The Role of Diffusion in Changing Kinship Systems DOWNEY D. RAIBOURN, Indiana University

George Peter Murdock in his book Social Structure (7) made a crushing indictment against diffusional studies of social structural change. He conclusively demonstrated that unilinear descent is not as anomalous as was conceived by the various historical schools. The assumption of a single or a limited number of origins for unilinear descent which then spread throughout the world was thus unwarranted. He demonstrated from his world wide sample of 250 societies that similarities in social structure and kinship systems occurred where diffusional theory would anticipate differences, and differences occurred where similarities were expected. He further demonstrated the limiting effect of diffusion by utilizing Spoehr's (9) work among the Indians, of the Southeastern United States. Spoehr had shown that under the influence of white contact, the Southeastern Indians had changed from a unilinear system to a bilateral system but they had selected an alternate bilateral system not the one possessed by Europeans.

The role of diffusion as conceived by Murdock (7, p. 196) is of minimal importance for he states that "Traits of social structure appear to be borrowed, in general only under conditions in which the same traits would be independently elaborated even in the absence of culture contacts."

The object of this paper is to demonstrate that while Murdock is essentially correct, diffusional studies can substantially aid Murdock's theory of historical reconstruction when both are utilized together in an area of limited size.

The limited area dealt with is central California. This area was selected because of the great variability in kinship systems. Before beginning research it seemed that this area might be one in which Murdock's principles of kinship change were not valid. This research started with the aim of testing Murdock's theory in this area.

The consensus of opinion among workers in the central California area seemed to be that the area was moving toward the patrilineate. This assumption was apparently based primarily on the age area principle which holds that traits at the margin of an area are older than those at the center. If this assumption was valid, then Murdock's theory was not valid as applied to the area.

After analyzing the 27 tribes or tribelets in the central Californian area, it was shown that Murdock's theory was valid. In this area, the marginal traits, not the central ones, were the most recent. From the sample of 27 tribes, 21 show a developmental trend out of patriorganization towards a bi to matri type of social structure. Only three tribes showed a developmental trend toward patri-organization. With respect to these three, two were based on limited data and one may have had a recent residence change. Such a change would then not invalidate Murdock's theory. The social structure of the remaining three tribes was in equilibrium and shows no developmental trend. As such these three tribes with their social structure in equilibrium neither aided nor abetted Murdock's theory. Thus most of the tribes showed a trend anticipated by Murdock's theory and the three which showed the opposite trend were based on questionable data.

Murdock's theory while valid in central California does not imply that the age area principle is invalid. The age area principle as previously mentioned states that marginal traits are older. This aspect of the principle particularly holds; if the central area is one of high culture where the rate of invention is greater; if the type of trait involved is unlimited; and if the acceptance of the trait does not involve a radical change in social organization. In the central California area, all of these conditions are lacking. The central part of that area is neither higher nor lower than the margins; the type of change involved in social structure or kinship system change is limited; and such changes demand significant changes in organization. Kroeber (6) who appreciates the value of the age area principle has nevertheless pointed out that when radical changes are introduced they frequently can survive and grow only at the margins of areas. The beginning of Christianity and practical communism would be examples. To state that the age area principle does not apply in central California is to state only that it does not apply in this context. It does not refute the very valuable function which the age area principle can perform in historical reconstruction.

In other contexts the age area principle was used with central California data. This application involved not system but kinship terms. The actual terms used are unlimited since a relative could be designated by any term. Also the adoption of a term does not involve a radical change in organization even though they may reflect such changes. By utilizing kinship terms rather than systems the requirements for the application of the age area principle were met. The use of the principle in this manner made it possible in many instances to determine which dialects of a related language were conservative or innovators with respect to terms used for specific relatives. It could then be shown that many of the innovations involved attempts to change from patri to bi or matri organizations in accordance with Murdock's theory.

A basic component of Murdock's theory was the classification of cousin terminology. Using only male terms for female relatives each type of cousin terminology may be briefly outlined as follows:

- Eskimo: A bilateral system involving the lineal principle of classifying kindred. Cross and parallel cousins are classified together but they are differentiated from sisters.
- Hawaiian: A bilateral system involving the generational principle of classifying kindred. Cross and parallel cousin are classified together and they are classed with and called by the same term as sisters.
- Iroquois: A unilinear and transitional system involving the bifurcate and symmetrical merging principles of classifying kindred. Both cross cousins classed together but they are differentiated from parallel cousins and sisters.
- Sudanese: A unilinear and transitional system involving the bifurcate collateral principle of classifying kindred. Cross cousins are differentiated from each other and neither is classified with any other relative.
- Omaha: A patrilineal system involving the asymmetrical merging principle of classifying kindred. Cross cousins are differ-

entiated from each other except mother's, brother's, daughter (MoBrDa) is classified with mother's sister (MoSi) and/or father's sister's daughter (FaSiDa) with sister's daughter (SiDa).

Crow: A matrilineal system involving the asymmetrical merging principle of classifying kindred. Cross cousins are differentiated from each other and from other relatives except FaSiDa is classed with FaSi and/or MoBrDa is classed with BrDa.

With the cousin term system defined as above an example of the method used in applying the age area principle to the study of kinship change will be demonstrated.

Table 1 represents a distribution of the terms used for FaSiDa, SiHu, the relative called by the same term as FaSiHu, the present cousin term system and the possible ancestry for the Southern, Southwestern, Central, Southeastern, Eastern and Northern Pomo respectively.

TABLE 1

Pomo Term for FaSiDa and SiHu Which Indicate Possible Ancestry for Present Types of Cousin

Pomo Dialect	FaSiDa	SiHu	FaSiHu Lumped with	Cousin Terms	Possible Ancestry
S	Amutsin	Amaghon	SiHu	Crow	Omaha
SW	Digin, Comen	Maghon	MoBr	Hawaiian	Iroquois
С	Kegu	Magoda	SiHu	Omaha	Equilibrium
SE	Hadjin	Imkon	SiHu	Omaha	Equilibrium
E	Dah	God	SiHu	Omaha	Equilibrium
N	Tcamandi	Aghon	MoBr	Sudanese	Iroquois

From Table 1 it is apparent that the terms used to designate SiHu have elements in common and would thus represent an old Pomo term for this relative. In contrast the terms used to designate one type of cousin, FaSiDa, are different terms in each dialect which implies that terms for this relative have undergone recent changes. This limited example illustrates that kinship change normally begins among the cousin category. Gifford (4) showed that the priority of cousin term change held not only for the Pomo but throughout the California area. That cousin terms normally change before changes affect other relatives is historically documented in the works of Eggan (3), Spoehr (9) and Schmidt (8). Driver (1, 2) in a study of North American Social Structure which is based on correlation has pointed out that kinship systems normally begin to change in the cousin category. The priority of cousin term change is also inferred though not specifically mentioned in Murdock's (7) study on the determinants of kinship terminology. Murdock's correlations and his Chi square index of probability which involved cousins were in general higher than those which involved other relatives. Since there are higher coefficients between cousins and the determinants of kinship systems than with other relatives, it would indicate that the determinant of kinship terminology, normally affects cousin terms before affecting terms for other relatives.

The priority of cousin term change is thus a principle which can be used in historical reconstruction. Table 1 illustrates the use of this principle. The equating of FaSiHu with SiHu is an Omaha extension which in accordance with the cousin term principle indicates former Omaha cousin terminology among non-Omaha type tribes. The Southern Pomo which classifies cousins by the Crow system has this Omaha extension thereby indicating former Omaha ancestry. Among the Southwestern Pomo which equate FaSiHu with MoBr but with no other relative the ancestry indicated is Iroquois. However, the Iroquois extension in this instance probably represents a transitional type because the Southwestern Pomo have a number of Omaha extension when terms for other relatives are utilized. While only one extension has been used to indicate the method employed, conclusions should be based upon the presence of as many extensions as possible.

Murdock used several aspects of social structure from which historical reconstruction can be determined. Utilizing only cousin terminology type, the distribution of the 27 dialects in central California are presented in Table 2.

TABLE 2

The Distribution of Linguistic Groups and Types of Terminology Represented. The number represents tribes or dialects.

	Bilateral		Unilinear		Patri	Matri
Linguistic Group	Eskimo	Hawaiian	Iroquois	Sudanese	Omaha	Crow
Yokuts		3			3	
Miwok		1 1	1		4	
Wintu			2		3	
Maidu		1	3			
Pomo		1		1	3	1
Wappo						1

The distribution from Table 2 points out a number of factors. Eskimo cousin terminology is the only type unrepresented in the area. Since all Europeans in the area classify cousins by the Eskimo system, any influence by Europeans which may have aided the movement out of patriorganization was ineffective in establishing an Eskimo system. The distribution also shows the variability of kinship system within the area for five of the six possible ways of classifying cousins are represented. Since 14 of the 27 dialects are non-Omaha, the distribution shows that the movement out of Omaha or patri-unilinear types of organization is well underway. It is necessary to add some of the patri-unilinear tribes to the Omaha because it could not be determined from the data whether or not the three Maidu dialects with Iroquois terminology and the one Pomo dialect with Sudanese terminology had formerly possessed the Omaha system. However with respect to the one Maidu dialect with Hawaiian terminology there were indications of former Iroquois terminology so that the Hawaiian terms thus represent a movement out of patri-unilinear organization. With these four exceptitons all the remaining non-Omaha dialects showed indication of a previous Omaha system.

The distribution in Table 2 also illustrates the previously mentioned conflict involving the age area principle and Murdock's theory. In accordance with the age area interpretation the present variability in the area would be moving towards a state of homogeneity. This would be expected in such a limited area as central California. However, the age area interpretation does not explain the great amount of diversity which is present even among closely related dialects. In such a small area, homogeneity would be expected at least among related dialects. Expectations from Murdock's theory, on the other hand, point to either an Omaha or the closely related patri-unilinear type of organization in the immediate past for all groups; the present diversity is completely accounted for and the direction of change would lead eventually to a new state of relative homogeneity. The present diversity thus represents transitional stages in the movement from patri to bi or matri-organization.

Changing from one kinship system to another usually involves the applications of a new term to designate certain relatives. Such new terms may be either invented or borrowed. The presence of unique terms for a relative involved in the change of kinship system was sought because the presence of unique terms aids in determining the direction of change. No attempt was made to determine the origin of such terms, i.e. whether invented or borrowed, but a few cases of apparent borrowing of terms were encountered.

One apparently borrowed term is found among the Northern Pomo which have the term "Tcamandai" for FaSiDa and SiDa. Since this term is unique and the "dai" in the SiDa generation indicates only the address form, it appears to have been borrowed from the central Wintu grandmother term "Tcama." The Northern Pomo which are Sudanese with respect to reference terms seem never to have developed an Omaha system. However the use of this term gives them an Omaha system with respect to address terms. It was perhaps borrowed as a result of an Omaha stimulus.

A second instance of borrowing of terms occurs among the Wappo who utilize the term "olo" for FaYrBr and FaSiSo. This is the same term utilized by the Lake and Coast Miwok for FaOlBr. Since the Wappo utilize the term for a Crow linkage it suggests that the term was borrowed in order to make the shift to the Crow system.

The Wappo seem to have been borrowers to a greater degree than other central California tribes. With respect to kinship they differ greatly from most Yukian tribes but are closely associated with the Southern Pomo. Not only do they have Crow cousin terms in common with the Southern Pomo but also three Omaha extensions which are FaOlBr = FaFa, FaOlBrWi = FaMo and FaSiHu = SiHu. The Wappo have one Omaha extension which is not found among any of the Pomo but which is present among the Central, Southwestern and Southeastern Wintu. This is the lumping of FaSi with Si. For some unexplained reason the Wappo seem to be particularly vulnerable to the borrowing of traits to inaugurate changes in their kinship system.

Other evidence which points out a change of system as a result of diffusional stimulus is also present. The tribes in Table 2 which have Hawaiian or Iroquoian terminology had neighbors with these types of organizations. Thus the neighbors could serve as models which could aid their movement out of the Omaha system. The Pomo on the other hand were marginal and surrounded by tribes most of which had Omaha organization. The diversity of the Pomo is thus accounted for not because of diffusion but probably has resulted from a lack of stimulus. Lacking the stimulus of diffusion the movement out of Omaha would involve random invention which could result in a variety of systems being developed.

That Murdock's theory and diffusional studies are not antagonistic is shown by reference to Gifford's (4) analysis of California kinship terminologies. Gifford's conclusions were based primarily on distribution, and diffusion and was published 27 years before Murdock's theory. Yet the similarities of the results between the two are remarkable. Identical conclusions are outlined as follows: the Crow cousin terminology of the Southern Pomo and Wappo are recent innovations (4, p. 164); the present Northern Wintu terms have been derived from Omaha (4, p. 164); the Yokuts tribes with Hawaiian cousin terms are derived from Omaha (4, p. 204) and that many of the non-Omaha tribes in central California had kinship systems which were similar to Shoshone (4, p. 210).

Gifford reached a number of conclusions which were not comparable with Murdock's theory. But only one significant conclusion differed from the expectations derived from Murdock's theory. This difference involved the Hawaiian cousin terms of the Southwestern Pomo. Gifford considered the Hawaiian terms of the Southwestern Pomo to be old while Murdock's theory indicates they are derived from former Omaha organization.

In summary Murdock's criticism of the general widespread diffusion of kinship systems is justified. However, in a small local area, utilizing kinship terms which are unlimited, not systems which are limited, the use of diffusional and distributional studies can substantiate interpretations derived from Murdock's theory. Such studies can also aid in the refinement or correction of hypothesis included in Murdock's theory as was pointed out by Schmidt (8). One can also be more certain of the validity of conclusions if such conclusions are reached through two different and unrelated types of analysis.

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