

VI. SOUTHEAST ASIA

Sa-huỳnh Related Pottery in Southeast Asia

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DISTINCTIVE pottery complexes have been presented for several scattered areas in Southeast Asia. They are clearly distinguishable, one from the other, yet some specific vessels from any one of the complexes could easily be classified within one or more of the other, if found out of context. This is even more true when it comes to sherds. A large number of distinctive sherds from one complex could be lost if mixed with those from one or more of the other complexes. Before examining briefly the traits common to the different complexes, it would be well to summarize the distinctive elements of each complex.

SA-HUỠNH AND INDOCHINA

The Sa-huỳnh complex pottery is sophisticated and varied. Surface treatment, decoration and form vary.

As far as surface area is concerned, most of the pottery is plain. This may not be true when referring to whole vessels. Decorated vessels commonly have a large percentage of their surface plain. Cord-marked vessels are not common, but are present, particularly in the form of large burial jars. It is possible that rarely a grooved paddle was used resulting in an uneven impressed surface similar to that of cord-marking. Many vessels had a blackish, probably polished surface, as if graphite had been spread over the outer surface.

Decoration is done by incising, impressing, and painting. Painting is not found by itself but always with incising. A red, probably clay, slip is used as paint between incised lines to emphasize the incision pattern. Emphasized areas within the overall incised pattern may be alternately painted and plain, painted and incised with dashes or hachure, painted and simple tool impressed (punctations or triangular impressions), incised and plain, simple tool impressed and plain, or compound tool (in this case, Arca shell) impressed and plain. Occasionally, the lips of rims have small impressed or gouged grooves. Roulette impressions may have been obtained with some form of a dentate tool.

The patterns are usually arranged in horizontal bands around the vessel, bordered by incised lines. This is often not apparent on sherds. The most common pattern makes use of series of triangles: side by side pointing the same direction or alternating directions; point to point forming plain diamonds between; or base to base forming a diamond or square with plain point to point triangles between. A variation of the last design is done with the impressed lines from an Arca shell placed in series of chevrons facing horizontally one direction and then another series facing the other direction with the open base of end-chevrons joining, then a third series the other direction with points joining, etc. Another common pattern is a band of

vertical rectangular elements, emphasized by hachure, dashes, or punctations. Finally, there are varieties of rectangular meander patterns and, possibly developed from this, a kind of zigzag where the meander is incomplete. Not at Sa-huỳnh but found elsewhere in Indochina are curvilinear scrolls with triangular elements filling in blank areas.

Form is difficult to summarize because it has so much variety. There are about eight basic elements of form and they come in a number of combinations and differing proportions. These are: cylindrical body, conical body with flat bottom (or top), sub-spherical body, an angle or an angle and flange between two portions of a vessel, a shallow bowl, a ring foot, a flaring rim, and an incurving rim (rare).

Three of these eight elements are found in only one specific vessel form. Cylindrical bodies with rounded bottom and flaring rim are the common form of the large burial jars. The conical vessels with flat bottom are primarily lids for the burial jars, so the flat portion is a top. Rare similar forms which, if not lids, may be stands for a flat bottomed vessel. The incurving rim is found only on a vessel which has been called a lamp; it is a combination of a small shallow bowl, on a ring stand, with a flange at the lip of the bowl, and the incurving rim proceeding from the inner diameter of the flange.

The most common forms are varying proportions of sub-spherical bodies with rounded bottoms and flaring rim. A major variation comes with the addition of an angle to these forms. The angle, when present, is usually below the vertical mid-section of the vessel but is at the maximum width of the body. A vessel with an angle usually has a sub-spherical body below the angle with a relatively straight in-slanting side above the angle. Different proportions of height of a vessel above and below the angle allow for great variety in appearance. This variation may be due to more than one angle on a vessel, or a flange added to the angle accentuating it greatly. A new series of these forms is obtained by simply adding a ring foot to the vessel.

A less common form is the shallow bowl. In combination with a ring foot of varying height, the bowl has a simple form without a distinct rim and the greatest diameter of the bowl is at the lip. The few shallow bowls without a ring foot have an angle which may or may not be at its maximum diameter. If the angle is at the maximum diameter, the side comes in slightly above the angle and there is no distinct rim, only a plain lip. With a slight flaring rim added above the angle, the diameter of the rim is equal to or slightly greater than that at the angle. This form of bowl without the ring foot may be a lid.

Flaring rims are usually short, but at times they are lengthened and present a different form. The two vessels pictured on Plate VIII of Malleret's article, pages 113-120, have such rims added on the inside of a flange, which now forms a shoulder. The adding of a second high flaring rim in a similar way above the first, produces another variation of form. Malleret considers that several elements of these two vessels are probably of Chinese origin, but this does not necessarily include the added single or double rim.

One other element in the pottery which must have been of some functional use are the perforations in a ring stand or elsewhere on the vessel. These are often found in pairs. Ring stands were made separately and applied to the base of the vessel before firing.

MALAYA

Decoration is rare in the Gua Cha complex pottery; its absence is more than compensated by a great variation in form. Variation in surface treatment is moderate.

The most common varieties of surface of the Gua Cha complex pottery are plain and cord-marked. These two surface treatments are often found together on the same vessel with cord-marks on the bottom portion, often reaching up to its greatest diameter, leaving the upper portion plain. The cord-marking is done with a cord wrapped beater or paddle used in the manufacture or the finishing of the vessel. There are rare indications of the use of a carved paddle with either a grooved or crossed design on the paddle, producing a corrugated surface difficult to distinguish from some varieties of cord-marks, or a surface with a lattice of squares. The inner surfaces of vessels, particularly bowls, are often polished to the extent of high burnishing. Some vessels are red slipped.

The varieties of decoration are done by incising, impressing, carving, and painting. When present, incising and impressing are often found together with an incised pattern emphasized by simple or compound tool impressions within borders of the pattern. A pointed simple tool was used for punctations. The compound tools used were multiple toothed like a comb or the serrated edge of a sea shell (*Arca*). The wavy shell impressions have so far been found only on the west coast. Carving is found on rims or flanges. On rims, or rarely, on flanges, small sections were sliced off forming numerous facets around the circumference. Another variety of carving made U-shaped notches on the rim producing a serrated or frill effect. Red painting, if present, is extremely rare. The most common patterns seem to be variations of triangles, though this has not as yet been analysed. There also occur curvilinear scrolls and possibly rectangular meanders.

Gua Cha complex pottery has so much variation in form that it is extremely difficult to summarize. Elements present are: cylindrical bodies, sub-spherical bodies, pots with constricted mouths, shallow bowls, deep bowls, angles, flanges, flat bottoms, rounded bottoms, slightly concave bottoms, tripods, ring stands, flaring rims, straight rims, in-turned rims (rare and only on shallow bowls), multiple rims, cylindrical or conical vessels without bottom, and conical vessels with flat bottom.

The elements listed are found in all sorts of combinations and differing proportions.

The pottery is well made. The high degree of technical skill indicated and the sophistication of form is probably due to the use of some type of wheel in shaping and finishing. The horizontal striations which are commonly found on rims further bear this out. Many of the more complicated shapes were made as separate units which were then joined together, as is the case with the bowls which had two or three rims added one above the other. The ring foot is made separately and added. Hollow tripod (?) legs were made by coiling. Sherds from a number of sites have perforations made intentionally before firing.

PHILIPPINES

The pottery of the Kalanay pottery complex is a sophisticated, technologically well-made pottery. Variation is in both surface treatment and decoration, but most

noticeable in form. To date, every site with a fair number of whole or restorable vessels has had one or more unique forms combining in a new way elements found more commonly in other vessels.

The most common sherd surface is plain and smooth. Polishing is not uncommon on either or both the inner and outer surfaces, and is usual on the shallow bowl with a ring foot. Red slipping is common. The use of a carved paddle is not definitely present. However, a few sherds with a square crossed pattern have been found in uncertain association with Kalanay complex pottery and there is no other likely source to explain their presence. Definite cord-marking has not been found.

Decoration is incised, impressed, carved, and painted. The incising was ordinarily done with a single point tool but in late sites the use of a two- or three-tooth instrument is evident. Lime, or some other white material, was occasionally inlaid in incised or impressed lines, probably to bring out the pattern. Impressing was done with a simple or compound tool. Simple tool impressions of punctations or small circles often serve to emphasize the pattern of an incised design. The impressed circles occasionally make up the pattern independently of any incising that might be present. Compound tool impressions are from an Arca shell. Carving is rare and was usually used to cut away small portions of clay from the rim or flange of a vessel. Even more rare are cut-outs in the ring foot. Painting is unusual; it is red, or very rarely, red and black, and emphasizes an incised pattern.

The most common element of design is the triangle, found in many varied forms. Triangles may make up the central element of a pattern or they may be used to fill in otherwise blank areas of a design. Impressions from an Arca shell are made to form chevrons (an open triangle). The usual carved elements are lenticular shaped facets, or notches or gouges, on rims or flanges. Similar shaped elements on the same features of vessels are done by modelling with a finger or the side of a cylindrical tool.

Patterns are usually arranged in horizontal bands of repeated elements around the neck or in the case of circular vessels, above their greatest diameter. Angular vessels are often decorated over their entire surface except for their bottom. Patterns on some angular vessels and on the top of circular lids are often arranged in a radial design. The common patterns are series of triangles, curvilinear scrolls, rectangular meanders varying into zigzags, series of vertical or diagonal lines in many combinations between horizontal borders, series of vertical rectangular elements, and chevrons. Decorated rims are not uncommon.

The simplest way to present the variety of forms is again through their elements which are: cylindrical body (rare), sub-spherical body, angular body (rare), angle, flange, flaring rim, straight rim, incurving rim (rare), rounded bottom, flat bottom (rare), ring foot, and tetrapod (very rare). The cylindrical body is usually found with flat bottom (both being rare) and often with a flange at the joint of body and base. The sub-spherical body is found in two general forms, either as a pot with constricted mouths and flaring or straight rim, or a bowl without a distinct rim. The bowl may be deep with a slightly constricted mouth, or shallow without a constricted mouth. An uncommon form of vessel with a sub-spherical body has a

narrow mouth and high neck with no distinct rim. The addition of an angle to either of the forms of the sub-spherical body results in a different series of forms. Shallow bowls with angles often have a flange at the angle and an incurving rim. A number of these forms may well be lids. The angular body is not common and may be in the form of a box or an angular lid. The ring foot is rarely found on pots but are not uncommon on shallow bowls. Shallow bowls with four feet are rare. The flat bottom is found only in large cylindrical jars (occasionally with a straight ring foot) or in small, usually rather heavy, vessels. One of these is very much like the so-called lamp of Sa-huỳnh.

Much, though not all, of the Kalanay complex pottery is symmetrical and sophisticated. The symmetry and the very common horizontal striations on rims indicates that the non-angular vessels were probably made on a slow wheel. The ring foot was made separately and added to a prepared surface. Rims, particularly large rims, were often added after the clay of the previously formed vessel had hardened considerably. Perforations, made previous to firing, are common in the ring foot or near the rims of probable lids and large jars.

BORNEO

Niah complex pottery has been found to date on only three sites, and from the third of these sites only two sherds had been examined at the time of writing. While there is a considerable difference in the pottery from the Great Cave at Niah and from Gua Sirih, it is certainly closely related.

The majority of the Niah vessels and sherds which have been examined are plain. However, a sizeable percentage, probably about a third, are paddle impressed. Two major subdivisions of the paddle impressions are carved paddle and bound paddle impressed. The carved paddle impression is a lattice work of squares. The bound paddle impression is either from cord bound paddles (cord-marked), or from paddles with basket weaves of several varieties woven over their surfaces. Red slipping is common and polishing is not uncommon.

Decoration consists of incising, impressing, modelling, and painting. The impressing, other than that done by the paddles in manufacture or finishing, is simple tool punctations or circles. Modelling, found primarily at Gua Sirih, was used to form lenticular facets on rims. Painting in black and red on a reddish tan background, emphasized incised patterns. Inlaid lime in incised or impressed lines was also occasionally used.

Patterns, arranged in horizontal bands, were rectangular meanders, curvilinear and rectangular scrolls, repeated triangles, and interlocking arches.

Reconstruction and analyses of the Niah complex pottery has not gone far enough to present a reasonably complete list of the elements of form: however, enough is known to show its great variety. As usual, there are rounded bodies with flaring rim. There are pear shaped vessels with a high neck and narrow mouth, angle vessels, shallow hexagonal bowls with flat bottom, spouts, handle-spout combinations (stirrup), double spouted or horned vessels, large conical basins with rounded base, and the ring foot (perforated). At Gua Sirih there appears to be less variety in body form but more variety in rim form and decoration.

COMMON ELEMENTS

With the brief summaries of the four pottery complexes given above, there is no need to go into great detail about the common elements. Brief comparison of any two complexes will show many common elements in surface treatment, decoration and form. Table 1 presents an incomplete listing of elements of surface treatment, decoration and form. It emphasizes similarities as elements found in only one complex are omitted. There are many obvious similarities and many obvious differences between any two complexes. The lack of cord-marking in the Kalanay pottery complex and the rarity of decoration in the Gua Cha complex stand out as major distinguishing characteristics of these two groups, setting them apart from the others. However, looking at these four complexes in generalities, some sort of relationship shows up clearly. This is much more obvious when these complexes are compared to the other major group of related pottery complexes found throughout much of the same area. The only one of these complexes yet named is the Bau pottery complex of Borneo (Solheim 1960: 2-3). Further definition of this complex and related pottery complexes and comparison of the two groups of complexes will be the subjects of two later papers by this writer.

INDONESIA

With the related pottery complexes in the Philippines and Borneo at the north-eastern end of Indonesia and in Malaya at the northwestern end, it would be logical to find related pottery inside Indonesia. Archaeologically, this is so in Celebes and there are ethnological indications of contacts, if not more, in Sumatra and on many other of the Indonesian islands.

Celebes. The excavations by van Stein Callenfels (1951) and H. R. van Heekeren (1957: 118-119) at Galumpang in West Central Celebes have produced a number of sherds related to the pottery complexes previously discussed.

Galumpang (Kalumpang) is a small village in West Torajaland, Central Celebes, 93 km. up-stream on the Karama River. The site, a short distance southwest of the village, is called Kamassi. Excavations were first conducted there by Stein Callenfels, in 1933, and again by van Heekeren in 1949.

The site was in an agricultural area before excavation and was badly disturbed. Both Callenfels and van Heekeren consider that there are three or more cultures represented in this site which got mixed together as a result of the agricultural activities. These cultures are distinguished therefore purely on a typological basis. The considerable amount of pottery found in the site is divided between two of these cultures and Callenfels thought that some of the pottery came from a proto-neolithic third culture (Callenfels 1951: 89-90). As the prehistoric pottery of Celebes is not known elsewhere to any great degree, it is inadvisable to depend on the divisions presented from this disturbed site. They may prove to be correct or they may not. Therefore, reference is made here only to the pottery most distinctly similar to that which interests us, keeping in mind that the less similar pieces from the site may or may not have been made by the same potter. Unfortunately van Heekeren's report on his excavations has not been seen so is not included (1951).

TABLE I

Common elements in surface treatment, decoration and form found in the Sa-huỳnh, Gua Cha, Kalanay, and Niah pottery complexes.

<i>Characteristics</i>	<i>Sa-huỳnh</i>	<i>Gua Cha</i>	<i>Kalanay</i>	<i>Niah</i>
SURFACE TREATMENT:				
cord-marked - - -	present	present		present
grooved paddle - - -	possible	rare		possible
crossed paddle - - -		rare	possible	present
polished - - - -	present	present	present	present
red slip - - - -	?	present	present	present
DECORATION:				
incised - - - -	present	present	present	present
impressed: simple tool - - -	present	present	present	present
punctations - - - -	present	present	present	present
circles - - - -		rare	present	present
compound tool - - - -	present	present	rare (?)	
dentate - - - -	present	present	rare (?)	
Arca shell - - - -	present	rare	rare	very rare
painted: red - - - -	rare	rare (?)	rare	present
black - - - -			very rare	present
incised decoration emphasized by:				
incising - - - -	present	present	present	present
impressing - - - -	present	present	present	present
painting - - - -	present		present	present
white inlay - - - -			present	present
rims notched or grooved - - -	present	present	present	present
rims or flanges scalloped - - -	possible	present	present	present
patterns in horizontal bands - - -	present	present	present	present
triangles - - - -	present	present	present	present
chevrons - - - -	present	present	present	
vert. rect. elements - - - -	present		present	
rect. meander - - - -	present	(?)	present	possible
zigzag - - - -	present		present	present
curvilinear scroll - - - -	present	present	present	present
FORM:				
cylindrical body - - - -	present	present	present	present
conical body and flat base - - -	present	present		
angle - - - -	present	present	present	present
flanges - - - -	present	present	present	present
shallow bowls - - - -	present	present	present	present
low ring foot - - - -	present	present	rare	present
shallow bowls with ring foot - - -	present	present	present	
flaring rim most common - - -	yes	yes	yes	yes
straight rim common on shallow bowls - - - -	yes	yes	yes	
perforations - - - -	present	present	present	present
lamps (?) - - - -	present		present	
rim and/or ring-foot made separately - - - -	present	present	present	present

Nothing can be said about the form or surface treatment of the Celebes pottery. Most of the sherds illustrated by Callenfels (1951, pls. XIV-XIX) do not show specific resemblance to the pottery of the complexes in which we are interested other than the common use of triangles as elements of incised decoration. The illustrations presented by van Heekeren (1957: pls. 37-38) from Galumpang and Minango Sipakko (West Central Celebes) and the sherds illustrated here (Pl. I *a-j*) show definite similarities. The decoration appears to be incised or simple tool impressed, the latter being punctations or small circles. Incised dashes, circles, punctations and other apparently simple tool impressions, are used to emphasize the patterns incised. Some sherds show that patterns were, in some cases at least, arranged in horizontal bands (Pl. I *a, g-h*). Triangular elements are commonly used (Pl. I *a, c, e, h*, and Heekeren 1957: pls. 37-38). Patterns include rectangular meanders (Pl. I *a, c*, and Heekeren 1957: pl. 38), curvilinear scrolls (Pl. I *f*), zigzags (Pl. I *i*, and Heekeren 1957: pl. 37), a series of vertical rectangular elements (Pl. I *b* and *g*), and interlocking arcs (Pl. I *i* and Heekeren 1957: pl. 38). One sherd is in the form of a human head (Callenfels 1951: pl. XIX left).

Due to the disturbed condition of the Kamassi site with the resultant mixture of cultures, it would be fruitless to mention the associated artifacts other than that no metal was recovered. There is no agreement on possible dating of the site or its components.

Two earthenware vessels in the ethnographic collections of the Djakarta Museum show strong indications of relationship to the Niah-Kalanay pottery complexes (Pl. I *k-l*). These vessels are catalogued as Bugis from in or near Makassar, Celebes. Though crudely made, the elements of form and decoration distinctly recall the pottery from Borneo and the Philippines. Two foreign elements in the bowl with cover (Pl. I *k*) are in the form of the cover and the quartered compound-tool impressions. Both of these are distinctive elements of the Bau pottery complex and present day 'Malay' pottery (see Solheim 1960: 2-3). A third similar vessel from Kadjang, near Makassar, is illustrated by Van der Hoop (1949: pl. II *c*). This vessel has several elements of Kalanay pottery complex form in typical combination, and has typical Kalanay incised and impressed decoration. The lid is like that on the vessel in Plate I *k*.

Sumatra. On visiting the museum in Djakarta there were three vessels in the Sumatra pottery case which I found extremely interesting. Unfortunately, the museum catalogue has very little information on them. They were collected at an early date in the history of the museum from Tulang Bawang, District of Lampung, at the southern end of Sumatra. The catalogue number of these three vessels is 586. Catalogue numbers of the museum are assigned consecutively. The early numbers have no date associated with them. The first dated and numbered specimen of which I took a picture is numbered 8,882 and that vessel was collected in 1899. Catalogued pottery numbered in the 8,300 series had no date. Thus all that can be said at present is that it was an early collection. In form and to a considerable degree in decoration, they are unique pieces in the museum's collection. Nothing of this nature has been published to my knowledge from other collections. If any reader knows of any similar pottery from Sumatra, or Indonesia, I would appreciate information on it. The vessels were probably heirloom pieces.

The first and most spectacular vessel (Pl. II) has in one single piece a person seated between a pair of 'horns', on a platform which is the top of an angled bowl. The vessel has a ring foot. The total height of this vessel is 40 cm. and the breadth across the top of the horns is 30 cm. Its horns are polished and, by themselves, remind me very much of the horns of the horned vessels from Niah Cave in Sarawak. The elements of decoration are apparent in the pictures. The only unusual decoration is the design in relief on the upper half of that portion of the vessel on which the person is seated. Neither the design nor the method of appliqué has been found on the pottery of the complexes covered in this issue. All the other decoration fits in well. As time was not available to study any of the vessels in detail, no further description will be presented.

The second vessel (Pl. III *a*) has the lower portion of the body of the same shape as that of the first, while the top has two horns joined by a handle forming a stirrup jar. The workmanship on these two vessels is so similar that they seem to have been made by the same potter. The height of this vessel is 23 cm. and the maximum breadth 17.5 cm.

The third vessel (Pl. III *b*) is a pitcher, roughly gourd shaped except for its flat bottom, with the spout shaped in the form of some animal head. One appliqué eye of the animal's head is just above the air hole with one ear just below and to the rear next to the handle. Its decoration is so similar to that on the other two that the vessel could also be by the same artist. The height of this vessel is 24.5 cm. and the diameter at its base, 17.5 cm.

My enthusiasm for these three beautiful pieces makes me want to write pages on them, but what more can be said? That there is some connection with the pottery complexes we have been examining is obvious, but what is it? Not knowing the circumstances of their origin or source, conjecture at the present time is vain. However, at least one of these vessels is not unique.

The vessel pictured in Plate III *c* was collected at a considerably later date than the first three. Its catalogue number is 8,325, making it likely that it was found sometime in the 1890s, or possibly a little earlier. Its similarity to the horned vessel of Plate III *a* is obvious; had the two vessels been collected from distant locations this similarity would still be noticed. The catalogue information on this vessel says that its origin is 'Lampung region, South Sumatra'. The form of vessel *c* would seem to be a crude imitation of vessel *a* with a similarity in decoration of the tip of the left 'horn' and the incised pattern at and between the bases of the two horns. Besides the inferior potting of vessel *c* compared to the more sophisticated vessel *a*, their major differences are the flat bottom and the incised decoration on *c*. The flat bottom found on vessel *b*, shows this is not a new element. The incised decoration is not like anything found on the other three vessels, *but* it is one of the distinctive designs of the Kalanay pottery complex in the Philippines. It would be most interesting to see whether there are any other similar vessels in this area of Sumatra, and through an archæological survey to search for other sites with a similar pottery.

The stirrup form of spouted vessel became very popular in Sumatra and from there went into Malaya. The stirrups increased from two to multiple joined 'horns' or spouts. These vessels will be included in a later paper on the Bau pottery complex and related ethnographic pottery.

Miscellaneous Indonesian Relationships. Van der Hoop, in his *Indonesian Ornamental Design*, has presented a number of design elements found scattered over all of Indonesia and in New Guinea which are common to the pottery complexes with which we have been dealing. He attributes these elements to the Dongson bronze drums, various types of which have been found over most of Indonesia. He includes in his comparisons a number of the sherds from Galumpang (1949: pls. II, XIX, and XXI). It is hard to doubt of a close connection between the geometrical ornament of the Toradjas of Middle Celebes (Van der Hoop 1949: pl. XXVII) and that of the Galumpang pottery of the same area. It is useless to argue whether these designs originated on the bronzes or on the pottery for they are found on both. The important question here, as in Indochina, is 'What is the relationship between the pottery and the bronze drums?' and this cannot be answered without further excavations in many areas in Southeast Asia.

Another interesting archæological relationship is between the Sa-huỳnh-Kalanay pottery complexes and several urn-burial sites in Indonesia. In Sumatra, associated with burial urns, vessels with rounded body, high neck, and narrow mouth, have incised rectangular meander designs around their necks (Heekeren 1958: pl. 32 and Van der Hoop 1949: pl. XIX c). The pottery associated with urn burials in Melolo, East Sumba, also bears some resemblances to the Sa-huỳnh-Kalanay pottery. Both these complexes are found, at least sometimes, with burial urns, and this recalls the possible connection between Sa-huỳnh and the Tran-Ninh stone-urn site. The bronze anthropomorphic and zoomorphic figures of Sumatra (Heekeren 1958: pl. 9) and Java (Heekeren 1958: pl. 15 and fig. 15) make one wonder about the iron zoomorphic figures mentioned by Madeleine Colani to which reference is made in the first article of this issue.

CONCLUSIONS

As stated in my 'Introduction to Sa-huỳnh', this is not yet the time for detailed comparisons of these pottery complexes with carefully reasoned conclusions. It might have been best to have labelled this section 'Observations', yet in some ways, the few observations I make are conclusions.

I feel that these pottery complexes are all part of a single pottery tradition which arrived in their widespread locations not by trade but by the movement of people; thereby I do not necessarily mean migrations. From ethnological sources we know that it is and was the women in this area who make the pottery. In other words the movement of the pottery is the movement of women. This could come from a slave traffic in women, exogamy with virilocal residence, or migration.

If these scattered pottery complexes were the results of trade there should be much closer similarity in the pottery. Using negative reasoning, the considerable quantities of pottery found over such a wide area as the result of trade would mean an extensive, well developed sea-trade of a fragile, heavy commodity—this I cannot accept. On the other hand, from ethnographic information, local trade over reasonably wide areas seems logical.

I feel that these pottery complexes had a common origin, even if the potters that made the pottery did not. But, I feel that the potters had a more or less common origin as well. There is a feeling or a spirit about this pottery which must have been held in common by its manufacturers. Many of the potters were artists with considerable freedom of artistic expression. There seem to have been some traditional designs but there were very few if any traditional forms. This was not a dogmatic conservative craft. Within limits it must have expressed at least the philosophy of the potters, and—since they did not live in a vacuum—of their societies and culture(s) as well. I doubt that an artistic feeling and a philosophy would spread easily through stimulus diffusion.

With the differences between complexes there must have been considerable local evolution from the common background. I feel an urge to present my ideas about this common background, but it is probably a bit premature.

To advance our knowledge, much more careful excavation is required. Only the pottery has been covered here with little hints here and there of the associated artifacts. In both pottery and metal, zoomorphic and anthropomorphic representation was widespread. This brings us back again to one of our major problems. What is the relationship between 'Dongson' and our pottery tradition? Many of the elements of pottery decoration and the zoomorphic and anthropomorphic representation of the pottery are also found on the 'Dongson' drums. Yet to my knowledge no drum has been found associated with this pottery. The idea has been advanced that form and elements of decoration for both Dongson and the pottery go back to Halstatt. Could these have been neighbouring groups of similar background, who, when foreign ideas were presented, went their separate ways, one expressing these ideas in bronze and the other in pottery?

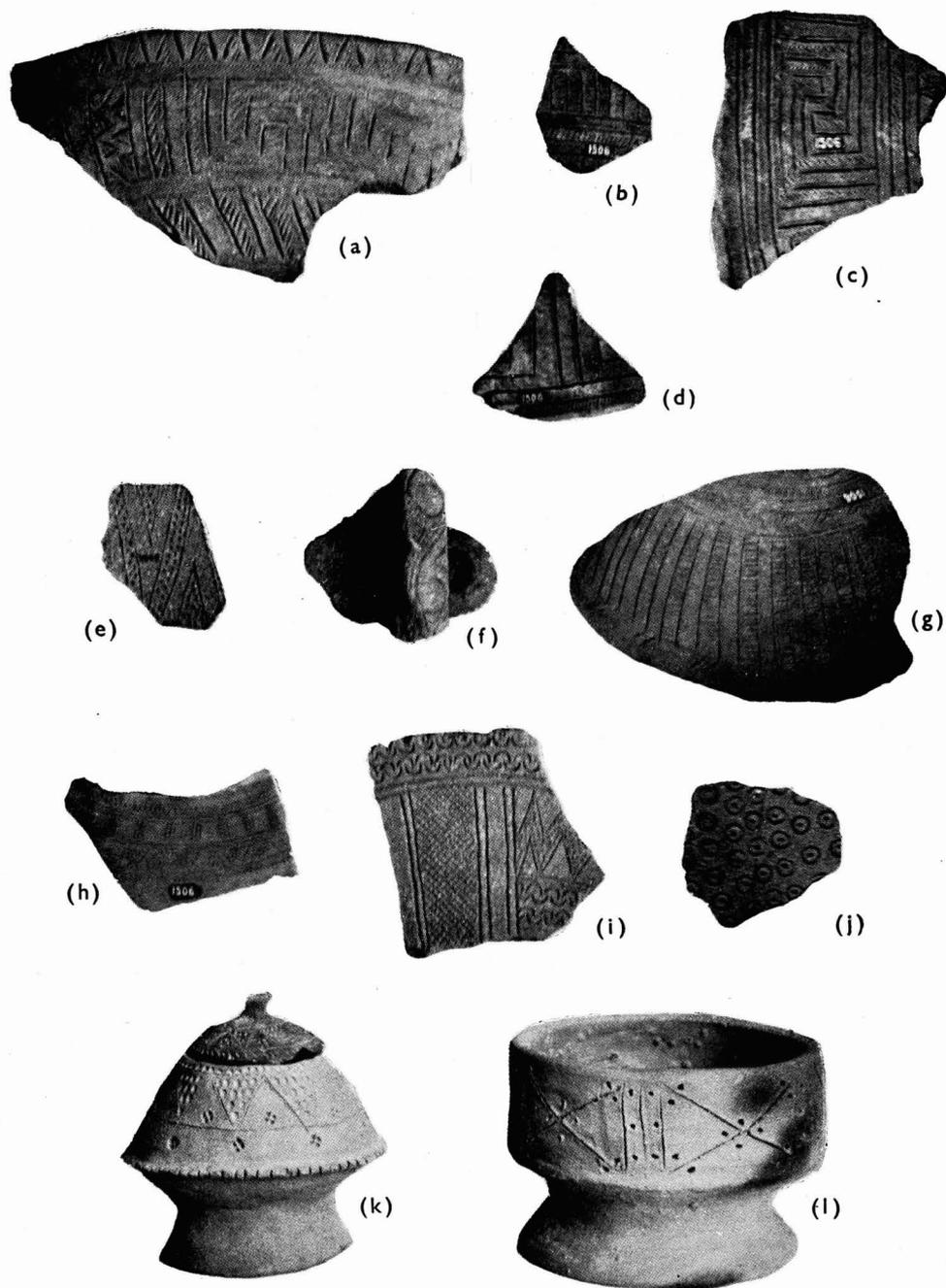
Through a few C-14 dates and other indications we have some ideas on the dating of these pottery complexes. The C-14 dates vary from about 750 B.C. to A.D. 200. The pottery has been found in Late Neolithic sites and in other sites associated with bronze and iron. In Indochina and in Malaya it precedes Chinese and Hindu influences. In general, this could well have been a recognizable and distinct pottery tradition as early as 1,000 B.C., though if present at that time, probably it was without the distinct Halstatt elements. It seems to have come to an end as a recognizable pottery tradition on the mainland with the advent of the Chinese and Hindu (philosophy?). It lasted much longer in outlying areas.

This dating and the widespread locations of the pottery brings up another question. To be found over such a wide area, these people must have been seafarers, and good ones at that. What relationship has it to the 'Indonesian' people who made contacts and movements to Africa and Madagascar? Could they not have brought information to India about Southeast Asia which would have led to the beginnings of Indian penetration into the area?

Finally, an observation even more wonderful if anything. There is an amazing similarity between this Southeast Asian pottery tradition, plus the carved paddle patterns of the Bau pottery complex, and the pottery of the southeastern United States.

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Sherds and recent vessels from Celebes, in the collections of the Djakarta Museum. Thanks are due to Messrs Ghozali, E. Soepardi and Abu Ridho for their kind assistance, the arrangements which they made to help me in taking the pictures, and for the information which they gave. Sherds *a* to *j* are from Galumpang, West Central Celebes; *k-l* listed as Bugis, Sulawesi, from Makassar (maximum diameter of *k* is 11.5 cm.)



Anthropomorphic vessel from South Sumatra.



a



b



c

Earthenware vessels from South Sumatra.