The Circum-Caribbean Theory, An Archeological Test

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A SIGNIFICANT by-product of the publication of the *Handbook of South American Indians* (Steward, 1946–50) has been the development of a new theory of South American culture history. Based upon the four-fold classification of Marginal Tribes, Andean Civilizations, Tropical Forest Tribes, and Circum-Caribbean Tribes according to which the ethnographic volumes of the *Handbook* are organized, this theory conceives of the following sequence of events (Steward, 1947):

1. South America was first settled by Indians on a Marginal level of development, i.e., by hunters and gatherers with a relatively simple social organization and religion.
2. In the central part of the Andes, these Indians developed agriculture, pottery, a territorial form of government, a class system, a priest-temple-idol cult, and other elements of what Steward calls "Formative culture."
3. Formative culture spread northward into the Caribbean area—whether by migration or by diffusion to the Marginal tribes of that area is not specified—and there it is known as the Circum-Caribbean type of culture.
4. Back in the Central Andes, the various Formative cultures evolved into civilizations. The Circum-Caribbean cultures, on the other hand, remained on a Formative level of development or, in one place, disappeared.
5. The place of disappearance was in northeastern Venezuela and the Lesser Antilles, around the mouth of the Orinoco River (Fig. 1).[1] Here, the social and religious elements of Circum-Caribbean culture died out—perhaps as the result of conquest or degeneration in a relatively unfavorable environment—leaving only agriculture, pottery. and the other technological traits common to both Tropical Forest and Circum-Caribbean cultures.
6. These traits spread southward into the Guianas and Amazonia, where their appearance raised the local tribes from the Marginal to the Tropical Forest level of development. Only the Indians of southern South America, the headwaters of the Amazon, and a few peripheral districts in the Greater Antilles then remained on the Marginal level.

The distinctive point in this theory is that, while it assumes a northward spread of Formative culture from the central Andes into the Caribbean, it does not allow for diffusion eastward into Amazonia, but instead postulates a southward movement of Tropical Forest culture from the formerly Circum-Caribbean region around the mouth of the Orinoco. According to Steward (1946–50, vol. 5, Map 22), the original spread of Formative culture northward took place primarily via a land route: up the Andes into Central America; east along the chain of mountains which border the north coast of South American from Colombia to the mouth of the Orinoco River; and then, after a shift to water transportation, out into the Antilles (Fig. 1). The southward diffusion of Trop-

ical Forest culture, on the other hand is supposed to have taken place entirely over water: along the coast of the Guianas from the Orinoco Delta to the mouth of the Amazon and up that river into its tributaries; possibly also up the Orinoco River, through the Casiquiara Canal, and down the Río Negro to the Amazon (*op. cit.*, p. 762).

In formulating the Circum-Caribbean theory, Steward (1946–50, vol. 4, pp. 11–15) relied mainly on ethnological rather than archeological data. He could hardly have done otherwise so far as the eastern half of the Caribbean is concerned, for our knowledge of the archeology of that area was very fragmentary at the time the *Handbook* was begun (in 1941). Subsequent research, in which the Caribbean Anthropological Program of Yale University is playing a major role,[2] has resulted in the accumulation of a large amount of new data and in the formulation of a tentative synthesis of the archeology of the area. It is the purpose of this article to test the validity of the Circum-Caribbean theory in terms of the new data and their synthesis.

The area to be covered includes the West Indies and the adjacent lowlands of Venezuela and British Guiana (Fig. 1). While not very large, this area is crucial for the theory, since it is here that the shift from Circum-Caribbean to Tropical Forest culture is assumed to have taken place, and from here, the Tropical Forest traits are supposed to have diffused southward into Amazonia. If the theory is valid, we should expect to find the following cultural sequence in this area:

1. A series of *Marginal cultures*, representing the original occupation of the area.
2. *Circum-Caribbean culture*, coming in from the Andes and spreading to all parts of the area except the Guianas and the most remote sections of the Greater Antilles, where the Marginal cultures continued in existence.
3. *Tropical Forest culture*, developing in the central part of the area and spreading south into the Guianas, with Circum-Caribbean culture surviving only in north central Venezuela and the Greater Antilles, and the Marginal cultures only in several even more isolated sections of the mainland and the Greater Antilles.

Our problem is to determine whether or not the archeology confirms this sequence.

SYNTHESIS OF THE ARCHAEOLOGY

Figure 2 presents the tentative synthesis of the archeology in the form of a series of chronological profiles,[3] following the principal routes of water transportation. The locations of these profiles are shown in Figure 1. Each is set up with its geographical divisions (separated by dots in Fig. 1) extending across the top of the chart and a uniform four-fold series of periods along the side. Period I is preceramic and Periods II–IV, ceramic, except in a few places where non-ceramic occupations seem to have survived the coming of pottery.[4] The top of Period IV represents the time of historic contact (1492 A.D.), and

it has been estimated that each of the preceding periods and sub-periods lasted for approximately a century (Rouse, 1951a, p. 251).

Where pottery is lacking (this is indicated by stippling), the names in the bodies of the charts refer to specific phases of culture, defined in terms of all the artifacts recovered. Otherwise (in the hatched and crosshatched areas), the names designate ceramic styles, a practice which has been adopted because potsherds comprise 95–99 per cent of the artifacts encountered and are therefore the only statistically reliable means of establishing chronological units (*op. cit.*, p. 252). Parentheses indicate that a culture or style is provisional,

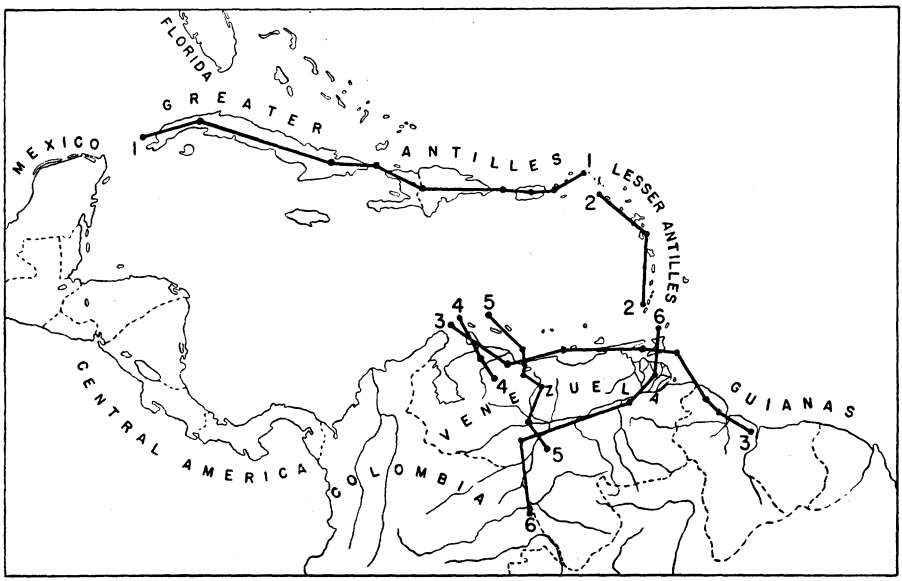

FIG. 1. Map of the Caribbean Area. The heavy, numbered lines show the locations of the profiles given in Figure 2.

i.e., that it is poorly known or has not yet been well defined, while a question mark signifies that its chronological position is uncertain.

Profile 1, for the Greater Antilles, is the best grounded in stratigraphy, because of a concentration of research in that area, and hence we have used it to set the pattern for the rest of the profiles. Since this chart has already been published elsewhere (Rouse, 1951a),[5] it need not be further discussed here.

Profile 2, referring to the Lesser Antilles, is based primarily upon research by European archeologists: Josselin de Jong (1947) on the Dutch islands of Saba and St. Eustatius and several excavators (e.g., Revert, 1949, pp. 197–222) on the French island of Martinique. Since neither Josselin de Jong nor the Martinique workers dug stratigraphically, we are unable to establish sequences of ceramic styles, but have instead noted the stylistic resemblances to the sequences in the neighboring profiles (1 and 6). Never-

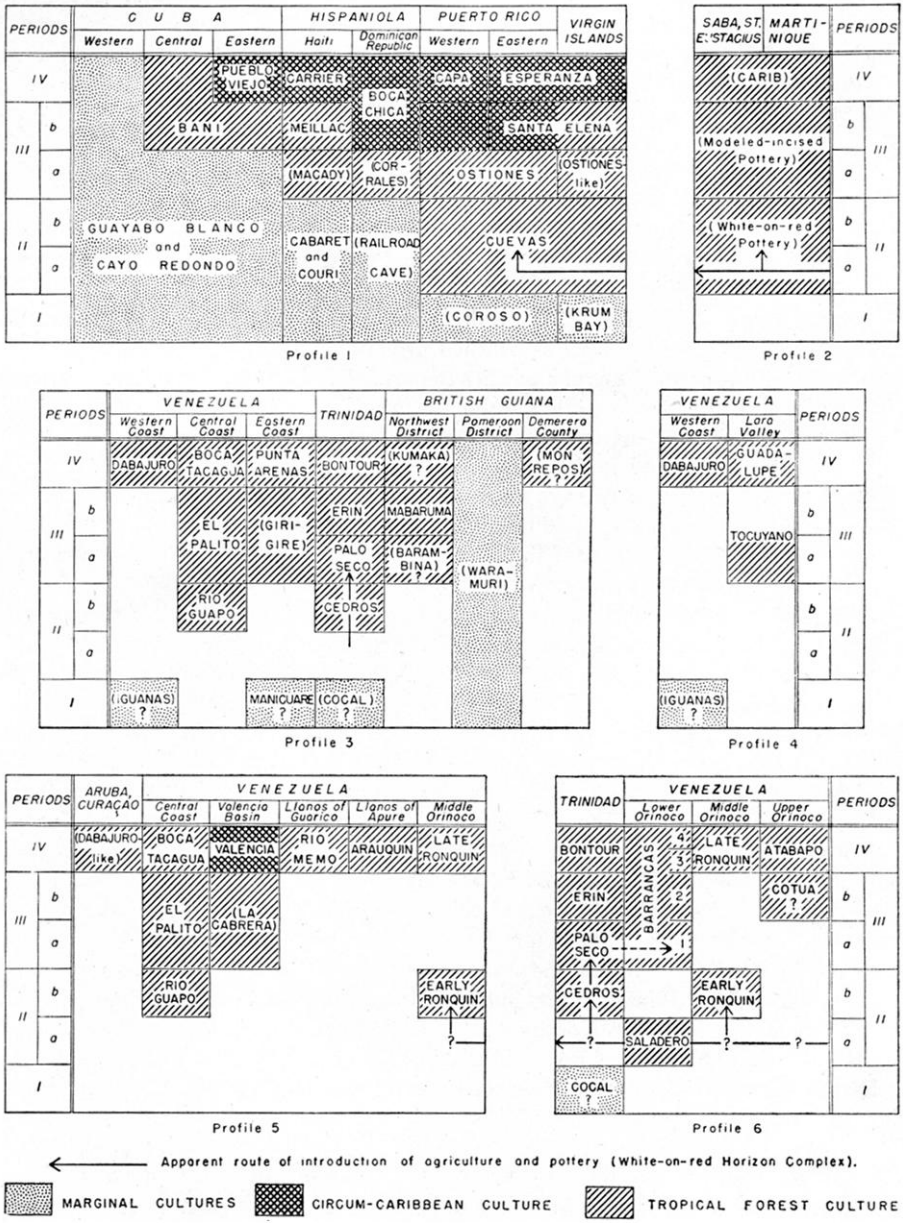

FIG. 2. Chronological Profiles for the Eastern Half of the Caribbean Area. See Figure 1 for the locations of these profiles.

theless, both the Dutch and the French excavations were extensive, and as a result we possess relatively more information concerning the artifacts associated (or not associated) with their pottery than in some parts of the Greater Antilles. The term "Carib" at the top of this chart refers to the historic Indians of the area and is based solely upon ethnological data, since no Carib remains have yet been definitely identified.

Profile 3 extends along the north coast of South America from Venezuela through Trinidad into British Guiana. Its western part is adapted from a forthcoming synthesis of Venezuela archeology by J.M. Cruxent (n.d.),[6] the Trinidad sequence is the result of extensive excavations by Bullbrook (n.d.) and ourselves (Rouse, 1947), and the remaining columns are inferred from Osgood's summary of the archeology of British Guiana (Osgood, 1946). Only the Trinidad sequence is stratigraphically reliable. The Venezuelan columns have been established primarily by means of seriation and the Guianan section, on the basis of analogies to parts of the Orinoco profile (no. 6) except in the case of the Pomeroon column, where the presence of European trade objects indicates a late survival of supposedly preceramic culture.

Profile 4 passes inland up the rivers of western Venezuela to the state of Lara at the base of the Andes, where we have cut it short because the mountains are outside the scope of this article. The Lara column, which is the only new one on this chart, has relatively great reliability because of the excavations there by Osgood and Howard (1943, pp. 78–91) and Cruxent and the writer (unpublished).

Profile 5 crosses the Caribbean coast, the Maritime Andes, and the Llanos or plains of central Venezuela from the Dutch islands of Aruba and Curaçao on the north to the middle part of the Orinoco River on the south, following the principal water routes between these places. It overlaps Profile 3 in the north and Profile 6 in the south, the three of them forming a triangle which encloses the dry, relatively inhospitable Llanos of eastern Venezuela. Excavations by Bennett (1937), Osgood (1943), Kidder (1944), and a series of local archeologists (e.g., Cruxent and others, 1946) have made the Valencia column the best known in this profile. Elsewhere (except in the case of the overlap with the Orinoco region), the profile is based primarily on seriation rather than stratigraphy. Howard (1947, Table 2), Kidder (1948, pp. 432–3), and Cruxent (n.d.) had previously prepared chronological charts referring to all or parts of the regions covered by our Profiles 4 and 5, and we have adapted ours from Cruxent's.

Profile 6, finally, extends up the Orinoco River from Profile 2, overlapping Profile 3 at its lower end and Profile 5 at its upper. It is the latest of a series of charts for the Orinoco Basin prepared by Howard (1947, Table 2), Kidder (1948, pp. 432–3), the writer (Rouse, 1947, Fig. 2; 1951b, Fig. 2), and Cruxent (n.d.), to which the reader is referred for further information. We will only note here that the profile is well-grounded in stratigraphy.

The six profiles are tied together by the existence of a number of horizon complexes, each consisting of a series of ceramic traits which extend from area to area and appear to have been more or less contemporaneous wherever they occur. For the sake of simplicity, we have omitted these from Figure 2 except for the earliest, White-on-red Complex, which has some bearing on the Circum-

Caribbean theory. We will, however, list the complete series here, as a further indication of the present state of knowledge of the archeology:

1. *White-on-red Horizon Complex:* very fine pottery, sometimes having sherd temper; bell-shaped, keeled bowls; vertical strap handles; and white-on-red designs, in which the paint is used primarily to cover areas rather than to form lines. The distribution of this complex and the assumed route of its spread are shown on Figure 2 by means of arrows (see also Rainey, 1940, pp. 182–3; Howard, 1943, p. 66; Rouse, 1947, p. 97; and Rouse, 1951b, p. 346). Since it is the earliest known form of pottery wherever it is found, we believe that it marks the introduction of ceramics from an as yet undetermined source.

2. *Modeled-incised Horizon Complex:* relatively coarse pottery with grit temper; open bowls with flanged rims; large, biomorphic lugs elaborately decorated by means of both modeling and incision; and broad-line, curvilinear incised designs on the flanges. So far as we can tell from our present evidence, this complex is foreshadowed by the Río Guapo and Cedros styles which existed along the shore of the Caribbean (Profile 3) during Period IIb, but it does not appear fully developed until the subsequent Period IIIa, when it is found among the following styles, again mainly along the shore of the Caribbean (in Profiles 5, 3, and 6 respectively): La Cabrera, El Palito, Giri-Gire, Palo Seco, and Barrancas 1 (combined, in the last two instances, with white-on-red designs which appear to have survived from the previous complex). Its entrance into the Lesser Antilles may have also taken place at this time. During the subsequent Period IIIb it seems to have persisted in the areas of its previous occurrence and at the same time to have spread into British Guiana (the Mabaruma style) and influenced several of the styles of the Greater Antilles (Santa Elena, late Ostiones, and early Boca Chica). By Period IV, however, it had died out everywhere except on the lower Orinoco (Barrancas 3 and 4) and, in an aberrant form, in the Greater Antilles (Esperanza, Capá, late Boca Chica, Carrier, and Pueblo Viejo). Cruxent (1951, pp. 152–3) has suggested a dual origin for this complex (which he calls "Barrancoid") in Amazonia and Peru, but it would be premature to draw any definite conclusion until more work has been done in the intervening regions.

3. *Black-red-white Horizon Complex:* moderately fine pottery, sometimes tempered with shell; bowls supported by hollow lugs; horizontal handles; and the linear designs painted in various combinations of black, red, white, etc. This complex is found among the Period IV styles of the western, central, and eastern coasts of Venezuela (Profile 3), the Lara Valley (Profile 4), and Curaçao-Aruba (Profile 5), as well as in northeastern Colombia (Reichel-Dolmatoff, 1951, pp. 51–103). Osgood and Howard (1943, p. 145) have pointed out that it has resemblances with Panama, and Cruxent (who calls it "Isthmian") goes so far as to suggest that it originated there (Cruxent, 1951, pp. 154–5). In any case, it appears to have spread from west to east along the coast of Venezuela, displacing the previous modeled-incised pottery of the central and eastern coasts.

4. *Complicated-incised Horizon Complex:* rather chalky pottery, tempered with sponge spicules; both bowls and jars; simple, crudely modeled and incised lugs and rectilinear, fine-line incised designs, which are poorly executed but rather intricate. Another late complex, this one is limited to the styles of Period IV on the middle and upper

Orinoco (Profile 6) and the Llanos of Apure (Profile 5), with some elements also appearing in the Valencia style further north (Howard, 1947, pp. 37–9). Evans and Meggers (1950, p. 9) and Cruxent (1950, p. 14) have noted resemblances to material on the Amazon, and Cruxent (1951, p. 154) suggests that this complex originated in Amazonia.

IDENTIFICATION OF THE CULTURE TYPES

We have used the profiles of Figure 2 as a base on which to plot the distribution in time and space of the three main types of culture involved in the Circum-Caribbean theory. We consider all the non-ceramic cultures to be Marginal in type and have so marked them by means of stippling. Those ceramic styles which appear to be associated with Circum-Caribbean remains are cross-hatched, while the styles which seem instead to have Tropical Forest associations are hatched.

All the non-ceramic cultures are identified as Marginal because (1) they lack agricultural implements and utensils; (2) most of their sites are located in areas more suitable for hunting and fishing than agriculture, i.e., on islets, in swamps, or on savannas; and (3) the relatively small depth and size of their middens indicates a seminomadic existence and a band type of social organization. It is considered particularly significant that none of these cultures (with the possible exception of Waramuri in British Guiana) has yielded any artifacts comparable to the griddles (*burenes*, *budares*, or *comales*) which are still used today in many parts of the area for baking cakes made from manioc or maize.

All pottery-bearing sites are assumed to be either Circum-Caribbean or Tropical Forest, not only because most of them contain clay griddles but also because their large size, relatively great depth of refuse, and situation on cultivatable ground imply the existence of settled, agricultural villages. If a given style of pottery is accompanied to any appreciable extent by ceremonial structures and paraphernalia, we have identified it with Circum-Caribbean culture; if not, we assume that it had Tropical Forest associations.

Since the differences between Circum-Caribbean and Tropical Forest culture consist largely of social and religious traits which have a non-material nature, the question arises whether we are justified in identifying these two types of culture on the basis of archeological remains. In so doing, we have in effect used the "direct historical approach" (Steward, 1942), i.e., we have worked back from the Colonial period, in which the Circum-Caribbean and Tropical Forest cultures have been identified ethnologically, into prehistoric time. As has been noted, Circum-Caribbean culture existed historically only in the peripheries of our area: the Greater Antilles and northwestern Venezuela (Steward, 1947, Fig. 1). Since the former is isolated, the original Circum-Caribbean culture should have survived there in a relatively pure form, and hence we should be able to use the traits of historic Circum-Caribbean culture

in the Greater Antilles to determine the prehistoric occurrences of that culture.

Fortunately, the historic Indians of the Greater Antilles used a relatively large assortment of structures and paraphernalia in connection with their ceremonies; these had political as well as religious significance; and an unusually large number of them have survived archeologically, in part because it was customary to set them up in cave shrines, where they have been protected from the weather (Lovén, 1935, pp. 125–34). They include stools, which were limited to the people of higher rank and hence imply a class system; dance plazas and ball courts, in which ceremonies and ball games took place; spatulas used to induce vomiting and tubes for taking snuff in connection with the ceremonies; amulets of various kinds; and a wide variety of carved stone, bone, shell, clay, wooden, and cotton idols or *zemis*, which the chiefs and priests kept in special buildings as well as in caves and relied upon as a principal source of their power (Rouse, 1948, 1952, pp. 359–62).

Where no structures or objects like these are represented in the archeology (and, in addition, there is no indication of special burial practices, such as elaborate grave furniture), we assume that the culture is Tropical Forest in type. For example, an intensive search of the caves of Trinidad has revealed no trace of ceremonial activity there; ball courts and other earthworks are lacking; all burials are in refuse with few, if any, grave objects; and a large amount of excavation has not, to our knowledge, turned up any religious artifacts except for two amulets (Rouse, n.d.). These facts indicate that the culture of Trinidad remained on a Tropical Forest level throughout the ceramic sequence, and we have so marked it in Figure 2 (Profiles 3 and 6).

TEST OF THE THEORY

The distribution of Marginal cultures, as given in Figure 2, conforms nicely to the Circum-Caribbean theory. All of these cultures seem to have preceded the appearance of Circum-Caribbean and Tropical Forest remains, except in the two peripheral regions of Cuba and British Guiana where, in accordance with the theory, they apparently survived until historic times.

The distributions of Circum-Caribbean and Tropical Forest culture, on the other hand, are contrary to the theory. Circum-Caribbean culture fails to make its appearance early and throughout the region, as the theory would have it. Instead, this type of culture is restricted to Periods IIIb and IV in parts of northwestern Venezuela and the Greater Antilles, the two places where it has been identified ethnologically; and it is Tropical Forest culture which follows immediately after the Marginal cultures and extends throughout the area.[7]

It is difficult to reconcile the great distance between the two regions of Circum-Caribbean culture with the theory that they were connected by means of a migration. Furthermore, if we are correct in concluding that the earliest,

White-on-red Horizon Complex marks the first appearance of Tropical Forest culture and that it spread in the direction indicated by the arrows in Figure 2, then Tropical Forest culture must have been moving down the Orinoco River, although the theory assumes the reverse.

The archeology of the eastern Caribbean thus fails to corroborate the Circum-Caribbean theory, except in giving priority to the Marginal cultures. It indicates that the Tropical Forest tribes have been in the area longer than supposed; that they were responsible for the introduction of agriculture and pottery; and that their culture was succeeded by the Circum-Caribbean only in two widely separated parts of the area.

CONCLUSIONS

Since this article is limited in scope to the eastern half of the Caribbean, we will not attempt to suggest a revision of the Circum-Caribbean theory as a whole, but will only propose an hypothesis to account for its discrepancies with the archeology of the area under consideration:

1. There seems to be no reason to doubt that the area was originally settled by Marginal tribes, as previously assumed.

2. Tropical Forest people came next, moving down the Orinoco River and out into the Antilles along the line of distribution of the White-on-red Horizon Complex. Whether these people originated in Amazonia and moved from there into the upper Orinoco via the Río Negro and the Casiquiara Canal, or else originated in the Montaña and migrated down the Río Meta from Colombia to the Middle Orinoco (a principal artery of travel in Colonial times), remains to be determined, as does the route of their penetration into western Venezuela.

3. Separate groups of the Tropical Forest people in northwestern Venezuela and the Greater Antilles developed Circum-Caribbean culture. It is not unlikely that each of these groups drew inspiration from the center of Circum-Caribbean development adjacent to it, in Colombia and Meso-American respectively. They may also have indirectly influenced each other, via the intervening Tropical Forest tribes, since they have some similarities. The extent to which they obtained their Circum-Caribbean traits as the result of independent evolution, parallel diffusion from the distinct centers to their west, and mutual influence, is a matter for future research to decide.

The validity of the foregoing hypothesis is best attested on the island of Puerto Rico, where a survey of some 300 sites and excavation in 59 of them has revealed a detailed picture of cultural development (Rouse, 1952). Here, the poorly defined Coroso culture of Period I is Marginal in type (Fig. 2). An agricultural people (marked by the Cuevas style of pottery) came in during Period IIa but appear to have been limited to the coastal regions in both Periods IIa and IIb, presumably because they relied on fishing as well as agriculture. Their culture, which is variously known as Igneri or Crab, lacks all traces of ceremonialism and consequently has to be considered Tropical Forest in type.

Periods IIIa and IIIb appear to have been a time of transition in Puerto Rico, during which the inhabitants gradually penetrated the mountainous interior and, in Period IIIb, began to construct ball courts and to made ceremonial objects. The majority of the Period IV sites are situated back from the coast and yield ceremonial material, as if the Indians had come to emphasize agriculture at the expense of fishing and were at the climax of their ceremonial development. The culture of this period, which is known as Taino or Shell, can therefore be considered typically Circum-Caribbean.

The proposed hypothesis has the advantage over the Circum-Caribbean theory that it conforms better to certain facts of geography and ethnology in the area under consideration. For example, Fewkes (1914), Ricketson (1940), and de Hostos (1941), have called attention to the great strength of the prevailing winds and currents in the eastern Caribbean, and de Hostos has showed that these have had a considerable effect on the course of prehistoric migrations. The Circum-Caribbean theory assumes, on the contrary, that, except for the movement out into the Antilles, all migration and diffusion of both Circum-Caribbean and Tropical Forest culture proceeded from west to east, directly into the face of the trade winds and currents, or alternatively, up the Orinoco River, where the Indians would also have had to battle strong currents (as the writer can testify from personal experience). The hypothesis proposed here does not require this assumption.

A second point arises from the fact that bitter manioc was the staple food of the historic Indians of the Greater Antilles. Since this plant is basic to the culture, we may assume that it came in with the first appearance of agriculture. If so, and if the Circum-Caribbean theory is correct, bitter manioc should have diffused from western South America; yet, it does not occur there. Instead, it appears to have originated somewhere in Amazonia or along the Montaña, together with several other plants which are found in the Antilles but not in western South America (Bennett, 1952, p. 12). The distribution of these plants corroborates our hypothesis that the Tropical Forest people introduced agriculture into the eastern Caribbean from somewhere to the south.

Finally, there are a number of specific resemblances between the rubber-ball game in Meso-America and the Greater Antilles (Alegría, 1951, p. 349). Stern (1950, p. 101) and Alegría (1951, pp. 348–9) have suggested that these are the result of diffusion from Mexico to the Greater Antilles via the Circum-Caribbean route along the north shore of South America. So far as is known, however, the ball game does not occur along this route in any form, even among the Circum-Caribbean people of northwestern Venezuela.[8] If, therefore, diffusion did take place, it is more logical to conclude, as Lovén (1935, pp. 694–5) has done, that the ball game passed directly from Mexico to the Greater Antilles.

The test of the Circum-Caribbean theory which has been made here seems

to us to offer another example of the danger of reconstructing culture history primarily on the basis of ethnological data, without the time perspective provided by archeological research (cf. Strong, 1933). In formulating the Circum-Caribbean theory, as we have seen, Steward encountered a gap in the distribution of Circum-Caribbean culture between northwestern Venezuela and the Greater Antilles, and he assumed, without having the necessary archeological evidence, that this gap had formerly been closed. Now the archeology shows that it was always open, and the theory has to be changed accordingly.

Steward also encountered gaps of a different kind around the headwaters of the Amazon and its tributaries. Here, the Tropical Forest tribes are largely separated from the people of the Andes by Marginal tribes. Steward (1947, p. 101) assumed that this separation has historical depth and inferred therefrom that agriculture and the technological traits of Formative culture did not diffuse from the Andes into Amazonia. One wonders whether future archeological research will verify this, or whether it will indicate that the Marginal tribes of the headwaters mask a previous Formative-Tropical Forest continuum.

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NOTES

[1] This disappearance of Circum-Caribbean culture is not specifically mentioned by Steward, so far as we are aware, but it has to be assumed to account for the break in the historic distribution of Circum-Caribbean culture between northwestern Venezuela and the Greater Antilles (Steward, 1947, Map 1). It might instead be argued that the Circum-Caribbean people migrated across the break without leaving any traces, but this is not likely since, as Steward (1947, pp. 26–7) has pointed out, the Circum-Caribbean people were originally orientated towards the land. They must have stopped in the region of the break long enough to acquire a knowledge of water transportation before venturing into the Antilles.

[2] We wish to express our appreciation to the Wenner-Gren Foundation for Anthropological Research, Inc. for its support of the Yale program.

[3] For a previous use of this method of presentation, see Ford and Willey, 1941, Figs. 1–6.

[4] Howard (1947, pp. 18–41) has used the terms Early, Middle, and Late Ceramic to refer to our Periods II, III, and IV respectively.

[5] See also Howard (1947, Table 1), Rouse (1948, Table 1), and Rouse (1949). The present version contains several minor changes, based on the discovery of red-painted pottery in the Dominican Republic, which apparently dates from Period IIIa (J. M. Cruxent, personal communication) and on the recent work of Gary Vescelius and others in the Virgin Islands.

[6] Cruxent (n.d.) divides Period IV into two parts, *a* and *b*, the former being prehistoric and the latter historic. We have omitted the latter from our profiles for the sake of simplification.

[7] Circum-Caribbean culture may also be represented archeologically on the Llanos of Barinas, Portuguesa, and western Apure, south of Profile 4 and west of Profile 6, by the *calzadas* or causeways of that area (Cruxent, 1952, pp. 280–6). These have been omitted from consideration because so little is known about them.

[8] The rubber-ball game does occur ethnologically in another part of our area: among the Otomac and several other tribes on the Llanos of Apure and along the upper Orinoco (Stern,

1950, Map 7). In this case, too, we would suggest that it may be derived from the closest place where it is known to be present, in the Andes to the west.

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