The Assignment of Relationship Terms in Binumarien[1]

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Disputes about the meaning of relationship terms are as old as the discipline of anthropology. As Leach (1961: 29-30) has said:

> Kinship systems have a perennial fascination. From Morgan's day to the present, a long succession of authors have produced their diagrams and algebraic explanations . . . Kinship terminology and its diagramatic arrangements provide, ready made, a delightful series of mathematical abstractions and it is all too easy to develop their analysis into a 'system' having little relation to sociological facts.

This paper considers four propositions about the meaning of kinship terms in relation to a pertinent set of sociological facts about the actual assignment of relationship terms in a community. Its purpose is to shed quantitative empirical light on what has been largely a theoretical debate.

The propositions to be empirically evaluated here belong to the social category view of relationship terminologies, as developed by Edmund Leach, Rodney Needham, and A. R. Radcliffe-Brown.

The first proposition to be examined empirically is that relationship terms are not labels for genealogically defined categories. Needham (1974: 40-41) for example, generalizes as follows:

> . . . kinship has to do with the allocation of rights and their transmission from one generation to the next. These rights are not of any specific kind . . . Certainly they have no intrinsic connection with the facts or the cultural idioms of procreation . . . These jural systems and their component statuses can be genealogically defined . . . but the method of description does not entail any particular property in what is described . . . Still less does it mean that the relationships in question are genealogical or that they are so conceived by the actors.

The second proposition to be matched against quantitative data is that age is a more important principle of relationship classification than genealogy. Leach (1961: 52) reports that he was finally able to produce a satisfactory analysis of Jinghpaw kinship terminology only after he "had made the initial assumption that differentiation would be on the basis of age and sex." And Needham (1966: 1) has specifically suggested that in cognatic organizations (and the data used here come from one) it is likely to be relative age rather than genealogical

position that has the strongest "influence on the employment of categories of relationship."

The third proposition to be evaluated empirically is a corollary to the generalization that relationship terms label categories which are associated with specific and significant variations in behavior. Racliffe-Brown (1950: 9) says:

> The general rule is that the inclusion of two relatives in the same terminological category implies that there is some significant similarity in the customary behavior due to both of them, or in the social relation in which one stands to each of them, while inversely the placing of two relatives in different categories implies some significant difference in customary behavior or social relations.

A corollary to this is the presumption that sets of interacting individuals who classify each other as kinsmen do so in ways that are internally consistent among the interacting set; e.g., if two men are classificatory brothers and a third is the classificatory father of one of them, that third man will be a classificatory father of the first as well. Most certainly he will not be classed as, say, younger brother by the first man. If distinct interaction patterns are associated with certain kin term assignments, then all the patterns among a set of interacting persons must mesh consistently.

> For a kinship system to exist, or to continue to exist, it must 'work' with at least some measure of effectiveness. It must provide an integration of persons in a set of relationships within which they can interact and co-operate without too many serious conflicts (Radcliffe-Brown 1950: 83).

The last social category proposition to be tested here is that residence is a defining dimension of relationship classifications. Leach (1958: 131) says of his analysis of Trobriand kinship terminology that it "demonstrates even more clearly that kinship categories express differences of locality and of age status rather than genealogical relationship."

Binumarien, a small (population 172), linguistically isolated community of gardeners and pig keepers in the Eastern Highlands District of Papua New Guinea, is a test case for these four propositions. The relationship terms assigned by all the adult men of the community to each other are reported and the distribution of these assignments is matched against genealogical connection, relative age, residence, and against each other.

Binumarien relationship nomenclature is reported and analyzed elsewhere (Hawkes n.d.). I have argued there that the terminological distinctions in this system are associated with the pattern of marriage. In Binumarien women are exchanged between sets of kinsmen who neither form nor represent corporate groups. The terminology system reflects the alliance distinctions of such an arrangement. While I am persuaded that the structure of Binumarien kinship nomenclature is directly associated with the local organization of parenthood and marriage, the interactional implications of terminological assignments (i.e., their significance for interpersonal behavior) are another matter entirely.

THE DISTRIBUTION OF BINUMARIEN RELATIONSHIP TERMS

The definitions given for Binumarien relationship terms elsewhere (Hawkes n.d.) are kinship definitions. I begin here by assuming those genealogical meanings to simplify the presentation but that assumption is then tested.

The consanguineal part of the terminology is of the bifurcate generation type (Dole 1969; Hawkes n.d.). These terms are used for stepkin as well; i.e., the generationally junior consanguines of spouses and reciprocals of these (cf. Lounsbury 1965). Terms for in-laws, i.e., the same generation and senior generation consanguines of spouses and reciprocals of these are different (cf. Lounsbury 1965). They are applied to kin in ego's own generation and those immediately adjacent. Distinctions within this set are made for the sex of the terminal spouse and for relative generation (same or alternate).

The terms and their kinship definitions are listed in Table 1. the distribution of these terms as they are used among actual people may be displayed as a square matrix. The numbers defining the rows and columns identify particular individuals. There are 39 adult men in Binumarien and so a 39 × 39 matrix shows the relationship classification all men make for each other (Figure 1). Each row in the matrix shows the relationship terms used by the individual whose identification number defines the row. For example, 19 is the identification number of a young man named Faupau. He classifies Amiqi, whose identification number is 23, as *qipasaafa*, the term numbered 17b in Table 1.[2]

Zeroes in the matrix indicate that the man identified by the row does not count the man identified by the column as a kinsman. The rare occurrence of zeroes in the matrix shows that most Binumarien men classify each other as kinsmen. One man, Apu, whose identification number is 4, is exceptional. Although his wife was born and raised in Binumarien, she had left some years ago when they married. The family had just moved to Binumarien the year before my stay and Apu is still somewhat an outsider as the high number of zeroes given him shows. If he is discounted, only ten men fail to classify every other man as a kinsman. Of these, seven are young men, and, although this might indicate change, I think instead it is youthful brashness (most especially on the part of Adao, 2, and Uuio, 8).

Where there are multiple kinship connections between two kinsmen, and this is commonly the case in Binumarien, one path becomes the conventional referent. Classification shifts according to context do not occur. However, new marriages may be the basis for reclassification and the termination of marriages, through divorce or death, may lead to reclassification as well. But neither of these is obligatory. A betrothal may provide a reason for a set of new in-law classifications and these terminological assignments may continue even if the betrothal is cancelled. Years later a woman who has married someone else and even born children may still be classified as a daughter-in-law by the parents of a man she once promised but never married.

GENEALOGICAL CONNECTIONS

If, as the discussion so far has assumed, these relationship terms are really kinship terms, then by definition they must map appropriately onto genealogical relationships. To test this, genealogical relationships among the men must be matched against the terminological categories. But, while there are only twelve (plus one very rare) relationship terms which men may use for each other, the number of distinct genealogical relationships which may obtain between them is immensely greater. To test the match between the relationship term in use

TABLE 1

KINSHIP TERMS AND DEFINITIONS

Term	English Gloss	Definition (refers to kinsmen indicated when the phrase in parentheses is omitted and when it is included)*
1. qikoofa	'classificatory father'	any male who is (the spouse of) a first ascending generation parallel-consanguine** of ego
2. qinoofa	'classificatory mother'	any female who is (the spouse of) a first ascending generation parallel-consanguine of ego
3. faiqi	'classificatory child'	any first descending generation consanguine of (a spouse of) ego
3a. qinauqi	'classificatory nephew/ niece, man speaking'	any first descending generation collateral cross-consanguine of (a spouse of) a male ego
3b. qimaaku	'classificatory son'	any male first descending generation consanguine of (a spouse of) ego
3c. qimaamuqi	'classificatory nephew/ niece, woman speaking'	any first descending generation collateral cross-consanguine of (a spouse of) a female ego
3d. qiraamuna	'classificatory daughter'	any female first descending generation consanguine of (a spouse of) ego
4. qitaatoofa	'classificatory grand-mother'	any female who is (the spouse of) a second ascending generation consanguine of ego
5. qinaakufa	'classificatory grand-father'	any male who is (the spouse of) a second ascending generation consanguine of ego
6. qinaufa	'classificatory uncle'	any male who is (the spouse of) a first ascending generation collateral cross-consanguine of ego
7. qimaamufa	'classificatory aunt'	any female who is (the spouse of) a first ascending generation collateral cross-consanguine of ego
8. qinaini	'classificatory grand-child'	any second descending generation consanguine of (a spouse of) ego
9a. qisaifaqafa	'classificatory great grandkinsman'	anyone who is (the spouse of) a third ascending generation kinsman of ego and reciprocally
9b. qifaqanafa	'classificatory great great grandkinsman'	anyone who is (the spouse of) a fourth ascending generation kinsman of ego and reciprocally
10. daiquafa	'sibling-in-law'	any male spouse of a same generation collateral consanguine of ego and reciprocally
11. qimaaqifa	'sibling-in-law'	any female spouse of a same generation collateral consanguine of ego and reciprocally
12. qinaaku	'parent-/ daughter-in-law'	any female spouse of a first descending generation consanguine of ego and reciprocally
13. dairaamaku	'parent-/ son-in-law'	any male spouse of a first descending generation consanguine of ego and reciprocally
15. daraaqi	'co-parent-in-law'	any parent of the spouse of a child of ego, reciprocal[rare]
16. qisookifa	'opposite-sex classificatory sibling'	any opposite sex same generation collateral consanguine of ego

TABLE 1 (continued)

Term	English Gloss	Definition
17. akaqapasaa	'classificatory brother, man speaking'	any male who is a same generation collateral consanguine of a male ego, reciprocal [used for distant kin]
17a. qikaqa	'classificatory younger brother'	a male later born same generation collateral consanguine of an earlier born ego
17b. qipasaafa	'classificatory older brother'	a male earlier born same generation collateral consanguine of a later born ego
18. daunanaafa	'classificatory sister, woman speaking'	a female same generation collateral consanguine of a female ego
18a. dauna	'classificatory younger sister'	a female later born same generation collateral consanguine of an earlier born ego
18b. qinasaafa	'classificatory older sister'	a female earlier born same generation collateral consanguine of a later born ego
19. faaqi	'husband'	any male spouse of a female ego
20. qinaaqa	'wife'	any female spouse of a male ego
21. qioonafa	'classificatory co-wife'	any female spouse of (a same generation consanguine of) a spouse of a female ego

* For example:
1. qikoofa = any male who is a first ascending generation parallel consanguine of ego
and = any male who is the spouse of a first ascending generation parallel consanguine of ego.

** Parallel here means that the immediate link to the generationally junior terminal kinsman is the same sex as his/her generation mate in the path. The terminal kinsmen (a) are parallel-consanguines while (b) are cross-consanguines. The parallel condition is met in a logically trivial sense with lineals (the immediate link to the generationally junior terminal kinsman is the same sex as him/herself). They are thus counted as parallel kinsmen.

(a) = 

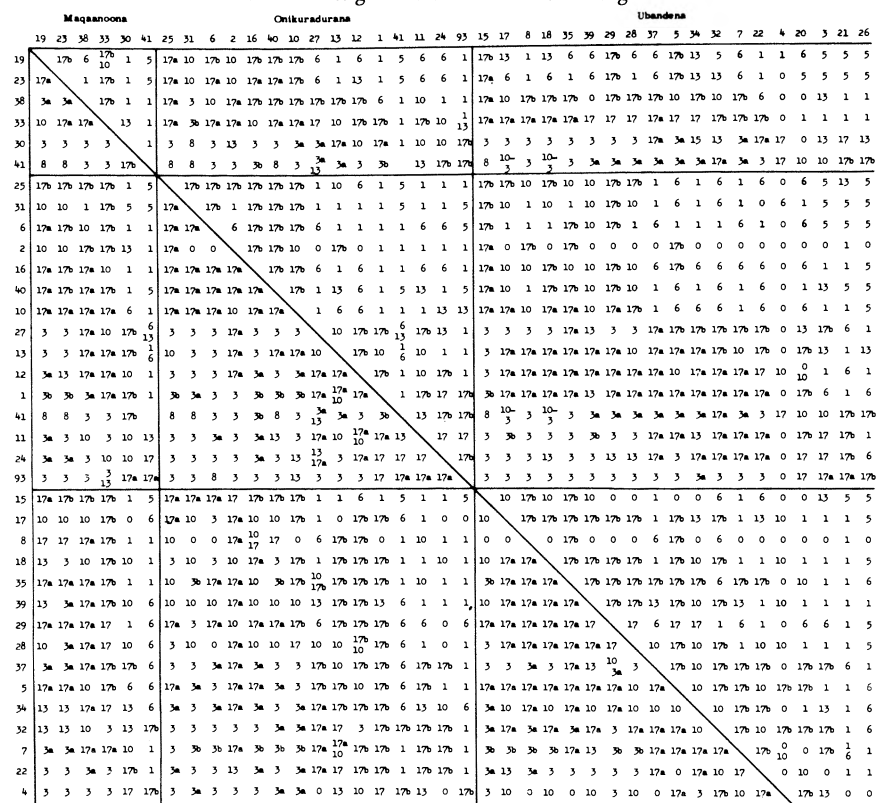
(b) = 

between a pair of men and their genealogical connection a simplified and incomplete set of connection types will suffice.

Of the 741 distinct pairs of adult men, 215 or 29 per cent are genealogically related in ways which fall into one of the following nine categories:[3]

1. father/son pairs (foster and step relations are included in each category)
2. brother pairs
3. father-/son-in-law pairs (if a connecting marriage has been terminated, the in-law connection is considered terminated for this classification)
4. brother-in-law pairs
5. father's brother/brother's son pairs
6. mother's brother/sister's son pairs
7. parent's sibling's son pairs
8. more distant consanguine to whom the genealogical connection can be specifically traced
9. putative consanguine to whom the particulars of connection are no longer remembered but to whom a genealogical connection, only partly specifiable, is nevertheless affirmed.

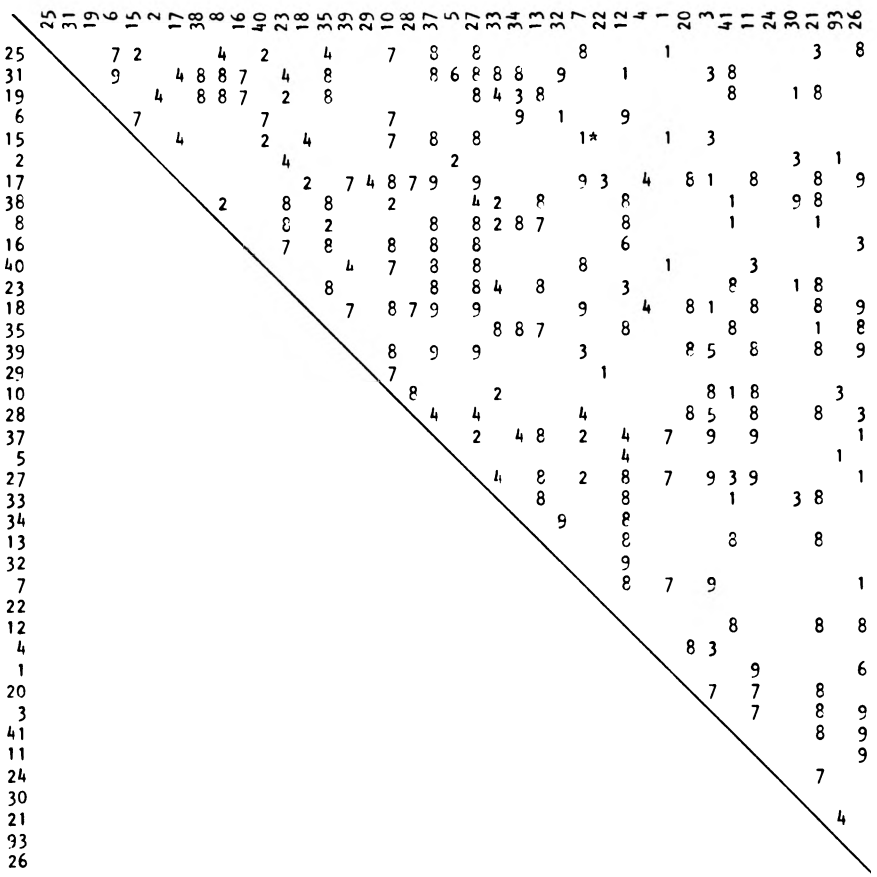
FIGURE 1: Assignment of Kin Terms Among Men



This matrix is ordered by hamlet residence; i.e., the residents of each of the three currently occupied hamlets are listed successively. One man, 41, has dual residence and is listed twice. The entries correspond to numbers in Table 1. If more than one term is used by one man for another, more than one number appears in the appropriate cell. There are two places where an odd usage *daiquana faiqi* coded (10-3) is recorded. This literally means *faiqi* (3, "classificatory child") of my *daiquafa* (10, "classificatory brother-in-law"). The marriage of Sisia, 41, and Arano, the sister of Pafaasi, 3, ended in divorce some years ago. Although Sisia might call Awaiqa, 17, and Apaaqa, 18, the sons of Pafaasi, *faiqi* (3) or *qinauqi* (3a) his choice not to do so emphasizes that the connecting marriage has been terminated. Note however that the "in-law" relationship is still remembered in his use of the brother-in-law term (10) for Pafaasi.

The matrix in Fig. 2 shows the distribution of these genealogical connections. If more than one of these connections obtains between a pair of men, the closest (i.e., the lowest number) is indicated. Of the 215 pairs of men who are related in these ways all but nineteen use the kin term appropriate to their closest genealogical tracing. All but one of these nineteen exceptions alternate to or from in-law classifications. Some in-laws (connections of type 3 and 4) use a consanguineal (and step) term, some distant consanguines (connections of type 7 and 8) use in-law terms. For every such alternative classification a genealogical explanation is available.

FIGURE 2: Genealogical Connections Among Men



* 15's father is 1, but 1's mother's brother's son, 7, has no living sons of his own, while 1 has four. Thus 15 lives with 7 as his surrogate son.

This matrix is ordered by relative age. All genealogical connections are, of course, reciprocal but they are only entered for the pair ordered younger to older. As it happens, in every case of cross generation connections this is also the order of generationally junior to senior kinsman. The entries 1, 3, 5, 6 are thus classified as follows:

1 = son to father
3 = son-in-law to father-in-law
5 and 6 = sibling's son to parent's brother.

Ten of the nineteen exceptions are in-laws. Four are fathers- and sons-in-law and six are brothers-in-law. In these ten cases non-in-law terms are used instead. In eight of these ten cases the connecting marriages are at least second ones and they were contracted well after both members of the pair had reached adulthood. So the terms used between the pair of men before they became in-laws is still in use.

Aside from the ten pairs who do not use in-law terms for each other, there are nine other pairs who do not use the term appropriate to the tracing indicated. All but one of these are pairs of distant consanguines who use in-law terms to classify each other. (The single exception is the young man, Uuio, 8, who does not classify his distant consanguine, Wowa, 34, as a kinsman and who is generally exceptional in the high number of others he does not classify as kinsmen.) In each of these cases there is a marriage between one of the men and a consanguine (more distant than sister or daughter) of the other which provides the basis for the in-law classification. Thus, although there are classifications which are not dictated by the closest genealogical tracing, these alternative classifications are still genealogically based.

In addition to the 29 per cent of the pairs of men who are connected to each other in the ways listed above, most other pairs of men classify each other as kinsmen. There is some tendency to classify unrelated men according to relative age (cf. Kronenfeld 1973, and Rivière 1969 for such patterns elsewhere). But here such a procedure is only a last resort. Even where a specific genealogical tracing is denied, classification is still biased by genealogy. For example, two men, Apaaqa, 18, and Amiqi, 23, are near each other in age and there is no genealogical connection claimed between them. Nevertheless Apaaqa calls Amiqi *qinauqi* (classificatory sister's child) and Amiqi returns the proper reciprocal. Reasons are not readily given by either of these men because they learn their usage from the usage of their parents. Questioning older members of the community reveals that Amiqi's mother's father's father's father and Apaaqa's father's father's father were initiated together. And the classification of the descendants of each for the other has followed from that.

Often the ultimate connection is not even a social relationship between ancestors. Aufo, 93, calls Wowa, 34, *qinauqi* (classificatory sister's child) and Wowa returns the proper reciprocal. Perseverant questioning elicits this explanation: Wowa's mother's mother came from the place (a non-Binumarien community, now extinct) where Aufo's parents lived and Aufo was born and grew to adulthood.

These examples are typical. When a terminological assignment is questioned, young people tend to respond with a shrug of the shoulders and a suggestion to ask the old folks. Or they say it is because their mother or their father made certain classifications. People with more extensive genealogical knowledge and more interest in the task give genealogical explanations, if not for the entire connecting path then for segments of it.

But where genealogy fails completely, where there is no marriage connecting kinsmen and no connection is claimed between parents for a pair of individuals, the tendency is nevertheless to use kin terms to classify the relationship. Here relative age plays a role. But even here relative age is quickly encumbered by genealogy. Older people may classify each other as *akaqapasaa, qisookifa,* or *daunanaafa,* if there is no stronger reason to do so than that they are both residents of Binumarien. And, as I was told, to call someone a kinsman makes him happy: not to do that is to imply that he is an outsider, and that is something which may cause a fight. But given this classification which is influenced by relative age, other kinsmen of these old people proceed to classify each other and the elders themselves according to the relative products calculated from the usage of their senior kinsmen. Once the first classification is made

the link is treated just as though it were literally genealogical, with the same properties (i.e., allowing the same additions and combinations) as any relationship classification based on traceable genealogical ties.

RELATIVE AGE

All of this shows that the relationship terms at issue here are definitely kinship terms. Terminological assignments both match and are explained by genealogical relationships. What then of sociocentric features of social identity, for example, relative age?

Rodney Needham (1966) pointed out that a mismatch—at least occasionally—between generational seniority and relative age is an eventuality to be faced by all classificatory (in the Morganian sense) kinship systems. In his (Needham 1966:1) exploration of "the influence of relative age on the employment of categories of relationship," Needham (1966:22) was led to conclude that "there appears to be a general correlation between linearity and the predominance of category whereas in cognatic societies it is relative age that is determinative." This actually involves two hypotheses because Needham talks about the influence of relative age on two different things in this paper. Sometimes he is talking about the role of relative age in determining the assignment of relationship terms, as in his introductory sentence quoted above. Sometimes he is talking about the role of relative age in determining expected interpersonal behavior. Each of these can be tested for Binumarien.

Needham has republished his 1966 essay in a collection which includes some pertinent introductory discussion. He (Needham 1974:21) refers to Colin Turnbull's work on the cognatic society of the Mbuti:

> Turnbull, to begin with, went out to the Mbuti pygmies of the Ituri Forest, in 1957-8, with the specific intention (among other concerns) to investigate the significance of relative age . . . His findings conform well, also with our theoretical expectations . . . 'the personal terminology of the Mbuti stresses their relative age and economic status rather than their kinship' (111). In general practice, 'the terms refer not to degrees of kinship at all, but to conditions of life: childhood, youth, adulthood, and old age (269) . . . Accordingly the application of the terminology may also vary according to age.

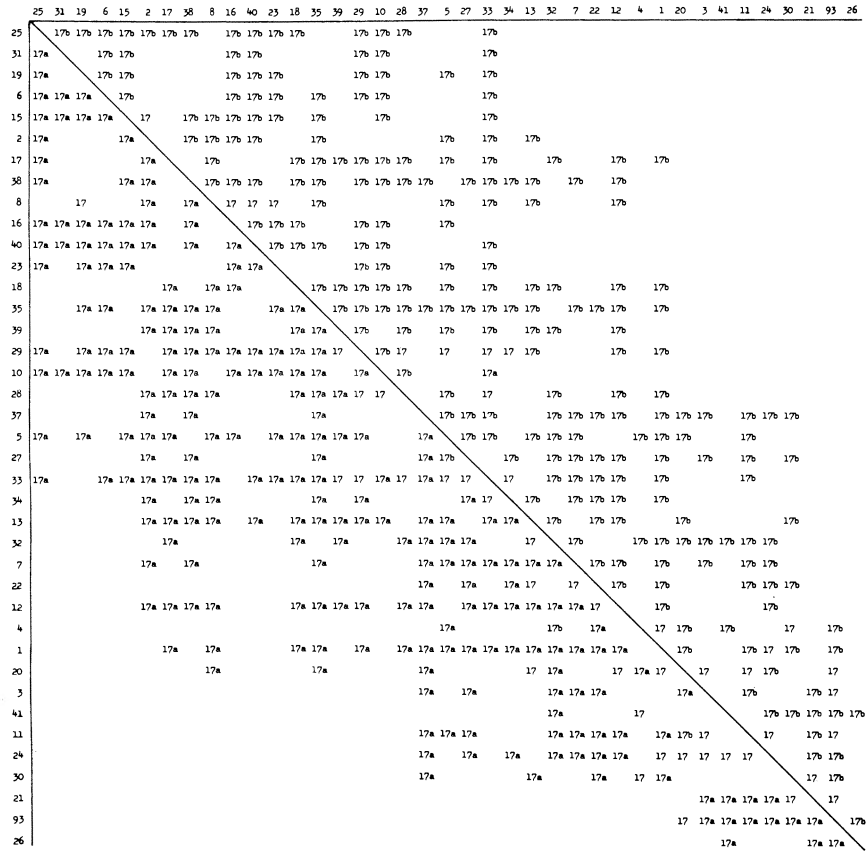
Needham (1974: 22) goes on to briefly discuss some of Peter Rivière's findings among the Trio and cites in support of his general hypothesis Rivière's (1966: 59) conclusion:

> In other words, although the terminology is a lineal descent one, and status is defined by category, certain aspects of an individual's classification of his social world into appropriate categories have cognatic characteristics. It is just where these cognatic characteristics are pronounced that relative age prevails as a determinant [of categorical assignment].

The Binumarien case is relevant to the hypothesis that relationship terms are assigned on the basis of relative age in a cognatic organization, that "in a cognatic organization relative age will be the dominant criterion of classification" (Needham 1974: 22). There is no unilineal ideology in Binumarien (see Hawkes 1976, Hawkes n.d.), it is a cognatic community. According to Needham's hypothesis the assignment of relationship terms should be significantly influenced by relative age.

The demonstration of the section preceding this one is counter to such a hypothesis. The assignment of relationship terms in Binumarien is a genealogi-

FIGURE 3: Assignment of Same Generation Kin Terms Among Men



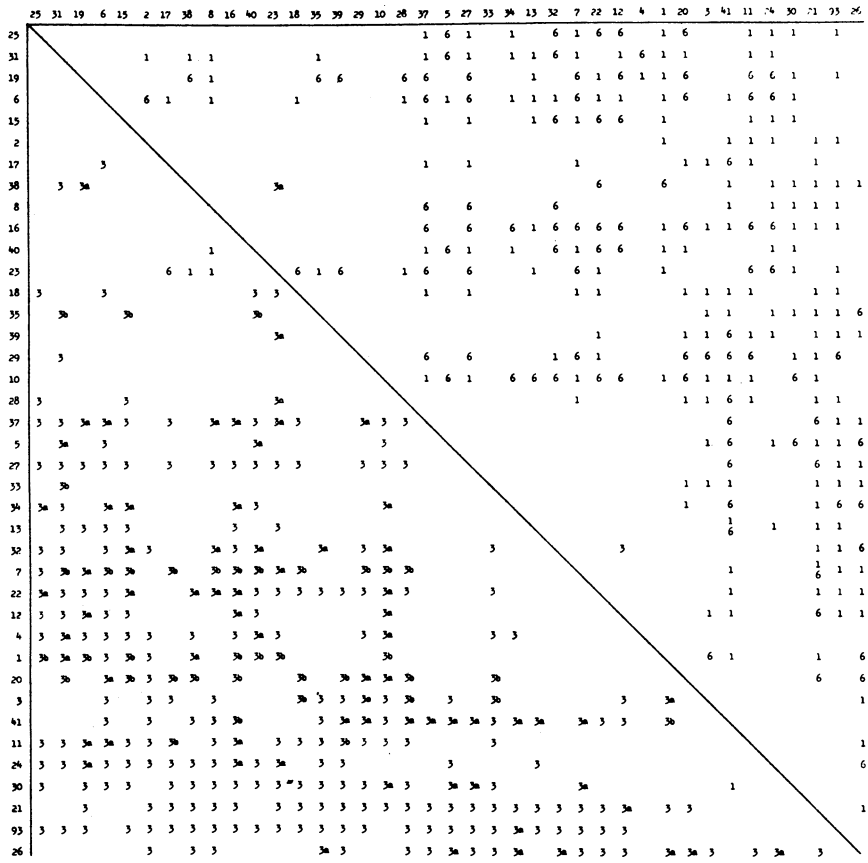
cal matter. But that section was focused on genealogy, let us now turn more directly to relative age.

The matrix in Figure 3 is ordered by relative age (25 is the youngest adult male in Binumarien, 26 is the oldest); it shows the attribution of same generation non-in-law kinship terms. The distribution shows that relative age and generation are associated. The entries cluster along the diagonal; i.e., men near each other in age tend to call each other generation mate, while those far apart in age do not.

The matrix in Figure 4 uses the same order and shows only the adjacent generation non-in-law terms. These terms tend to cluster away from the diagonal, again associated with relative age. Adjacent generation terms are used between pairs of men who are far apart in age.

This general tendency for relative age and generation to go together does not surprise common sense; parents must be older than their children. But for collaterals this is no longer a logical requirement. It is quite possible for people to have siblings younger than their own children. As Needham (1966: 27) notes, thus a

FIGURE 4: Assignment of Adjacent Generation Kin Terms Among Men



general issue to be considered is that raised by Firth, in a Tikopian context, of how it comes about that such wide disparities between category and age over even two or three generations do not lead to quite unmanageable differences of the kind in a longer period of time.

There are two answers for Binumairen. One of them is provided by Firth (1930) and Needham quotes it. This is the tendency for spouses to be of approximately the same age, As Needham points out this is hardly a universal tendency but it is the pattern in Tikopia and here in Binumarien as well. In addition there is a strong tendency toward community endogamy. Of the 45 unions current during my stay, six were between spouses both living outside Binumarien at the time of their marriage. But of the 39 in which at least one of the spouses was living in Binumarien at the time the marriage was contracted, 30 were between spouses who were both residents of Binumarien before thier marriage; i.e., more than three-fourths of them were community endogamous. In addition, four betrothals were arranged during my stay (all between Binumarien teenagers) and three

of them led to marriages (one betrothal was cancelled). The combination of community endogamy and the near age of spouses (women tend to be a few years younger than men at their first marriage) provide a continuing correction for discrepancies in age and generation. Marriage is prohibited with kinsmen as close as second cousins. There is no requirement for marriage within one's own generation, the concern is rather that prospective spouses be near in age. So as collateral distance increases and with it probability of a mismatch between age and generation also increases, the prohibition on marriage disappears and the tendency toward community endogamy and the marriage of near age mates come into play, providing a new genealogical tracing which corrects the mismatch between generation and age.

All this is relevant to the second reading of Needham's hypothesis, that dealing not with the effect of relative age on the assignment of terms but the effect of relative age on interpersonal behavior. Reviewing restrictions on who may marry whom, Needham (1966: 22) concludes:

> There appears to be a general correlation between linearity and the predominance of category whereas in cognatic societies it is relative age that is determinitive.

To this generalization Binumarien conforms.

In addition to Needham's (1966: 27) "resolution of discrepancies by means of marriage between genealogical levels," there is another correction factor in Binumarien. Here genealogical details are not counted of much importance and genealogies tend to be quite shallow. Young people pay little attention to learning ancestral specifics and although some people know more than others and some older people have a very wide knowledge it is never very deep. Everyone knows the names of his or her parents and usually parents' siblings. Many people can name grandparents and sometimes another relative or two in that generation. But at the third ascending generation very few people can name any kinsmen at all and those few know only one or two. This genealogical shallowness provides a correction for discrepancies between generation and age because as the specific links are forgotten paths may be reclassified to correspond better with relative age.

For example, Sisia, 41 and Yaaqo, 30, both agree that properly Sisia is Yaaqo's *qikoofa* (term 1 in Table 1); i.e., that 41 is 30's "classificatory father." But Yaaqo is the older of the two and so, although they think it genealogically improper, it makes more social sense for them to use generation mate terms and Sisia calls Yaaqo "classificatory older brother" (term 17b in Table 1). The genealogical distance between these two men is great. No one remembers the specifics of the connection between them. If the details were known, if all linking kinsmen were remembered, then the correction for age—which they feel is improper anyway—would be most unlikely.

Thus while discrepancies between relative age and generation are continually manufactured and amplified by this classificatory kinship terminology, they are also continually adjusted by the pattern of marriage and by the shortness of genealogical memories. While this (plus of course the necessary age and generation concordance for parents and children) tends to make relative age and generation approximately coincide, the coincidence is not perfect. As Needham (1966: 27) noted:

> Even if there are no exogamous descent groups . . . there will nevertheless be a range of kindred

within which marriage is forbidden, and the statuses of individuals within this range will still be subject to the effects of the disparities of their ages with the categories to which they belong . . . they . . . remain matters for empirical investigation in order to see what particular societies do about them.

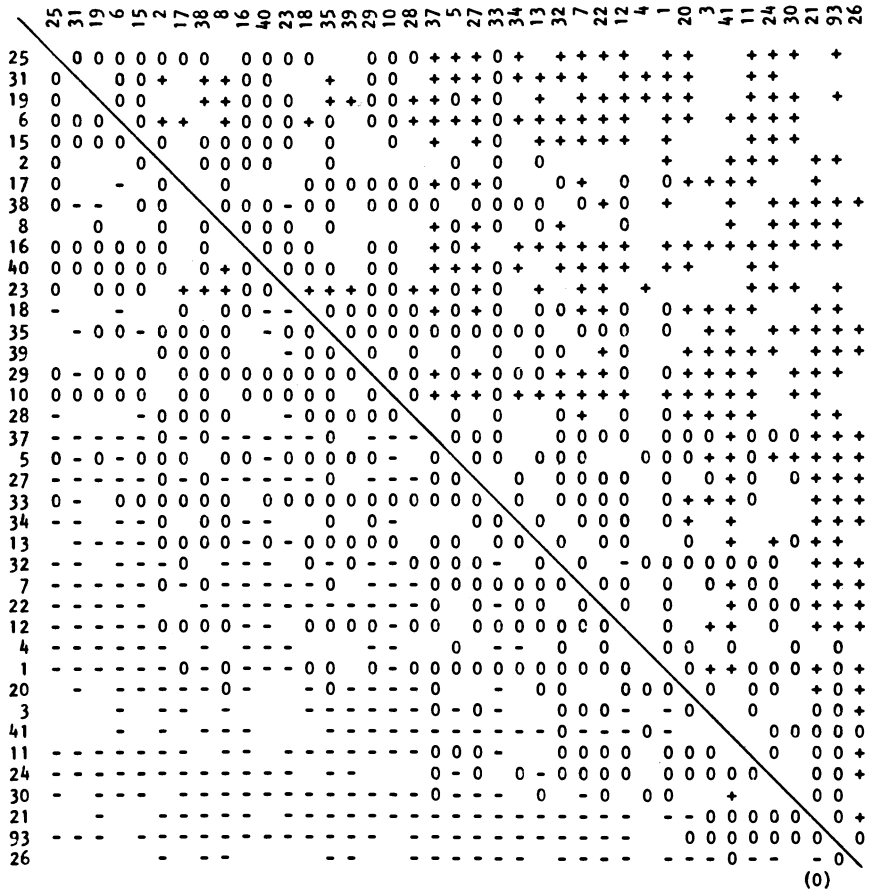
For these cases as well as for very distant connections which have not been roped in by a convenient marriage, the genealogically appropriate terms are used whether or not they fit relative ages. The genealogical meaning of these terms is always reaffirmed in conversations about them and the classes they label. The terms are always defined genealogically. For example, I asked about a pair of sisters of widely varying ages. The older of the two, Saiaa, already had born a daughter, Maqaa, when her sister, Naiyo, was born. And of course the older sister's children called their mother's sister "classificatory mother," *qinoofa* (term 2 in Table 1). I asked what would happen if the older sister's daughter, Maqaa, married quickly and had a child while her mother's sister, Naiyo, married late and was slow to conceive. Then in the next generation the ages would be even more strongly skewed. What if Maqaa had a daughter who was about the age the girls are now when Naiyo's child was born, so that Maqaa's daughter would be old enough to care for the baby? Would the baby nevertheless be her *qinoofa*? All agreed that of course she would. The age discrepancy would not affect the proper application of the terms.

In the matrix in Figure 4 there are occasional instances of men calling others older than themselves by junior generation kin terms and occasional instances of men calling others younger than themselves by senior generation kin terms. This lack of match between age and generation is more clearly illustrated in Figure 5, which shows the overlap between age and terminological category. In this matrix the men are again ordered by relative age and only non-in-law terms are considered. A minus sign (−) is entered if a first descending generation term is used. A zero (0) is entered if a same generation term is used. A plus sign (+) is entered if a first ascending generation term is used. Each row of this matrix shows the relative age of all men and the overlap of the kin terms used by a certain ego with that relative age. Each of the rows in this display provides information similar to that Needham (his diagrams 1966: 13, 18) presents in an alternative form. But the kin categorizations of Binumarien men are not consistent from individual to individual, two men who classify each other as generation mates do not necessarily place other men in the same relative generational position. Of two men, mutually generation mates, one may place a third in the first ascending generation while the other puts that same man in his own generation. This means that diagrams of the sort Needham suggests would have to be constructed for each individual. That is what Rivière (1966, 1969) has done for the Trio. He selects three informants to illustrate the overlap between category and relative age. But if we wish more complete information (and for some things we certainly do not need it) the display here is preferable. Contained in this one matrix is the same information which would require 39 separate diagrams of the other form. Regardless of how the data are presented they clearly illustrate that age and category do overlap, and it is not age that determines the application of relationship terms.

GENERATIONAL CONSISTENCY

The lack of consistency in generational assignments from one ego to another is more than a reporting complication. It has very important implications for the

FIGURE 5: Relative Generation Assignments Among Men



function of these terminological assignments. If they indicate behaviorally significant categories, then it seems reasonable to expect that sets of interacting individuals would assign kin terms to each other in ways that are self-consistent among the members of the set. This would seem especially likely in a small community where face-to-face interaction is so dense. If the relations labeled *qipasaafa/qikaqa* between a pair of men indicates something significant about their mutual behavioral expectations, then the presence of a third man who is *qipasaafa* to one and *faiqi* to the other (as with 25, 38 and 31) should be a matter of some complication and social difficulty. Among sets of men who interact with great frequency smooth social interaction would require that such inconsistencies be strictly minimized.

Consider Radcliffe-Brown's (1952: 63) generalization:

The actual social relation between a person and his relative, as defined by rights and duties or socially approved attitudes and modes of behavior, is then to a greater or less extent fixed by the

category to which the relative belongs, The nomenclature of kinship is commonly used as a means of establishing and recognising these categories.

And he (Radcliffe-Brown 1950: 9) has elsewhere said:

The general rule is that the inclusion of two relatives in the same terminological category implies that there is some significant similarity in the customary behavior due to both of them, or in the social relation in which one stands to each of them, while inversely the placing of two relatives in different categories implies some significant difference in customary behavior or social relations. Some anthropologists make a great point of real or supposed exceptions to this rule, but they seem to forget that there can only be an exception when there is a general rule to which it is an exception.

I sympathize with his dry comment about quibbles, and I am opposed to the ethnological agnosticism which counters all generalizations with: "But what about the . . .?" But the issue here seems more than an exception to the rule. Instead the rule itself is in question.

While the Binumarien community as a whole is small enough for frequent interaction among all its members, the component hamlets are smaller yet. If the terms label categories which are relevant to workaday behavioral expectations, "rights and duties or socially approved attitudes and modes of behavior," then, at least within hamlets, an orderly social life would require a high internal consistency in the terminological assignments of residents for each other.

The matrix in Fig. 1 is ordered according to hamlet residence. There are three currently occupied hamlets in Binumarien. The six men listed first moving from left to right and from top to bottom are residents of Maqaanoona, the smallest hamlet, residents of Onikuradurana are the next fifteen (41 appears twice because he is a resident of both hamlets), and the last nineteen men are the residents of Ubandena. For each of these hamlets all possible sets of three men can be extracted and their kin term assignments for each other evaluated for generational consistency.

In the smallest hamlet there are twenty triads, twenty ways in which six men can be placed in combinations of three men each. In the next largest hamlet there are 455 distinct triads. And in the largest hamlet there are 969. Each of these triads can be evaluated for generational consistency, and four judgments are possible for each triad: (1) it may be generationally consistent, (2) it may be generationally inconsistent, (3) it may be incomplete (i.e., if at least one pair of men mutually classify each other as non-kinsmen), or (4) it may be "ambivalent," if there are no mutual non-kin classifications but at least one pair use terms which are not appropriate generational reciprocals.

Radcliffe-Brown (1950: 27-28) said:

An essential of an orderly social life is some considerable measure of conformity to established usage, and conformity can only be maintained if the rules have some sort and measure of authority behind them. The continuity of the social order depends upon the passing on of tradition, of knowledge and skill, of manners and morals, religion and taste, from one generation to the next. In simple societies the largest share in the control and education of the young falls to the parents and other relatives of the parents' generation. It is their authority that is or ought to be effective. All this is obvious and it is unnecessary to dwell upon it.

If we take generation here to mean something literally genealogical, and that I think is the intention, then certainly the effectiveness of authority would be seriously undermined if two men place each other in the same generation but one of them counts a third as an "equal," the same generation as himself (and so by implication as the first man) while the first man places the third in a subordinate generation. Radcliffe-Brown saw kinship terms as labels for statuses with important implications for everyday interaction. If he was right in general, and so, by implication, right for the Binumarien case, then sets of men who are either internally consistent or incomplete in their generational assignments of each other should heavily outnumber any rare exceptions. An evaluation of generational consistency in Binumarien is a test of Radcliffe-Brown's view of kinship terms.

Table 2 reports the results of an evaluation of all triads in each hamlet. These figures seem striking although the absence of comparative data hampers evaluation. There appears to be a remarkably weak emphasis on consistency. Moreover, it is not the case that Binumarien, who quite often have more than one genealogical connection between them, alternate between various classifications depending on context. Here one connection becomes the conventional referent and the classification defined by it the conventional kin term assignment. That means that in a very large proportion of cases the terminological assignments of sets of men who are in significant day-to-day interaction with each other are not internally consistent. The obvious conclusion suggested by such a finding is that the kin terms are not associated with significant day-to-day behavioral expectations and so the inconsistency is of little moment, that Radcliffe-Brown was wrong, at least as his generalizations apply to Binumarien. Such a conclusion is consistent with the overlap of category and age; here too there is an inconsistency which is tolerated without difficulty. Men of nearly the same age are placed in different generational levels while men of widely varying age are placed in the same one. All this leads toward the conclusion that kin terms do not label statuses which are significant for day-to-day interaction. Such a conclusion cannot be firmly drawn until the pattern of day-to-day interaction is itself investigated, a matter well beyond scope of this paper (see Hawkes in press). But the fact of inconsistency, both of age and category and from man to man, remains. And the most obvious explanation is that these are terms which label egocentric classes of genealogical connections which are not of general daily interactional significance. They are not "categories which determine or influence social relations as exhibited in conduct" (Radcliffe-Brown 1950: 9).

RESIDENCE

This can be carried one step further by examining another feature of social identity, residence. Unilocal residence has been a standard part of the explanation for bifurcation in kinship terminologies (e.g., Murdock 1949: 136 ff, Service 1971: 67-68). In Leach's paper on Trobriand kinship terms he took this standard association to its extreme with a classic social category analysis. Leach argues that the Trobriand egocentric relationship terms reported by Malinowski are not kinship terms at all but rather social category labels which he defined in terms of residence. For example, *tama* (classificatory father), he argues, is not a genealogical but a socio-spatial classification which might be "seen to refer to a

TABLE 2
Generational Consistency in Kin Term Assignments among all Possible Sets of Three Men

	Consistent	In-consistent	In-complete	Ambivalent	Total	%Consistent or Incomplete
Maqaanoona Adult male population 6	10	6	0	4	20	50%
Onikuradurana Adult male population 15	305	113	0	37	455	67%
Ubandena Adult male population 19	527	260	90	92	969	63%

'domiciled male of my father's sub-clan hamlet' " (Leach 1958: 132). Leach's analysis had been very influential. This influence persists in spite of questions raised by Powell (1969)[4] about the congruence of Leach's definitions with Trobriand census information. The elegance of the explanation developed by Leach seems to overpower empirical objections. But ultimately the validity of any such explanation must be measured in its match with the sociological facts. To test the definitions offered by Leach we must know, for example, what terms are used by actual Trobriand males for the specific individuals surrounding them. Eighteen years have passed since the publication of Leach's paper and the issue of the genealogical versus social category meaning of kinship terms have stimulated every kind of argument but only rarely (e.g., Powell 1969: 189-194, Rivière 1969, Kronenfeld 1975) a simply empirical one. Most often positions are taken in the absence of the relevant sort of specific detailed data.

Binumarien data cannot shed light directly on the Trobriand case, for Binumarien has no unilineal descent groups, no ranking, and it does not have a Crow terminology. But the kind of examination of Binumarien usage to be made here is the kind of examination useful to adjudicate issues of the social category or genealogical meaning of kinship terms.

Although Binumarien kinship nomenclature has generational cousin terms, the terms of the first ascending generation are bifurcate merging. Since post-marital residence is patri (viri) local in Binumarien it exemplifies the association between bifurcate merging terminology and unilocality demonstrated by Murdock (1949: 150-151).

Out of nineteen living adult son and father or father surrogate pairs, all but two of them are also cohamlet residents. Eight of them live in the same house, and five of them are next-door neighbors. Both of the exceptional pairs did follow the patrilocal pattern in the past, the sons residing with their fathers at least until their wives had borne one child.

The patrilocal pattern is dramatized by the part of the wedding which involves the instruction to the bride to give up the home and gardens of her childhood and go to those of her husband. But the new couple's residential position after marriage is not a permanent affiliation. There is no one in

Binumarien over the age of ten who has not lived in at least two different hamlets (many of these are not currently occupied). Sometime after the birth of their first child (it may be long after) the son and his wife, who have their own hearth and usually have acted as a distinct domestic unit in the husband's father's house, build a separate house. Now, although father and son may make the same residential shifts in hamlet residence, they also may not.

The pattern of local endogamy makes it necessary to qualify a unilocal classification of the postmarital residence pattern since such a descriptive conventionally means residential affiliation with one of the new spouse's kin and implies spatial separation from the kin of the other spouse. This latter implication is not entailed in Binumarien. There are fifteen adult women with a living parent or parent surrogate in Binumarien. One of these women was a divorcee living with her parents temporarily. Of the remaining fourteen, eight adult women were living with their husbands in the hamlet where the woman's parent or parent surrogate resided. Nevertheless, I would be tempted in only one of these cases to classify the couple's residence as uxorilocal. In no instance did a couple live in the same house as the parents of the wife.

Given the co-occurrence of unilocal residence and bifurcate merging kin terms, some details of that co-occurrence can be tested. If the first ascending generation is bifurcated as a consequence of residence distributions the match between residence and term assignments should be close. To carry that further, though doing little justice to Leach, an argument for Binumarien, parallel to parts of his Trobriand argument, might entail the following propositions. Postmarital residence is patrilocal and although the majority of current marriages are community endogamous, the majority are also hamlet exogamous. Thus *qikoofa* (term 1 in Table 1, "classificatory father") might refer to senior male of my hamlet, while *qinaufa* (term 6 in Table 1, "classificatory mother's brother") might refer to senior male of another hamlet, with *dairamaku* (term 13 in Table 1, "classificatory parent-/son-in-law") and *daiquafa* (term 10 in Table 1, "classificatory brother-in-law") alternative terms for males of other hamlets.

The matrix in Figure 1 is ordered by hamlets, and so the kin term attributions made for cohamlet residents and for noncoresidents can be tabulated directly from it (41 appears twice in the matrix, terms used for and by him are only counted once). The three squares along the diagonal contain kin term attributions among hamlet coresidents, the three squares above and three squares below the diagonal each contain the kin terms used by all the male adult members of one hamlet for all the adult male residents of another.

The distribution of terms can be statistically evaluated. The contingency tables and relevant statistics appear in Table 3. Only one of the four associations predicted from a residence definition of these terms is significant statistically and the coefficient of association calculated for it[5] is negligible. It is not residence distributions that explain these terminological distributions. A social category account of these terms along the lines of Leach's account of Trobriand categories is falsified in advance by the lack of association. Where Leach (1958: 131) says that his social category analysis of Trobriand demonstrates "that the kinship categories express differences of locality and age status rather than genealogical relationship," this examination demonstrates precisely the contrary. Certainly Leach might argue that such a thing is only to be expected, since

TABLE 3
Association of Kin Term Assignments with Residence

	qikoofa	Other	Total
Hamlet co-resident	86	496	582
Not Hamlet co-resident	96	804	900
Total	182	1300	1482

Chi Square = 5.53 p less than .02
Yule's Q = .18

	qinaufa	Other	Total
Hamlet co-resident	32	550	582
Not Hamlet co-resident	65	835	900
Total	97	1385	1482

Chi Square = 2.92 p less than .10 n.s. at .05

	dairamaaku daiquafa	Other	Total
Hamlet co-resident	71	511	582
Not Hamlet co-resident	139	761	900
Total	210	1272	1482

Chi Square = 3.06 p less than .10 n.s. at .05

Binumarien and Trobriand are very different sorts of social systems and their relationship categories are different sorts of things. Nevertheless, this is the sort of data we must have to test social category assertions when they are made, and these data support suspicion of such accounts.

SUMMARY AND CONCLUSIONS

Binumarien is a community of kinsmen. It lacks either spatially or socially defined unilineal groups or categories, and that organizational fact is a relevant precondition to the distribution of relationship terms discussed here. The kinship nomenclature discriminates egocentric categories of kin according to genealogical connection (for an explanation of the terminological distinctions made here see Hawkes n.d.). It does not discriminate directly according to relative age or according to residential location. The terminology groups almost all Binumarien into large egocentric classes which are not mutually consistent from ego to ego. This is a very different point than the standard structural one about kindreds. Here it is not merely that the composition of the classes shifts; i.e., who is in and who is out, from ego to ego. More than that, the relative position of two people vis-à-vis each other may be very different from the point of view of different egos. All this suggests that these classes would not be suited to organizing day-to-day interpersonal interaction. The data presented here show that, for Binumarien at least, kin terms are unlikely to be social status labels, or at least that they are unlikely to have more than minimal or rarely significant role attributes. This leads us directly to the logical conclusion that it is not labeled kin categories which organize interpersonal interaction in this kinship society.

While the generalization that kin terms are status labels has wide currency, there is another generalization, equally widely held yet diametrically opposed in implication. It is that kinship societies are distinctive for the situational, context-specific character of behavior, that the continuous face-to-face nature of interaction in a small scale society is associated with familistic expectations. This means not only the prevalence of a kinship morality, but also that expectations are tailored, as in any domestic group, to the many variations in relative social identity. Not only sex, age, and birth order, but also collateral distance makes a difference in the sorts of expectations, the obligations, the frequency and character of interactions which occur between a pair of individuals (see Hawkes in press for an empirical demonstration of this in Binumarien). Yet it is precisely these societies which have classificatory kinship terminologies which lump broad classes of kinsmen—lineals to the most distant collaterals—into the same category.

In that light, the evidence presented here merely confirms the prediction inherent in the simple but important generalization that contextual and personal rather than absolute and impersonal morality and behavioral norms are characteristic of kinship societies. If behavioral expectations are situational, then the widely applied labels of a classificatory kinship terminology cannot dictate them.

NOTES

1. The fieldwork on which this paper is based was supported by an NIMH predoctoral research fellowship for which I am most grateful. The people of Binumarien, especially Sisia, who assisted and shared with me have my appreciation for their generosity and my thanks for their patient co-operation. I wish to thank Per Hage for useful comments on an earlier version of this paper. Orthographic conventions for Binumarien words are as follows. A 'q' represents a glottal stop. A double letter, e.g., 'aa,' indicates a long vowel, a single letter, e.g., 'a,' indicates a short vowel.

2. The data collection procedure I used incorporated a technique used by Frederick Rose (1960)

for studying kinship. It consisted of taking a photograph of each individual in the universe of study, and using those photographs to ask questions about the relationships and behaviors of the subjects of the photographs. The terminological assignments were elicited by showing the man identified by the row number a photograph of the man identified by the column number and asking *"Maa fasiqafa ani naqira fee?"* (This man you what say?)

3. These connection types are listed according to their social distance in Binumarien. Elaboration of that point is beyond the scope of this paper but it will be developed elsewhere.

4. Powell has presented data to show the significant mismatch between subclan membership and residence in one Trobriand village cluster. He also reports a high incidence of fostering which often puts children under the care of relatives who are not in the same kinship category as their parents. Thus he (Powell 1969: 194) concludes, "The ontogenetic content of the *tama* and other usages will be as variable as the residential situation of the individual child; if therefore the categorical contents of usages are to be systematic, they must be independent of the factor of residence." This statement which is supported by quantitative census data is to some degree undercut by an assertion which Powell makes, unaccountably, earlier in the paper. He (Powell 1969: 182) says, "Leach inferred correctly from Malinowski's account that *luta* is not simply "sister" but "alien girl resident in my father's hamlet" (1958: 132)." Powell could have expanded the terms *tuwa/bwada* similarly. No quantitative data are provided to support such a conclusion.

5. Yule's Q is chosen as the coefficient of association here because a perfect correlation of any of these terminological assignments with residence would produce a zero in only one of the four cells.

BIBLIOGRAPHY

Dole, G. 1969. Generation Kinship Nomenclature as an Adaptation to Endogamy. Southwestern Journal of Anthropology 25: 105-123.

Firth, R. 1930. Marriage and the Classificatory System of Relationship. Journal of the Royal Anthropological Institute 60: 235-268.

Hawkes, K. 1976. Binumarien: Kinship and Cooperation in a New Guinea Highlands Community. Unpublished Ph.D. dissertation. University of Washington, Seattle.

——— n.d. Cooperation in Binumarien: Evidence for Sahlins' Model. Man (in press).

——— n.d. Another Explanation for Bifurcate Generation Kinship Nomenclature: The Binumarien Case.

Kronenfeld, D. B. 1973. Fanti Kinship: The Structure of Terminology and Behavior. American Anthropologist 75: 1577-1595.

——— 1975. Radcliffe-Brown on Kinship Behavior: The Fanti Test Case. Man 10: 257-284.

Leach, E. R. 1958. Concerning Trobriand Clans and the Kinship Category *Tabu*. The Developmental Cycle in Domestic Groups, ed. J. Goody, pp. 120-145. Cambridge Papers in Social Anthropology No. 1. London.

——— 1961. Rethinking Anthropology. London School of Economics Monographs on Social Anthropology No. 22. London.

Lounsbury, F. 1965. Another View of Trobriand Kinship Categories. Formal Semantic Analysis, ed. E. A. Hammel. American Anthropologist Special Publication. 67 (2): pp. 142-185.

Murdock, G. P. 1949. Social Structure. New York.

Needham, R. 1966. Age, Category and Descent. Bijdragen tot de Taal-, Land-en Volkenkunde 122: 1-35.

——— 1974. Remarks and Inventions: Skeptical Essays About Kinship. London.

Powell, H. A. 1969. Genealogy, Residence and Kinship in Kiriwina. Man 4: 177-202.

Radcliffe-Brown, A. R. 1950. Introduction. African Systems of Kinship and Marriage, eds. A. R. Radcliffe-Brown and Daryll Forde, pp. 1-85. London.

——— 1952. Structure and Function in Primitive Society. New York.

Rivière, P. G. 1966. Age: A Determinant of Social Classification. Southwestern Journal of Anthropology 22: 43-60.

——— 1969. Marriage Among the Trio: A Principle of Social Organization. Oxford.

Rose, F. G. 1960. Classification of Kin, Age Structure and Marriage Among the Groote Eylandt Aborigines: A Study in Method and a Theory of Australian Kinship. Berlin.

Service, E. R. 1971. Primitive Social Organization: An Evolutionary Perspective (2nd ed.). New York.