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Kinship and marriage in Sirioný society: a re-examination

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KINSHIP AND MARRIAGE IN SIRIONO SOCIETY: A RE-EXAMINATION

The arguments put forward in this paper are excerpted from a larger study of Sirionó social organization, to which reference has been made elsewhere (Shapiro 1966b: 85). I had hoped to be able to offer the study in its entirety at the present time, but fieldwork commitments in Australia have made this impossible. I have decided to present it now in abbreviated form because of the recent surge of interest in avuncular marriage (cf. Lave 1966; Moore 1963; Rivière 1966a, 1966b; Shapiro 1966a, 1966b), an institution which I regard as fundamental to an understanding of certain aspects of Sirionó ethnography.¹

In the first two sections below I criticize previous interpretations of Sirionó social organization; in sections III and IV, I present and explain my own model of the kinship terminology. Section V deals with the significance of my interpretation from theoretical and comparative perspectives.

The ethnographic material upon which the present analysis rests is derived wholly from Allan Holmberg's publications (Holmberg 1950, 1954; Holmberg in Steward 1948); I have not myself carried out fieldwork among the Sirionó.

I

There have been two major interpretations of Sirionó social organization, the first that of the ethnographer himself. I shall deal here only with his analysis of the kinship terminology:

The father's sister's children are terminologically classified with the father's sister and her husband, i.e., they are raised one generation, while the mother's

¹ I began my re-analysis of the Sirionó material in mid-1964. Since then, John Barnes, Ann Chowning, Floyd Lounsbury, Robert F. Murphy, W. E. H. Stanner, and Andrew Strathern have given it critical consideration, for which I am very grateful.

brother's children are classified with nephews and nieces, i.e., they are terminologically depressed one generation. On the basis of cousin terminology the kinship system is thus of the Crow type (Holmberg 1950: 54).

The kinship terminologies of most other Tupian-speaking peoples seem to fall into two categories: (1) a more or less typical Dravidian pattern, with bifurcation in the first ascending generation and Iroquois cousin terminology;² and (2) a pattern, termed by Dole (1962) "bifurcate Hawaiian", featuring bifurcation in the parental generation but Hawaiian cousin terminology rather than Iroquois.³ Besides Sirionó, the only known exceptions are the Maué, who have an Omaha pattern, and the Mundurucú, whose kinship terminology is extremely unusual and will be discussed in section V. Table 1 classifies the kinship terminology of every Tupian-speaking people for which there is adequate information on this subject.

TABLE 1.

Kinship and marriage among the ethnographically-known peoples of the Tupi-Guarani language family.

<i>Society</i>	<i>Kin-terminology</i>	<i>Marriage System</i>
Auetí	Dravidian *	symmetric
Cayúa	bifurcate Hawaiian	proscriptive
Cocamá	?	symmetric
Guarayú-Pauserna	?	symmetric
Kamaiurá	Dravidian *	symmetric; preferential
Maué	Omaha	symmetric; preferential
Mundurucú	anomalous	symmetric; preferential
Oyampí-Emerillon	Dravidian	?
Sirionó	see text	see text
Tapirapé	bifurcate Hawaiian	proscriptive
Tenetehara	bifurcate Hawaiian	proscriptive
Tupí-Kawahib	?	symmetric
Tupinambá	Dravidian	symmetric; prescriptive
Urubú	Dravidian	symmetric

* According to Oberg (1953). Galvão (1953) reports bifurcate Hawaiian. Oberg informs me, in a personal communication, that he found both patterns among the Kamaiurá. It seems likely that these systems are in transition from a Dravidian to a bifurcate Hawaiian pattern (cf. section V).

² I use "Dravidian" here instead of introducing a new term, but it should be made clear that my usage does not have the specificity attached to this rubric by Dumont (1953) and, especially, Lounsbury (1964b: 1079). Avuncular and nepotic terminology, in my usage, may be (and among Tupian peoples is) either bifurcate merging or bifurcate collateral, though cousin terminology must be Iroquois.

³ This pattern was first named by Eggan (1937: 93), who called it "Cheyenne". Wagley and Galvão (1946) later referred to it as "Tupian", which, for reasons to be spelled out in section V, I regard as misleading. I prefer Dole's label.

Sources:

Auetí (Galvão 1953, Oberg 1953); Cayuá (J. Watson 1952, V. Watson 1944); Cocamá (Métraux in Steward 1948); Guarayú-Pauserna (Métraux 1942, Métraux in Steward 1948); Kamaiurá (Galvão 1953, Oberg 1953); Maué (personal communication from Seth Leacock); Mundurucú (Horton in Steward 1948, Murphy 1956, 1960); Oyampí-Emerillon (Hurault 1962); Sirionó (Holmberg in Steward 1948, Holmberg 1950); Tapirapé (Wagley 1940, 1951, Wagley & Galvão 1946 and in Steward 1948); Tenetehara (Wagley & Galvão 1946, 1949 and in Steward 1948); Tupí-Kawahib (Lévi-Strauss in Steward 1948); Tupinambá (Fernandes 1963, Kirchhoff 1931, 1932, Lafone-Quevedo 1919, Lévi-Strauss 1943, 1948, Métraux in Steward 1948, Philipson 1946, 1947, Wagley & Galvão 1946); Urubú (Huxley 1956).

Crow terminology, then, is not a Tupian characteristic, and in fact a close examination of Holmberg's schedule of kinship terms (1950: 52-54) reveals that the Sirionó system is not really of this type. Thus the "nephew" with which MBS is equated is not BS, in Crow fashion, but ZS, while MBD is equated with neither BD nor ZD. FZS is equated with FZH, not with F or FB as in a true Crow system.⁴ Besides this, the following lineal equations, far from suggesting a Crow terminology, are indicative (though not definitive) of an *Omaha* system:

$$\begin{array}{ll} \text{FMB} = \text{FMBS} & \text{MBS} = \text{MBSS} \\ \text{MF} = \text{MB} & \text{MMB} = \text{MMBS} \\ & \text{WF} = \text{WFF} \end{array}$$

Sirionó kinship terminology also has some *Kariera* characteristics:

$$\begin{array}{ll} \text{FF} = \text{MMB} & \text{MB} = \text{FZH} \\ \text{FZ} = \text{MBW} & \text{SW} = \text{ZD (m.s.)} \\ & \text{MBDD} = \text{FZDD (f.s.)} \end{array}$$

But this is not all; as I have pointed out elsewhere (Shapiro 1966b: 83-84), the terminology gives indications of avuncular (sister's daughter) marriage. Some of these are missing in my earlier paper; here is the full list:

$$\begin{array}{ll} \text{MM} = \text{FZ} & \text{MB} = \text{FZS (m.s.)} \\ \text{MBS} = \text{DH}^5 & \text{WF} = \text{ZH (m.s.)} \\ & \text{MBS} = \text{ZS (m.s.)} \end{array}$$

(It will be noted that avuncular marriage is inconsistent with Crow-Omaha terminologies in that it has a dyadic, i.e., symmetric, structure,

⁴ The divergences just mentioned were first pointed out by Needham (1961: 250).

⁵ The Sirionó system equates these two kin-types without regard to the sex of Ego, though the equation is indicative of avuncular marriage only if Ego is male.

while theirs is triadic, i.e., asymmetric. Because it implies cross-generational equations, it is also inconsistent with a Kariera pattern, which segregates the generations terminologically).

Sirionó kinship terminology, then, is not a simple Crow system, but rather *appears to be* an amorphous entity displaying, here and there, characteristics of several more definite structures.

II

The other major contribution to the analysis of Sirionó social organization is that of Needham (1961, 1964), who maintains that the Sirionó marriage system is asymmetrically prescriptive. How does this square with what is known of the marriage systems of other Tupian-speaking peoples?

These systems seem to be of two general kinds, each type correlated rather strongly with one of the two types of kinship terminology mentioned earlier. Those Tupian societies with the bifurcate Hawaiian pattern appear to have only negative marriage regulations: marriage is prohibited within a certain genealogical range, anyone outside this range being marriageable. Following Reay (1966), I call such marriage systems "proscriptive". Systems of this kind are of course non-prescriptive.

Tupian societies with Dravidian kinship terminology are associated with marriage arrangements of a different sort. Here women of the "cross-cousin" and "ZD" categories are marriageable, those of other categories not.⁶ Because it has two categories of marriageable women, such a system is preferential, not prescriptive (cf. Needham 1962b: 9).

Of the three known exceptions to these generalizations, the Maué and Mundurucú are alike in that both have two "cross-cousin" categories (i.e., FZD $\neq$ MBD), either one of which is marriageable. These two societies thus also have preferential, rather than prescriptive, marriage systems. The Tupinambá system, on the other hand, not only has but one "cross-cousin" category, it also lacks a separate "ZD" class (i.e., FZD = MBD = ZD) — a pattern I have termed „Amazonian" (Shapiro 1966a). Since the only marriageable category in Tupinambá is "cross-cousin: ZD", we are dealing, at last, with a

⁶ I infer that marriage in these societies is phrased categorically, though in the literature preferences are usually reported as genealogical specifications.

Tupian prescriptive marriage system. But it is symmetrically rather than asymmetrically prescriptive, because the kinship terminology has a dyadic and not a triadic structure, and more particularly only one "cross-cousin" category, not two (cf. Needham 1961:243-46, 1962a:242-45). If Needham's analysis is correct, Sirionó is thus the only known Tupian society with asymmetric prescription.

(Table 1 classifies the marriage systems of all adequately-known Tupian societies).⁷

There can be no doubt that the Sirionó system is prescriptive: *yánde*, the term for "spouse", is also used for MBD (m.s.) and FZS (f.s.). It will also be noted that different terms are used for FZD and MBS — *ári* and *akwaníndu* respectively. But this does not necessarily mean that the marriage system is asymmetric: thus, in a "perfect" avuncular marriage system there would be two "cross-cousin" categories, yet the structure of marriages would be dyadic (cf. Lave 1966; Rivière 1966b). In ethnographic fact, such an ideal system is closely approximated by the Trio, a Carib-speaking people (Rivière 1966b), and by the Tupian-speaking Mundurucú, who no longer permit marriage with the sister's daughter (Murphy 1956:420-22, 1960:92-96). The conclusion is that the categorical separation of FZD and MBD cannot be regarded as diagnostic of asymmetric prescription, particularly when dealing with an Amazonian society.

A perhaps more reliable criterion is whether the kinship terminology as a whole is structured triadically. But this is useless in the present case: we have seen that Sirionó kinship terminology has some Kariëra features, and Needham himself has pointed out its lack of a consistently triadic structure (1961:244, 251).

After making his Sirionó diagnosis, Needham concluded that it "appears to hold in little more than a formal sense" (1961:246), and went on to point out the radical differences between the case under consideration and "other" systems of asymmetric prescription (pp. 246-52). In this section I have tried to show that not even in a formal sense is there good comparative or internal evidence that the Sirionó marriage system is asymmetrically prescriptive.

⁷ Since the literature on Tupian social organizations is often of low quality, particularly as regards kinship terminology, I have taken the liberty in Table 1 of classifying marriage systems in terms of reported genealogical preferences (cf. previous note). Thus a statement to the effect that a cross-cousin and/or the sister's daughter should be married is taken as evidence of a symmetric marriage system.

III

My own model of Sirionó kinship terminology involves an avuncular marriage network — an ideal system in which every man marries his sister's daughter. The denotata accepted for each kin-term are of course those listed by Holmberg (1950:42, 54), with the difference that Needham's modifications, apparently approved by Holmberg (cf. Needham 1961:244-45), are taken into account.⁸

As has been pointed out recently (Lave 1966; Rivière 1966b), such a system can be seen as one of reciprocal marriage between two patrilineages. This does not necessarily mean that a society so analyzed is divided into endogamous pairs of patrilineages, or even that it has patrilineal descent groups; I have no doubt, e.g., that the Sirionó are cognatic, as Holmberg reports (1950:50).⁹ It is simply an analytical device.

Besides this, the model has the following properties:

- (1) a special "spouse" term (*ninini*);
- (2) terminological separation of what may be termed the "unilocal extended families of orientation and procreation"¹⁰ — i.e., Ego's primary relatives, in Murdock's sense (1949:94), and relatives parallel to them (*éru*, *ézi*, *anóNge*, *yánde*, *edidi*);
- (3) a special term for individuals of the second descending generation (*áke*);
- (4) a group of terms which spans the entire marriage network, distinguishing only sex and, in a limited way, generation:

⁸ I suspect (and shall here assume) that the specification "child" for *áke* means not "son and daughter" in a genealogical sense but "very young person" in a chronological sense (cf. "old man" for *ámi*, "old woman" for *ári*). It should also be mentioned here that some of the kinship terms given by Holmberg in his first publication on the Sirionó do not appear in his monograph: thus his *Handbook of South American Indians* article has *paba*, *tain*, and *eco* for what in his later work are *éru*, *ézi*, and *edidi*, respectively (cf. Holmberg in Steward 1948:459; Holmberg 1950:52, 54). In my analysis I shall use his *Nomads of the Long Bow* schedule.

⁹ Needham has maintained that the Sirionó have matrilineal descent groups, a position I cannot accept. But this question is outside the scope of the present paper, except for the conclusion that if the Sirionó practice avuncular marriage they cannot possibly be organized into exogamous matrilineages.

¹⁰ According to Holmberg (1950:50), the Sirionó extended family is matrilocal. I suspect that it is in fact patrilocal, but because of the dyadic structure of the model, it is not necessary to argue this point here.

- (a) a term for males of ascending generations, regardless of patriline (*ámi*);
- (b) a term for females of ascending generations, regardless of patriline (*ári*);
- (c) a term for males of descending generations, regardless of patriline (*akwaníndu*);
- (d) a term for females of descending generations, regardless of patriline (*akwáni*).

It should be added that the model displays these properties independently of the sex of Ego.

Property (4) is clearly the one most in need of clarification. The first thing to note is that while Property (4) may be regarded as but one element in the kinship terminology, it is also in itself a *full* statement of the kinship system from a particular perspective: it covers all the structural positions subsumed by the other properties, and several others as well. And it does not recognize the patriline but rather classifies them together and makes distinctions of another kind. One of these distinctions I have called, for expository purposes, "ascending vs. descending generation", but this label is crude and ethnocentric. It is more correct to say that what is involved is a division of the system into two generations, and to stipulate that:

(5) With respect to Property (4), in the affinal patriline the generational division is located at the MB:MBS transition ($MB = \acute{a}mi$, $MBS = akwaníndu$).

The question, then, is: Given the lack of distinction between the patriline, where in Ego's patriline must the generational division occur? Or, more generally, by what principle can two kin-types (or two structural positions) of different patriline be regarded as equivalent?

There are several paths to an answer to this latter question. I shall choose the most readily and visually perceptible: the "*equivalence principle*" is the occupation of points on the same horizontal line in Fig. 1. This provides an answer to the first question:

(6) With respect to Property (4), in Ego's patriline the generational division is located at the position "Ego and siblings". Because the patriline is identical in both structure and content, this position must therefore contain *both* the term applied to MB *and* that applied to MBS. Thus $MMBS = \acute{a}mi$, $FZDS = akwaníndu$; in Fig. 1, $MMBS = FZDS = \text{male Ego}$.¹¹

¹¹ For simplicity's sake, Properties (5) and (6) have been presented using male kin-types only, but they hold equally for female kin-types.

FIGURE 1.

The logic of the Siriono Kinship System.

Horizontal lines connect "equivalent" points on the two patriline. The vertically hachured horizontal marks the transition points on the patriline at which kin-terminology changes from that for ascending generations to that for descending generations; these points are "Ego and siblings" in Ego's patriline and "the transition MB: MBS" in the affinal patriline. The spaces above and below these points may be thought of as continuous genealogical spaces in which the terms *ámi-ári* and *akwaníndu-akwání*, respectively, "exist". Members of the affinal patriline are shown in black, those of Ego's patriline in white.

This, then, is the model; Table 2 gives the denotata of Siriono kinship terms. If these denotata are plotted against Fig. 1, it will be seen that, with one exception, the model just proposed fits the facts perfectly — every position in Fig. 1 is covered by the predicted kin-term and that one only, and each denotatum in Table 2 falls under the predicted kin-term on the basis of its correspondence to a particular position in Fig. 1.

TABLE 2.

Siriono kinship terms and their denotata

(numbers correspond to those in the text).

(1) <i>nininízi.</i>	W, H.
(2) <i>éru.</i>	F, FB, MZH, FFBS, FMZS, MH.
<i>ézi.</i>	M, MZ, FBW, FMBD, MMZD, FW.
<i>anóNge.</i>	B, Z, MZS, MZD, FBS, FBD, HBW, WZH.
<i>yánde.</i>	MBD (m.s.), WZ, FZS (f.s.), HB, "potential wife", "potential husband".
<i>edidi.</i>	S, D, WS, WD, HS, HD, BS (m.s.), BD (m.s.), FBSS (m.s.), FBSD (m.s.), MZSS (m.s.), MZSD (m.s.), MBDD (m.s.), MBDS (m.s.), ZS (f.s.), ZD (f.s.), FBDD (f.s.), FBDS (f.s.), FZSS (f.s.), FZSD (f.s.), MZDD (f.s.), MZDS (f.s.).
(3) <i>áke.</i>	"grandson, granddaughter, child of nephew or niece, child of first cousin once removed, child" (Holmberg 1950: 54).
(4) <i>ámi.</i>	FF, FFB, FFZS, FMB, FMBS, MF, MFB, MFBS, MMB, MMBS, MMZS, MB, FZH, FZS (m.s.), WF, WFF, ZH (m.s.), HF, HFF, HZH, "old man".
<i>ári.</i>	FM, FMZ, FMZD, FFBD, FFZD, MM, MMZ, MMBD, MBW, FFZ, FZ, FZD, WM, WMM, HM, HMM, HZ, "old woman".
<i>akwaníndu.</i>	MBS, MBSS, FZDS, DH, MZDS (m.s.), ZS (m.s.), FBDS (m.s.), FZSS (m.s.), WB, MBDS (f.s.), MZSS (f.s.), BS (f.s.), FBSS (f.s.).
<i>akwáni.</i>	MBSD, SW, MZDD (m.s.), ZD (m.s.), FBDD (m.s.), FZDD (m.s.), FZSD (m.s.), WBW, MBD (f.s.), MZSD (f.s.), BD (f.s.), FBSD (f.s.), FZDD (f.s.), BW (f.s.).

The single case that mars a perfect fit is the absence, according to Table 2, of an *akwaníndu* kin-type in the position "S (m.s.)" in Fig. 1. This may be an ethnographic or other error or it may not be; at worst

I think it can be claimed that the model presented here fits the facts better than any heretofore employed.¹²

IV

"The preferred form of marriage is that between a man and his mother's brother's daughter. Marriage between a man and his father's sister's daughter is forbidden" (Holmberg 1950: 81). This situation is not only compatible with avuncular marriage, it is expected: in Fig. 1, every man marries not only his ZD but also his MBD, and his FZD is structurally equivalent to his mother.

Holmberg (1950: 64) also states, however, that sexual relations between "uncle and niece" are prohibited, and this would seem to destroy the sociological basis of my model. But there are at least two other possibilities. First, "uncle and niece" is a rather imprecise mode of reporting, and may refer only to the FB-BD relationship; indeed, it is not inconceivable that Holmberg was told of the prohibition of sexual intercourse in *this* dyad and generalized it in terms of Western categories. Secondly, it may well be that the Sirionó once practiced avuncular marriage but no longer do so: it is not news that kinship terminology often continues to reflect positive marriage regulations long after these have disappeared, and there are at least two other Tupian societies — Cayuá and Mundurucú — where avuncular marriage specifically has followed this course.¹³ (If this is the case here, the question remains as to why the Sirionó have done so, but this will not be considered in the present paper).

One of the more striking characteristics of the model presented above is its division of Sirionó kinship terms into essentially two classes — those pertaining only to the extended family and those covering the entire marriage network. Yet even this seems to fit Sirionó society, with its organization into isolated endogamous bands composed in turn of highly solidary extended families: the two classes of kin-

¹² I began my reworking of the Sirionó material before the appearance of Lounsbury's pioneer application of transformational analysis to the study of kin-terminologies (cf. Lounsbury 1964a); since then, I have not tried this method against Holmberg's data. In any case, a formal analysis of any kind would not conflict with the present one, which is more directly sociological.

¹³ The Urubú should probably be added to this list. Cf. Huxley's reference, in his popular ethnography, to the relationship between "a man and his niece, who, in the old days, he could also marry" (1956: 163).

terms would seem to correspond with two strongly-bounded social units, the extended family and the band (cf. Holmberg 1950: 36, 50-52).

My final comment concerning the model and its relation to Sirionó ethnography has to do with the concept of "generation" it implies. Though it seems largely to ignore genealogical levels, the manner in which the two generations are split in that part of the terminology subsumed by Property (4) suggests that the Sirionó are in fact cognizant of genealogical generations in the Western sense. I suspect that this is generally true of peoples with cross-generational terminological equations, though it would be hard to support this assertion with the existing literature.

V

Sirionó kinship terminology — or rather that part of it subsumed under Property (4) — is in a sense Hawaiian in type. It does not display, of course, the specific kin-type equations stipulated by Murdock (1949: 223) as being definitive of this type, but it does have certain properties which one generally thinks of as associated with Hawaiian terminologies: a monadic or "bilateral" structure with each term having numerous denotata, and an emphasis on distinctions of sex and generation (of a sort) at the expense of lineality-collaterality; it might thus be dubbed "hawaiianoid".

In section I, I mentioned the widespread occurrence of another hawaiianoid pattern among Tupian peoples; this is Dole's "bifurcate Hawaiian". I also pointed out the other major Tupian pattern of kinship terminology, the Dravidian. Among the known Tupian systems of this latter type, only the Tupinambá terminology displays any of the cross-generational equations expectable in a society practicing avuncular marriage. The others, so far as is known, show complete segregation of the generations, and even the Tupinambá system is basically generation-distinguishing. The only ethnographically-recorded Tupian kin-terminology that more fully reflects avuncular marriage and still retains a predominantly dyadic structure is the interesting Mundurucú system analyzed by Murphy and noted above. The referential terms and their genealogically close denotata for a male Ego are as follows:

adjut djut. FF, MF.
awah wah. FM.
adjung jung. MM, FZ.
we bai. F.

o kit pit. yB.
o kōt kōt. yMZS, yFBS.
we šit. Z, FBD, MZD.
da ũ ũ. FZD.

bai bai. F, FB.*u ši.* M.*ai i.* M, MZ.*o djoin.* MB, FZS.*wanyũ yũ.* eB, eMZS, eFBS.*we ši.* MBC, ZC.*o pöt.* S, BS.*o ra ši.* D, BD.*rašenyebit.* SC, DC.

Of these terms, the first and the last have a monadic structure; both, however, apply to kin-types two generations removed from Ego's, an association of characteristics by no means uncommon in otherwise dyadically-structured terminologies. More to the point, the Mundurucú system contains the following equations and inequations which are indicative of, or at least consistent with, avuncular marriage:

$$MM = FZ$$

$$MBC = ZC$$

$$MB = FZS$$

$$FZC \neq MBC^{14}$$

The only characteristic of the terminology that would not be expected in an avuncular marriage system is the inequation $M \neq FZD$. Otherwise, the Mundurucú material provides us with an excellent example of a kinship terminology structured dyadically and in terms of marriage with the sister's daughter.

Having isolated these properties of the Mundurucú kin-term system and introduced the notion of hawaiianoid terminologies, we are in a better position to consider the structural relationships among the various Tupian terminological patterns. The Dravidian pattern is of course both generation-segregating and dyadically structured. The bifurcate Hawaiian is generation-segregating but monadically structured.¹⁵ The Mundurucú system is, like the Dravidian, dyadic in structure, but it has cross-generational equations. Given these variables, there is a fourth possibility — a terminology with a monadic structure and cross-generational equations. I submit that the Sirionó system realizes this possibility.

More, just as bifurcate Hawaiian may be regarded as the hawaiianoid version of the Dravidian pattern, so that part of the Sirionó terminology subsumed under Property (4) is essentially a "hawaiianized" Mundurucú

¹⁴ Murphy (1956: 421, 1960: 93-94) has pointed out the significance of the three previous equations, but this inequation, because of its rarity in dyadically-structured systems, should also be emphasized.

¹⁵ Actually, in the bifurcate Hawaiian pattern, only the cousin terminology has a monadic structure. A "pure" Hawaiian system, with generational avuncular and nepotic terminology in addition to Hawaiian cousin terminology, has a more complete monadic structure, but such a system is not found in any known Tupian society.

system. I purposely express the relationship in these terms, since it is my contention that Sirionó kinship terminology has developed from a pattern very much like the one Murphy found among the Mundurucú. Similarly, Dole (1957:342-51) (1962) has argued, correctly to my mind, that bifurcate Hawaiian has emerged historically from a Dravidian pattern among the peoples of Tropical South America.

What factors are responsible for such changes? Dole singles out depopulation and the resulting shifts from unilocal to "ambilocal" residential alignments and the breakdown of local exogamy. It seems clear that when Holmberg found the Sirionó, their population had been greatly reduced by smallpox and influenza epidemics, and that marriage was predominantly endogamous with respect to the local group (Holmberg 1950:9, 50). The residence pattern was not of the loose or "ambilocal" kind generally associated with hawaiianoid kin-terminologies; rather, it was unilocal with regard to the extended family, a situation which would seem to controvert Dole's hypothesis. But although it was divided into extended families, the band as a whole occupied a single domicile (Holmberg 1950:18), an unusual arrangement among human societies. The residential pattern, at the level of the local group, was thus monadic, which is to say, unstructured, a characteristic shared by "ambilocal" residential configurations. It should therefore not be surprising that the kinship terminology is similarly unstructured, i.e., hawaiianoid.

We do not, of course, have direct evidence that residence among the Sirionó was once more highly structured, that marriage was locally exogamous, and that the kinship terminology was similar to that of the Mundurucú; all we have is a group of correlations in the ethnographic present. It nevertheless seems at least reasonable that Dole's hypothesis applies here, provided that it be broadened to include all hawaiianoid (and not merely Hawaiian) terminologies and all unstructured (and not merely "ambilocal") residential alignments.¹⁶

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¹⁶ As the present paper was nearing completion, I learned that at the recent (1966) sessions of the American Anthropological Association, Floyd Lounsbury and Harold Scheffler presented a formal analysis of Sirionó kinship terminology.

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