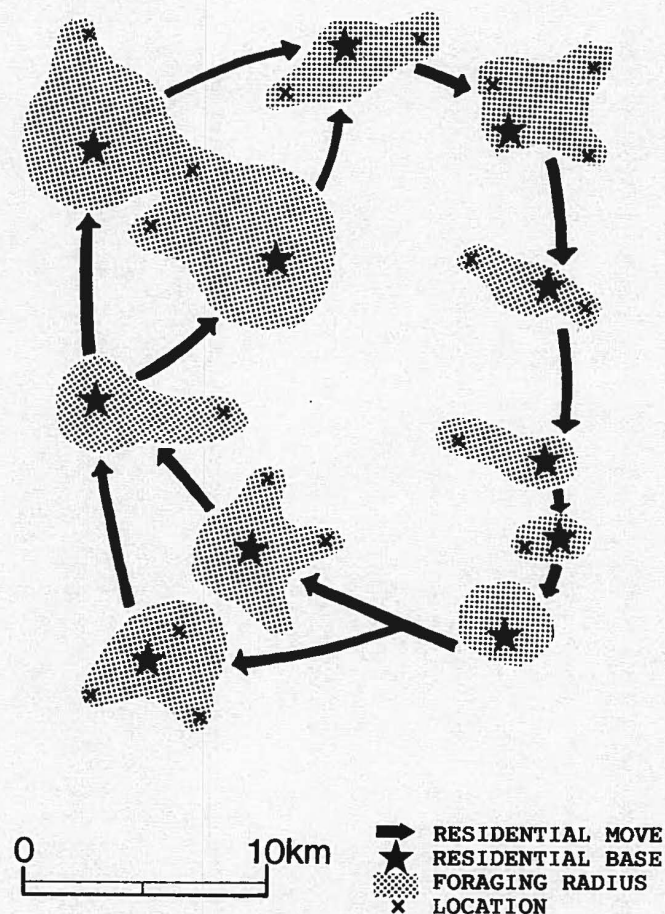


Figure 1.4 Schematic representation of a forager settlement pattern (modified and redrawn from Binford 1980: 6)

example, a total of nine residential moves per year take place. Ethnographic data indicate that foragers move their residential bases anything from five to forty-five times a year (Binford 1980: 7).

Compared to foragers, collectors are more sedentary. Figure 1.5 illustrates key characteristics of a collector system. When the distribution of critical resources is spatially and/or seasonally uneven, hunter-gatherers tend to organize their subsistence activities logistically; i.e., in addition to daily food-gathering activities within the foraging zone, collectors send

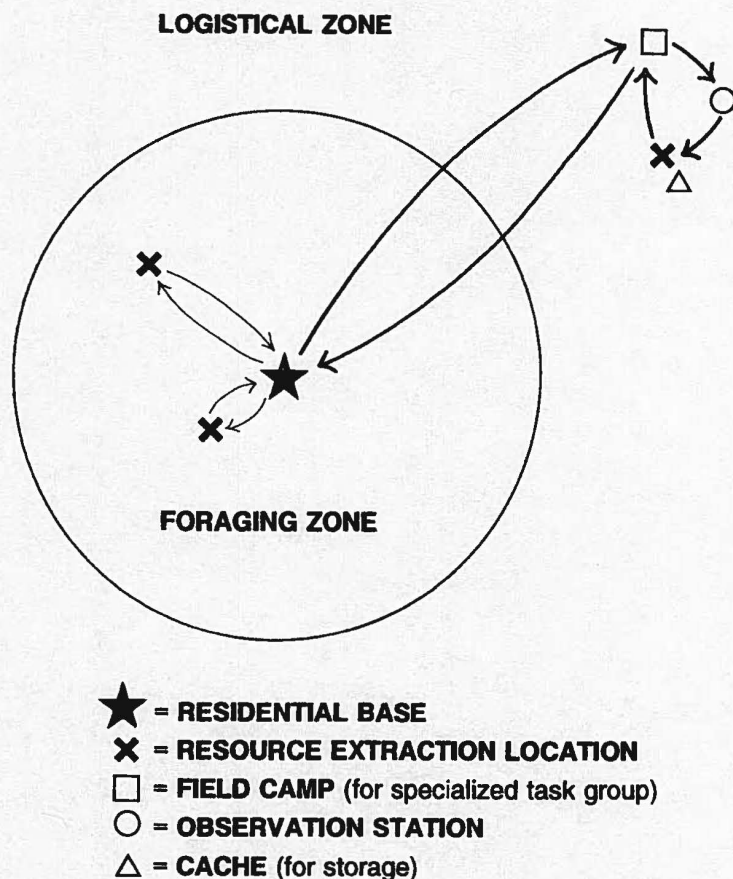


Figure 1.5 Characterization of a collector system

specialized task groups to acquire food resources located outside the foraging zone (called *logistical zone*), and bring them back. Food storage is an important part of collectors' subsistence strategy. Figure 1.6 represents an example of collectors' settlement patterns using the data of the Nunamiut in Alaska. As indicated in the figure, the majority of collectors move their residential bases only a few times a year. In this example, the group forms a large residential base at settlement #1 in the figure, staying there from the fall to the spring. In the early summer, they move the whole village to settlement #2, because #2 is more convenient for

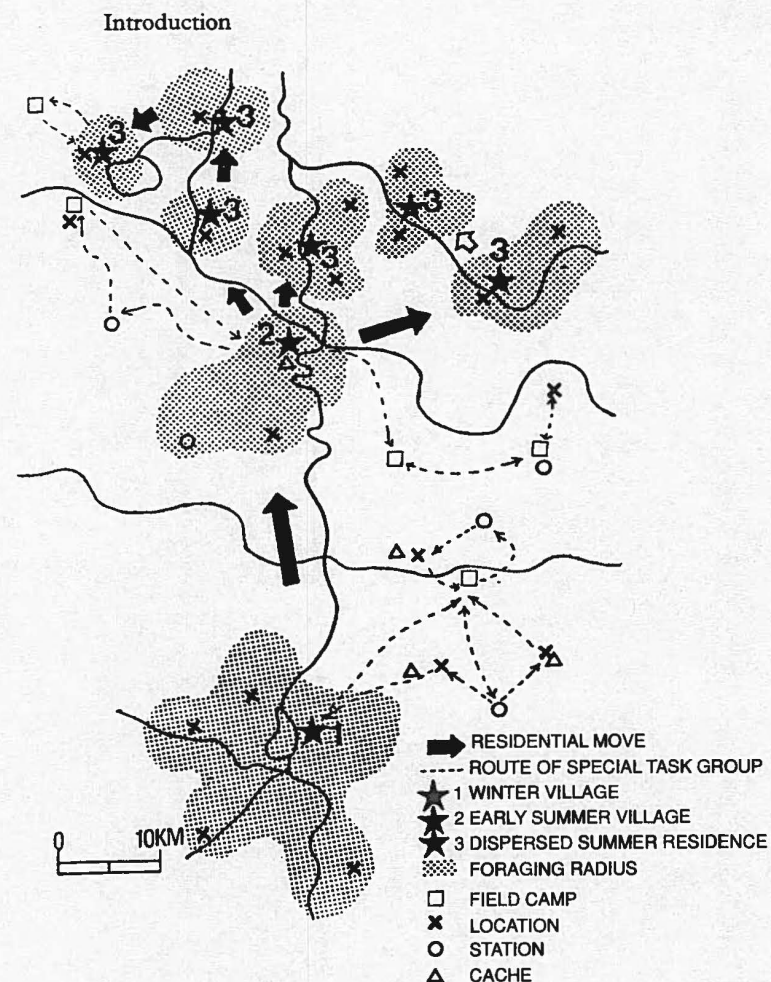


Figure 1.6 Schematic representation of a collector settlement pattern (modified and redrawn from Binford 1980: 11)

summer subsistence activities than #1. In the late summer, the group disperses to smaller residential bases at settlements #3.

According to Binford (1980: 12), forager and collector systems are not polarized types of systems but lie on a continuum from simple to complex. As these systems incorporate relatively more logistical components, the role and importance of residential mobility will change. In other words, when we examine subsistence-settlement systems of the Jomon people, it is unlikely that we will find "pure" collecting or "pure" foraging



systems; most systems will be placed somewhere on the collector–forager continuum. However, the two extremes provide the necessary reference points from which I interpret actual subsistence–settlement systems of hunter-gatherers.

Although all of the ethnographic examples of collectors presented by Binford (1980; 1982) are groups with seasonal moves, theoretically collectors may stay in permanent residential bases throughout the year. In reality, such societies are rare, one of the few ethnographically documented exceptions being the Ainu in Hokkaido (H. Watanabe 1972). The settlement patterns of the Ainu people are shown in fig. 1.7; in this example, the Ainu people maintain a year-round residential base. This type of system occurs only when all the seasonally important resources are available from a single residential base. I call this type *fully sedentary collectors*.

Unlike many other ecological models of hunter-gatherer subsistence and settlement, which attempt to develop general models deductively by using ecological and economic principles, the collector–forager model is an informal model based on ethnographic examples; i.e., the model is inductive in its origin. Because of this characteristic, some Japanese archaeologists have expressed their skepticism about the usefulness of the model for the analysis of Jomon data. For example, Fujio Sasaki (1993) suggests that the collector model is not applicable to Jomon hunter-gatherers of the temperate zone since it is based on the ethnographic example of the Nunamiut, who lived in the Arctic. However, as an informal model, I find its applicability surprisingly wide. As articles in Fitzhugh and Habu (2002a) indicate, with some modifications the model is applicable to numerous archaeological and ethnographic cases from various parts of the world.

Although the collector–forager model (Binford 1980; 1982) is an ecological model, my use of it in this book does not mean that the environment is assumed to be the single causative factor of all human behavior, nor does it imply that the study of subsistence and settlement is more important than the study of social and ideological aspects of the Jomon culture. Rather, the collector–forager model is used as an explanatory device; i.e., although strong correlations between resource availability, subsistence activities, and mobility patterns are assumed, other factors are also thought to be potentially of equal influence in defining the lifeways of the Jomon people and their changes over time. For example, a case study of long-term settlement pattern changes in the Kanto and Chubu regions is presented on pages 87–108. This case study suggests that a shift from collectors to foragers in one region may have triggered a system change in another region. Although I explain these

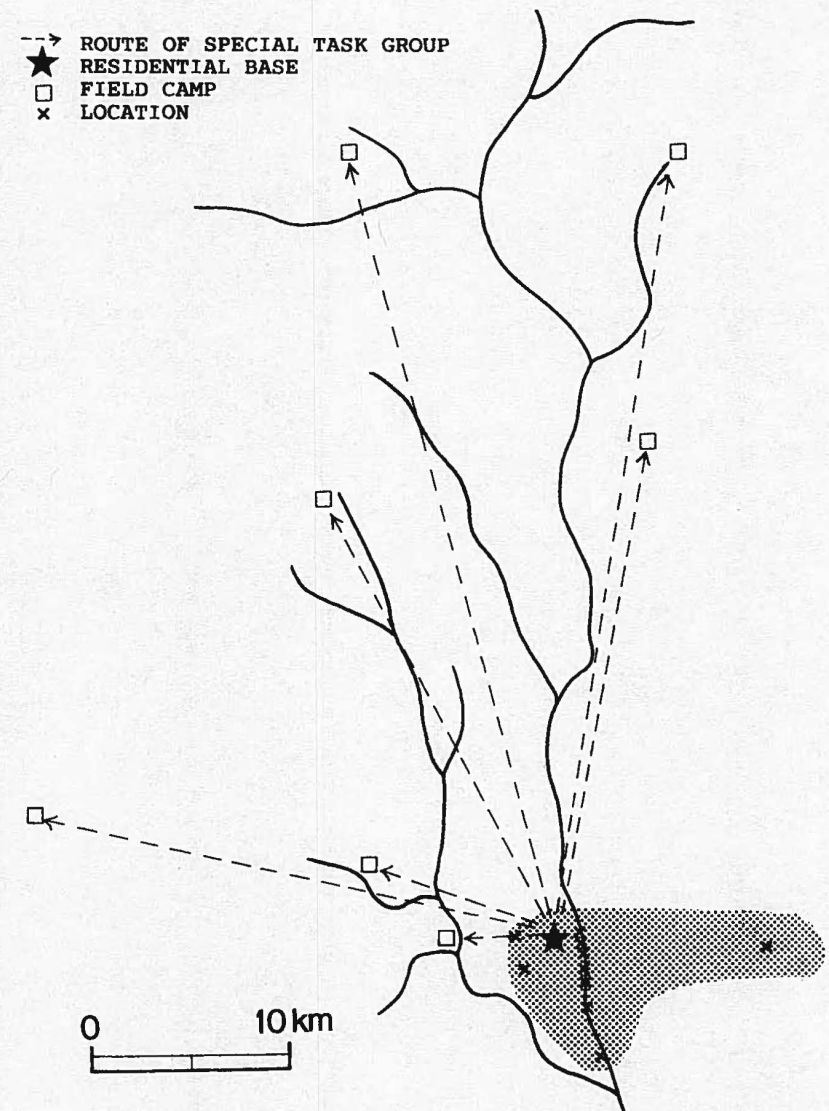


Figure 1.7 Schematic representation of a settlement pattern of fully sedentary hunter-gatherers (modified and redrawn from Hitoshi Watanabe 1972: map 2)

changes within the framework of the collector–forager model, the results of my analysis indicate that historically unique factors may be critical in understanding subsistence and settlement changes in this particular area.

The use of the collector–forager model does not imply that the Jomon people were relying exclusively on hunting–gathering–fishing. Analysis of floral remains indicates that several cultigens, including *egoma* (*Perilla frutescens* var. *japonica*) or shiso mint (*P. frutescens* var. *crispa*), bottle gourd (*Lagenaria siceraria*), and possibly barnyard millet (*Echinochloa utilis*), were present by the time of the Early Jomon period. Moreover, seven rice (*Oryza sativa*) grains were recovered from the Late Jomon Kazahari site in Aomori Prefecture (D’Andrea et al. 1995). For the moment, however, no archaeological data indicate that any of these cultigens were staple foods for the Jomon people. As Anderson’s (1988) study in New Zealand reveals, hunter–gatherers can incorporate plant cultivation as a minor component of their subsistence strategies quite easily. His case study can be seen as an example of a collecting system with seasonal moves even though sweet potato cultivation was apparently part of the people’s seasonal subsistence cycle. In any case, if some of the Jomon people, either in a specific region and/or in a particular time period, were relying heavily on cultivated plants, then characteristics of subsistence data and/or settlement patterns are likely to be significantly different from the collector–forager model. Thus, by identifying archaeological cases that do not fit into the collector–forager model, we may be detecting the presence of a new system with a strong emphasis on plant cultivation.

Using the collector–forager model, Part II of this book examines characteristics of Jomon subsistence and settlement. Particular attention is paid to such research topics as the development of sedentism, subsistence intensification, and changes in population density. Topics discussed in chapter 3 include the debate over possible importance of salmon fishing and plant cultivation, food storage, and maritime adaptation. Issues discussed in chapter 4 are closely related to various research topics examined in both traditional settlement archaeology (e.g., Adams 1965; Chang 1968; Flannery 1976; Trigger 1967; 1968; Willey 1953) and processual subsistence–settlement studies.

Following Part II, the two chapters in Part III examine various characteristics of Jomon cultures beyond subsistence and settlement. The collector–forager model (Binford 1980; 1982) assumes that organizational changes in subsistence and settlement would lead to a corresponding social and ideological reorientation. Rather than assuming that social behavior was necessarily structured by subsistence–settlement systems, the two chapters in Part III examine changes in Jomon rituals, crafts, and

exchange networks independently. Articulations between subsistence–settlement and other factors are then discussed in chapter 7 in Part IV.

Topics discussed in chapters 3 to 6 address various issues in recent studies of hunter–gatherer cultural complexity. Characteristics of so-called “complex” hunter–gatherers typically include seasonally and/or spatially intensive subsistence strategies, food storage, sedentism, high population density, elaboration of material culture, and social inequality (Ames 1985; Lightfoot 1993; Price and Brown 1985a; Price and Feinman 1995). Of particular interest in hunter–gatherer archaeological research over the past two decades is the interplay between these cultural elements.

The ambiguity of the concept “complexity” used in hunter–gatherer archaeology has been extensively discussed (e.g., Arnold 1996a; Fitzhugh 2003; Price 2002). According to Price and Brown, “[c]omplexity refers to that which is composed of many different parts” (Price and Brown 1985a: 7, emphasis in original). This is a general perspective shared by many scholars who have been involved in the discussion of the evolution of cultural complexity, including those who are interested in the formation of state-level societies (for overviews of the archaeological study of cultural complexity, see, e.g., McGuire 1983; Tainter 1996). Following this general understanding, Price and Brown state that “we follow a general definition of cultural complexity that focuses on increases in societal size, scale and organization” (Price and Brown 1985a: 8). More recently, Price states that “there is general consensus that complexity means bigger groups, longer stays, more elaborate technology, intensified subsistence, broader resource utilization, and the like” (Price 2002: 418). According to these definitions, “cultural complexity” can be understood as a concept that includes organizational complexity in subsistence and settlement systems. That is, if we follow these definitions, collectors *sensu* Binford (1980), i.e., more logistically organized hunter–gatherers, can be legitimately called “complex” hunter–gatherers regardless of their level of social inequality.

In contrast, some researchers suggest that the word “complexity” should be reserved for those societies with hereditary social differentiation. Focusing on the control of labor by the elite, Jeanne Arnold states that “[c]omplex, as I used it here, distinguishes those societies possessing social and labor relationships in which leaders have sustained or on-demand control over nonkin labor and social differentiation is hereditary” (Arnold 1996a: 78; emphasis in original). She continues that “[c]omplexity, then, relates most fundamentally to two organizational features: (1) some people must perform work for others under the direction of persons outside of their kin group, and (2) some people, including leaders, are higher ranking at birth than others” (Arnold 1996a: 78). This definition, with its



emphasis on labor organization, has its root in a Marxist perspective (see also Arnold 1992; 1995; 1996b).

In this book I adopt the broader definition of "cultural complexity." Following Price and Brown (1985a) and Price (2002), my definition of the concept "cultural complexity" here includes both organizational complexity in subsistence-settlement systems and social complexity. The former can be measured by the degree of the incorporation of various logistical strategies into subsistence-settlement systems, including food storage and the differentiation of site functions. The latter can be measured by the degree of vertical and horizontal social differentiation as well as the degree of the integration of the differentiated parts (Fitzhugh 2003). Under this definition, I consider social stratification as a form of social differentiation, but not necessarily the most important form in understanding the degree of social complexity.

Decoupling the concept of inequality from that of complexity allows us to examine the dynamics of long-term cultural change in human history without necessarily focusing on the development of political hierarchy. This is especially important when we examine hunter-gatherer societies that might not fit into the progressivist model of social evolution. Although the proposition that not all the hunter-gatherers are/were egalitarian or mobile gained significant support during and after the 1980s, long-term changes in hunter-gatherer subsistence, settlement, and society still tend to be interpreted from the perspective of unilinear evolution. However, with an increase in archaeological examples of hunter-gatherers from traditionally underrepresented regions, models that are capable of explaining diversity among different hunter-gatherer groups are increasingly attracting researchers' attention.

Under the broader definition of the concept of "cultural complexity," this book examines regional variability and long-term change in organizational complexity in subsistence and settlement in Part II, and variability and changes in social complexity, including social inequality, in Part III. On the basis of these analyses, the concluding chapter (chapter 7) will present a model that explains the interplay between Jomon subsistence, settlement, and society.

#### *Social contexts of Jomon archaeology*

The second perspective that underlies the discussion in this book is the recognition that no archaeological practice is free from the social contexts in which it is conducted. Although this point has been noted by many scholars with various theoretical backgrounds (e.g., Hodder 1999; Patterson 1995; Schmidt and Patterson 1995; Trigger 1995; Yoffee and

Sherratt 1993), I use the work of Kohl and Fawcett (1995a; 1995b) as my starting point for discussing the social contexts of Jomon archaeology. In the introduction of their edited volume, Kohl and Fawcett (1995a) point out the close relationship between archaeological work and its social, economic, and political contexts. A number of case studies in their edited volume reveal how archaeology in various countries has been used to support specific political perspectives favored by the politicians in power. The volume also shows the close link between archaeology and the construction of national and/or ethnic identities in each country. On the basis of various case studies, Kohl and Fawcett (1995a: 16) suggest that it is necessary to discuss explicitly the positive and negative features of nationalist archaeology and of the sociopolitical/economic contexts in which various archaeological studies are conducted.

Despite the realization of the close link between sociopolitical factors and archaeological interpretations, many authors in the Kohl and Fawcett (1995b) volume are critical of the hyperrelativist position advocated by such scholars as Shanks and Tilley (1987). Trigger (1995), for example, rejects the extreme relativist position taken by some postprocessual archaeologists, and suggests that the growing empirical database recovered by archaeologists should constrain archaeological interpretations. Citing Trigger (1995) and others, Kohl and Fawcett (1995a: 8) argue that even though only a fine line separates legitimate from questionable research, responsible archaeologists should be able to determine the *limits* of the evidence they control, what they can and cannot reconstruct with reasonable confidence from the archaeological record (see also Yoffee and Sherratt 1993; for a criticism of the perspectives of Kohl and Fawcett 1995a and others, see Hodder 1999: 16).

Following the arguments presented in Kohl and Fawcett (1995a), I suggest that particular attention should be paid to the sociopolitical, economic, and historical contexts in which archaeological studies of the Jomon period are conducted both within and outside Japan. In particular, throughout this book, the approaches of the two different academic traditions (i.e., Japanese and Anglo-American archaeology) to various research topics of Jomon archaeology are compared, and the advantages and limitations of these approaches are discussed.

In this time of increasing globalization, many archaeologists who publish primarily in English, particularly those who advocate a postprocessual (or sometimes post-postprocessual) archaeology, have begun to emphasize the importance of concepts such as multivocality and cultural diversity. For example, in his recent work, Hodder (1999) argues that a diversity of views should be espoused, with no singular and unified perspectives on the discipline. Ironically, however, these new perspectives are

primarily espoused by some British and North American archaeologists whose theoretical and methodological background was formed within the Western archaeological tradition. As a result, while many of these new approaches question the validity of the Western-centered perspectives, very few archaeologists from outside the Anglo-American academic tradition are actively involved in these debates. Additionally, many advocates of these new approaches use highly specialized technical terms that are not easy to understand for even native speakers of English. The nuances of these terms are almost impossible for nonnative speakers to comprehend, making the participation of non-Anglo-American archaeologists in these debates even more difficult.

By pointing out these problems, I do not intend to suggest that the issue of multivocality and cultural diversity can be addressed only by archaeologists outside the traditions of Anglo-American archaeology. Clearly, the shift in theoretical direction in British and North American archaeology over the past couple of decades has had the positive effect of broadening theoretical diversity and flexibility. Nevertheless, just as the active participation of female archaeologists was indispensable in the development of gender/feminist archaeology in English-speaking countries in the late 1980s and 1990s (e.g., Gero and Conkey 1991; Wylie 1991; 1993), archaeologists representing a variety of non-Anglophone academic traditions should have opportunities to present their perspectives in the theoretical debates of world archaeology.

Given these circumstances, I believe that the archaeology of the Jomon period can be an interesting test case for exploring how two academic traditions can interact and benefit from each other. Since issues dealt with in Jomon archaeology include various controversial topics in Anglo-American archaeology, such as the origins of pottery and the development of hunter-gatherer cultural complexity, it would have been possible for me to write this entire book as a reinterpretation of Jomon data using a theoretical framework derived from North American archaeology. However, given the complex social and academic milieus that surround both Japanese and Anglo-American archaeologies, detaching the results of Jomon archaeology from their social and academic context and simply presenting them in English would hinder accurate understanding of the current status of Jomon studies. Discussions on various controversial issues should be evaluated without dismissing the social and academic contexts in which Jomon data have been collected, presented, and interpreted. In this regard, I do not aim to provide the reader with an "objective" interpretation of Jomon data. Rather, I try to examine what we can achieve by considering Jomon data, how we can approach various research topics using different methods, and how the study of the

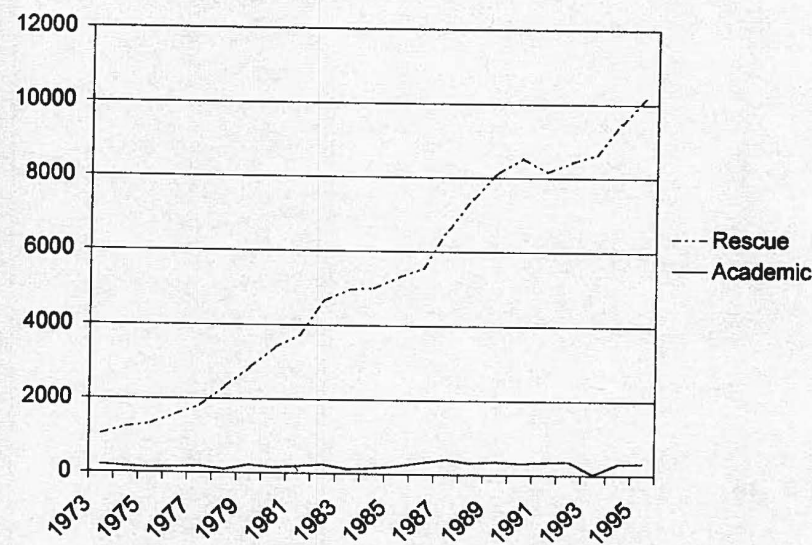


Figure 1.8 Changes over time in the number of rescue and academic excavations (raw data taken from Bunka-cho Bunkazai Hogo-bu Kinenbutsu-ka 1996: 1)

Jomon culture can make significant contributions to future developments in archaeology, especially in an international context.

To demonstrate the effects of sociopolitical factors on Jomon archaeology, I would like to discuss three factors that are particularly influential:

(1) *Rescue excavations and CRM organizations* First, an overwhelming abundance of archaeological data obtained through rescue excavations is a major factor that is affecting the practice of Jomon archaeology. The number of rescue excavations in Japan began to increase in the 1960s. With the rapid growth of the Japanese economy and resulting large-scale land development, the number and scale of rescue excavations increased exponentially from the 1970s through to the 1990s (e.g., Barnes 1993; Habu 1989a; Tanaka 1984). As indicated in figure 1.8 and table 1.1, the number of rescue excavations reached over 10,000 by the mid-1990s, while the number of academic excavations still remains approximately 300. Also, figure 1.9 and table 1.2 show that an extraordinary amount of money has been spent on rescue excavations over the past thirty years. While the amount began to decrease slightly after 1998, the annual spending on rescue excavations in the fiscal year 2000 was approximately 113 billion yen (approximately 1 billion dollars).



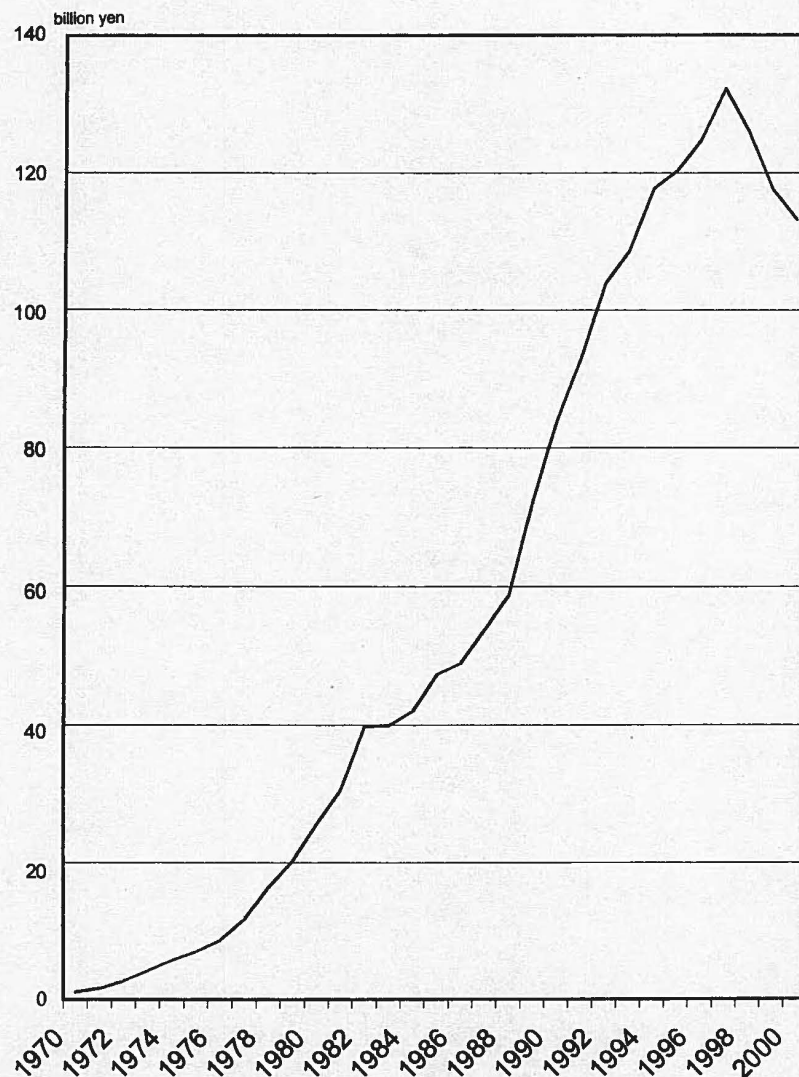


Figure 1.9 Annual spending on rescue excavations in Japan (billion yen) (raw data taken from Nara Bunkazai Kenkyu-jo Maizo Bunkazai Center 2002: 6)

Table 1.1 *Changes over time in the number of rescue and academic excavations*

Year	Rescue	Academic
1973	1,040	203
1974	1,231	164
1975	1,318	131
1976	1,571	155
1977	1,821	184
1978	2,331	105
1979	2,858	225
1980	3,408	158
1981	3,739	196
1982	4,669	250
1983	4,968	137
1984	5,004	158
1985	5,310	223
1986	5,555	316
1987	6,598	409
1988	7,439	321
1989	8,133	354
1990	8,536	317
1991	8,168	346
1992	8,440	372
1993	8,650	32
1994	9,494	310
1995	10,164	326

Source: Bunka-cho Bunkazai Hogo-bu Kinenbutsu-ka 1996: 1.

The implication of the proliferation of rescue excavations is profound. Because Japanese archaeologists were trained in the tradition of "archaeology as history," most of them believed, and still believe, that every single archaeological site is unique and therefore should be protected as much as possible. Under the land-development policy of the Japanese government, however, the ideal of site preservation is typically substituted by systematic rescue excavation: while the site itself would be lost, at least information contained in the site is documented in the excavation record. During the 1960s and 1970s, most of these rescue excavations were conducted by civil servants of the prefectural/municipal boards of education or museums. Later, government-based CRM organizations (usually called Maizo Bunkazai Centers) were established at both the prefectural and municipal levels. Currently, approximately 7,000 archaeologists are working at these CRM organizations, prefectural/municipal boards of

Table 1.2 *Annual spending on rescue excavations in Japan (million yen)*

Year	Excavation cost
1970	1,094
1971	1,600
1972	2,686
1973	4,225
1974	5,731
1975	6,980
1976	8,599
1977	11,665
1978	16,257
1979	20,058
1980	25,551
1981	30,480
1982	39,764
1983	39,897
1984	42,023
1985	47,216
1986	48,831
1987	53,765
1988	58,830
1989	72,209
1990	83,850
1991	93,082
1992	103,930
1993	108,687
1994	117,726
1995	120,298
1996	124,694
1997	132,128
1998	125,845
1999	117,630
2000	113,231

Source: Compiled from Nara Bunkazai Kenkyu-jo Maizo Bunkazai Center 2002: 6.

education, and museums (Nara Bunkazai Kenkyu-jo Maizo Bunkazai Center 2003).

This dramatic increase in the number and scale of excavations had both positive and negative effects on Jomon archaeology. On the positive side, it not only changed the quantity of available data, but also increased the types of archaeological research possible. In particular, in the field of settlement archaeology, both inter- and intrasite spatial analyses have

benefited from the rich Jomon database (see chapter 4). The greater quantity of data also made archaeologists realize the extent of regional and temporal variability in the Jomon culture.

On the negative side, this prevalence of rescue excavations resulted in an "overflow" of archaeological data. Many Japanese archaeologists are preoccupied by simply catching up with new findings. The development of CRM archaeology also resulted in the standardization of archaeological methods. Problem-oriented research was generally suppressed, and the collection of certain types of data, particularly those that are relevant to chronological studies of pottery, was encouraged. Other types of data, particularly quantitative data of faunal and floral remains, are often neglected.

In this book, I attempt to take advantage of the abundant rescue excavation data. Rather than criticizing the shortcomings of these data, I attempt to show what archaeologists can do with this large body of data, and also how the existing data may constrain archaeological interpretations. In particular, Case Study 1 in chapter 4 utilizes excavation reports of more than 1,000 Early Jomon sites as the raw data for analysis.

Since the quality of published data varies between different categories of data and for different excavations, some sections of this book (particularly those in chapter 6) are more descriptive than others. Some readers may find these sections less interesting. However, I believe that the exposition of this information is a necessary step toward conducting theory-oriented, deductive research.

(2) *Jomon as the ancestors of "the Japanese"* Second, there is a strong public interest in archaeology in Japan. Japanese archaeology has a long tradition of archaeology as history (Habu 1989a; Ikawa-Smith 1980). Within this tradition, various outreach programs have identified Japanese archaeology as the study of the ancestors of "the Japanese people." At public interpretation meetings of Jomon sites, archaeologists repeatedly tell the Japanese audience that the primary purpose of Japanese archaeology is to reconstruct the lives of their own ancestors. This is in sharp contrast with "archaeology as anthropology" in the Americas, in which archaeology originally developed as the study of the past of "the other."

Large-scale rescue excavations and subsequent site report preparations funded by tax money from various levels of government would be impossible without strong support from the general public. Some Jomon sites, which were initially excavated as salvage excavations prior to construction projects, managed to escape destruction because of a great deal of public support for preservation (e.g., Okada and Habu 1995). Public interest in



archaeological excavation has also been fueled by media reports since the early 1970s, when Japanese newspapers and television programs began to report archaeological discoveries in a sensational manner (Fawcett 1990; 1995).

The strong public and media interest, together with the rapid increase in the number of excavations, resulted in a "Jomon boom" in the mid-1990s (Habu and Fawcett 1999; Hudson 2003). Even though many physical anthropologists suggest that the people of the Jomon period are only partially ancestral to modern Japanese (e.g., Hanihara 1987), the Jomon people are often presented at various popular exhibitions as the ancestors of "the Japanese" or of "ourselves" (e.g., Jomon Mahoroba-haku Jikko Inkai 1996).

In this social environment, the results of archaeological study of the Jomon culture have considerable influence on the construction of "Japanese identity." In other words, archaeology of the Jomon period provides us with an extremely interesting test case for examining the relationship between archaeological studies and contemporary society.

It is not surprising that certain types of archaeological interpretation are preferred by media reports over others. Discoveries of the so-called "oldest" or "largest" artifacts and sites are regularly reported on the front pages of newspapers. Interpretations that emphasize the high level of social complexity of the Jomon culture frequently appear in popular books and magazines, some of which even identify the Jomon culture as an "ancient civilization" and call large Jomon sites "ancient cities." Another common theme in media reports is the quest for the roots of "Japaneseness" in the Jomon people.

One of the aims of this book, therefore, is to reassess these media stereotypes of the Jomon culture and provide alternative interpretations. Although I believe that emerging cultural and social complexity should be a focus of Jomon archaeology, the nature and degree of complexity should be evaluated on the basis of case studies, rather than be assumed. Regional and temporal variability of the Jomon culture is also systematically examined, and conditions, causes, and consequences of long-term changes are discussed. From these discussions, I hope to demonstrate that the nature of the Jomon culture is multifaceted, and not as simple as presented in the popular press.

(3) *Gender archaeology and the scarcity of female archaeologists*  
Throughout this book, the issue of gender is only minimally discussed. This is largely because feminist theories and perspectives are still virtually missing in current Jomon archaeology. I believe that this situation is closely related to the scarcity of female professional scholars in Japanese

archaeology. In 1964, women constituted 1.0 percent of the total membership of the Japanese Archaeological Association (JAA). In 1995, the percentage rose to 2.8 percent. Although the percentage almost tripled over thirty years, it is still extremely low. This unfortunate situation is certainly the major reason why gender and feminist archaeology is virtually absent in Jomon studies.

It should be noted that the scarcity of female professional scholars does not imply a scarcity of female students. Most undergraduate programs of archaeology in Japan have a significant number of female students. However, job opportunities for women, especially those in academic institutions, are still extremely limited. While this is a problem in Japanese academia in general, the percentage of women in archaeology is lower than in most other social sciences, including history.

With an increasing interaction with Anglo-American archaeology, where the issues of gender and feminism are two of the major research foci, changes in the social and academic status of women in Japanese archaeology, as well as the development of gender and feminist studies, are much anticipated. Ikawa-Smith's (2002) recent article on Jomon clay figurines may indicate that the situation is slowly changing.

Because of the fledgling nature of gender archaeology within Japanese archaeology, this topic will be only briefly touched on in the following chapters. Future areas of research would include sexual division of labor in subsistence activities, dietary differences between male and female skeletons, and the symbolic function of clay figurines and stone rods in Jomon social landscapes.

## Summary

In summary, this book seeks (1) to provide up-to-date information on Jomon archaeology to an English-speaking audience, (2) to examine regional diversity in the Jomon culture and present a model of long-term changes in Jomon cultural complexity, and (3) to open a dialogue for examining the sociopolitical contexts of archaeological studies in contemporary Japanese society. Through these discussions, I hope to bridge the gap between Japanese and Anglo-American archaeology. Above all, I hope that the description of Jomon data and their interpretations presented in this book will make the readers think of various ways in which the results of Jomon archaeology can be incorporated into world archaeology. If, after reading this book, the reader, whether a student, a professional archaeologist, or an amateur, can relate the contents of this book to her/his own research interests, then its primary goal will have been achieved.