

# A Look at "L'Art Prébouddhique de la Chine et de l'Asie du Sud-Est et Son Influence en Océanie" Forty Years After

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## FOREWORD

SEVERAL YEARS AGO, Karl Narr asked me to write an article summarizing the recently discovered data of Southeast Asian prehistory for publication in German in *Saeculum*. In the fall of 1977, I finally did this in the context of an examination of a number of Heine-Geldern's hypotheses on Southeast Asian prehistory. I titled the paper "New data on late Southeast Asian prehistory and their interpretation," with a subtitle that is the title of this paper (Solheim 1980a). As I suspected that relatively few of the specialists on Southeast Asian prehistory would read the original article in German, I requested permission to reprint portions of the article in English and this was very kindly granted, for which I express my thanks. For present purposes I have deleted the data portion of the original paper as not relevant to an issue of *AP* concerned primarily with the countries in Southeast Asia where Edmond Saurin worked. I have made a few further revisions and added a few minor points in the second half of the paper, but the major conclusions of this paper are much as they were in the original, except for my hypotheses added here on the Cham traders in western Indonesia and on to India and Madagascar. Different portions of the original paper, primarily those parts concerned with South China, have been reprinted in the *Journal of the Hong Kong Archaeological Society* (Solheim 1979).

## INTRODUCTION

The portion of the title of this paper in quotes is the title of an important early paper of Heine-Geldern's (1937) that precipitated a major controversy on the date and origin of the

so-called Dongson Culture. The major antagonist to Heine-Geldern's presentation was Bernard Karlgren (1942). Though I was acquainted with Heine-Geldern's general argument, I did not read this paper until the time of writing the original of this article. I had read Karlgren's answer to Heine-Geldern with considerable care many years ago, so I had a fair idea of its contents. I was surprised at the impact Heine-Geldern's paper made on me, even though I was now in disagreement with many of the points that it made because of much of the new data, and the new dates, from Southeast Asia and China. Before the summer of 1965, when we started receiving the startling new dates for Non Nok Tha in northeastern Thailand (Solheim 1968), I had strongly leaned toward Heine-Geldern's interpretation of Dongson as opposed to that of Karlgren, even though I suspected that many prehistorians were convinced by Karlgren's arguments.

It is unfortunate that, when a portion of a major work is found to be in error, it often happens that that whole work is considered useless, or is simply forgotten. In the so-called hard or exact sciences, a new paradigm replaces an old and accepted one and, perhaps properly, the old paradigm becomes merely of historical interest. In the social sciences, and certainly in prehistory, a successful paradigm is not necessarily wholly correct or completely false. Considering that Heine-Geldern's reconstruction of Southeast Asian prehistory was a successful paradigm that was widely accepted for more than 30 years, just because certain portions of this paradigm no longer fit with the new data is no reason to toss it into the pigeonhole of a historical curiosity. Heine-Geldern's arguments in this article were based on elements of design and art patterns; from these he developed relationships over wide areas and postulated movements of people to explain the presence of the similar geometric elements and patterns. (Erika Kaneko, a former student of Heine-Geldern's in Vienna, has told me [personal communication, 1978] that "although in his written statements Heine very often used the term migrations or movements of people, in his lectures, discussions and conversations he often used terms like 'contacts' or 'intercommunications.'") Unless we wished to depend to a considerable degree on the "psychic unity of mankind" as the explanation for the similarities pointed out by Heine-Geldern, we still must explain these similarities through some sort of contacts or communication between peoples. They will not go away by our ignoring them.

I do not here attempt to explain the similarities of design for the total area presented by Heine-Geldern. I only point out that they are worthy of explanation, and I do present an explanation (hypothesis) for these similarities for a portion of the area he covered. I summarize briefly the thesis presented in "L'Art prébouddhique" (1937) and the history and development of this thesis both before and after publication of the article. I then point out briefly where the new archaeological data do not fit Heine-Geldern's reconstruction. I finish this paper with a brief framework of my proposed new paradigm for Southeast Asia, South China, and Pacific prehistory with the hope that others might be interested in reexamining the western portion of Heine-Geldern's considerably larger reconstruction as well as considering, questioning, and adding to my suggestions. All of this has to do with my middle and late Extensionistic Period (Solheim 1975:151) or, in Heine-Geldern's terminology, the late neolithic, bronze, and early iron age of Southeast Asia.

#### HEINE-GELDERN'S THESIS OF LATE SOUTHEAST ASIAN PREHISTORY

Heine-Geldern's interest in Southeast Asian prehistory must have been the earliest of his interests in the general field of culture history. This is strongly suggested by the facts that his first publication, in 1917, and the great majority of his published papers up until

1936, were concerned with this subject (Kaneko 1970:6-7). His earlier papers, in the order in which they appear, show the development of his thoughts on Southeast Asian prehistory.

The first summary that I know of by Heine-Geldern appeared in 1923. This was a part of a much larger paper on Southeast Asia and was titled (in German) "Prehistoric finds" (1923: 752-766). This was primarily descriptive, though comparisons and distributions were presented within the area and with India and China. The "Bronze Age" was covered in two pages (pp. 763-764). Little mention was made of the bronzes, though in referring to the Tonkin bronzes as the highest development of the "Bronze Age" in Southeast Asia, he did list some of the most typical designs and forms and mentioned Parmentier's statement that these designs found on Tonkin bronze weapons are much the same as those found on the metal drums of Southeast Asia (p. 764). He further suggested a Chinese origin for the bronze technology (p. 764).

Heine-Geldern presented the first reconstruction of Southeast Asian prehistory in 1932. There is little overlap between that paper and his pre-Buddhist art paper; in fact, to some extent this later paper (1937) could be considered as carrying the subject of the 1932 paper through the "Bronze Age." At the time these two papers were written, very little archaeological excavation of professional quality had been done, much less published, so they were based to varying degrees on nonarchaeological data. From 1950 on, at an accelerating pace, archaeological excavations in Southeast Asia have produced data and dates that push back by several thousand years the art styles and design elements talked about by Heine-Geldern as dating in the first millennium B.C. This evidence requires the inclusion of Heine-Geldern's "Late Neolithic" in this review.

For the present purpose, there is no need to examine Heine-Geldern's arguments for the migrations he infers during his Late Neolithic of Southeast Asia. I simply quote small portions of Skinner's translation (1957) of the summary of the 1932 paper. Heine-Geldern proposed eight waves of culture into, within, and out of Southeast Asia. Of these eight waves, the third and the fifth through eighth waves are relevant here. For the third wave: "In the first half or middle of the second millennium B.C. the penetration [took place] of people with Neolithic Vierkanterbeil [*sic*] culture (the Uraustronesians) from China to S.E. Asia. Their culture most nearly related to the late Neolithic Yang-shao culture of China. . . . Among their culture elements may be listed the following: rectangular sectioned adzes . . . , net-and-band ceramic, manufacture of vessels in Treibtechnique . . . , megalithic monuments" (Skinner 1957:206-207). The fifth movement has a "penetration of a part of the Uraustronesians into the southern part of the Malay Peninsula" (1957: 207). The sixth has "further wandering of a branch of the Uraustronesians . . . by sea from the Malay Peninsula (the last common Urheimat of that part of the Uraustronesians from which [from the beginning parenthesis this last is a correction by Heine-Geldern (1958:171)] the present Austronesian tribes are descended) (a) via Sumatra, Java . . . into the extreme east of the archipelago. . . (b) A second branch via Borneo, the Philippines, and Formosa to Japan" (1957:207). The seventh is the "formation of the Polynesian culture, or at least of one of its most important components in the Formosan-Philippines-North Celebes area" (1957:207). Finally, the eighth is the "formation of the Melanesian languages and Melanesian cultures . . . out of a mixture of Austronesian language and culture with pre-Austronesian languages . . . and with Walzenbeil culture (the first neolithic movement from Japan or China)" (1957:207). A bit later I will bring in the other corrections Heine-Geldern made of this translation.

Heine-Geldern (and most, if not all, art historians with an interest in China, Southeast

Asia, and/or the Pacific) felt that the source of the primary decorative art style of Southeast Asia was the so-called Dongson Culture. This term appears to have been given to the Southeast Asian Bronze Age by Heine-Geldern. In his review of *The Archaeology and Art of Sumatra*, he said that "We may call this late bronze age culture, which probably began to penetrate South East Asia from the north not later than about 300 B.C. perhaps even as early as 600 B.C., and which must have lasted till about 100 A.D., 'Dong-son Culture' " (1935:315).

"L'Art préboudhique de la Chine et de l'Asie du sud-est et son influence en Océanie" has many different, though to a considerable extent interdependent, hypotheses. If one takes as the primary hypothesis that "the fundamental parentage of . . . the Norwegian [of the ninth century A.D.] and New Zealand sculpture is evident" (Heine-Geldern 1937:206; translation mine), then this is dependent on the majority of the other hypotheses presented. On the other hand, the hypothesis that the Shang art style of China was formed by the synthesis of a late and special form of the eastern Asian megalithic art and a particular ceramic ornamentation (1937:182) appears to be completely independent of the hypothesis that there is a historical relationship of some sort between the Shang and earliest Chou art and the Marquesan art style (1937:180-182). Whether the first of these two hypotheses is right or wrong has no effect on the major hypotheses presented. The second hypothesis may be wrong or right, but if correct it could be correct with quite a different history than Heine-Geldern had in mind. Further, whether right or wrong, it may or may not affect the hypothesis of a Norwegian-New Zealand relationship. What I wish to point out is that each hypothesis is worthy of examination on its own merits; just because one or two may be shown by new data to be wrong does not necessarily mean that any other hypothesis or all other hypotheses are wrong. On the other hand, it may be that Heine-Geldern's primary purpose in this paper was to make clear "the fundamental importance of the study of art styles for ethnology" (1937:206; translation mine; *ethnologie* should probably be glossed 'culture history' in our 1981 meaning of these terms). In this, I feel he was successful.

I will list here a number (but far from all) of the hypotheses presented by Heine-Geldern in this paper. I do not present his arguments in support of them. He begins the paper with the postulate that there are two distinct art styles in Southeast Asia. One of these is a sculptural, monumental, and symbolical style, the megalithic art, with relatively simple forms and little ornamentation, carved in stone or wood, in the round or deep relief, with generally rectilinear contours. The second style is ornamental with intricate curved lines and stylized animal figures (1937:177-179). Hypotheses follow (Heine-Geldern did not present these in the form of formal hypotheses):

1. The ornamental art style was introduced to Indonesia (Island Southeast Asia) during the first millennium B.C., in the Bronze Age.
2. The monumental art style is that of the megalithic culture, with its beginnings probably in the third millennium B.C. or the neolithic epoch.

A third style in the Far East, that of the painted pottery of China (presumably what he had earlier called the Yangshao pottery) is mentioned with its associated hypothesis, but he felt it was not important in Southeast Asia so he dealt no further with it. I feel, on the contrary, that this style may well be involved with Southeast Asian prehistory, so I include his hypothesis here:

3. The painted pottery style of China originated in the west (Ukraine, Romania, and Hungary) and can provisionally be dated to the first centuries of the second millennium B.C.

He felt that this style was of little importance in Indochina and probably never reached Indonesia or Oceania, further mentioning that in Indonesia painting was not used for ornamentation on pottery, only incising (1937:179).

Next come the Shang-Marquesas hypotheses. First he presents some of the characteristic traits of the Shang art style as decoration made up of several parts with the principal motifs stylized animals, dragons, birds, *t'ao tieh*, secondary motifs coming off of the primary motifs, more or less angular pseudomeanders and spirals, and a tendency for decomposition of the principal motif so that all that is left are the eyes (1937:180). He finds no analogies for this style elsewhere in Asia or Europe but does see traces in the Pacific, the coast of Alaska, and British Columbia. The closest resemblances in the Pacific are to Marquesan woodcarving (1937:180–182). On this subject he has these hypotheses:

4. The Shang and the Marquesan art styles have a common pre-Polynesian ancestor (1937:184).
5. The common ancestor of the Shang and Marquesan art styles is the pre-Shang art of China (1937:182–183).
6. The movement of people that brought the pre-Shang art style to the Marquesas took place between 1800 and 600 B.C. (1937:183).

It should be noted that Heine-Geldern considered hypotheses 5 and 6 somewhat questionable. He then proceeds to mention a number of other places where he sees traces of the pre-Shang art style: in New Zealand, northwestern America, northern Sulawesi and Borneo, the Philippines, Formosa, Japan, and southern China (1937:183). Each of these could be considered a hypothesis, as could his following arguments pointing to possible Shang (read pre-Shang?) traits in New Guinea (1937:183–185). At this point he comes to late Chou art motifs and "Dongson."

I have never understood what other writers meant by the "Dongson Culture," taking into account what I knew about the site Dongson and so-called Dongson artifacts. Heine-Geldern here explains what he means by Dongson and, though I disagree with it, for the first time it makes some sense to me. He said (my free translation), "I provisionally understand for the term Dongsonian all the known civilizations [I suspect this would best be called "cultures"] of the Bronze Age of Yunnan, Indochina, and Indonesia, recognizing that further research will enable us to recognize among these cultures distinct local groups, different chronological sequences, and several vague tool traditions (*culturelles* = tool traditions; see Kaneko 1970:4) and it will perhaps be necessary one day to use this term in a more restricted way" (1937:186). Perhaps in today's terminology this might be considered an "area cotradition."

Heine-Geldern points out that late Chou art and Dongsonian art share some motifs, but other motifs found in either style are not shared. They share double spirals in an  $\infty$  form and tresses (a loose, regular intertwining of two or more parallel, curving lines), the simplest forms of the late Chou art, but the most complex of the late Chou motifs they do not share (1937:186). A series of hypotheses explains this differential sharing and the

origins of these motifs. Besides the two motifs just mentioned, other elements of the Dongsonian involved in these hypotheses of Dongsonian origins are the forms of socketed axes, circles, and tangents, a semimeander, buckles and their method of fastening, multiple interlocking spirals, and others (1937:186-191).

Several of the hypotheses presented to explain the origins of these elements may be combined:

7. Elements of the Dongsonian and of the Late Chou art style originated in eastern Europe in the Hallstatt Cultures of the Bronze and early Iron Age of the Caucasus, and the Bronze Age of Transylvania and eastern Hungary (1937:186-191).
8. These elements were brought to the Orient by Thraco-Cimmerian tribes between about 800 and 600 B.C. (1937:191-194).
9. The movement(s) bringing these elements affected both Chou China and Indochina directly, the latter without passing through China (1937:192-193).

Heine-Geldern continues with the Dongsonian art style and movements of the "Indonesians":

10. It is probable that Indonesian movement from Mainland Southeast Asia into Indonesia in the Neolithic introduced the megalithic art into this area (1937:197; see hypothesis 1).
11. The Dongsonian art style (the ornamental art style) was introduced into Indonesia by a colonization of the Yueh of South China and northern Viet Nam; from there it continued to be spread by Indonesian tribes (1937:197; hypothesis 2).

In connection with hypothesis 10, he noted that the "rubanée" ceramics with their spiral motifs and the like, as included in his third migration in Southeast Asia (the Uraustronesians), were included in the neolithic migration in error and came later instead (1937:197, n2).

Further hypotheses presented that I do not include here involve the north coast of New Guinea and some interior areas and islands off the coast of eastern New Guinea, New Zealand, and Dongsonian and Late Chou art styles. He had previously referred to possible connections between the Thraco-Cimmerians and Scandinavian countries, so it is through this link that he hypothesized the relationship between Norway and New Zealand by way of Late Chou art (1937:204-206).

Karlgren, in 1942, published a paper in which he presented his hypotheses of the origins and dating of the "Dongson Culture." In opposition to Goloubew's original dating of the "Dongson Culture" as the first century A.D. (Karlgren 1942:2-5), he argues for the dating of early "Dongson Culture" as fourth-third century B.C. (pp. 5-25). He further disagrees with Heine-Geldern's hypothesized origins of the Dongson art style or any Hallstatt influence on Chou China (pp. 19-23), and sums this up saying, "This much is certain: the Hallstatt-China legend ought to be shelved until reliable data have been furnished" (p. 23). Karlgren presents data that he feels demonstrate that the art motifs which Heine-Geldern argues came to Dongson from the west and were not found in late Chou art were in fact present—in some cases commonly, in other cases rarely—in the Huai style (Late Chou), and so he concludes, "The early Dongson culture was neighbor of and closely related to—certainly to a large extent influenced by—the Huai style of Central China" (1942:25).

Heine-Geldern reiterated his beliefs and conclusions on the megalithic and geometric art styles of Southeast Asia in research conducted in 1944 and published in 1945 (pp. 142-153). He added a bit to his thoughts of 1937 on the introduction of the "Dongson Culture" to Indonesia by the Yueh when he said ". . . that the introduction of this culture in the Archipelago was not due to large scale ethnic migrations, but rather to small groups of merchants and colonists who gradually become absorbed into the local population . . ." (p. 147). He further adds, "It is quite possible that both Yue and Cham took part in the colonial movement in question" (p. 147). Karlgren's arguments are not mentioned and he is not included in the notes or bibliography to this paper on "Prehistoric research in the Netherlands Indies." This research was done in New York during the war, and he no doubt had not seen Karlgren's 1942 paper. He remarked that van Stein Callenfels ". . . had come independently and at the same time to almost identical conclusions" (p. 147) as to the origins and dating of the Dongsonian. He presents the idea of van der Hoop that the "Dongson Culture" knew iron as well as bronze from its beginning, and he considers this an open question (p. 143). He states that for both Indonesia and Mainland Southeast Asia, bronze-socketed celts are the most common Dongson artifacts, and goes on to say, "The socketed celt indicates clearly the origin of the Culture. It is not known in the Near East nor in India. We know that it originated in Europe and, by way of Siberia, spread to China, from where it eventually reached further India and Indonesia" (pp. 143-145). He felt it probable that the custom of urn burial was introduced to Indonesia from Indo-China during the Dongson period (p. 148). Referring to megalithic beliefs and rituals, he said ". . . that it must have been brought by the same ethnic wave which introduced the neolithic Quadrangular Adze Culture. . . . If this proves correct, its first appearance in Indonesia would probably have to be dated between 2500 and 1500 B.C." (p. 149). He feels that a ". . . younger megalithic wave (again probably a series of migrations rather than a single one) came during the period of the Dongson Culture and the Early Iron Age and introduced the use of stone cist graves, dolmen-like slab graves, stone sarcophaguses and stone vats" (p. 151). He sees both the Dongsonian art style and the Late Chou art style of China as being widely represented in Indonesia and both as reaching Indonesia during the same period (1945:152-153).

Ralph Linton was an American anthropologist who had a considerable personal knowledge of art and art styles in the Pacific. In the book he was writing at the time of his death (*The Tree of Culture*, 1955) he had one part on the "Southeast Asiatic Complex" (pp. 173-222) and within this a chapter on Oceania and Madagascar (pp. 183-206). Although he mentioned the art styles of Polynesia and Melanesia briefly, he talked only of their content and nothing about derivation. He mentions Dongson four times, according to the index. The first time, he states: "A few bronze objects of the Dongson culture have been found in Indo-China . . ." (p. 109). His longest discussion of Dongson culture suggests dating of Dongson type bronzes between 600 and 300 B.C. and that its style ". . . is emphatically neither Chinese nor Indian" (p. 208), though similar to designs found in Borneo and parts of Melanesia. I am sure that he knew both Heine-Geldern's and Karlgren's papers on the subject, so he was unconvinced by either. His third mention (p. 475) was that ". . . the south Indian Megalithic culture resembled the Dongson complex of Southeast Asia, which was also associated with Megalithic construction." His final mention of Dongson was part of a discussion of Shang Dynasty art. He pointed out that Shang art, though in North China, had very few northern animals represented, while "the favorite subjects were tigers, water buffalo, rams, and bulls . . .," suggesting a southern origin (pp. 532-533). He continues:

No close parallel for designs can be identified outside of China, but the present writer feels that they show a kinship with the Dong Son designs, and also with the historic arts of certain culturally conservative areas in Indonesia and Melanesia, and even with the arts of the Polynesian Marquesans and Maori. Although the assumption is quite unprovable, I would not be surprised if archaeological research eventually reveals the presence of an old Southeast Asiatic art style from which all these, including Shang, was [*sic*] derived. (1955:533)

This is saying the same thing as hypotheses 4 and 5 that I have listed for Heine-Geldern concerning the pre-Shang art of China, but with Linton putting his own suggested identification of where the pre-Shang art originated.

Heine-Geldern's primary answer to Karlgren was presented in 1951. I am not directly acquainted with this in detail, but H. R. van Heekeren summarized "Heine-Geldern's thesis on the Pontic migration and the origin of the Dongson Culture" in his book *The Bronze-Iron Age of Indonesia* (1958:95-98). There is little difference in this from what I have included earlier except that van Heekeren presents a list of 14 implements, ornaments, and trinkets of the "Dongson Culture" that were supposedly of Western origin.

The first professionally conducted excavations made at and in the neighborhood of Dongson were done by Janse from 1934 to 1939. The final report on this research has been presented in three volumes (Janse 1947, 1951, 1958). The first two of these volumes are primarily concerned with several brick tombs and their contents and three kilns of late Han times (first to early third centuries A.D.; 1947:58-59). A number of unusual bronze artifacts were recovered that are not at all Chinese in appearance but suggested to Janse a possible Mediterranean origin. Others are obviously Chinese and many are of possible local origin. For the purposes of this paper, the most interesting items are the locally made pottery. This was found in large quantities of sherds in the kilns (1947: pl. 139, 142-143, 147-151, 158, etc.), as broken and whole vessels in the tombs (1947: pl. 38, 40, 48), and from other localities in the general area (1947: pl. 102-104, 110). This pottery was carved-paddle impressed (see Solheim 1952 and 1967*a* for technical information on this method of pottery decoration). Some floor tiles covering the floor of one of the tombs had an impressed pattern exactly the same as on some of the pottery (1947: pl. 113-3, 143-2 left, 151 upper right). More detail on these impressed patterns was presented in the second volume (1951: pls. 33-39).

Janse's third volume was concerned primarily with excavations at the site of Dongson. Here he found earlier remains than those presented in the first two volumes, both in a fairly widespread layer and in a few burials. With two of these burials were typical Dongson bronze drums (1958:22, pl. 8-10). Associated with the burials and in the artifact-bearing layer were numerous other artifacts that are considered typical of "Dongson Culture." In one area, Janse discovered the piles of a dwelling *in situ* (1958:28-30); associated with these were typical Dongson artifacts, some Chinese pottery, and considerable "native" earthenware pottery (1958:29). What Janse here refers to as Chinese pottery is like that from the kilns and is illustrated in volumes 1 and 2, as listed earlier (1958:82, pl. 60-1-6, 61-63). These may have been stoneware, as they are referred to as "potsherds of hard ware, of Chinese make" (1958: pl. 61). Several of these sherds from Dongson are of simpler rectangular or diamond patterns than those just listed (1958: pl. 60-1-6, 61). The so-called native pottery is often cord-marked (see Solheim 1952 for an explanation of cord marking) and is of quite different form from the "Chinese" pot-

tery, often with low ring feet (1958: pl. 51-54) and sometimes with a smoothed surface and a simple incised decoration (1958: pl. 53, 55, 56-6). Curious pediform vessels were also part of this native pottery assemblage (1958:80-82).

Janse has one page of "conclusions" in his third volume (1958:91). He states, "Many speculations have been made regarding the chronological and cultural classification of the Dong-so'n industry," and here he referred to Heine-Geldern's 1951 paper. Concerning the Dongson dwelling site, he goes on to say:

Before the Chinese influence was felt there in IIIrd or IVth century B.C., the locality was inhabited by an 'Indonesian' or proto-Malayan people, ancestors of the present 'Moi', who lived on a Stone Age Level. With arrival of the Chinese pioneers, and possibly also of sinicized Thai, they learned the use of tools and weapons made of bronze and iron and received many cultural elements from the Chinese. (1958:91)

Louis Malleret, a former director of l'École Française d'Extrême-Orient, made a detailed review of Janse's three volumes in 1959. He footnoted on the first page (1959a: 1197) Karlgren's disagreement with Heine-Geldern's answer, and noted similarities between Dongsonian and Chinese decorative elements and European elements of the Hallstatt period (1959a:1206-1207). But he only summarized Janse's three volumes and did not take part in this debate himself.

Although Janse was the only person to conduct archaeological excavations of professional quality at Dongson and in nearby areas before World War II, he was not particularly interested in the Dongsonian itself, and did not become involved in the arguments concerning its origins. He accepted Heine-Geldern's Pontian migration and felt this had reached the Dongson site itself around 500 B.C. (1961:1648-1650). His interests were much more directed toward what he considered the second phase of Vietnamese civilization—Dongson being the first phase—the Lach-truong phase with its brick tombs and possible eastern Mediterranean relationships (1961:1651-1668). He has published numerous papers on this subject, which I will not go into here. While I did not note this earlier, it was to a considerable degree several papers of Janse's that apparently convinced Heine-Geldern of the connections between Dongsonian and Late Chou art and Hallstatt and other European art styles (Heine-Geldern 1937:185-186). Two of the most important of these papers of Janse's were published in 1931 and 1932.

Two of the corrections of the Austronesian migrations hypotheses made by Heine-Geldern in his 1958 letter to the *Journal of the Polynesian Society* are of interest here. For paragraph 3, he said:

The 'Austronesian' Quadrangular Adze Culture of South-East Asia had certainly much in common with the neolithic Painted Pottery Cultures of China. . . . These Chinese traits are even more marked in the mixed Quadrangular and Shouldered Adze Culture of the Indo-Chinese Peninsula. However, the connections were not as simple and direct as I formerly thought. I had been misled by certain incised spiral ornamental designs on pottery from Samrong-sen in Cambodia which resemble those of Chinese pottery. Today I am convinced that this Samrong-sen pottery is not even neolithic but belongs to the Dongson culture and should be dated somewhere between 700 B.C. and 100 A.D. (1958:171)

Second, Heine-Geldern felt it probable that there were pre-Polynesian immigrants from Asia in eastern Polynesia (including the Marquesas) and that the later Polynesians absorbed these people and adopted some of their culture traits, which they took with them to New Zealand (1958:171). These pre-Polynesians, I assume, would have been the people who shared their art style with the pre-Shang people of China.

Richard Pearson, in 1962, published a paper on "Dong-so'n and its origins." Here he reviewed the archaeological data on the "Dongson Culture," reviewed very briefly the arguments about Dongson origins, and came to his own conclusions. He added the site of Shih-chai-shan in Yunnan (Rudolph 1960) to Dongson, making these the two "... large and well recorded sites" (Pearson 1962:27) of the "Dongson Culture." He reports that William Watson would not include Shih-chai-shan with Dongson, but Pearson (1962:29) argues against Watson. More recent opinions stated by some specialists on South Chinese archaeology, following lengthy study, have agreed with Watson while pointing out that there are obvious close relationships in the bronze technology and art style of the two sites (Bunker 1974:326; Dewall 1974:330-331). Chang, however, still considers that both belong to one culture (Chang 1977:466-467). In summarizing the data, Pearson points out the potential importance of the pottery recovered from the site at Dongson and that no one has seriously studied this pottery (1962:38-40). He also points out that "an alignment of menhirs forming several squares and rectangles in the centre of which was a large stone" was reported by Pajot in 1927 for the site of Dongson and that no further mention has been made of this possible megalithic association (1962:41). Finally, he strongly, though not in direct words, suggests the Ch'u state as the source of the Dongson Culture (1962:44-46).

In 1965, Heine-Geldern rewrote, in English, the title piece of this paper for an anthology, leaving out that portion which had dealt with Oceanian art styles (Heine-Geldern 1966:165). In bringing his 1937 paper up to date, he used new data that had been published up to 1964 and included many new illustrations, along with some of those used previously. My remarks here have to do primarily with changes and clarifications that he made in the earlier work, plus quoting some of his more forcefully made statements.

I first quote a statement summarizing an argument from his 1932 paper:

As I first pointed out more than thirty years ago, the Indonesian languages must have been introduced into the islands by people who came from the interior of Further India, bringing with them late Neolithic cultures characterized by quadrangular stone adzes and beaked adzes. My conclusions were mainly based on two arguments: the gradual development of the beaked adze discernible in the area from Laos down through the Malay Peninsula into Indonesia (a process which clearly indicates an ancient movement from north to south) . . . (1966:174)

Heine-Geldern reiterates (1966:186) his answer to Karlgren (1951) on the Dongson-Late Chou art style relationships. He closes his list of "facts" by saying that the designs in Dongson were little or not at all changed by Dongson because "in the south the people who introduced the art of bronze casting and created the Dongson culture must have come into an area of Neolithic cultures in which the old monumental style with its design of pure ornament prevailed. Therefore their own designs, imported from the west, met with no local competition." He alludes to my work, pointing out pottery in Island Southeast Asia and on the mainland with incised or painted "Dongson" designs, but con-

siders this as Dongson influence (derived) and, if some of my dates are correct, notes the requirement of pushing back the spread of these Dongson influences to the Philippines to the eighth or seventh century B.C. (1966:189). Rather more strongly than before, he emphasizes the influences of Late Chou directly on the art of some areas of eastern Indonesia, particularly interior Borneo (1966:194–202).

Toward the end of this paper Heine-Geldern presents a challenge:

. . . whether I was right or wrong in bringing the Cimmerians and Tokharians into the picture, there still remain the striking similarities between Dongsonian and western, i.e., European and Caucasian, objects and designs which can only be explained by the assumption of an ethnic movement. A few scholars have rejected my theory concerning the origin of the Dongson culture, but significantly not a single one has tried either to offer another interpretation of its correspondences with the west or to disprove them. (1966:201)

Grand reconstructions, such as this one by Heine-Geldern, that cover huge areas stretching from Scandinavia to the Marquesas and New Zealand run into criticisms from many specialists in some small portion of the area covered, but seldom do they receive criticism on the total reconstruction. Most American archaeologists and prehistorians have been so critical of the total reconstruction made by Heine-Geldern that they have not bothered even to consider it in print. One could observe that the North American criticism is theoretical rather than specific, but it is more a matter of philosophy and fad than theory. Without bothering to look at the specific examples and arguments presented, critics condemn the whole as being diffusionist—and virtually any resemblance that is “explained” by diffusion is automatically suspect. In a way, this is proper, as the term diffusion explains nothing. There are many different ways in which diffusion works, though most of it is through some sort of contact between peoples. Heine-Geldern usually considers “ethnic movements” or migrations as the model of diffusion in the reconstruction I am here concerned with, but to many today this is almost equally suspect. On the other hand, art historians in the United States and Canada have not disregarded Heine-Geldern’s work because “diffusion” is central to their methodology, and they are not concerned with the form(s) of diffusion involved in the movement of the art motifs or styles with which they are concerned.

I have not attempted an examination of the literature to see how art historians have regarded Heine-Geldern’s total set of hypotheses I am examining here. I have noted that a number of art historians from the United States and elsewhere as well as prehistorians, outside of the United States for the most part, have worked with one or more of Heine-Geldern’s hypotheses involving a small portion of the total area he covered. An example is a recent work by H. Spiegel (1973*a*, 1973*b*) having to do with an art style found on New Ireland in Melanesia. After presenting considerable data on several motifs found in wood-carving, Spiegel goes on to say:

It is not astonishing to find Siberian motifs and themes in Melanesian art; the connecting link is Shang and Early Chou art, whose influence is noticeable in Indonesia and Malaysia as well as in Polynesia. R. von Heine-Geldern, 1966, in a Note on Relationship between the art styles of the Maori and of Ancient China . . . points out the many instances where his so-called ‘Old Pacific Style’, i.e., O.P. is found in the island world

of Sumatra, Borneo, the Sepik River area of New Guinea and New Ireland, and its relationship to Permian and Siberian bronzes. D. Fraser in his study of 'Early Chinese Art and the Pacific Basin', 1967 [*sic*], also points out more specifically eleven motifs from the Shang and Chou period for which he could trace parallels in Sumatra, Borneo, the Sepik River, especially the Iatmul region, New Ireland and New Zealand, the New Caledonia Islands, Hawaii and Easter Island and Mexico. (1973*b*:211)

Talking about ceremonial boats, Spiegel continues:

It could thus be shown that the links between Dong-Son bronze art and New Ireland carvings are closer in space and time than I had previously assumed, and the Indonesian influence, through the medium of textiles and bark-painting from the Dajaks . . .— which go back to that important exponent of a Chinese source . . .—and show the direct descentance from Dong-Son drums—are clearly established, not only in the underlying idea of the soul-boat, but also in actual decoration, style and content. (1973*b*:216–217)

In this article we see an elaboration of a portion of Heine-Geldern's hypotheses 4, 5, and 11 as presented in this paper and his further references to Dongson and Chou art spreading into the Philippines and eastern Indonesia.

The reference to Fraser in the first quotation from Spiegel given earlier is to a catalogue originally made to go with an exhibit of photographs presented at Columbia University in 1967 and held in conjunction with a symposium on "Early Chinese Art and Its Possible Influence in the Pacific Basin." The participants presenting papers included a slight majority of art historians, a smaller number of archaeologists, and a few cultural anthropologists, geographers, historians, and so on. As earlier statements in this paper have indicated, North American archaeologists do not hold the concept of diffusion in the same regard as do the art historians, and the archaeologists descended from the British tradition (Australian and New Zealanders, in this case) regard diffusion in much the same way as the North Americans. It was unusual to have art history and archaeology so strongly represented together in a symposium in the United States. Though there was no animosity between the two groups, the depth of communication between them was not great. Twenty-seven papers were published in the proceedings (Barnard 1974). Their content is not equally easy to categorize, but in a rapidly made review, I would say that the archaeologists' papers (11) either do not include Heine-Geldern in their references or, where he is referred to, it is in a neutral way, except in three papers. These three were by European or European-trained archaeologists and prehistorians. On the other hand, 11 papers can be categorized as art oriented, and only one of these does not include Heine-Geldern in its references (Inverarity 1974), though curiously this paper is on a subject in which Heine-Geldern was interested. This is not unnatural, however, as many of the archaeological papers were data oriented and the subject of the book is one in which Heine-Geldern was centrally involved along the lines of art history.

In his introduction to the book, Noel Barnard (1974) suggests that it appears likely that diffusion of art motifs to New Zealand started "to spread from central/Southern China not much later than early Han times (circa 200 B.C.) and not much earlier than, say, 600 B.C." The title of Mino Badner's paper, "Some evidences of Dong-Son-derived influence in the art of the Admiralty Islands" (1974), tells its own story. Douglas Fraser's paper, "Early Chinese artistic influence in Melanesia?" (1974), includes Indonesia, Pacific

Islands, and New World art motifs as well as those from Melanesia. In his paper, a sort of commentary on the photographic exhibit presented at this symposium, he examines specific motifs such as the hanging tongue and points out that "there are precedents for *every one of our motifs* in the archaeological art of China in Late Chou times or earlier. Support for a Sinitic origin comes also from the priority of China in such motifs . . . which never achieved any popularity in India or Japan unless under indirect Chinese influence. The Dongson culture clearly has nothing to do with our complex. . . . The Ch'u culture, with its impressive long tongues, provides a clue that the original location may have been South China, presumably near the coast. But there is scant evidence in the present archaeological record to lead us to attribute the complex directly either to Ch'u or Yueh" (1974: 651-652). In a postscript to his paper (1974:652), Fraser provisionally accepts William Watson's and Heine-Geldern's suggestions that this complex of motifs is pre-Shang in origin and that it is nonroyal, which "would go far to explain the vigorous primitive quality of the motifs which seem so indecorous by Chinese standards," and that it reached various parts of the Pacific Basin at various times. He proposed to call this the Old Sinitic Complex.

Two of the papers in this publication support or amplify the European portion of Heine-Geldern's edifice. I mentioned earlier that two of Janse's articles (1931, 1932) may have been important in Heine-Geldern's original idea, leading to his hypothesis of the Pontic migrations. Karl Jettmar, in his paper "The Thraco-Cimmerian phase in Central Asia: evidence for the 'Pontic migration' " (1974), fills a major gap in Janse's 1932 paper on a particular form of cruciform tube and a button with a cruciform decoration. Jettmar noted both of these forms in various museum exhibits that had not yet been published. After presenting the gap-filling data, he continues:

I could give more examples, but even in this case I would have to refer to unpublished (but exhibited) material. For the moment I only want to mention that all these parallels belong to the same early horizon—the seventh century B.C. at the latest. . . .

Almost certainly there was not one isolated migration but a rather intricate pattern of movements starting perhaps in the last centuries of the second millennium B.C. . . .

But I do not believe that this is enough for an adaptation of Heine-Geldern's theory to the present state of research. We must add the hypothesis that the Westerners settling in the border-zone of China did not completely lose contact with their former homelands. Perhaps some bands even returned and encouraged further expeditions. This could be the background for the establishment of a system of transcontinental trade many centuries before the silk road came into being. This system rendered possible the diffusion of ideas and techniques taken over by the frontiersmen from the centres of Chinese civilization far to the West. So the Pontic migration finally provoked a kind of cultural backlash.

Arguments for such a reverse current are numerous and they cover a long period. (1974:235, 237)

The second paper is by Carl Schuster (1974), and its data and implications cover almost as broad an area as did those of Heine-Geldern. In our discussions during the symposium, it was apparent that this was a paper using art history methods that many of the archaeologists found impressive. It starts with a somewhat complex motif that Schuster found on an embroidered cloth from Szechwan Province in China. He convincingly points out this

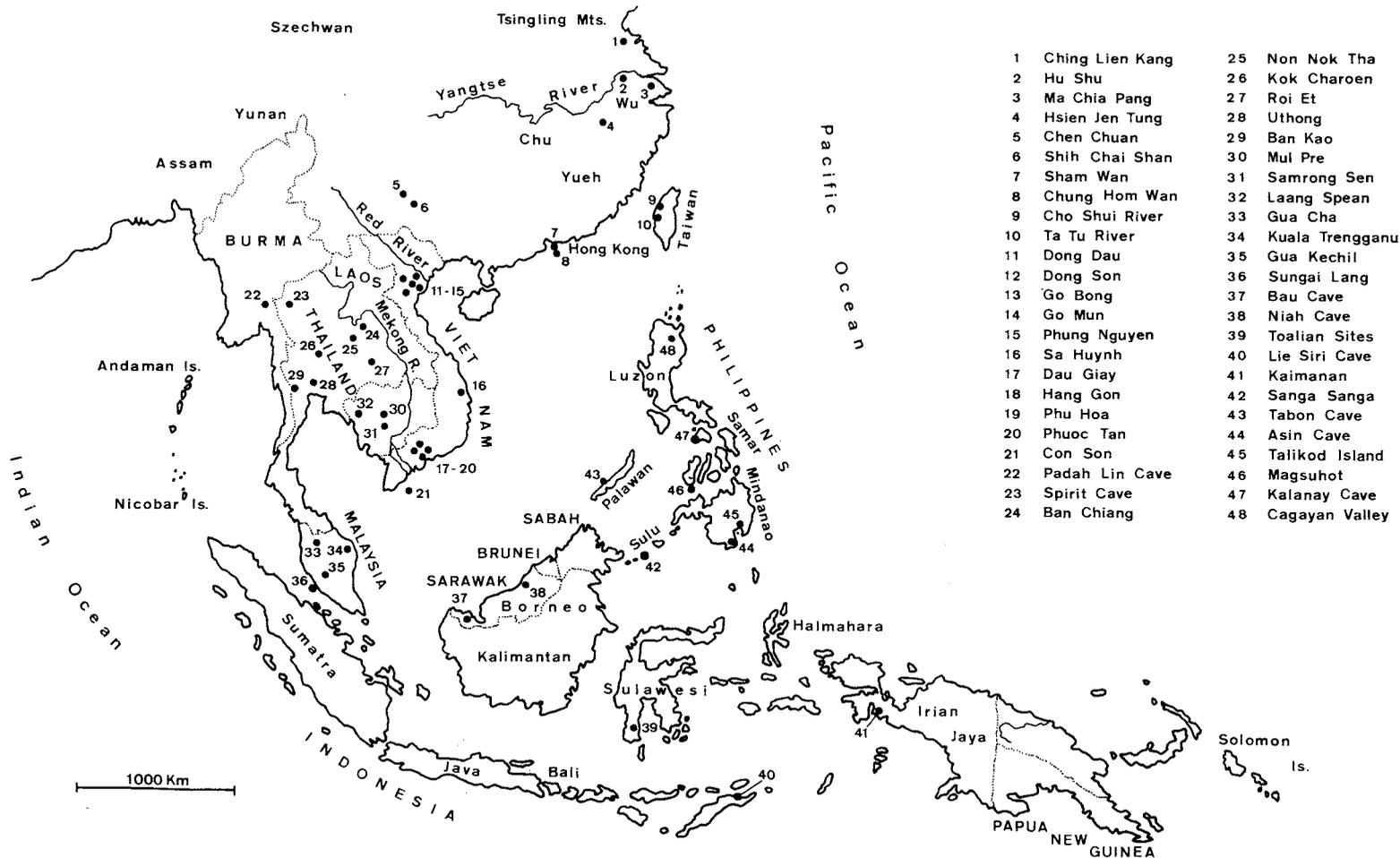


Fig. 1 Map of Southeast Asia showing archaeological sites.

same motif, and related ones, from a remote valley in the Carpathian mountains in Poland, through various intermediate locations, to southern Bougainville, Solomon Islands, in Melanesia. Although most of his paper presents data on specific artifacts, Schuster compares and interprets the locations where he has found this motif to Heine-Geldern's Pontic migration, its proposed influence on Dongson, and from there out into the Pacific (Schuster 1974:270-274).

Emma Bunker in her paper on the Tien culture of Yunnan (1974:304-305) presents support for Heine-Geldern's eastern European-Dongson relationship. Janse reported two different *ko* which were of unknown provenience and suggested that they were of Dongson type. Karlgren argued that these *ko* "may safely be determined as being specimens belonging to the Huai style of North-central China" (1942:27-28), can therefore be removed from the list of Dongson artifacts, and thus cannot be used in any argument on Dongson relationships. Bunker shows that these *ko* are almost exact duplicates of *ko* recovered from Shih-chai-shan (1974:304-305) and not Chinese in origin. Janse does not refer back to any of his earlier papers that were so important to Heine-Geldern's arguments, but it is interesting to note that he feels that the Lach-truong culture, which followed the Dongson culture in the neighborhood of Dongson, was "a ramification of the Ch'u culture" (1974:202).

Heine-Geldern also took part in this symposium. Although his paper was on "American metallurgy and the Old World" (1974), he included in it a summary of his Pontian migration hypothesis to explain similarities between Caucasian and South American objects by way of the Pacific (1974:783-795). In this paper he adds to the Dongson culture elements of material culture not previously mentioned. These were gold (1974:806) and more specifically the decoration of gold objects with small balls of gold (1974:807-808), and further, the use of *cire-perdue* casting and the use of *tumbaga*, gold-copper alloy (1974:809-810).

I complete my review of Heine-Geldern's interpretation of Dongson, what came before it and what followed, and views on this subject by others, with a statement by Magdalene von Dewall (1974:331): "The term Dong-son civilization, it seems, having served conveniently for a large period to cover many diverse aspects of time, region, cultural development and socio-religious orientation, has by now outlived its time and needs a fresh coining of its constituents in more meaningful associations." I support this statement and present a new paradigm to take its place in the conclusions to this paper.

#### THE NEW DATA AND HEINE-GELDERN'S HYPOTHESES

The postulate of two distinct art styles in Southeast Asia, one sculptural and monumental and the other ornamental with intricate curved lines and stylized animal figures, is, I feel, neither supported nor denied by the new data. The second style is fundamental in early Southeast Asian art, from the first decoration on pottery at Ban Chiang (Gorman and Charoenwongsa 1976; see Fig. 1 for location of sites) and Non Nok Tha (Solheim 1970a: pl. Id; 1970b: pl. Ic) in northeastern Thailand from the fourth millennium B.C. and perhaps earlier, into the Sa-huỳnh-Kalanay (Solheim 1964:14, 42, 92, pls. 7, 11a, 19, etc.) and Lapita pottery (Golson 1974:fig. 3, 558-559) of the first millennium B.C. and earlier. It must be recognized, however, that straight-line and angular patterns are as important as the curved. Also, to my knowledge stylized animal figures do not show up with this art style as represented on pottery until the first millennium B.C. at the earliest. The

monumental style, except for megaliths, I find hard to recognize archaeologically. Heine-Geldern also pointed out the difficulty of identifying the monumental art style archaeologically (1966:213). The lack of prehistoric evidence may be because this style, as illustrated by Heine-Geldern, is usually found in woodcarving (1966:fig. 1-8). A few simple stone figures from the Philippines, associated with burials, and pottery figures of a similar nature, also associated with burials, are of this style, but these are at times associated with ornamental style. Though these styles, as defined by Heine-Geldern, are distinct, I do not feel, from the prehistoric evidence as I see it, that they are necessarily distinct in origin, except possibly for the menhirs. I proceed with the hypotheses of Heine-Geldern in the order in which I have presented them at the beginning of this paper.

1. The ornamental art style was introduced to Indonesia (Island Southeast Asia) during the first millennium B.C., in the Bronze Age. Heine-Geldern equates the ornamental art style with the Dongson art style (1966:176-178). I have remarked on numerous occasions on the close relationship of the designs of the Sa-huỳnh-Kalanay Pottery Tradition and those of the Dongson style (Solheim 1957:286-288; 1959b:187; 1967c:163-164; 1976:143-145). Heine-Geldern noted this but stated that ". . . the question of the supposed Dongsonian affiliation of Kalanay designs needs further study" (1966:189). To establish that there is more than a casual relationship between the Dongson and Sa-huỳnh-Kalanay pottery designs, I present in Figure 2 a comparison of motifs of these two art styles. I use lists of motifs or elements of Dongson art that I have made from Heine-Geldern, Karlgren, and van Heekeren. Each of these lists has several elements that are not on the other two lists, as well as elements shared between two lists and several elements on all three lists. I do not use all the elements of any one list and start with the elements found on all three lists (1-5), then those found on any two lists (6-10), and finally some of those on any one list (11-16). Though I do not find a distinct circle and tangent decoration in the islands, there are numerous running scrolls that must be examined to see that they are not the circle and tangent. I believe this comparison demonstrates that there is a relationship between the geometric designs and motifs of the Dongson style (ornamental art style) and those of the Sa-huỳnh-Kalanay Pottery Tradition and that the two are sufficiently similar that we can say that the decoration of the Sa-huỳnh-Kalanay Pottery Tradition is in the ornamental art style as described by Heine-Geldern. This comparison says nothing about what the relationship is between the Dongson style and the pottery decoration style, only that both are parts of the ornamental style.

The first appearance of the ornamental art style in Island Southeast Asia is very poorly documented. Most of the sites from which it has been reported were not excavated. Most of the sites which were probably well excavated have been published only in preliminary reports where the association of the  $^{14}\text{C}$  dates with specific vessels, and thus with specific motifs, is not always clear. The one site on which there is a published final report (Kalanay Cave Site; Solheim 1964:22-78) has no dates. I have been working with this pottery tradition and its relationships since well before my first publication on the subject (1957). Subjectively, at present, I feel that the peak of the expression of the ornamental art style in the Sa-huỳnh-Kalanay Pottery Tradition took place between 500 B.C. and A.D. 500. The earliest dates in the Philippines for pottery clearly with the Sa-huỳnh-Kalanay Tradition decoration are  $2660 \pm 80$  B.P. and  $2840 \pm 80$  B.P. (890 and 1050 B.C., Clark [1975] correction) for Chamber A of Manunggul Cave in Palawan (Fox 1970:16). Earlier dates indicated for this decoration from Lie Siri Cave in former Portuguese Timor are  $2660 \pm 110$  B.P. (ANU-173),  $3530 \pm 90$  B.P. (ANU-235), and  $3545 \pm 120$  B.P. (ANU-172)

(890 B.C., 1955 B.C., and 1970 B.C., Clark correction; Mulvaney and Soejono 1970:175). This is clearly earlier than the earliest date suggested for the Dongson Culture in Vietnam. Therefore, the ornamental art style's first appearance noted archaeologically in Island Southeast Asia could not have been a Dongson introduction and its introduction, if it did not develop in Island Southeast Asia, was considerably earlier than the first millennium B.C.

Fox estimates that bronze appeared in the Tabon assemblage of Palawan in Duyong and Uyaw Cave between 300 and 500 B.C. (uncorrected dates; 1970:16). A metal needle from a cave in the Cagayan Valley of northern Luzon is dated from before 2000 B.C. (Solheim 1981:81, n5), but this was not associated with pottery with ornamental style decoration. It would appear that, while bronze was associated in Island Southeast Asia with the Sa-huỳnh-Kalanay Pottery Tradition from around 500–700 B.C., it did not enter the area as early as the ornamental art style. On the other hand, I will show later that this art style on the mainland was associated with bronze at the time it started to spread into the islands. In anticipation of this demonstration, I say that Heine-Geldern was correct in his hypothesizing the introduction of the ornamental art style to Island Southeast Asia from an association on the mainland with bronze, but he dated this introduction over a thousand years too late.

2. The monumental art style is that of the megalithic culture, with its beginnings probably in the third millennium B.C., or the neolithic epoch. As I said earlier, in looking at the postulate of the two distinct art styles in Southeast Asia, it is very difficult to distinguish the monumental art style archaeologically. It is curious, however, that in an article on the Sa-huỳnh-Kalanay Pottery Tradition, I brought up the similarities of the Toradja art style of Celebes in its use of the bull's head and that of the Paiwan in Taiwan in its use of paired snakes and suggested that both of these cultures showed a relationship in their art to the decoration of the Sa-huỳnh-Kalanay pottery (1967c:157–161). It is just these bulls' heads of the Toradja that Heine-Geldern points out as examples of the monumental style (1966:167–170). He also considers a combination of four spirals as an important motif of the monumental style (1966:167–170), yet the spiral, I feel, is a central part of the ornamental art style, probably from its beginning (more on this later). In his two illustrations of this four-part spiral, from the Naga art of Assam and the Toradja art (1966:fig. 6–7), the use of the spiral is very similar to that painted on a pottery lid from Asin Cave, Davao del Sur, Mindanao, where it is associated with typical Sa-huỳnh-Kalanay pottery (Fig. 3; Solheim, Legaspi, and Neri n.d.). I mentioned before the alignment of menhirs on the site of Dongson. Could it be that Heine-Geldern's monumental art and ornamental art are the two sides of the same coin?

3. The painted pottery style of China originated in the West and can provisionally be dated to the first centuries of the second millennium B.C.; this style was of little importance in Indochina and probably never reached Indonesia or Oceania. This Heine-Geldern modified to say that it was probably present at Samrong Sen, dating somewhere between 700 B.C. and A.D. 100, and that Samrong Sen was a part of the Dongson Culture. With tentative <sup>14</sup>C dates for Samrong Sen going back to before 2000 B.C. (Carbonnel and Delibrias 1968), it would have been much earlier than Dongson and thus could not have been a part of it. The painted pottery style is that of the Yangshao Culture, and early dates for this now go back to 4500 B.C. (5400 B.C.; Clark [1975] correction; Chang 1977:485). Painted pottery, including a simple, curvilinear interlocking scroll pattern, is a part of the earliest Hong Kong archaeological culture. This was apparently a coastal, seafaring,

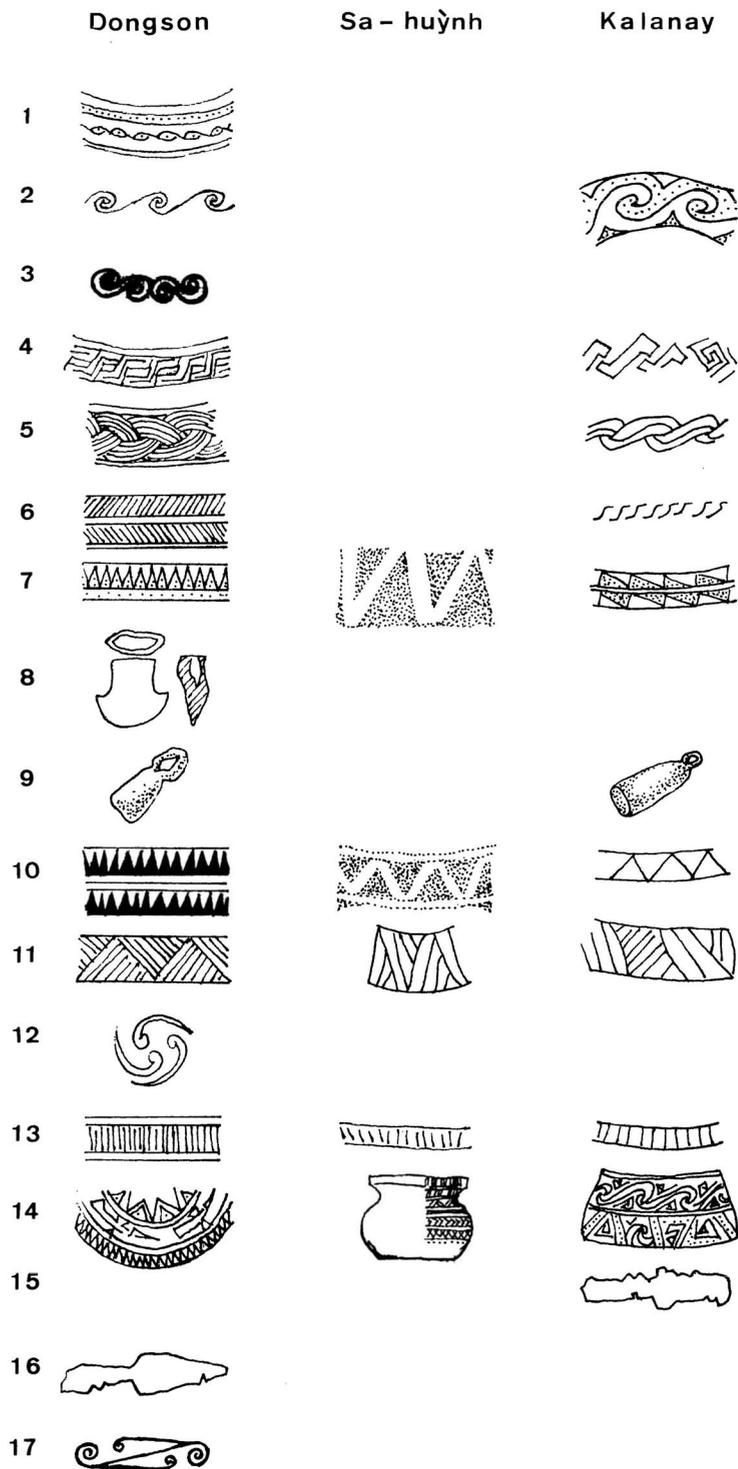


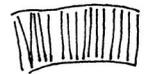
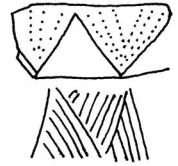
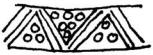
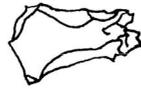
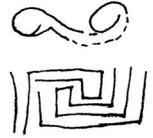
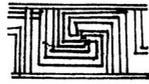
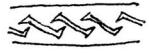
Fig. 2 Motifs found on Dongson bronzes and similar motifs found on pottery of the Sa-huỳnh-Kalanay Pottery Tradition of Island Southeast Asia: (1) circle and tangent, (2) running spiral, (3) double spiral, (4) meander, (5) loose plait, (6) cord or rope pattern, (7) granulation, (8) socketed bronze axe, (9) bronze bell, (10) sawtooth

Tabon

Mindanao  
Talaud

Borneo

Suluwesi  
(Celebes)



pattern, (11) hachured triangles, (12) crochets/hooks, (13) ladder, (14) concentric circular zones, (15) double-edge sword or dagger, (16) socketed spearhead, (17) spiral with regressive volutes. (For specific sources, contact the author, who also wishes to thank Edwin Solheim and Bertel Davis for for their work on the figures.)

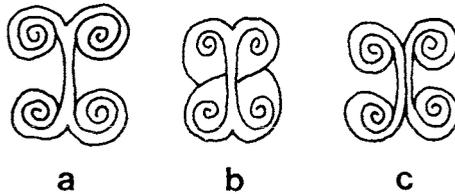


Fig. 3 Quadruple spiral pattern from: (a) Toradja, Sulawesi (Celebes), (b) Asin Cave, Mindanao, Philippines, (c) Maram Naga, Assam, India.

Southeast Asian population showing up here at around 4000 B.C. (Meacham 1980:51–55). Painted pottery, though rare, is a part of the earliest levels at Non Nok Tha and the fourth phase at Ban Chiang in Thailand, with painted spirals, similar to the Yangshao painted spirals, being the primary motif. I illustrate here two more vessels of the black pottery of the bottom layer at Ban Chiang showing likely precursors of the later spiral and running scroll (Pl. I). These date from the fourth and third millennia B.C. and on (Solheim 1967*b*:fig. 5; 1970*a*:147; Gorman and Charoenwongsa 1976:21, fig. 3–4, 26). This painted decoration continues, though not commonly except at Ban Chiang of the first millennium B.C., through time and space into Cambodia and southern Vietnam until it is taken up in the Sa-huỳnh-Kalanay Pottery Tradition, where it becomes somewhat more important, but never common (Solheim 1959*b*:183). The only portion of this hypothesis that remains even partially correct is the presence but small importance of the painted pottery style in Indochina, as long as northeastern Thailand is not considered a part of Indochina.

4. The Shang and the Marquesan art styles have a common pre-Polynesian ancestor and (5) this ancestor is the pre-Shang art of China. The present archaeological opinion is that there were no settlers in Polynesia before the Polynesians and thus the first Marquesans were Polynesians. Development of the Polynesians took place in Tonga and Samoa during the first millennium B.C., so Shang times are pre-Polynesian. I do not have the background to say anything about the Shang, pre-Shang, and/or the Marquesan art styles, but I suspect that these hypotheses are correct. I further suspect that what I intimated earlier in this paper, that Heine-Geldern's and Linton's suppositions on the origins of Shang art (pre-Shang art) point in the same direction, is correct, and that this pre-Shang art is the Old Southeast Asian Art Style.

In examining Heine-Geldern's seventh hypothesis, I will be showing that the Dongson art style evolved almost totally in Southeast Asia, with only minor influence, if any, from China. In examining the ornamental art style, I indicated that the beginnings of the Sa-huỳnh-Kalanay Pottery Tradition, the first archaeological indications of that art style in Island Southeast Asia, may go back to close to 2000 B.C. This ornamental art style, as well as the Dongson art style, developed out of the same source within Southeast Asia. As I will show, this ornamental art style includes the variety of both curvilinear and angular (rectilinear, triangular, etc.) spiral designs that Heine-Geldern uses to relate Shang to Marquesan art (1937:180–181). This would mean that these motifs are an integral part of the ornamental art, as carried by the proto-Polynesians to Tonga-Samoa, where this culture became the early Polynesian, and by these people out to the Marquesas and eventually New Zealand. With these elements of the ornamental art style evolving in Mainland Southeast Asia during the fourth and third millennia B.C. (as I will develop later) but ap-

parently not showing up in China until early Shang times, it would appear logical that these elements, with other elements of the Old Southeast Asian Art Style (if not the total style), were taken up by the early Shang people, through some sort of extensive and/or intensive contact with the people using this style in Southeast Asia. The curvilinear spiral, so common in some areas of the Yangshao cultures of North China (Chang 1977:130), may be an exception to this, but there appears to be a considerable gap between the use of the spiral in Yangshao and in Shang art. Until we know much better the fourth and fifth millennia B.C. art in South China, we cannot know whether there was a direct relationship between the Yangshao spiral motifs and those of the fourth millennium B.C. black pottery of Ban Chiang.

6. The movement of people that brought the pre-Shang art style to the Marquesas took place between 1800 and 600 B.C. It is surprising how little these dates need to be changed to come into line with our present, still incomplete, knowledge. Recognizing that this movement of people was not a direct movement from Mainland Southeast Asia to the Marquesas, we need only to widen this time span to about 2000 to 1 B.C., using Pawley's (1977:493) general dating of around 2000 years ago for beginning settlement of the eastern Pacific. Although Heine-Geldern thought these fifth and sixth hypotheses somewhat questionable, they require only relatively minor revision to bring them into line with the archaeological and linguistic data.

7. Elements of the Dongsonian and of the Late Chou art style originated in eastern Europe in the Hallstatt Culture, Bronze and early Iron Age of the Caucasus, and the Bronze Age of Transylvania and eastern Hungary. I will show here that most of the Dongson elements listed by Heine-Geldern and van Heekeren as having been brought to the Dongson area from eastern Europe, or by Karlgren from the Huai art style of Chou China, evolved in the area of present-day Vietnam for at least 1500 years previous to Dongson and more generally are known developing in northeastern Thailand for at least another 1500 years before that. This Southeast Asian development leading to the Dongson art style does not necessarily mean, however, that there were no connections between eastern Europe and Dongson.

It can be argued that the new data do not rigorously prove my statement. I feel that I can present a *prima facie* case, but proof that would satisfy any and all skeptics must await final publication of final reports on the excavations of stratified sites and excavations in areas where no archaeological work has been done.

I present my case again with visual evidence in the form of Figure 4. Although it is obvious that many of the geometric designs found on the Dongson bronze drums were present on the earlier pottery of northern Vietnam and that many of these designs were also present at the same time in South Vietnam, the dynamic interrelationships that must have been underway cannot be worked out as yet. Clarification of these interrelationships must wait until we have much better chronological control of the data and can work out the cultural interaction between the north and the south of Vietnam from about 2500 to 500 B.C. We may not have to wait long, however, as a majority of the articles in two recent issues of *Khao Co Hoc* (Archaeology, vol. 24[4], 1977 and 25[1], 1978), published by the Institute of Archaeology of Vietnam, are on the archaeology of southern Vietnam. Several articles are on the site and culture of Sa-huỳnh, its relationship with Dongson (Ha and Trinh 1977), and the relationship of the Phung Nguyen culture of the Red River Valley with Sa-huỳnh and the cultures of Island Southeast Asia and the Pacific (Ha 1978).

The relationships with the sites of Non Nok Tha and Ban Chiang in northeastern



Plate I Ban Chiang black pottery from northeastern Thailand with (a) incised and impressed rocker stamp double spiral pattern on lower panel (thanks to the collection of the Krannert Art Museum, University of Illi-



nois, Urbana-Champaign), height without foot 26.67 cm; (b) incised and impressed rocker stamp running spiral on lower panel and meander on upper panel (Solheim collection), total height including foot 23.5–24.75 cm.

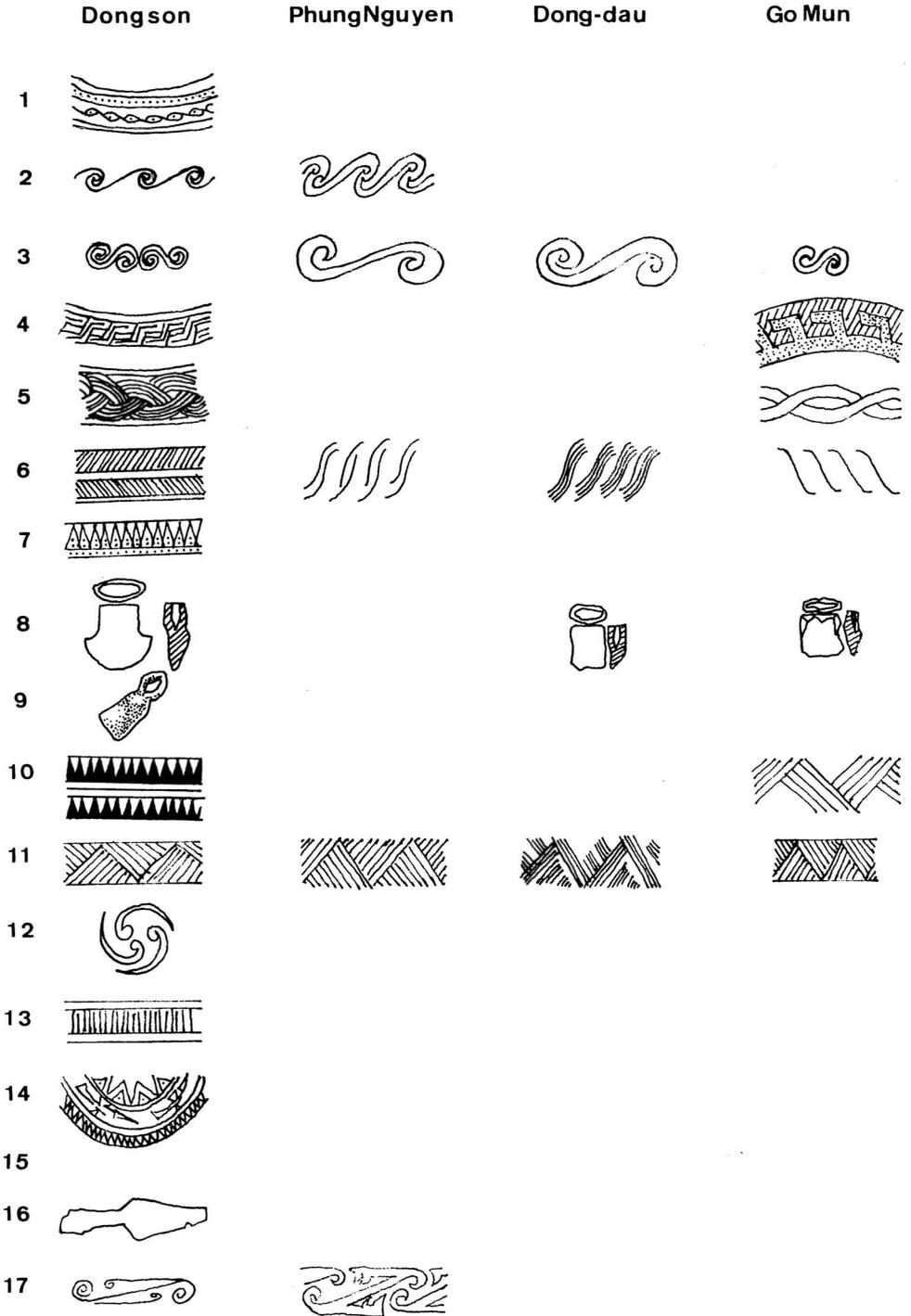


Fig. 4. Motifs found on Dongson bronzes and similar motifs found on pottery from pre-Dongson levels of

South  
Viet Nam

Cambodia

Non Nok Tha

Ban Chiang



sites in eastern Southeast Asia. (Designs the same as those used in Fig. 2.)

Thailand going back into the fourth millennium B.C. and earlier are more general, with connections suggested by way of Cambodia. Again, all of these sites have bronze working at the sites (Davidson 1975; Fontaine 1970, 1972; Lévy 1943; Malleret 1959*b*; Mansuy 1902; Saurin 1962, 1963, 1964, 1966; Solheim 1959*a*; Wheeler and Maddin 1976). The area directly between northern Vietnam and northeastern Thailand is virtually unknown archaeologically, so we have no idea whether there might have been direct contact between these two areas. There is the possibility of contact, however, from Cambodia directly to the east, as Vietnamese archaeologists have reported early sites of the "Sa Huỳnh culture" in the interior west of the coastal area where it was first known. It appears that some of the pottery decoration was painted, but it is not evident whether bronze was associated with these early interior sites (Chu 1979:28–29). It is apparent from Chu's brief and very interesting paper that my use of the concept of a pottery tradition—the Sa Huỳnh Kalanay Pottery Tradition in particular—is thought to refer to a culture rather than only to the pottery (Chu 1979:31). I have clarified my use of the term "pottery tradition" in another paper (Solheim 1981:49) and so need not go into this here. What I can say with considerable confidence is that by 2000 B.C. there were numerous related cultures in central and eastern Mainland Southeast Asia that were manufacturing bronze artifacts and were making pottery with decoration expressing an art style held in common by the peoples of these cultures. The origins of both the bronze working and the art style (which I consider to be the ornamental art style of Heine-Geldern) are still unknown, but I doubt that they were in the immediate area of Non Nok Tha and Ban Chiang.

There are no kilns known for firing pottery in northeastern Thailand before the first millennium A.D., and the earthenware of northeastern Thailand of today is fired in open fires at temperatures well below 1000°C. The temperatures needed for smelting and casting bronze and later iron are much higher than this. Recent thermal testing of sherds from Non Nok Tha and Phimai, however, suggests that there may have been some sort of kiln, perhaps similar to the above-ground semikiln used in the very recent past by some potters in Cambodia (Biagini and Mourer 1971:212, fig. 16). Firing temperatures of 750° to 810°C are indicated for the pottery of the bottom layer and 800° to 975°C for the next three layers at Non Nok Tha, covering from before 3000 B.C. to c. 1500 B.C., and 800° to 1200°C for Phimai black pottery, which is pre-Khmer back to 500 B.C. or earlier (Meacham and Solheim 1979). The small size of the crucibles recovered from Ban Chiang and Non Nok Tha (Gorman and Charoenwongsa 1976:20, fig. 2; Smith 1973: fig. II, 21–22) would suggest the use of bellows and a small fire rather than a kiln. This would help to explain why the bronze artifacts known from c. 4000–500 B.C. are all relatively small. The casting of the large Dongson drums must have required kilns that could melt much larger quantities of bronze at one time. The earliest pottery found at Ban Chiang, the black pottery, was associated with bronze and came from the bottom layer (Gorman and Charoenwongsa 1976:18, fig. 2, 26). Thus the two came in together from somewhere else. The only earlier pottery yet known in central Southeast Asia is that from Spirit Cave. Some of this pottery, from around 6500 B.C., was incised in a wavy line pattern (Gorman 1970: pl. *vf*). Although the pottery from Spirit Cave is unlikely to be the direct precursor, it is probably of the same pottery tradition found at Ban Chiang and Non Nok Tha, all having cord marking as their most common surface treatment (Gorman 1970:96; Gorman and Charoenwongsa 1976:26; Bayard 1970:122).

I feel that Figure 4 amply demonstrates that there is no need to go outside of Southeast Asia for the origins of the Dongson art style or the ornamental art style. Out of 23 different elements on the three lists of Dongson elements, only seven are not included in Figure

4. These elements are as follows: (1) double-edge swords and daggers, and (2) swords with antenna handles. A wide variety of bronze swords and daggers are known from surface finds and sites in the Chiangrai area of northern Thailand. None of these has been dated or the sites excavated, but I suspect that dates for these artifacts could well go back to the second millennium B.C. if not earlier. Blust's (1976:27-31) arguments for the words for *iron* and *short sword* going back to proto-Austronesian are strong, but I feel his alternative of *metal* for *iron* is more likely. Whatever the case, the root for *short sword (dagger)* is a good indication that this type of implement was a part of Southeast Asian culture long before Dongson. (3) Bronze pendants of human shapes, (4) processions of deer, (5) cruciform buttons and tubes. Though I do not know of this kind of button or tube in Southeast Asia, there have been a number of buttonlike objects of fired clay or bone found at Samrong Sen in Cambodia, some with a cruciform pattern incised on them (Mansuy 1902:17-18, pl. xiii) similar to the cruciform buttons and tubes first illustrated by Janse (1932:199, fig. 6-7). This cruciform motif is not otherwise found at the site. These are associated with pottery with ornamental style decoration and probably with bronzes, and possibly date earlier than early Dongson (Carbonnel and Delibrias 1968). (6) Central star, (7) birds. As I mentioned before, zoomorphic representation (stylized animal figures) appears to be a rather late entrant to the ornamental art, and missing items 3, 4, and 7 and are zoomorphic. Thus, it is possible that some of the Dongson motifs had an origin outside Southeast Asia.

8. These elements were brought to the Orient by a Thraco-Cimmerian tribe between 800 and 600 B.C. I have shown that the great majority of the elements were present as a part of the ornamental art present in Southeast Asia for thousands of years before the time of Dongson. Therefore this hypothesis must, for the most part, be wrong. On the other hand, Jettmar has shown the possibility of the movement of the cruciform buttons and tubes from eastern Europe (1974:232-235) and stated that almost certainly there was "an intricate pattern of movements" for several centuries around 1000 B.C., with trade and stimulus diffusion going in both directions. I would suggest the likelihood that patterns went both directions and that some of the Dongson designs that Heine-Geldern derived from eastern Europe moved instead from the ornamental art style of Southeast Asia to Europe. I leave this for others to investigate if there is interest.

9. The movements bringing these elements affected both Chou China and Indochina directly, the latter without passing through China. With "movements" changed to "trade" and going in both directions, and most of the Dongson art elements originating in Southeast Asia, this hypothesis is, for the most part, no longer relevant. This brings up, however, the relationship between Dongson and Chou China. It was in connection with the previous two hypotheses that Karlgren hypothesized that the Huai style art of Eastern Chou China was the source of many of the elements of Dongson art. These elements were included in Figure 4. Of the 11 elements on Karlgren's list, two were elements not yet noted in the earlier ornamental art, these being the central star and birds. It is possible that these were a contribution of the Huai style to Dongson art. On the other hand, the other nine elements being much earlier in the ornamental art than in the Huai style, they may well be a part of the Chou art that came from the pre-Shang style, from Southeast Asia, or came into China about the middle of Western Chou (c. 950 B.C.). At this time there was a "sudden, complete and fundamental change in the art tradition in China."

It is characterized on the one hand by a ruthless abolition of the whole array of Yin elements . . . on the other hand by the introduction of a series of new elements, most of

which were entirely unknown in China before that time, and some of which had cropped up but sporadically, in exceptional cases, anterior to 947. (Chang, from Karlgren, 1977:376)

I would suggest that this is the time when the ornamental style of Southeast Asia was of great influence on the Chou art, quite possibly by way of Ch'u. I would hope that someone with the needed background would examine this suggestion. The nine elements of the Huai style which are earlier elements of the ornamental style are: (1) granulation as filler between lines, (2) two (and more) stranded loose plait, (3) meander and meander-filled band (—|—|—|—|), (4) sawtooth pattern, (5) slanting stroke band or rope pattern, (6) double S spiral and running spiral, (7) circle with tangents, (8) spiral with regressive volutes, and (9) concentric circular zones.

10. It is probable that Indonesian movement from Mainland Southeast Asia into Indonesia in the Neolithic introduced the megalithic art into this area. The presumed Indonesian movement from the mainland, according to Heine-Geldern, went from western Malaysia into western Indonesia and then eastward. In speculating further on the dating of the megalithic/monumental art style, he argues that it spread into eastern India around the middle of the second millennium B.C. (1966:171-173). He further argues that the monumental art style extended far into China, introduced the bull's head into Shang art, and thus was in existence at least as early as the latter half of the second millennium B.C. (1966:173-174). These dates, of course, we now know are well after bronze came into use in at least a considerable portion of central Southeast Asia, bordering on what is today South China (what I consider northern Southeast Asia at the time of which we are speaking). This further suggests to me that the monumental and the ornamental art styles, if not two aspects of the same style, are at least considerably overlapping. Heine-Geldern goes on to say:

As I pointed out more than thirty years ago, the Indonesian languages must have been introduced into the islands by people who came from the interior of further India, bringing with them late Neolithic cultures characterized by quadrangular stone adzes. My conclusions were mainly based on two arguments: the gradual development of the beaked adze discernible in the area from Laos down through the Malay Peninsula into Indonesia (a process which clearly indicates an ancient movement from north to south) and the fact that the quadrangular adze is the kind of stone tool the distribution of which in the archipelago corresponds to that of the Indonesian languages. (1966:174)

The new archaeological data from the area between Laos and Indonesia do not support this statement.

No adzes have been recovered from excavated, stratigraphic positions in Laos. The form of the stone adzes excavated at Ban Chiang has not been mentioned, and in any case all stone adzes here, as at Non Nok Tha, are concurrent with bronze. At Non Nok Tha, the adzes in the lower levels are small and, according to Bayard, rectangular or trapezoidal in cross section (1970:122). I would add lenticular to this. At Kok Charoen, in Lopburi Province, central Thailand, the adzes recovered are small, rectangular to lenticular in cross section, with a unilateral bevelled cutting edge, as at Non Nok Tha (Loofs and Watson 1970:75). At Ban Kao in western central Thailand, there is a greater variety of adzes, including rectangular, trapezoidal, oval, to lenticular, most with a unilateral bevelled cut-

ting edge but a few with a bilateral bevelling like the beaked adze of Malaysia (Sørensen and Hatting 1967:plates of line drawings). In talking about adzes in Thailand, Duff says (1970:60) that "the Beaked Adze in its classical Malayan form . . . is well represented, but appears to have moved only into the southern provinces of Thailand stopping abruptly at the 10th parallel (North Latitude)" (Ban Kao is at about 14° N latitude). Duff further suggests that the beaked adze of Indonesia and western Malaysia was a late development of western Indonesia that diffused only as far east as northeastern Sulawesi and north into south and (central western) Thailand (1970:12, 15). Not only is there no indication of a movement of people south through Mainland Southeast Asia into western Indonesia (after the probable spread of people with the Hoabinhian culture from the north into northern Sumatra), but I can see no archaeological suggestion for Austronesian languages in Mainland Southeast Asia, except along the South China and Vietnamese coast, until the arrival of the Dongson bronze drums in Malaya, possibly around 200 B.C. I would therefore say that there was no movement, as hypothesized by Heine-Geldern, through Mainland Southeast Asia and western Malaysia into western Indonesia, and thus the megalithic art, if such there be, did not come into Indonesia in this way.

11. The Dongsonian art style (the ornamental style) was introduced into Indonesia by a colonization of the Yue(h) of South China and northern Vietnam and from there it continued to be spread by Indonesian tribes. As I reported earlier in this paper, Heine-Geldern modified this hypothesis in saying that this movement was not a large-scale ethnic migration but small numbers of merchants and colonists who were absorbed into the local populations; he also included Cham as being a part of this migration. I have shown that the Dongsonian art style is not *the* ornamental art style but evolved from the ornamental art style and probably incorporated a few elements from outside Southeast Asia. These, I suggest, it added to the ornamental art style in its continuing evolution. I am in partial agreement with this point and will clarify this in my conclusions.

Heine-Geldern made a number of modifications and additions to the foregoing hypotheses, some of which I have presented in the first part of this paper. I cover these briefly. He thought that urn burial was introduced to Island Southeast Asia from Indochina during the Dongson period. Urn burial was directly associated with the Sa-huỳnh-Kalanay Pottery Tradition; in fact, most of the known sites are caves with urn burials. This probably goes back to the second millennium in the Tabon and Niah Caves and in any case is definitely earlier than the Dongson period. He felt that megalithic rituals and beliefs were introduced into Island Southeast Asia with the quadrangular adze between 2500 and 1500 B.C. I suspect that in general this is correct but would move the beginning date back to 3500 B.C. and possibly earlier. He felt that there was a later megalithic "wave," bringing the use of stone cist graves, dolmenlike slab graves, stone sarcophaguses and vats during the Dongson and Early Iron Age periods. I will modify this in my conclusions. He sees Dongsonian and Late Chou art styles coming into Island Southeast Asia together. I would agree that there were probably a few minor additions to the ornamental art style from Dongsonian and Late Chou art around 300±200 years B.C.

Heine-Geldern felt that the socketed celt presented one of his strongest arguments for origins of the Dongson Culture in Europe. He stated that it is not known in the Near East or India, it was known to have originated in Europe, and it spread by way of Siberia to China, from which point it moved to Southeast Asia. We have the use of socketing for metal tools from the bottom layer of Ban Chiang, dated at around 3500 B.C. (4375 B.C., Clark [1975] correction) (Gorman and Charoenwongsa 1976:18, fig. 4, 26; Wheeler and

Maddin 1976:40–41, fig. 3–5). Socketed axes are present at Non Nok Tha from Level III, IV and on dating at about 3000 B.C. (3785 B.C., Clark [1975] correction) (Bayard 1970:123–124, 130–134, pl. IIIa; 1972; Solheim 1970a:146–149). To the best of my knowledge, these are the earliest known dates for the technique of socketing and for socketed axes. If this is correct, and future excavations do not make major changes, it is likely that socketing and socketed axes were first invented somewhere in Southeast Asia and spread to Europe from there, again possibly with the assistance of the Thraco-Cimmerian tribes or their predecessors.

Heine-Geldern's final addition of elements to the "Dongson Culture" was the use of gold and in particular decoration using small balls of gold, *cire-perdue* casting, and the use of *tumbaga*. There is some archaeological and linguistic evidence to support this hypothesis. Gold artifacts start showing up in the Tabon Caves in association with the Sa-huynh-Kalanay pottery around 100 B.C. (Fox 1970:15, 153). The use of the small gold balls for decoration is, to my knowledge, not yet known this early in Island Southeast Asia, though it is present later. Wheeler and Maddin (1976:43–45, figs. 1–4) suggest the possibility of the use of *cire-perdue* casting as early as 1300 B.C. at Non Nok Tha. *Tumbaga*, a term used in South America for a gold-copper alloy, is also a word found in Malay. When I was visiting Harold Conklin some years ago at Yale University, he asked me if I knew anything about the word *tumbaga*. He then went on to say that a number of different Malay languages had roots that converged on something like *tumbaga* for gold, copper, and yellow metal in general.

#### CONCLUSIONS AND NEW HYPOTHESES

Two possible purposes were presented at the beginning of this paper for Heine-Geldern's 1937 article. One of these was to demonstrate the fundamental parentage of Norwegian and New Zealand sculpture. I do not feel that this parentage is evident, but I do feel that there is a possibility of a connection between the two. Whether there is or is not a connection is not of great interest to the archaeologist, though it may be to the art historian. What are of interest to the archaeologist are the varying processes by which elements of art styles moved from one place to another, such as trade, and how these elements become incorporated in different art styles. The second possible purpose was to show the importance of the study of art styles for culture history. I suspect that it is a matter of opinion as to how well Heine-Geldern succeeded, but I feel he did reasonably well. To me, the value is in pointing out that, in a particular time and place, there was some sort of contact between two or more groups of peoples, through which contact the particular art elements or styles were passed from one group to other(s), and not necessarily in only one direction. If art elements were passed back and forth, it is likely that other elements of culture were involved as well, and this brings up numerous problems attendant on culture contact.

I feel that I have shown on the basis of much new archaeological data that some of Heine-Geldern's specific hypotheses were wrong, several (with a bit of adjustment for dating) could still be correct, and some others are still fundamentally reasonable. The ones that are wrong, such as the derivations of much of the Dongsonian art style from Eastern Europe, we can disregard for other than historic purposes. Whether wrong, partly correct, or as far as we can see from our present vantage point, a good interpretation of the data, we should move ahead by building on and with what he has left us and not simply move in complete disregard of his research.

I would like to propose two changes in terms used by Heine-Geldern and others. Recognizing that Dongson art was only a late expression of the ornamental art style in a portion of Southeast Asia and without primary importance for the spread of the ornamental art in Island Southeast Asia and Oceania, I suggest that we no longer consider the Dongson Culture as more than one phase of the Van-Lang Period (Bronze Age) of Vietnamese early history. We would then have the Van-Lang Period made up of the Go Bong Epoch (Early Bronze), the Dong-Dau Epoch (Middle Bronze), the Co Mun Epoch (Late Bronze), and the Dongson Epoch (Final Bronze/Initial Iron), this being subject to change depending on archaeological data from within Vietnam and contiguous areas. In place of holding the Dongson Culture responsible for the spread of the ornamental art style, including elements of the Late Chou art style which may have been incorporated, I propose the Middle Nusantao Period as the primary time of the spread of this ornamental art style. No one culture of Southeast Asia gave birth to this style of art and no one culture was responsible for its spread. I present the framework for the Middle Nusantao as follows and add that much more than an art style was spreading throughout Island Southeast Asia and Oceania.

I secondly propose a change of the name "ornamental style." I mentioned in the first part of this paper that Fraser (1974) had provisionally accepted Watson's and Heine-Geldern's suggestions that the motifs he was referring to were pre-Shang in origin and thus, I would suppose, a part of the pre-Shang art as referred to by Heine-Geldern. Fraser proposed to call this the Old Sinitic Complex (OSC). The OSC is not a part of the ornamental art style, but I think it would have been considered by Heine-Geldern as partly ancestral to it. I propose the term "Old Southeast Asian Complex" (OSEAC) to replace "ornamental art style," with this going as far back in time as to include much if not all of what Fraser meant by his designation "OSC." I do not say that these two terms are synonymous, but I do say that so much of what Fraser would include in his OSC would be a part of the OSEAC that the former might no longer have meaning. I believe this fits well with Linton's suppositions quoted earlier. The total content of the OSEAC remains to be determined by future archaeological excavation, but besides totally including the ornamental art style and much if not all of the OSC, I suspect we will see that the monumental art style is included as well. I have examined the relationship of the Old Southeast Asian Art Style and the early Chinese art styles in somewhat more detail in another paper (Solheim 1980b:6).

On several previous occasions I have presented my very general framework for Southeast Asian prehistory (Solheim 1969, 1970a, 1972, 1975, etc.). Here I present a somewhat more detailed framework of the middle and late *Extensionistic Period* from about 5000 B.C. to 200 B.C., when the period of *Conflicting Empires* began. This was a period of population growth when population pressure forced people out of the ecological niches that their ancestors had favored for thousands of years into almost all available niches, over all the area of Southeast Asia and into Island Oceania. During this period, most of the present-day methods of intensive tropical agriculture were developed, as well as metallurgy, widespread trade, and probably varying levels of indigenous state organization. The framework I present continues into the period of *Conflicting Empires*.

I divide the mainland *Extensionistic Period* into three parts: pre-bronze, from 8000–5000 B.C.; spread of bronze, 5000–2000 B.C.; and indigenous state formation, 2000–200 B.C. Island Southeast Asia I divide into *Proto-Nusantao*, 8000–5000 B.C., *Early Nusantao*, 5000–2000 B.C., *Middle Nusantao*, 2000 B.C.–A.D. 500, and *Late Nusantao*, A.D. 500–1511.

I hypothesize that, by the end of the pre-bronze phase, the OSEAC was well formed though far from complete. Its beginnings probably go well back into the *Crystallitic Period*. Throughout its existence—it is still alive and well—it has added new elements, many of these developing from within Southeast Asia but some incorporated from outside sources. I hypothesize that the separation of Island Southeast Asia from the mainland and into many islands led to the initial formation of a Nusantao cultural focus in eastern Indonesia and the southern Philippines during the *Proto-Nusantao* phase, with the formation of Proto-Austronesian and the invention of the outrigger and sail, and some method to increase the width of the sides to increase freeboard, which would assist in safer deep-water sailing. The Austro-Asiatic languages would have been developing on the mainland during this time.

I hypothesize that bronze metallurgy was invented somewhere in the Mekong drainage, to the west of the Mekong and to the west probably north of the Ban Chiang area, during the fifth millennium B.C., possibly as early as 5000 B.C. Bronze metallurgy then came to the Ban Chiang area during the second half of the fifth millennium B.C. accompanied by the manufacture of the black pottery, the decoration of which was in a developed OSEAC style.

The knowledge of bronze casting and working spread southward on the Khorat plateau along with the generalized pottery technology and decoration, all a part of OSEAC, not moving with a migration of people but with trade and movements of individuals, families, and small family groups. New and more land was needed as agriculture became more important to the economy, and hunting and gathering less profitable and easy. Trade in the metals needed for bronze, and possibly in the stone needed to make the molds, covered a considerable area. With no evidence so far of fortification of sites or warfare, there must have been developing some sort of political organization that would have maintained conditions needed for ease of movement required for this trade. By the third millennium B.C., bronze manufacture and the pottery forms and decoration of the OSEAC were being taken over by the peoples of southern and northern Vietnam and reaching the coast of the South China Sea and north into South China. Elements of the OSEAC may have been in this area considerably earlier, without bronze, as suggested by the pottery of Sham Wan Assemblage F of Hong Kong (Meacham 1978:126–133, 142–149; Meacham 1980:51; Frost 1979:14, fig. 5).

The *Early Nusantao* saw little change in western Indonesia except a gradual increase in southern Mongoloid genes and decrease in Melanesoid genes. This was probably not so much through migration as gradual infiltration of people and by some means selection for the southern Mongoloid gene type. In the east, dugout canoes were being improved and the outrigger invented. Improved methods of navigation led to longer voyages, so that the Early Nusantao people were becoming better long-distance and deepwater sailors and becoming more acquainted with seasonal winds and currents. I hypothesize the beginning of movement of small numbers of people out of the eastern Indonesian-southern Philippines area into Melanesia, and through the northern Philippines to the southeastern China coast. Besides being good sailors and fishermen, I hypothesize, these people were acquainted with simple horticultural methods utilizing a stone, shell, and wood tool kit, but initially without pottery. Though they found no people on the islands of Island Melanesia beyond New Britain and New Ireland, they did find small populations along the coasts of the northern Philippines, possibly Taiwan, and the mainland. These they interacted with genetically and culturally. I hypothesize that these people spread along the coast of China

north to Korea and Japan and south along the coast of Vietnam, developing a distinctive population that is showing up in the Sham Wan Culture of the Hong Kong area (Meacham 1980:50-55). They would live primarily on their boats, fishing and trading along the coast, intermarrying with the local population. They would have developed a trade language that was basically Austronesian and that would have been found all around the South China Sea. I hypothesize that it was groups of these "hybrid" coastal land and sea dwellers that moved to Taiwan during the third millennium B.C., bringing the OSEAC with them but not taking part there in the later development of the Sa-huỳnh-Kalanay Pottery Tradition. Using the counterclockwise currents of the South China Sea, at the southern end of their distribution they would have crossed from the coast of central Vietnam to Borneo, north along the coast, and then back into the home area of eastern Indonesia and the southern Philippines, bringing feedback from the mainland. I hypothesize that the knowledge and the methods of pottery manufacture were brought back to eastern Island Southeast Asia around the middle of the fourth millennium B.C. If there is a separate monumental art style, it probably moved out into the islands during this phase to eastern Indonesia and the southern Philippines but would not have involved Java, Sumatra, and western Mainland Southeast Asia to any great extent during the Early Nusantao Phase. I have gone into the development of the Nusantao coastal fishing/trading people in more detail in another recent paper (Solheim 1981).

The mainland *Indigenous State Formation* is conjectural at this time of writing. It seems quite likely that something of the nature of a state was developing in northern Vietnam during the second millennium B.C., if not earlier. The large fortified site of Co-loa near Hanoi verifies at least the later history of the Hung kings and centralized government going back long before any historically recorded contact with China (Long 1975:89). There is a possibility of some sort of state organization in northeastern Thailand from the latter half of the second millennium B.C. and for the southern half and the eastern portion of the central plains late in the first millennium B.C. The arguments for this possibility are not yet developed and I will not go into them. Others at the University of Michigan are working on this. Iron and a variety of bronze alloys were being cast starting around the middle of the second millennium B.C. (Clark correction) in northeastern and central Thailand. The coasts of Vietnam and China were as much a part of the Middle Nusantao as the islands and will be covered with that phase. Northern Southeast Asia must have been very active during this time. No doubt a number of states developed and had histories, but the success of China and their later becoming a part of China have led to the loss of their history and much of their identity, except for the brief time during which they were entering the orbit of Chinese history.

The *Middle Nusantao Phase* was the primary time for the spread of the Nusantao and the OSEAC. I hypothesize that very early in this phase there was a movement of people from the eastern Sulawesi and/or Halmahara area into the Pacific along the north coast of New Guinea to the Bismarcks, where they settled for a few generations and developed the Lapita Pottery Tradition. This eastern Indonesian area was the same general area where the Sa-huỳnh-Kalanay Pottery Tradition started its development using the forms and decorations of the pottery of the Vietnam coast. At about the same time, possibly a bit earlier, I hypothesize a movement from coastal Japan of a small number of people, possibly Austronesian-speaking peoples, who had been in the Ryukyus for the previous millennium, who worked their way south through western Micronesia, making some contact with eastern Taiwan and the Philippines, and east along the north coast of New Guinea.

They brought with them the circular and lenticular cross-sectioned adze and pottery made by coiling and ring building. They mixed in with the local Melanesians along the coast and up the Sepik River and in some areas in the New Hebrides. They, and their descendants, also made contacts with peoples in southern Mindanao and eastern Indonesia.

I hypothesize that circulation around the South China Sea intensified and that new elements of culture were being picked up by local cultures in some places and not in others, further differentiating these cultures but maintaining a general similarity through shared variety. Around 2000 B.C., there was a general similarity in the pottery all along the coast of South China and Vietnam, but this started changing with the development and spread of the Geometric pottery in South China. This style of pottery gradually moved south and westward along the coast and inland, displacing the earlier pottery, which had shared much with the pottery ancestral to the Sa-huỳnh-Kalanay pottery. Presumably other culture elements moved with the Geometric pottery. By 1000 B.C., it is probably safe to say this spread is associated with the spread of Yueh culture and people. The people of the Yueh culture in general would have been speaking Austro-Asiatic and Austro-Thai languages inland and Austronesian languages along the coast, or at least there was a widespread Austronesian trade language along the coast. They probably began infiltrating the Red River Valley of Vietnam in the first millennium B.C. By the time of the Dongson Epoch in North Vietnam, this Yueh-style Geometric pottery had replaced the earlier pottery. The art style of the earlier pottery continued, however, in the Dongson bronzes. This infiltration continued only a short way south of the Red River delta. I hypothesize that, previous to this infiltration, the peoples of northern and southern Vietnam were much the same and that it was the addition of the Yueh elements, both physical and cultural, probably not involving large numbers of people, that differentiated the north from the south and led to the tradition in Chinese and Vietnamese history that the people of the Red River were Yueh.

I hypothesize that the boat people along the coast were still the Austronesian-speaking people of the previous three thousand years or more and still interacting closely with the land people in the areas of their home bases. From about 500 B.C. to A.D. 500, there was a further intensification of the trade and movement of these boat people that spread cultural elements very widely. They were now entering western Indonesia and combining with the local people to form the Javanese and the different ethnic groups on Sumatra. The local people were already a combination of those who had been living there many millennia and peoples infiltrating from eastern Indonesia before the time that the OSEAC had started to come in there.

I have remarked before that the Sa-huỳnh-Kalanay pottery and Dongson bronze drums had not been found at the same site (1959*b*:187, 1967*c*:163-165). Bellwood has commented on this also in terms of the nonoverlapping distribution of jar burials (associated with the Sa-huỳnh-Kalanay pottery) and the areas of Dongson influence, saying that "from about 500 B.C. through to 1000 A.D. there are quite marked cultural differences between these two major regions . . ." (1976:419). I hypothesize that in some way the Yueh-related boat people of North Vietnam and the Cham-related boat people from southern and central Vietnam set up these nonoverlapping areas of trade, the former bringing in the bronze drums and possibly elements of Late Chou art from farther north along the coast and the latter the Sa-huỳnh-Kalanay Pottery Tradition, but both speaking closely related Malay languages. The Yueh-related boat people would have been trading with the western portion of Indonesia and the Cham across to Borneo and with eastern Indonesia and the Philippines.

I hypothesize that the Cham did not move back to central Vietnam from a Sumatran home but that they developed into the Cham *in situ* in Vietnam, a combination of the boat people and the local people of this area, and that the language of the boat people spread inland with the successful development of the Cham. This development probably goes back several thousand years, in central Vietnam. I hypothesize that the Austronesian trade language used along the coast of China and Vietnam gradually became the first language of most, if not all, the boat people and that this was the original Malay language. I further hypothesize that the proposed movement of the Cham from Sumatra to southern Vietnam did not happen, that the Cham are not closely related to the Sumatran group with whose language the Cham language most closely relates, but that this language in Sumatra comes from the Yueh boat-people traders—and no doubt some settlers as well—who were speaking the same language as the Cham. These Yueh boat people have long since stopped speaking their original language and many have completely disappeared as a distinct ethnic group, though the Hong Kong boat people may well be a remnant of them.

I hypothesize that the Cham-Nusantao trader-boat people, who were in eastern Indonesia earlier than the Yueh trader-boat people, overlapped with the Yueh traders in western Indonesia, coming to Bali and the southern end of Sumatra and bringing with them their pottery style and the custom of jar burial (see Soejono 1962: fig. 1; 1979:196-197; Solheim 1959b:184-185; 1960). I hypothesize that these Cham traders went along the west coast of Sumatra and ultimately probably reached the coast of southeastern India (near Madras) about 1000 B.C., as suggested by the presence of carnelian beads shortly after this time (corrected <sup>14</sup>C dating) at archaeological sites in Palawan, Philippines (Fox 1970:135-136; Solheim 1981). I hypothesize that by 500 B.C., through the agency of these Nusantao traders, the use of large burial jars (the practice brought from Southeast Asia) was commonly incorporated with megalithic burials of southern India and Sri Lanka, and in turn the Nusantao traders brought about the "younger megalithic wave" of Heine-Geldern in Southeast Asia by introducing many of the megalithic elements of the southern Indian megalith-building cultures back into Southeast Asia. I suggest that it was this no doubt continuing contact of Cham traders with South India and Sri Lanka that brought about the resemblance between the south Indian megalithic culture and Dongson as remarked on by Linton (1955:475). I further hypothesize that it was these traders who ultimately settled in Madagascar, and that a group of the same traders settling in southern Borneo were the ancestors of the present-day speakers of the language in Southeast Asia most closely related to Malagache.

I hypothesize that from about 200 B.C. to A.D. 200, there was particularly intensified trade through Island Southeast Asia, spreading iron, use of gold, the later megalithic, and other cultural elements. During this period, a much longer distance trade started to enter into this Southeast Asian trade. I hypothesize that during the first millennium B.C. the Malay traders (Cham traders, Malay-speaking) were starting to move all the way around the shores of the Indian Ocean and joined the eastern end of the trade between India and the Mediterranean world. At the China end of the Southeast Asian trade, the new Han Empire became involved. Gradually the trade between China and the West by way of India became the major trade, and the Southeast Asian portion of this became an appendage. The Malay traders, I hypothesize, were for a long time the major traders in this China-West trade, going all the way to the Persian Gulf ports and along the coast of East Africa, reaching Madagascar.

The *Late Nusantao Phase* is a time of localization of the Southeast Asian world. The zenith of the Nusantao sailors was the period from about 400 B.C. to A.D. 100, when they

were spreading between the eastern Pacific and Madagascar, indigenous state development was probably well underway over much of northern and central Mainland Southeast Asia, and northern Southeast Asia was probably at a level equal with China, until Chin and Han were able to incorporate South China into the first real "China." From that time, the international importance of Southeast Asia receded. Indian models became popular among the developing states of Southeast Asia, and where the Chinese did not take over, as in northern Vietnam, the Indian model was taken up and the indigenous beginnings and achievements were disguised and so became hard to recognize. The so-called Malay sea traders were the one portion of the Southeast Asian world that continued active and expanding. They continued to trade to and settle aggressively in some areas of Java, in Sumatra, around A.D. 1000 into Malaya, and north during the second millennium A.D. It was these people who first came into close contact with Islam, became Islamic, and continued to expand into eastern Indonesia and northward into the Philippines. This late spread of the Malay peoples I have deduced primarily on the basis of the spread of what I consider to be Malay pottery (Solheim n.d.).

The major question as I see it now in Southeast Asia prehistory is the relationship of the peoples and cultures of South China to those of North China and of Southeast Asia. I feel that it would be best to say that China and the Chinese did not begin until the unification of the Ch'in and Han Dynasties. The Yueh of South China were one of the many groups that became a part of China and Chinese culture, but, except for those of the State of Yueh, they did not think of themselves as Chinese nor did the Chinese regard them as Chinese at, say 300 B.C. I would say that Shang and Chou were not a part of China, nor were their people Chinese. Their names should not be coupled with China but should stand alone. They could well be called Proto-Chinese, the so-called Yangshao, Lungshan, and other similar cultures called pre-Chinese. It only makes trying to work out the relationships and development of the Chinese and Southeast Asian peoples much more complicated if we call one particular ethnic group or state Chinese and a part of China and another neighboring group not Chinese.

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