Since its inception, now almost a quarter of a century ago, this conference, this conference, ladies and gentleman, has been haunted by the spirit of the Island Carib. As you will understand, I am referring to the intriguing question of the archaeological identification of Island Carib material remains in the Windward Islands: a problem which in spite of claim to the contrary has not been solve to date. Today I wish to present evidence which I feel throws new light on this matter. I believe the Island Carib problem is a question worth investigating. Its solution will enable us at last to combine and compare ethnohistoric and archaeological information in reconstructing Amerindian culture and society in the Lesser Antilles during late-prehistoric and proto-historic times.

The Island Carib problem: Introduction

Way back in 1961, during the first congress, Father Pinchón demonstrated his firm conviction that in Martinique he was able to identify archaeologically the pottery complex characteristics of the Islands Carib, that is to say the Amerindians people know to have occupied the Windward Islands during at least the sixteenth through eighteenth centuries. Although nowadays Pinchon’s views are only of historical interest, his belief that in this particular instance ethnic identification of archeological materials was indeed possible and the origin of historically attested Amerindians peoples in the Caribbean could be traced backwards into Pre-Columbian times was not doubted by subsequent student of the problem until the late seventies. As a matter of fact, Pinchon’s ideas incited a discussion which since the first congress has never ceased.

Almost simultaneously Marshall McKusick noted faint similarities between the youngest Pre-Columbian culture he had been able to distinguish in St. Lucia, the Fannis complex, and ceramics at the time still made by local potters of mixed African/black Carib descent at this island. He concluded that Fannis probably represented the Pre-Columbian precursor of Island Carib ceramic but was unable to substantiate this view with hard evidence.

McKusick’s point was taken up by Ripley Bullen whose fieldwork in Grenada, Barbados, St. Vincent, and the Grenadines of the sixties and early seventies demonstrated that pottery complexes, closely related to Fannis and similarly late in chronological placement, existed in all
of this islands. It became obvious that these complexes represented the local expressions of one and the same Amerindian cultural tradition, nowadays known as the Suazoid series, which, as subsequent work by Allaire and Harris has shown, extended over the southern islands of the Lesser Antillean chain from as far north as Martinique to as far south as Tobago between ca. A.D. 1100 and 1450.

To make a long story short, Bullen was convinced that the Suazoid series represented Island Carib ceramic. Although Rouse, Haag and Bullen defended his view with so much eloquence that up till today many archaeologists in the Windward and beyond adhere to it remained move cautious. In fact, Bullen had no more evidence to prove his point than McKusick had: he was unable to locate undisputed Historic sites yielding Suazoid pottery anywhere in the Windwards.

A critical review of the entire Island Carib problem was made in the late seventies by Louis Allaire. Allaire’s extensive excavations at Suazoid sites in Martinique and his detailed comparison of Suazoid pottery with the available ethnohistoric information of that on the Island Carib demonstrated beyond any doubt that the later by no means can be identical to Suazoid ceramics. Unfortunately this admittedly negative conclusion has so far failed to make an impression on most archaeologists working in the Windwards (in my view mainly because the general public likes simple solutions rather than academic hesitation), but the correctness of Allaire’s view cannot be doubted.

So we are back to where we began. Allaire expressed as his opinion that Island Carib sites has not been discover in the Lesser Antilles to date and he even doubted whether such sites would ever be found. Obviously it is time to review the entire problem again, starting from scratch. If you allow me, ladies and gentleman in doing so I would like to discuss briefly some of the key historical and anthropological aspects of the Island Carib problem before analyzing a late-prehistoric archaeological complex from St. Vincent which so far has escaped the attention of the students of the question.

The Ethno-historic approach

First of all we have to make a distinction between Island Carib ethnicity and Island Carib cultural tradition. Ethnic alliance, the expression of a feeling of belonging to a particular people, is and has always been a matter of self-ascription. In tribal societies like that of the Island Carib by particular forms of body ornamentation pan-tribal unity was expressed and reinforced by the use of a common name, and by the adherence to an ideology involving the recognition of a common origin and the sharing of the stereotyped image of other tribes. It is an anthropological truism to state that there exist no one-to-one correlation between language, race, culture, and people (nation), and, consequently, ethnicity is a concept which is difficult to grasp archaeologically.

So it is obvious that the name a group of people give to themselves expressed their feelings of ethnicity. Now the Island Carib called themselves Kalinago in the men’s language and Kalipuna in the women’s language. The word Kalinago is derived from Kalina (meaning the own "people" in Cariban) that is to say the name the various Carib groups of Coastal Guiana and the Middle Orinoco Valley used and still use to indicate their common ethnicity, to which word the common Cariban honorific suffix-go had been added. Consequently, has Allaire has stressed
rightly the Island Carib considered themselves to belong to the same ethnic group as the mainland Kalina.

It is noteworthy that the name Kalina was certainly not the single ethnic name Caribs on the mainland used to express their ethnicity. Instead, it appears that at least in the Guianas separate names were employed by local groups of Amerindians who recognized a wider tribal unity expressed in the name Kalina. For instance, the Kalina of eastern Suriname and coastal French Guiana still call themselves Teyrou or Terewuyu while nevertheless claiming overall Kalina ethnicity with other Carib tribal segments elsewhere in the region.

The suffix-puna in Kalipuna, the group name used in the women's language of the Island Carib, is in fact the word the Maipuran Arawakan-speaking Lokono or "True" Arawak of Coastal Guiana and the Lower Orinoco Valley traditionally added to the names of plants and animals in order to arrive at clan names. Ethnohistoric evidence suggest that everywhere in northern South America the name Kalipuna was given by Arawakan-speakers to groups of Carib ethnic affiliation.

The use by Island Carib men and women of two different names to indicate their common ethnicity results from, and forms an expression of, their well-known linguistic and cultural dimorphism. As you know, studies by the Goeje and Taylor have shown that the Island Carib originally spoke two variants of what was basically Maipuran Arawakan: a women's and men's speech, of which the men's "language" shows numerous Cariban lexical borrowing. Thus, in spite of the fact that, like the women, the men in Island Carib society spoke a Maipuran Arawakan language, they felt that the Island Carib people belonged to the Cariban-speaking Kalina ethnic group of the mainland.

We all know that according to the commonly accepted interpretations of the Island Carib myths of origin, as recorded by French missionaries in the seventeenth century, the bifold linguistic situation in Kalinago/Kalipuna society originated as the result of conquest of the Windwards by Kalina from the mainland. In the process of this war the Kalina killed the men but the original inhabitants of these islands, called Arawak in one version of the tale and Igneri in another one kept the women alive as servants and concubines. They, according to Island Carib tradition, would as a consequence have been able to preserve their original language, i.e. Arawakan. The view, help by many scholars, that we must accept the explanation offered by these Island Carib myths as a historical fact which took place a few centuries before these narratives were recorded has been challenged by, again, Allaire. He points out that many of the Island Carib tales are contradictory and contends that since archaeological evidence for a Kalina migration from the Guianas to the Windward Islands during late-prehistoric times is completely lacking, these stories must be devoid of any historical value. Allaire suggests that in fact the Island Carib linguistic situation can be better explained by assuming rapid acculturation of the Maipuran Arawakan speaking inhabitants of the Lesser Antilles to the culture of the mainland Kalina due to regular Kalina long-distance trade between the Guiana coast and the Windwards. This would have resulted in the adoption of a Kalina trade jargon by the Arawak/Igneri and this pidgin would have developed into the men's language of the Island Carib as it was recorded by Father Bretón and others since the mid-seventeenth century.
The Cayo Complex of St. Vincent

Allaire is undoubtedly right in assuming long-standing trade contacts between the Amerindians of the Guiana coastal zone and those of the Lesser Antilles. Elsewhere I myself presented documentary evidence indicating uninterrupted trading among the Arawak (Lokono), Kalina and other Amerindian tribes in the Guianas, Trinidad, the Orinoco Valley and the Windward Islands during late-prehistoric and early Historic times. However, I feel that the main common element in the Island Carib tales of origin, the chain to a migration from the Guiana coastal area, cannot be dismissed easily and I believe that Allaire is too pessimistic in assuming that both ethnohistoric and archaeological data supporting this claim are lacking.

First of all, it is imperative to realize that in tribal societies like those of the Kalina and Arawak the boundary between trade and war is diffuse. In fact, the traditional warfare between the various Amerindian tribes in the Guianas and beyond never interrupted their mutual commerce. Raiding each other's villages was largely a village affair and trade and war can even be considered as merely two different expressions of the same pattern of social integration. To give a comparable example, as late as the mid-nineteenth century the Akawaio or Kapohn of Guyana were known as the tribe most feared by all other Amerindians in the country. Nevertheless, they were professional traders whose Caribbean dialect developed into the lingua franca of southern Guyana. Hillhouse relates how still in his time the Akawaio were accustomed to raid weak villages of other tribes but to trade with strong ones.

Both trade and war fostered acculturation; trade through direct contact between men of different ethnicity and linguistic affiliation and war through intermarriage between raiders and war-captives, whether male or female. For instance, as the sixteenth-century Arawak of Coastal Guiana stated, young Kalina boys or girls, captured as "slaves" (read: servants) during war expeditions often married into the Lokono tribe and "Then become Arawak themselves". In this respect it is significant that in Kalina the same word, poito-lu, is used for both "servant" and "son-in-law". This hints at not only the low status sons-in-law had and have in this matrilocal society but also at the fact that traditionally many war-captives became sons-in-law.

Secondly, it should be kept in mind that the Island Carib linguistic situation is by no means unique for the tropical Forest peoples of northern South America. There is documentary evidence suggesting that the contacts through trade and war between Caribbean- and Arawakan-speaking tribes led to linguistic developments on the mainland similar to those postulated by Allaire for the Windwards. Recently Taylor and Hoff showed that in the mid-seventeenth century the Kalina in the French Guiana coastal region employed a trade jargon showing close similarities to the men's language of the Island Carib, and, most interestingly, as early as 1596 Keymis makes reference to a tribe called Ipaio in this same area the members of which, as he wrote, "speak the language of the Indians of Dominica."

Obviously, culturally and linguistically mixed Arawak-Kalina groups of varying ethnicity were formerly more widespread that the present ethnographic situation in the Guianas would suggest. Late-sixteenth and early-seventeenth century word lists of such extinct languages as Nepoio and Shebaio, (both tribal groups originally occupying portions of the Lower Orinoco Valley and/or south-central Trinidad) include Maipuran Arawakan as well as Cariban words indicating varying degrees of acculturation. Misunderstood by linguists, the apparent bilinguality of these Amerindian peoples has led to shifting classifications of Shebaio and Nepoio into the Caribbean or Arawakan language families. Early wordlists, like those mentioned, were collected by
European sailors as the result of short-lived trading contacts with the Amerindians of the Southeast Caribbean. Since the men were traditionally traders such wordlists are most likely biased towards the men’s language, and consequently, in a linguistic situation similar to that of the Island Carib they would show Cariban rather than Maipuran Arawakan elements.

It follows that most likely Island Carib linguistic dimorphism forms part of a general process of trade, war, intermarriage, and acculturation between Arawakan and Cariban-speaking groups in the entire Southeast Caribbean, both in the Guianas and in the Lesser Antilles.

Continuing this line of reasoning, the Island Carib myths of origin can be interpreted as partially Antillean adaptations of narratives already current on the mainland about the wars between Kalina and Lokono. Gullick has pointed out that the only common elements in all of the different versions of the Island Carib stories on their origin are, firstly, the provenance of the men in Coastal Guiana and their ethnic alliance to the Kalina and, secondly, the emphasis on the hostilities and differences between Kalina and Arawak. The latter element indeed forms a repeatedly recurring theme in tales of both these tribal peoples in the Guianas. For instance, according to sixteenth-century Spanish accounts, the Arawak of Coastal Guiana have a tradition that they only settled in this region after having dislodged the Kalina from their lands.

As we have seen, such stories, obviously forming conceptualizations of a common ideology stressing ethnic identity, create a distorted picture of the actual pattern of inter-tribal relationships in northern South America. Trade and war went hand-in-hand and regular barter between traditionally hostile tribes appears to have been the rule. The Island Carib did not form an exception. According to Father Bretón, the Kalinago were accustomed to trade with the Arawak in particular highly-valued products of the mainland. They bartered with specific Lokono, namely these with whom "They had made a contract and exchanged names." This created a true tie of kinship.

Furthermore, it is after forgotten that not all of the Island Carib narratives unequivocally make the claim that the bilinguality in their society originated at the time to the migration to the Windward Islands. Close reading of the prime sources suggests that on this point French missionary interpretation may well have obscured genuine Amerindian tradition. I suspect that Island Carib bilinguality originated from the ongoing capturing of Taino women from the Greater Antilles as well as Arawak women from the mainland, historically attested to by numerous sixteenth-century sources, rather than from the absorption of an Arawakan-speaking people in the Windward sat the time of the Island Carib conquest.

Due to the practice of raiding Taino and Lokono females, which in any case had the effect of continuous reinforcement of the Maipuran Arawakan-speaking element in Island Carib society, mid-seventeenth century Island Carib language was as close to Taino as to "True" Arawak.

The enigmatic interchangeable use of the names Arawak and Igneri for the hypothetical "original" inhabitants of the Lesser Antilles forms another inconsistency in the Island Carib stories of their origins. The name Igneri appears to have been derived from the Maipuran Arawakan word eyeri, meaning "men" or "people" (of other ethnicity than their own), and, according to Brinton, it is common as a suffix in Taino names for particular Amerindian ethnic groups in the Greater Antilles such as the Guantaneyeri and Siboneyeri. The use of this word
suggests that when the story was recorded in the mid-seventeenth century the ethnicity of the "original" inhabitants of the Windwards had fact long been forgotten.

Even more disturbing is the alternative use in several of the tales of the name Arawak as this suggest that the Eyeri were ethnically Lokono. Elsewhere I have shown that this name originated as an optional tribal name for Lokono due to Spanish-Lokono trade contacts in the first quarter of the sixteenth century. It was rapidly accepted, possibly by several Amerindians tribal groups of the Lower Orinoco Valley, Trinidad and the Western part of the Guiana coastal zone, due to the protection the name gave against Spanish slave-raiding expeditions, especially after Rodrigo de Figueroa's report of 1520. Consequently, at the time of the Island Carib migration claimed to have taken place somewhere in the fourteenth through fifteenth centuries, Amerindian groups referring to themselves as Arawak were nonexistent, either in the Lesser Antilles or on the mainland. In fact, the use of the name Arawak in the Island Carib tales of origin suggests that my interpretation of the origin of Kalinago linguistic dimorphism is correct.

In addition, contrary to the commonly held view, the Island Carib narratives are certainly not unanimous in claiming that the Island Carib exterminated the Eyeri men and married their women. One of the earliest recorded tales even holds that the Lesser Antilles were uninhabited at the time of the Island Carib migration. Inconsistencies in the various tales like the one listed, arising from varying local Amerindian traditions and/or French missionary interpretation, suggest that the value of these narratives for ethnohistoric reconstruction is limited. I would be inclined to accept the single common element in all of the different versions of the myth, namely the claim to a movement from the Guiana coastal zone into the Windwards by a people recognizing Kalinago ethnicity, as the one most likely based on historical fact.

Indeed, some ethnohistoric and linguistic evidence, admittedly of mainly circumstantial character, is available suggesting that the Island Carib view on their provenance area is correct and that this region can be identified as the western part of the Guiana coastal zone, i.e. the area which in the sixteenth century formed the major Lokono settlement region. Documentary sources indicate that during this period the Lokono inhabited the lower reaches of the rivers debouching into the Atlantic Ocean in Guyana and Suriname while all other Amerindian tribal groups, including the Kalina, occupied the banks of these same rivers, upstream from the Lokono.

As early as the 1580s an Amerindian people called Yaio, most likely a Kalina tribal segment, is mentioned in the historical documents as living in southwest Trinidad and the western and central portions of Coastal Guiana. In the few instances that we have detailed information about the Yaio settlement area outside Trinidad, they are invariably mentioned as occupying a geographically intermediate position between Arawak and Kalina on the riverbanks in the Guiana coastal plain. This obviously fostered acculturation with both these tribes.

Wordlists collected among the Yaio by European sailors in Trinidad and in the Guiana coastal zone indicate that at least the men in Yaio society spoke a Cariban language, related though not identical to Yaio and Kalina are reported to have had difficulties understanding each other. Most interestingly, these wordlists also include Maipuran Arawakan words and show linguistic similarities between Yaio and Island Carib, not found between Kalina and Island Carib. This suggested to Douglas Taylor that the Cariban-speaking element in Island Carib society may have originated in Trinidad or the western part of coastal Guiana. Obviously, this is not sufficient
evidence to hypothesize that the Yaio were as bilingual as the Island Carib (although the correspondence in names between the Yiao and the Ipaio of Keymis is suggestive), but the possible Yaio-Island Carib connection is well worth further investigation.

First of all it is more than noteworthy that in the early seventeenth century the name Yaio appears to have been used in the documentary source interchangeably with Kalipuna, i.e. The name the Island Carib women employed to refer to their nation and, as we have seen, a generic term used by Arawakan-speakers for groups of overall Kalina ethnicity. This suggests that by this time due to intermarriage, the just like the Island Carib, Yaio people had become composed of Arawakan-speaking women and Cariban-speaking men.

Besides, in the Island Carib and Kalina systems of kinship terminology the word iácu represents a classificatory term indicating mother's brother, i.e. The man who in the system of cross cousin marriage, preferred in Kalinago as well as Kalina society, was often the (peaceful) bride-giver and thus became father-in-law. This may perhaps be interpreted as an implicit recognition by the Island Carib of a claim to Yaio relationship. Similarly, the Kalinago recognized descent from the Arawak. Several versions of their tradition of origin state that on the mainland the Island Carib had been the slaves (read: "sons-in-law") of the Arawak before they rebelled and fled into the Antilles.

The name Yaio as a tribal name disappears after ca. 1650. Most likely they were rapidly absorbed into the Kalina proper of the French Guiana coastal zone after their historically attested flight from Trinidad and northwest Guyana to the eastern most portion of the Guianas between 1590 and 1610. As the men in Yaio society used a Cariban dialect closely related to the forms of Cariban spoken on the east Venezuelan coast, a substantial number of specifically Western-Cariban linguistic elements may have entered Kalina language after the absorption of the Yaio.

In conclusion, it would seem that the following ethnohistoric scenario can be developed to account for the Island Carib problem. First of all I wish to postulate a movement from the western portion of the Guiana Coastal Plain into the Windward of an Amerindian group related to the Yaio and, like them, claiming overall Kalina ethnicity. As Island Carib social structure, especially their kinship terminology, is closely related to that of the Kalina, I believe that originally Carib elements in culture society and language of this proto Island-Carib people were dominant although a certain acculturation with Arawakan-speakers may already have taken place before the movement into the Antilles.

Secondly, I wish to postulate that the capturing of Taino women from the Greater Antilles and Lokono females from the mainland rather than the hypothetical absorption of the "original" inhabitants of the Windwards was responsible for the (further?) development of Island Carib bilinguality during the first centuries of Antillean settlement. On the other hand, continuing trade contacts with the Kalina of central and eastern coastal Guiana would in turn have reinforced the claim to Kalina ethnicity. The historically attested movement of the Yaio to the French Guiana coastal zone would explain the shift in major trade routes to this area where traditionally the Kalina ethnic element appears to have been strong in contrast to the western portion of coastal Guiana.
The Cayo Complex of St. Vincent

The Archaeological Evidence

It is time, ladies and gentlemen, to see whether and how far archaeology supports the hypothetical reconstruction I developed to account for the Island Carib situation. In order to answer this question I wish to adopt the following line of investigation. First, I shall attempt to define a series of ceramic traits required for an Antillean pottery tradition to be classified as the ancestor of the Kalinago ceramic complex, drawing conclusions from the ethnohistoric scenario I hypothesized for the Island Carib problem. Secondly, I shall identify this complex and trace its origins and cultural affiliations of the mainland of South America. Thirdly, the relationships of this complex to the historic pottery traditions of the Kalina, Lokono (Arawak) and Yaio of the Guianas, for as far as these are known from historical records and ethnographic investigations, will be discussed and, finally, I wish to show the close agreement between this Antillean ceramic tradition and the mid-seventeenth century descriptions of Island Carib pottery.

What would the Island Carib pottery complex have to look like if my interpretation of the available ethnohistoric data is correct? First of all it should reflect the postulated origin on the South American mainland, i.e. show a close relationship to at least one major late-prehistoric ceramic tradition of the Guiana coastal area. Secondly, this particular mainland pottery series or subseries should be demonstrably ancestral to both the historic Kalina ceramic complex of the Guianas and Island Carib pottery assemblage.

Moreover, if we accept that the bifold linguistic affiliation of the Island Carib reflects their dual cultural heritage, it can be reasoned that theoretically other aspects of Island Carib culture and society, such as their tradition of pottery making, should do the same. It follows that if the women were their potters among can be expected to show elements of both the Historic Kalina and Arawak pottery traditions.

Furthermore since it is historically attested that the Island Carib captured numerous Taino-speaking females in the Greater Antilles at and probably before the time of Columbus it is reasonable to assume a substantial proportion of the Island Carib ceramic complex to show close affinities to the Chicoid series of late-prehistoric and early Historic times. Besides documentary evidence is available to show that from the early-sixteenth century onwards increasing numbers of black slaves working on the Spanish plantations in Puerto Rico and Hispaniola were also captured by the Island Carib. Consequently, the Island Carib ceramic complex of Historic times might show even some African influence.

Cayo, Koniabo and the Polychrome Tradition

The only late-prehistoric to Historic pottery tradition from the Windward Islands meeting all the requirements needed to classify it as the Island Carib ceramic complex is Cayo of St Vincent. The Cayo complex was discovered and defined by Dr I.A. Earle Kirby in the early seventies but has since been neglected sadly by all serious students of the Island Carib problem. It is noteworthy that pottery similar to Cayo was found subsequently by Henri Petitjean Roget at two sites in Dominica and by Allaire at the Macabov site in Martinique while the Bullens mention related material from St Lucia, Grenada and the Grenadines. I am referring to their "Peasant Ware" and "Savanne Plain" types which they date to Historic times.
Thanks to a grant from the government of Trinidad and Tobago, made available through the archaeology budget of the University of the West Indies, I was able to study the Cayo collection, kept in the Archeological Museum of the St. Vincent National trust at Kingstown, during March 1984. Dr Kirby was kind enough to show me various archeological sites at which Cayo pottery had been found and to discuss continually its chronological placement and cultural affinities with me. Though my conclusions regarding these two matters do not tally completely with Dr Kirby’s opinion, as expressed in his 1974 paper, I agree fully with him that Cayo represents an independent and thus far insufficiently defined, and even, ignored, pottery complex in the Lesser Antilles.

According to Kirby, Cayo complex ceramics have been discovered at various archaeological sites on the south and east coasts of St. Vincent. Most material appears to have been collected at the sites of New Sandy Bay, close to the Cayo River. And Oiwa in the northeast of the island. Less substantial amounts of Cayo pottery were found at Camden Park (Madame Dukes River), Fancy (“Old Carib Cementery”), Sans Souci, and Mount Pleasant in the southeast and southwest. I refer to Bullen & Bullen for a list of other sites in St Vincent at which a few surface finds of Cayo pottery have been made, keeping in mind that these authors include ceramics related to Cayo in their "Peasant Ware" and "Savanne Plain" types.

Most, if not all, of the archaeological sites yielding Cayo pottery appear to be multi-component middens or pottery deposits. As thus far only surface collections have been made at these sites, segregating Cayo pottery from the other ceramic styles represented is difficult. Stratigraphic observations are virtually absent. Although I had the opportunity to examine a vertical cross-section of the Camden Park site I am unable to confirm Kirby’s interpretation of the culture-chronological sequence thought to be represented at this site.

Unfortunately, it was not possible to identify the sites at which about one third of the pottery fragments, included by Kirby in the Cayo complex, have been found. In all, 152 potsherds in the museum collection are considered to belong to this ceramic tradition; a substantial number of these appear to have been found at New Sandy Bay. Although, due to selective collecting, undecorated wall fragments are virtually absent from this material. It is felt that the sample of rim fragments (116) is sufficient to enable reconstruction of a representative number of vessel shapes.

As explained above, I would be inclined to include Bullen’s "Peasant Ware" and "Savanne Plain" types in the Cayo cultural continuum. Since both these pottery categories have been found at various sites in St Vincent, St Lucia, Grenada and the Grenadines in apparent association with Historic materials, notably Spanish olive jars of Goggin’s Middle Style, they most likely date from the sixteenth and/or seventeenth centuries. I believe that it will be possible in future to distinguish between a fully prehistoric Cayo complex and a Historic successor which clearly developed out of it. I would coin the term Fancy for the latter ceramic complex after the Fancy site "Old Carib Cementery" of which it seems to be characteristic. As I was unable to segregate the Cayo and Fancy components due to insufficient labelling of the museum collection, both are included in the present analysis of Cayo pottery.

All Cayo pottery is manufactured by coiling. Clays and temper were obviously obtained mainly locally as only eight sherds show temper material foreign to St Vincent. No less than 84.9% of
The pottery fragments are tempered with fine to medium-coarse volcanic sand, containing numerous magnetite particles and occasionally hematite grains of up to 2 mm in size. As a result, sherds are often strongly magnetic. This ware is of medium hardness and medium thickness (on an average ca. 7-8 mm). Firing is incomplete: many pieces show blackish cross-sections. Furthermore, an appreciable amount (46.1%) appears to have been baked in a reducing environment, resulting in an overall black color, both inside and outside.

Small proportion of Cayo pottery (9.9%) is tempered heavily with angular and rounded fragments of pounded quartz crystals of up to 4 mm in size. This is a well fired, hard pottery ware, yellowish to orange in color both on the outside and in cross-section. The other surfaces have a sparkling appearance due to the numerous quartz crystal grains sticking through them. The inner surfaces are often eroded or show blackish coloring due to baking in a reducing environment. This ware is often extremely thick, on an average 12 mm, and apparently it represents Bullen's "Savanne Plain" and "Peasant Ware" types.

A third category is formed by eight potsherds tempered with medium-fine caraipé. This is a thin (4-5, 5 mm in thickness), medium-hard and incompletely oxidized type of pottery, yellowish to grey in color, which was probably obtained as trade ware. Caraipé is the ash of the siliceous bark of a small tree, Licania apetala, known to be indigenous to the Guianas and Trinidad but, as far as I know, unreported from the Windward Islands. At present caraipé forms the only tempering material used by the Amerindians of the Guianas. The bark is burnt resulting in the removal of most organic components, and afterwards pounded. Temper consists of a mixture of white to grey siliceous particles, columnar and cellular in structure, and grains of carbonized organic material.

Eight major vessel shapes can be distinguished in Cayo pottery. Form 1, represented by 20.8% of the rim sherds, includes predominantly medium-sized bowls with constricted mouths and rounded or flattened lips. Two specimens reach enormous proportions: rim diameters are as large as 74 cm. Form 2 (13.6%) comprises small to medium-sized open bowls with convex sides and often bevelled rims. Form 3 (5.6%) is represented by medium-sized open bowls typically with concave sides and flattened lips. The average rim diameters of all three bowl forms vary around 35 cm.

A second group of Cayo vessel shapes includes bowls or jars with composite contours. Form 4 (22.4%) comprises more or less biconical bowls with concave necks of medium proportions, showing rounded or flattened lips. Form 5 (16.8%) is represented by small to medium-sized jars with out curving rims, flattened lips. Vertical or almost vertical necks, and globular bodies. Mean rim diameters of both Forms 4 and 5 vary around 22.5 cm. Form 6 (4.8%) includes medium-sized to large jars with short, vertical rims and flattened lips, straight necks and globular bodies.

The remaining group of Cayo vessel shapes comprises jars of sizeable proportions. Form 7 (7.2%) is represented by medium-sized to large jars with inflected contours, showing almost vertical necks and rounded or flattened lips. Finally, Form 8 (5.6%) includes predominantly large jars typically with convex necks, rounded or flattened lips, and globular bodies showing almost straight sides below the largest belly diameter. Although the mean rim diameters of both Forms 7 and 8 vary around 38 cm, they may become as large as 52 cm.
Bases are badly represented in the Cayo collection. Most of them are flat and show unmodified junctions to the vessel walls, one Form 5 jar has a concave base. Handles are associated with Forms 1, 4 and 5. They are mainly strap-like although one specimen of a rod type of handle also occurs. Two fragments of cassava griddles are known; one of these shows an upturned rim. Finally, it is noteworthy that volcanic sand temper is associated with all vessel shapes, quartz crystal temper with Forms 1, 3, 5, 6, 7, and 8 while caraipé occurs only in connection with a Form 3 bowl.

More that half of the potsherds in the Cayo collection are decorated. Obviously, decorated pieces are over represented due to selective collecting. Specimens of all vessel shapes, including griddles, show one or another kind of decoration. The proportion of decorated pieces of Forms 3, 4, and 5 is even higher than that of undecorated specimens, although the significance of these statistics is hard to determine. At any rate the variation in both decorative techniques and motifs is remarkable.

No less than twelve techniques of decoration can be distinguished in Cayo pottery. The first group of these includes painted or slipped designs, incised and grooved motifs, punctuations, lobed rims and outward bossed wall sections. The inner or outer surfaces of vessels of various forms are occasionally red painted (8.8%). White slipping of surfaces is restricted to Forms 3 bowls (3.5%). Nicked or punctuated designs (2.7%) occur mainly as fields on the outside of handles or lobes. Outward bossed wall sections are rare (0.9%); this decorative technique is associated with a Form 5 jar. Rounded-off rectangular rim lobes of varying dimensions (8.8%) are found in association with several bowl forms.

Incision is frequent (23%). It comprises rectilinear motifs such as horizontal or vertical, parallel lines (found mainly on the flattened rims of Form 5 jars), hooked lines, short parallel lines, and criss-cross applied designs, as well as curvilinear motifs such as concentric circles and spirals, semi-circles and ovals. Incised lines are typically narrow (1 mm wide), shallow (1mm deep) and V-shaped in cross-section: they were applied with a pointed stylus. Carefully executed designs are rare. Scatched lines (3.5%) comprise wide, shallow grooves (5 mm wide and 1 mm deep), applied with a blunt stylus with a serrated tip. Motifs are rectilinear, including horizontal, vertical or oblique, parallel lines and hooked lines. They occur on the bevelled or flattened lips of several vessel forms.

Applique fillets are nicked, punctuated or unmodified. They are curving or straight and occur mainly on bowls of Form 4 (11.5%). Knobs and appendages form the most frequently used decorative technique (28.3%). Most of them occur singly, applied to vessel rims, walls or, typically, to the largest belly diameter of Form 4 bowls. Knobs are unmodified, punctuated or show an indentation applied with a hollow reed. Some knobs form the ends of applique fillets.

Modelled designs form the last group of decorative technique in Cayo pottery. Anthropomorphic face designs are rare (0.9%). Low relief adornos range from combinations of a few punctuated or nicked small knobs to small biomorphic heads or biomorphic figures, often found in association with handles on Form 4 bowls (7.1%). Finally, high relief modelling is rare (0.9%). The only example is formed by two frog-like creatures, applied to the outer neck of a Form 7 jar.
The Cayo Complex of St. Vincent

There cannot be any doubt that the Cayo complex of St. Vincent, Dominique, St. Lucia, Grenada and Grenadines forms a direct offshoot of the late-prehistoric Koriabo complex of the Guianas which itself represents the northernmost member of the Amazonian ceramic series known as the Polychrome tradition. Sites of the Koriabo complex are known from both the coastal and inland parts of Guyana, Suriname and French Guiana. The easternmost site is situated on the ile de Cayenne in the latter country; a "trade" sherd found in Apostadero context on the Lower Orinoco River forms the westernmost occurrence of Koriabo pottery. In coastal Guyana Koriabo trade pieces have been encountered at sites of the Late Mabaruma "phase", a ceramic complex which appears to be almost identical to Apostadero.

Analysis at Cayo and Koriabo ceramic traits shows the close similarity between both complexes. Apart from Forms 1 and 2 bowls, which are almost universal in shape, Cayo and Koriabo share the bowls with concave sides of Form 3, the globular-bodied and straight-necked jars of Form 5, the S-shaped jars with vertical necks of Form 7 and the convex-necked jars of Form 8. In fact, jars identical to Cayo Form 5 represent the most frequently found Koriabo vessel shape in Suriname (22.3%) as well as in Guyana (28.3%). Although biconical bowls like Cayo Form 4 occur in Koriabo context on the mainland, they are rare and appear to form trade pieces from Amazonia. Their frequent occurrence in Cayo suggests an origin other than derivation from the Koriabo complex of the Guianas.

Most of the Cayo decorative techniques and motifs can be considered as direct copies of those characteristic of the Koriabo complex. Cayo incised and scraped designs, the latter typically applied with a stylus with a serrated tip its red painted and white slipper surfaces, lobed rims, outward bossed wall sections, appliqué fillets, knobs (especially those applied with a hollow reed), modelled face designs, low and high relief adornos, all of these duplicate Koriabo motifs. It is noteworthy that taken as a whole Koriabo pottery is more varied in vessel shapes, rims and base forms, decorative techniques and motifs than Cayo ceramics, suggesting that the latter complex forms a somewhat simplified offshoot of Koriabo. The difference in locally available raw materials in the Windwards and the Guianas accounts for the variation in temper observable between Cayo and Koriabo. Quartz sand, micaceous sand and caraipe were the temper materials preferred by the Koriabo potters of the mainland. In St. Vincent the first was replaced by local volcanic sand while it can be reasoned that by choosing quartz crystal temper the Cayo potters attempted to copy the sparkling surface of many Koriabo vessels originating from the mainland use of micaceous sand as temper agent. Obviously, the few caraipe-tempered pieces in the Cayo complex represent trade pieces from the Guiana area. Like Cayo many Koriabo-potsherds show dark surface due to firing in a reducing environment.

A minority of Kariabo ceramics is painted with red and black designs on a white-slipped background. Motifs are delicate, showing carefully drawn rectilinear and curvilinear lines, the latter mainly comprising spirals and ovals. Cayo painted designs are much simpler although the possibility cannot be excluded that originally the white-slipped component in Cayo pottery carried such designs. The paints used were obviously vegetable pigments which are extremely fugitive and, according to my experience in Suriname, their preservation depends entirely on local soil conditions.

The present Amerindians of the Guianas use red pigments called arnotto also (kusuwé or ruku) and tapuripa for painting pottery and other items of material culture as well as for body paint.
Arnottó is derived from the seeds of a small tree (*Bixa orellana*) which is especially cultivated for these purposes, tapurípa from the fruits of the lana tree (*Genipa americana*). Formerly, black pigment was produced from the bark of the serada tree (*Inga laterifolia*); nowadays lamp soot is utilized as such. The white slip used as background was most likely obtained from kaolinitic clays which are locally available in the Guiana Shield area.

Koriabo and Cayo vessel shapes rim and base forms, techniques and motifs of decoration as well as types of temper show close similarities to those of other local pottery complexes of the Polychrome Tradition in Amazonia and the Guianas, indicating that Koriabo/Cayo forms the northernmost extension of this major late-prehistoric ceramic series. Pottery belonging to the Polychrome Tradition (or Marajoaroid series) is widespread in the tropical forest area of northern South America. Its distribution extends from east Peru, east Ecuador, and southeast Colombia to the Middle and Lower Amazon Basin in Brazil. Especially close affinities appear to exist between Koriabo/Cayo and the Polychrome complexes of Brazilian Amapá and eastern most French Guiana.

The origins of the Polychrome Tradition have to be sought in the Lower Amazon Valley. The recently discovered Pocó complex of the Lower Nhamundá and Lower Trombetas rivers of this region, which shows a mixed pottery assemblage including a definite Polychrome component, has been dated by C-14 as early as the time of Christ. Thermoluminescence and radiocarbon dates place the beginnings of the Marajoara complex of Marajó Island in the mouth of the Amazon somewhat later, ca. 500 A.D.

To the west, in the Lower Rio Negro region and on the Middle Amazon (Marañón), Polychrome complexes belonging to the Guaritan subseries such as Guarita, Apuaú, Tefé, and Sao Joaquin replace various earlier pottery traditions, most of them affiliated to the "Incised Rim Horizon Style", from ca. 650 A.D. onwards. The westernmost Marajoaroid complexes, i.e. Caimito in Peru, Napo in Ecuador, Zebú and Nofurei in Colombia, and Pirapitinga in northwest Brazil show close affinities to the Miracangueran subseries of the Polychrome Tradition of the central Amazon which represents a later development out of, or parallel to, Guaritan. Obviously, the peripheral Polychrome complexes, which may be included in a Caimitan subseries, are the result of upstream migration along the main course of the Amazon and its major tributaries out of central Amazonia about 900/1000 A.D.

The available radiocarbon dates for Koriabo sites in Suriname suggest that the northern Polychrome complexes, including Arua, Mazagao, Aristé, and Koriabo, represent a similar offshoot of the Marajoaroid series of the Lower and Middle Amazon. These Guiana Polychrome complexes may be included in a Koriaban subseries, the beginnings of which appear to date back to ca. 900/1000 A.D. It follows that the upstream expansion of the Polychrome Tradition out of the central Amazon followed a two-pronged pattern: on the one hand migration into the western periphery of Amazonia and on the other hand movement into the Guianas.

Several Polychrome complexes extend chronologically into Historic times. In western Amazonia the Caimitan subseries survived into the Spanish colonial period. Moreover, sixteenth-and seventeenth-century documents suggest that it can be associated with the Historic Omagua and Cocama, both Tupian-speaking Amerindian peoples. However, ethnographic evidence indicates that on the Lower Rio Negro ceramic made after the fashion of the Marajoaroid series were still
made by the Manoa, a tribe belonging to the Maipuran Arawakan language family, in the early nineteenth century. Obviously, a one-to-one correlation between pottery tradition and linguistic affiliation does not exist in the case of the Polychrome Tradition.

Glass beads and other European trade materials, discovered in association with Late Aristé, Late Mazagao and Late Arua pottery in Brazilian Amapá and the Oyapock area of French Guiana, prove that in the eastern portion of the Guianas the Marajoaroid series extended into Historic times as well. On the other hand, Koriabo pottery has never been found in Historic context and, significantly, Koriabo appears to be closest to the Early Aristé, Early Mazagao, and Early Arua "phases" which are fully prehistoric. Consequently, the Koriabo migration to the Windward Islands, which gave rise to the Cayo complex, has to be placed at some date in late-prehistoric times, between 900/1000 and 1500 A.D. In view of the general resemblance between Cayo and the Koriabo pottery assemblage from northwest Guyana, which is firmly crossdated by Late Mabaruma/Apostadero imports, I would be inclined to date the Koriabo movement into the Windwards after ca. 1250 A.D.

The archaeological establishment of this direct cultural link between the Lesser Antilles and the Guianas during late-prehistoric times enables us to explain not only shared features of pottery manufacture in both areas but also thusfar unexplained phenomena such as the occurrence of individually found asymmetrical transversely notched stone axes of specifically Guianian form (my C2b1 type) at St. Vincent, St Lucia, Dominica and St. Kitts and that of closely related petroglyphs of Dubelaar's "elaborate type" in both the western part of the Guianas and the Windward Islands.

From Cayo to Historic Island Carib

If it is accepted that Cayo classifies as the most likely ancestor of the Kalinago ceramic complex there should exist a close correspondence between the Fancy component of Cayo pottery and the oldest (mid-seventeenth century) descriptions of Island Carib ceramics. Seeking to trace the Historic Kalinago pottery backwards in time was the line of investigation allowed by Allaire and, consequently, my analysis of Island Carib pottery draws heavily on his research into this aspect of the problem.

As explained above it is difficult to segregate the Cayo and Fancy components in the Cayo complex but from the descriptions of the "Peasant Ware" and "Savanne Plain" types by the Bullens, it can be concluded that quartz crystal temper, blackish vessel surfaces, and bowls or jars of Forms 5 and 6 at least, occasionally provided with handles, represent major elements of the Fancy component in Cayo ceramics in St Vincent and Grenada. Moreover, an analysis of the quartz-crystal tempered ware of the Cayo complex suggests that Forms 1, 3, 7, and 8 can probably be included in Fancy as well and that the development from Cayo towards Fancy is characterized by a general loss in decoration.

This tentative analysis of the Fancy assemblage corresponds reasonably well to the Historic descriptions of Kalinago pottery. According to Father Breton's dictionary, Island Carib ceramics included a number of vessels categories each with a particular function and designated by a specific name. Breton mentions the touroua (toloua), a cooking pot, the chamacou, a (cassava) beer brewing container, the tomahiem (male language) or tomali-ace (female language), a
vessel used to cook the famous tomali sauce, i.e. a stew consisting of a mixture of crabs and peppers, the rouara, another cooking pot, the balabi, a dish or plate, the tourae, a pot or "kettle" with unspecified function, and the iali-gali, a bottomless vessel used for roasting fish. Finally, Breton makes reference to the canalli (canari), but this appears to be a generic term for earthenware, of possibly Spanish origin, current in the French colonies of both the West Indies and the Guianas.

Additional information on Island Carib pottery is provided by several other mid-to late-seventeenth century missionaries to the Windward Islands such as Rochefort, a Protestant priest of Walloon descent who worked for some time in the Dutch colony of Tobago. These authors note the occasionally huge proportions of Island Carib vessels (up to 15 gallons in capacity if Rochefort is correct) and the occurrence of pointed (or rounded) vessel bases. Unfortunately, trustworthy iconographic records are almost completely lacking. The few available illustrations of seventeenth-century Island Carib ceramics suggest open bowls and necked vessels with globular bodies, occasionally provided with handles.

None of these historic sources mention any kind of pottery decoration but several writers note the Island Carib practice of smudging their pottery, i.e. firing it in a reducing rather than oxidizing environment, resulting in blackened surfaces, and varnishing it by burning a gum called élémi under the vessels. This procedure gave the vessels a "glazea" black appearance. A similar form of surface treatment is known also among the Amerindians of the Guianas. The resin, which the Kalina and Lokono call simiri, is derived from the bark of the locust tree (Hymenaea courbaril) and ensures a water-proof vessel surface. After some years of continuous use the varnish wears off, however, and it has to be applied again.

Allaire has noted the close correspondence which exists between the names the Island Carib gave to their various vessel categories and those still in use by the Kalina of the Guianas and the Middle Orinoco Valley for their earthenware. Obviously, seventeenth-century Island Carib chamacou is similar to present Kalina samaku (or samako) and, also, Island Carib touroua, balabi, tomahiem, and iali-gali to respectively present Kalina tuliwa (in the 1660s recorded as toroua), palapi, tumayene (tuma-iene), and wali-wali. Among the Kalina these names refer to vessels with specific capacities and functions. The only Island Carib name not also found among Kalina vessel names is tourae, which de Goeje tentatively links with Taino duado.

The correspondence in vessel names used by Island Carib and Kalina has led Allaire to assume that their respective ceramic complexes were completely identical. However, sufficient evidence is available to show that, in spite of striking similarities suggested by the linguistic data noted above, this conclusion is not entirely acceptable. First of all a number of names used by the Kalina for vessels with particular capacities and functions are not also found among the Island Carib. These include, for instance, the tapisi and sapera, bowls for drinking cassava beer, the mokwa and waresa, both cooking pots, the tukuware or kutuware, a water jar, and the karupu (gampu), a food bowl.

Moreover, Allaire's implicit assumption that there exists a one-to-one correlation in Kalina earthenware between name and vessel shape should be rectified. Among the Kalina one name may refer to vessels with the same function and capacity but showing various profiles while, on the other hand, vessels of similar shape but different functions are referred to by different
names. For instance, a medium-sized necked jar with globular body is known among the Kalina as tukuware if it is used as a water jar, as waresa if it is an ordinary cooking pot, and as tumayene if it is being utilized to cook the famous pepper-pot, a stew on the mainland mainly consisting of meat and peppers. Furthermore, both simple open bowls and bowls with constricted mouths, used as food containers, are called palapi but if an open bowl of similar shape is only meant for drinking cassava beer it is called tapisi sapera.

The most important difference between Kalina pottery and mid-seventeenth century Island Carib ceramics is the reported absence of any form of decoration on the latter while the majority of present Kalina vessels show elaborately painted designs in red and black on a white-slipped background. This painted pottery tradition of the Kalina can be traced back as far as the 1660s when it was mentioned for the first time by Warren with reference to the Kalina in Suriname. Like the Kalinago, the Kalina use vegetable resin to produce a water-proof vessel surface. At the same time this varnish seals off the painted designs. Kalina techniques and motifs of painted decoration show close similarities to those found on the painted components of the Pre-Columbian and Historic local pottery complexes in Amazonia and beyond which can be included in the Marajoaroid series. Especially close correspondences exist between Kalina painted motifs and those of the sixteenth-to seventeenth-century pottery of the Late Arua and Late Aristé "phases" of Brazilian Guiana and easternmost French Guiana and the present pottery of the Palikur, a Maipuran Arawakan-speaking tribe in this same area, which may have developed but of Late Aristé. Though each of these complexes show a character of their own in their painted designs their derivation from the Polychrome Tradition is obvious.

Even closer similarities exist between Kalina vessel shapes and those of the Late Aristé, Late Arua and Palikur complexes. We have seen that the Early Aristé, Early Mazagao and Early Arua "phases" were almost identical to the Koriabo complex of the Guianas. Although Kalina pottery has never been found in archaeological context, sufficient evidence is available to show that Kalina ceramics evolved likewise from Koriabo.

The generic relationship between Koriabo and Kalina is exemplified by the occurrence in both complexes of such vessel forms as two forms of cassava-brewing containers (Cayo Forms 7 and 8), the latter showing typically convex necks. Both of these sizeable vessels are known among the Kalina as samaku. Open bowls and bowls with constricted mouths (Cayo Forms 2 and 1), known as tapisi, prapi, karupu, or sapera, and water jars showing multi-convex bodies, called tukuware, are also found in both complexes. Finally, it can be argued that the Kalina necked jar, known as waresa, tumayene or tukumare, developed out of the most popular Koriabo vessel shape, the jar with outcurving flattened rim, vertical or slightly concave neck and globular body (Cayo Form 5).

Other correspondences between Koriabo and Kalina include the occasional occurrence in both pottery complexes of lobed or fingertipped rims, anthropomorphic wall faces and pointed (rounded) bases, the latter found on tumayene and samaku forms. The fact that the present Kalina potters use exclusively caraipé as tempering material forms a final ceramics trait illustrating the generic relationship between Koriabo and Kalina pottery. It is noteworthy that caraipé temper was described for the first time in connection with Kalina ceramics in the mid-eighteenth century.
Interestingly, vessel shapes resembling Koriabo and Kalina beer-brewing containers were in use also by the Yaio of the Lower Oyapock river in the early seventeenth century. According to Leigh, the Yaio manufactured probably round-bottomed "great Jarres of earth with narrow necks" which were "narrow in the bottom and broad above" for this purpose. Wilson notes that in this same period the Yaio had "Pots of Earth, which shew as if guilded, and some of them will hold thirty or forty gallons of liquor..." This suggest that the Yaio had a pottery varnishing tradition similar too.

Contrary to the importance of painting vessel surfaces the Kalina ceramic complex, polychrome painted pottery component formed only a minor component in Koriabo. As my research in Suriname has show, the Koriabo people used elaborately red-and-black-on-white painted vessels almost exclusively as a burial ware. We have to conclude that the development from Koriabo to Kalina was similar to that within the Aristé "phase" which, as Meggers and Evans observed, evolved from a Koriabo-like assemblage (Early Aristé) in which painted pottery was restricted to ceremonial earthenware to a Kalina-like assemblage (Late Aristé) characterized by complex painting of both burial and domestic ceramics.

The simultaneous and parallel development of the elaborately painted ceramics of Late Aristé and Kalina out of the Koriaban subseries suggests that the origins of the Kalina pottery complex have to be sought in the easternmost part of the Guianas. As present Palikur ceramics are most likely derived from Late Aristé, the Amazonian association of Marajoaoid pottery with Historic Amerindian peoples of various linguistic affiliations is thus repeated in the Guianas. Apparently, complex polychrome painting spread in the area northwest of the Amazon mouth, at or shortly before the time of the European discovery, due to interaction, trade and intermarriage between different Amerindian groups rather than migration, possibly in a manner similar to that hypothesized by Myers for the Upper Ucayali in Peru.

Knowing the antecedents of the Kalina ceramic complex, it is possible to make a better assessment of the similarities and dissimilarities between Island Carib and Kalina pottery. Contrary to Allaire's conclusion that Kalinago earthenware was completely identical to Kalina ceramics, it can now be argued that both developed parallel to each other out of a common ancestral tradition, the Koriabo complex, each following a different line of development. Moreover, it can be suggested that the resemblance in names for vessel shapes and other correspondences between Island Carib and Kalina ceramics go as far back as Koriabo times.

Continuing this line of reasoning, it becomes obvious why Kalina and Kalinago share a number of vessel forms which, on the other hand, are dissimilar in overall surface treatment. These include, for instance, the large beer-brewing container, the samaku, which in Kalina, Koriabo and Cayo (Fancy) shows two major shapes (Cayo Forms 7 and 8), and the Kalina necked jar, a medium-sized vessel form which obviously developed out of the Koriabo necked jar with globular body (Cayo Form 5). Similarly, the occurrence of rounded bases in both complexes can be attributed to derivation from the Koriabo pottery tradition in which such bases are common.

We have seen that the evolution from Cayo to Fancy, the Historic Island Carib ceramic complex, is characterized by simplification and ultimately an almost complete loss in pottery decoration and, simultaneously, an increase in smudged and varnished vessel surfaces. This development probably started relatively early as Cayo pottery ornamentation appears to represent
a simplified version of that of mainland Koriabo. Consequently, while retaining the Koriabo vessel shapes and the Cariban names for their various pottery categories the Island Carib developed form of vessel surface treatment totally different from that emphasized by the Kalina potters.

What caused the Cayo complex to diverge from the mainland line of Koriabo ceramics evolution?. This question cannot be answered satisfactorily yet but I am inclined to ascribe the Island Carib practice of smudging rather than painting vessel surfaces to influence of the Arawak (Lokono) ceramic complex. If so, the Island Carib ceramic complex would, just as the Island Carib bifold linguistic affiliation, reflect their dual, Cariban-Arawak cultural heritage.

Unfortunately, the Arawak (Lokono) ceramic complex is badly known as the surviving members of this tribe in Guyana and Suriname gave up traditional pottery manufacture in the mid-nineteenth century and have since obtained their domestic earthenware by trade from the Kalina. Furthermore, iconographic and other ethnohistoric records are rare and fragmentary while archaeological evidence is completely lacking. Possibly the prehistoric antecedents of Lokono pottery can be sought in the Late Mabaruma/Apostadero complex of coastal Guyana, southwest Trinidad and the Lower Orinoco Valley but this is not more than an educated guess.

The only Arawak vessel category repeatedly mentioned in the sixteenth-through early nineteenth-century literature is represented by a large jar for brewing cassava beer, which the Lokono called *kumuti* (first recorded as *commodyen*). Undoubtedly this *kumuti* jar was the vessel shape Raleigh had in mind when he wrote that the Arawak of the Lower Orinoco river stored their cassava beer "in great earthen pots of ten or twelve gallons." Similarly oversized beer-brewing containers are mentioned by Oviedo as manufactured by the Arawak of this area in the early sixteenth century. He calls them *tinajas* and estimates their capacity at ten to twelve *arrobas*. A huge necked vessel with probably a rounded base and a suggested height of some 75 cm, most likely a *kumuti jar*, is shown by Hamshere (1833) as part of the scenery of an Arawak village in Guyana.

Other vessel categories mentioned in the early literature as belonging to the Arawak ceramic inventory include a small or medium-sized cooking pot or pepper pot called *dwaada* but known as the "buckopt" to the Dutch in the former colonies of Essequibo, Demerara and Berbice, a goblet-like water jar and a shallow bowl of which no indigenous names are known to me. A probably Arawak cooking pot with inflected contour is illustrated by Quandt (1807). Eighteenth-century descriptions suggest that like the Palikur and Kalina the Arawak tempered their pottery with *caraipé*, called *kauta* in Lokono language.

Most importantly, all eighteenth-and nineteenth-century references to Arawak pottery agree that just as Island Carib ceramics the Arawak earthenware invariably showed glossy blackened surfaces due to smudging and varnishing with *simiri* resin. Bancroft notes that the Lokono of Essequibo and Berbice sold necked vessels known as "buck pots", which had been "stained black with juice from some particular herbs", to the Dutch in these colonies. Similar observations were made by later writers such as St Clair who observed blackened earthenware in an Arawak settlement on the Corantijn (Corentine) river in the early nineteenth century.
During the seventeenth and eighteenth centuries the Arawak of the Dutch colonies of Essequibo, Demerara and Berbice were considered to manufacture the best cooking pots of all Amerindian tribes in the area and a lively trade developed between Lokono and Europeans in these "buck pots". The word "buck" is an Anglicised version of the Dutch bok, meaning "billy-goat", a slightly derogatory term indicating Amerindians (it may have originated from the resemblance between horns and Indian feather crowns). It was known in this sense in all of the former Dutch colonies in the Guianas. However, the use of the name "buck pot" was and is restricted to the three colonies which are now united in Guyana (previously British Guiana) whereas it did not extend to the equally former Dutch colony of Suriname.

Although detailed descriptions and illustrations of seventeenth-to eighteenth-century Arawak "buck pot" are lacking, I suspect that the late nineteenth century, Amerindians necked cooking pot known in Guyana as the "buck pot" represents an originally typically Arawak form. This is a globular vessel with sharply everted neck and flattened and/or bevelled lip which shows a characteristically glossy black color due to smudging and varnishing with simiri resin. Neither name or exactly this form of cooking vessel is known from Suriname where the Kalina monopolized the pottery trade with English and Dutch from the early seventeenth century onwards.

Sufficient morphological differences exist between this probably Arawak "buck pot" and the modern Kalina necked jar used as a cooking pot or water jar to suggest different origins for either of them. The latter vessel shape shows an almost vertical and slightly concave neck on top of a globular body which, as we have seen, suggests a direct derivation from a Koraiabo prototype (Cayo Form 5). The origins of the Arawak "buck pot" are unknown though a possibly ancestral form is represented by the Late Mabaruma/Apostadero keeled jar, known from the Lower Orinoco Valley, southwest Trinidad and coastal Guyana (Akawabi Incised and Modeled Form 4).

Vessel shapes closely resembling the Arawak "buck pot" had a wide distribution on the Paria peninsula of northeast Venezuela and the islands of Cubagua and Trinidad during late-prehistoric and early Historic times. Such necked jars are diagnostic of the Mayoid series in Trinidad, a portion of the Guayabita complex of the Gùiria region on the west coast of the Gulf of Paria, the Maurica complex of the Barcelona area on the east Venezuelan coast and the Obispos and Nueva Cadiz complexes of Cubagua island. The latter three pottery assemblages as well as the Mayo complex of the Trinidadian Mayoid series can be dated in the sixteenth through eighteenth centuries.

As Mayoid ceramics have been found at various Spanish/Amerindian mission sites in Trinidad, it is possible to identify their makers as belonging to the Nepoio tribe, a group of probably mixed Cariban-Arawakan cultural heritage, known to have lived both in Trinidad and on the Lower Orinoco river during the sixteenth and seventeenth centuries.

Interestingly, recent evidence from the Guayaguayare and Buenos Ayres sites in south Trinidad indicates that a minority of Mayoid ceramics, which is invariably tempered with caraípé, is smudged and/or painted black not unlike the Arawak pottery of the westernmost part of the Guianas and the Island Carib earthenware of the Windward Islands.
The Cayo Complex of St. Vincent

Decorated pottery is reduced to almost the absolute minimum in the Mayoid series (on an average only 1.2% of the sherds shows any form of ornamentation). Lack of decoration is a negative ceramic trait shared by the Nepoio earthenware of Trinidad and all of the early Historic pottery complexes on the east Venezuelan coast. This suggests that the absence of decoration on the presumed Arawak ceramics of the western portion of the Guianas forms a related phenomenon. In the Gulf of Paria/Lower Orinoco, Amerindian interaction sphere, a process of ceramic development characterized by a loss of pottery decoration stated as early as Guayabitan (Arauquinoid) times and it continued into the Mayoid series. Consequently, the similar loss of ceramic ornamentation in the Island Carib pottery evolution from Cayo to Fancy may be partially due to influence from the Trinidad and Paria regions.

Summarizing, the mid-seventeenth century Island Carib pottery complex can thus be analyzed satisfactorily as showing a combination consisting of a majority of Proto-Kalina and a minority of Arawak ceramic traits. While retaining the Koriabo/Kalina vessel shapes and the Cariban names for these, the Island Carib potters developed a form of vessel surface treatment, smudging and varnishing, which is most likely of Arawak (Lokono) derivation. Obviously, the loss of pottery decoration in the process of development from Cayo to Fancy was influenced by a similar evolution resulting in the Arawak, Nepoio and other ceramic complexes of the western part of the Guiana coastal plain, Trinidad and the Gulf of Paria area. The theoretically expected Taino influence in the Island Carib ceramic assemblage is probably represented by Cayo Form 4, the biconical bowl decorated with nicked knobs on the largest belly diameter. Form as well as ornamentation of this vessel shape show close similarities to the Late Chicoid bowls of the Greater Antilles, especially those found in Historic context. Possibly this bowl is the Island Carib tourae, a name which de Goeje derives from Taino duado.

Conclusion

Both according to ethnohistoric and archaeological data, the Island Carib tradition of their origin in the Guiana coastal area can be shown to be accurate. The Island Carib migration into the Windward Islands obviously took place during the last few centuries before the European discovery. As a whole pottery complex was transferred from the mainland to the Antilles; this movement must have involved both men and women as the latter were undoubtedly the potters. Consequently, Island Carib bilingualism most likely originated in the Antilles due to the capture of Taino and Arawak (Lokono) women from respectively the Greater Antilles and the mainland of South America.

Insufficient evidence is available to explain the rapid and simultaneous disappearance of Suazoid pottery traits from the Windward Islands. As Allaire has shown convincingly, the Suazoid series left no trace in the Island Carib ceramic record. I would be inclined to accept his suggestion that this was due to a previous depopulation of the Windwards, the reason of which is unknown. Such a depopulation would account for the apparent lack of mutual influence between Cayo and Suazoid ceramics and confirm the Island Carib tale that at the time of their migration to the Lesser Antilles these islands were uninhabited.

The incentives for the Kalinago movement can only be guessed at. Whereas social reasons are emphasized in the Island Carib narratives of their origin, I feel that the possibility of environmental stress cannot be excluded. Palynological investigations have shown that the period
between ca. A.D. 1100 and 1350 is typified by relatively dry conditions in comparison to the immediately preceding climatic episode in northern South America. This major dry period, of supra-regional character which coincides closely with the dry and warm "Little Climatic Optimum" in the temperate zone of the Northern Hemisphere, probably reached its climax about A.D. 1250, i.e. at the estimated time of the Island Carib migration from the Guianas into the Windward Islands.