

A Matrix Display of Western Bukidnon Manobo Kinship

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Introduction

A conventional genealogical chart of a kinship system, though very useful, does not always reveal semantic dimensions, features of symmetry, and patterns of ranking which may be inherent in the system. Kenneth L. Pike in his article, "Dimensions of Grammatical Constructions," asks the question: "Can grammatical dimensions be charted like phonetic ones?" and he demonstrates that in principle the question is answerable in the affirmative.¹ This article is an attempt to answer a similar question concerning the dimensions of a kinship system, i.e., can dimensions of a kinship system be charted like those of a phonological system?

The studies of Floyd Lounsbury² and Ward Goodenough³ in this field have demonstrated that techniques which have been useful in descriptive linguistics are also useful in principle for the analysis of other areas of culture. Both have charted kinship dimensions in displays which might be referred to as matrices. This study is the outcome of an at-

tempt to utilize matrix theory in the analysis of Bukidnon Manobo kinship.⁴

Consanguinal Kinship

The consanguinal kinship system of the Manobo of Bukidnon is a bilateral structure in which the nuclear family is the basic unit. Incest regulations contain both unconditional and conditional restrictions. Unconditional restrictions are absolute and prohibit Ego's marrying or cohabiting with his sibling or any individual in his own line of ascent or descent. Conditional restrictions prohibit Ego's marrying or cohabiting with any member of his sibling's line of descent, a parent's sibling, or a parent's sibling's child unless certain ceremonial requirements are met.⁵ Polygamy is practiced but is infrequent.

⁴ Field work was done in 1957-58 under the auspices of the Summer Institute of Linguistics during residence in Barandias, Pangantocan, Bukidnon in central Mindanao in the Philippines. Helpful suggestions offered by Kenneth L. Pike, William Smalley, and Howard McKaughan are gratefully acknowledged.

⁵ The following is quoted from my article "The Anit Taboo of the Western Bukidnon Manobo," to appear in *Practical Anthropology*:

"A person may marry a parent's sibling or the offspring of a parent's sibling only if the *manlilimas* (shaman) is called in to perform the prescribed sacrifices. The *manlilimas* is given a piece of black cloth and two pesos. The two pesos is called *ibpaddingding* 'that which is used to make a wall.' These are meant to hide the incest from *anit*. At the time of the wedding the *manlilimas* must kill a pig allowing the blood to flow into a small hole at the foot of the ladder of the house where the wedding is to take place. Then he dips bits of ginger into the blood and rubs it on the hands and forehead of everyone present. This is meant to protect these attending from *anit*."

¹ Kenneth L. Pike, "Dimensions of Grammatical Constructions," *Language*, Vol. 38 (1962), pp. 221-244.

² Floyd G. Lounsbury, "A Semantic Analysis of the Pawnees Kinship Usage," *Language*, Vol. 32 (1956), pp. 158-194.

³ Ward H. Goodenough, "Componential Analysis and the Study of Meaning," *Language*, Vol. 32 (1956), pp. 195-216.

Semantic Dimensions

The basic matrix shown in Figure 1 is, for Manobo consanguinal kinship, the analogue of a phonetic chart. The semantic dimensions in the display are: generational separation in the horizontal rows, lines of descent in the vertical columns, and the line of ascent on a

		D1	D2	D3	D4	D5	D6	D7	D8	D9
G+5						pa pa pa pa	pa pa pa pa	pa pa pa sb	pa pa pa ch	pa pa pa ch
G+4				pa pa pa	pa pa pa sb	pa pa pa ch	pa pa pa sb	pa pa pa ch	pa pa pa ch	pa pa pa ch
G+3			pa pa sb	pa pa pa sb	pa pa pa ch	pa pa pa ch	pa pa pa ch	pa pa pa ch	pa pa pa ch	pa pa pa ch
G+2	Male or Female	pa sb	pa sb ch	pa pa sb ch	pa pa pa sb	pa pa pa ch	pa pa pa ch	pa pa pa ch	pa pa pa ch	pa pa pa ch
G1	Ego	sb ch	pa sb ch	pa pa sb ch	pa pa pa ch	pa pa pa ch	pa pa pa ch	pa pa pa ch	pa pa pa ch	pa pa pa ch
G-2		ch sb ch	pa sb ch ch	pa pa sb ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch
G-3		ch ch ch	sb ch ch	pa sb ch ch	pa pa sb ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch
G-4		ch ch ch	sb ch ch ch	pa sb ch ch	pa pa sb ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch
G-5		ch ch ch ch	sb ch ch ch	pa sb ch ch	pa pa sb ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch	pa pa ch ch

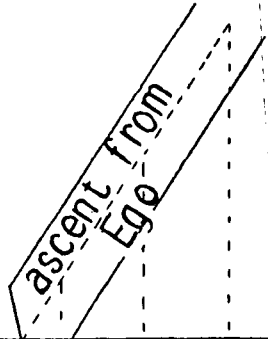


FIGURE I
THE BASIC MATRIX
For Manobo Kinship
The Analogue of a
Phonetic Chart

diagonal proceeding from Ego. The structure composed of dotted lines which is superimposed upon the basic matrix is added to aid the reader in identifying the line of ascent from Ego and the lines of descent from Ego and his forebears. Sex distinctions are significant only in generation level $G + 2$. Cells in $G + 2$ may be read as either male or female. For example, $G + 2/D3$ may be read as parent's male sibling or parent's female sibling.

The formatives in the cells are the denotata⁶ of the universe of Manobo kinship. They (other than Ego) include all individuals who might possibly be alive during Ego's lifetime, and whom he recognizes as consanguinal kin. Just as the notations listed on a phonetic chart include all the speech sounds of a particular language, so also the notations in this kinship chart include denotative descriptions of the relationship of every individual which a Bukidnon Manobo Ego regards as his consanguinal kin. Other individuals related to Ego who are more than four generations removed from him are not regarded as kin in the same sense as those in the basic matrix.

Goodenough describes a denotative notation of kinship as follows: "The distinctions made in this notation are not the same as those which distinguish between the cultural categories of kin signified by kinship terms, just as the distinctions of phonetic notation are not the same as those between the cultural categories of speech sound which the linguists call phonemes. What the notation describes is the semantic equivalent of the allophones of phonemic analysis."⁷

The abbreviations used are to be read as follows: pa = parent or parent's,

⁶ Goodenough, *op. cit.*

⁷ *Ibid.*

sb = sibling or sibling's, ch = child or child's. Generations ascending from Ego are $G + 2$, $G + 3$, $G + 4$, and $G + 5$. $G1$ is Ego's generation. Generations descending from Ego are $G-2$, $G-3$, $G-4$, and $G-5$. Lines of descent beginning with Ego's line are $D1$, $D2$, $D3$, $D4$, $D5$, $D6$, $D7$, $D8$, and $D9$.

The cells in Figure 1 are to be read in the following manner:

$G+3/D3$ "parent's parent"

$G1/D5$ "parent's parent's parent's sibling's child's child's child"

$G-5/D3$ "parent's sibling's child's child's child's child's child"

Figure 2, a matrix derived from Figure 1, shows the structure of Manobo kinship terminology. As Figure 1 is the analogue of a phonetic chart, Figure 2 is the analogue of a phonemic chart. In this display the denotata which were the formatives in the cells of Figure 1 are grouped into blocks, each of which represents a kinship term. Comparison with Figure 1 will reveal the denotative membership of each block.

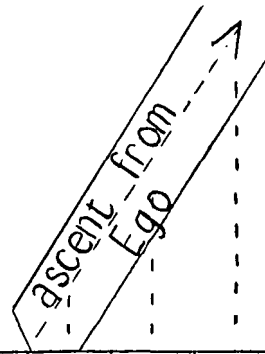
Most Manobo kinship terms are used both in reference and in address. A few have dual forms, one of which is used in reference and the other in address. Although it is impossible to give brief translational equivalents in English for many of the terms, perhaps the following will be helpful:

amey (referent), *Ama* (address) father
iney (referent), *Ina* (address) mother
anak child

*suled*⁸ generic for 'sibling', in the Hawaiian or extended sense, not in the

⁸ Less generic variants of the term *suled* involve sex and age distinctions. Although these could be displayed in two submatrices of the *suled* block, for our purposes here a verbal description will suffice *etevey* "male ego's female *suled*," *meemehan* "female ego's male *suled*," *kakey* "older *suled*," *hari* "younger *suled*."

English sense.
 aya parent's female *suled*
 anggam parent's male *suled*
 enaken child of one's *suled*
 id-agew one's *suled* who is not one's si-
 bling, in the English sense .
 apu person's relative who is removed
 from him by two or more generations



		D1	D2	D3	D4	D5	D6	D7	D8	D9
C+5							APU TE SIKU			
C+4						APU TE BUEL				
C+3			A P U							
C+2	Male or Female	AMEY/ DEY	ANGGAM AYA							
C1	Ego	SULED	ID-AGEW TE APU	ID-AGEW TE APU TE BUEL	ID-AGEW TE APU TE SIKU					
C-2	ANAK	ENAKEN								
C-3										
C-4		A P U								
C-5										

FIGURE 2
 DERIVED MATRIX I
 For Manobo Kinship
 The Analogue of a
 Phonemic Chart

*apu te buel knee apu*⁹, a person's relative of the third ascending generation from him

*apu te siku elbow apu*⁹, a person's relative of the fourth ascending generation from him

id-agew te apu a person's *suled* who is related to him only through a common forebear two generations removed

id-a-agew te apu te siku 'a person's *suled* who is related to him only through a common forebear three generations removed'

id-a-ew te apu te siku 'a person's *suled* who is related to him only through a common forebear four generations removed'

Features of Symmetry

The phonemic chart of a language is usually a fairly symmetrical structure. Similarly the display in Figure 2 reveals certain symmetrical features which are inherent in the Manobo kinship system. The structure composed of the total number of relationships which Ego regards as his kin is a symmetrical structure. This is implied by the number of generations and the number of lines of descent which are involved in the matrix. Ego's reckoning of consanguinal kin includes individuals in nine generations and members of nine lines of descent. Distance of generational reckoning is limited to four generations above G1 and four generations below. Distance of reckoning of line of descent or ascent is limited to five lines including Ego's line at any generational level. This results in a 4 x 5 block above G1 and a 4 x 5 block below G1.

⁹ Manobo folk etymology explains the term "knee *apu*" as referring to a person so old and stooped that when he squats his head is between his bony knees. The *elbow apu*, "older still, is so old that he has lost his ability to see and recognize, and when a person enters the house he must nudge someone with his elbow in order to find out who it is.

Patterns of Ranking

Figure also seems to imply certain patterns of ranking in the assignment of kinship terms. The term *apu* occupies the blocks formed by G + 3, G + 4, G + 5, and G-3, G-4, and G-5. This seems to indicate that the three center generations, G + 2, G1, and G-2, occupy a block which is of higher rank than the outer blocks. Added to this is the fact that the majority of kinship term contrasts occur in the block formed by G + 2, G1, and G-2.

A similar pattern of ranking appears with reference to the lines of descent within the central three generations. The terms for Ego's relatives in his own line of ascent and descent, *amey* (father), *iney* (mother), and *anak* (child), are not extended to other lines, while his terms for his other relatives within that block are extended over four lines of descent.

The following criteria, based on Figure 2, are suggested for assigning rank to the units of this particular semantic structure, i.e., the universe of consanguinal kinship of the Bukidnon Manobo:

(1) Ego's generation, G1, is higher in rank than other generations. Generations decrease in rank as they ascend or descend from Ego.

(2) A kinship term which represents fewer denotata (cells in the basic matrix, Figure 1) is higher in rank than those which represent more. For example, the term *anak* (child) which represents a single denotatum in Figure 1 is higher in rank than *enaken* (child of one's *suled*) which represents four denotata in Figure 1.

By multiplying the generation number of a kinship term by the number of denotata it represents it is possible to assign a numerical value of rank to each term. This, in effect, combines criteria

(1) and (2) and results in a scale which demonstrates numerically the ranking in the structure. A numerical value is to be understood only as either higher or lower in rank than another. A value of 8, for example, is higher in rank than a value of 45, but not necessarily five times as high.

The following is a listing of kinship terms according to the assignment of rank based on criteria (1) and (2):

Ego	$1 \times 1 = 2$	First in rank
<i>anak</i>	$2 \times 1 = 2$	Second in rank
<i>amey</i>	$2 \times 1 = 2$	Second in rank
or		
<i>iney</i>		
<i>suled</i>	$1 \times 4 = 4$	Third in rank
<i>anggam</i>	$2 \times 4 = 8$	Fourth in rank
or		
<i>ayà</i>		
<i>enaken</i>	$2 \times 4 = 8$	Fourth in rank
<i>apù</i>	$3 \times 15 = 45$	Fifth in rank

One may now ask the question, "Are these criteria valid for this particular kinship system?" In order to demonstrate their validity a test was made in which a Manobo informant was, in fancy, supplied with a great number of sacks of rice to be given away to his relatives. He was then asked how many sacks he would give to each of his consanguinal kin. The relative rank implied by his answer is as follows:

Ego		First in rank
<i>amey</i>		
or	parent	Second in rank
<i>iney</i>		
<i>anak</i>	child	Third in rank
<i>suled</i>	sibling	Fourth in rank
	in Hawaiian sense	
<i>anggam</i>		
or	parent's <i>suled</i>	Fifth in rank
<i>ayà</i>		
<i>enaken</i>	child of one's <i>suled</i>	Sixth in rank
+ <i>apù</i>	a person's relative who is removed from him by two or more generations'	Seventh in rank
(of an ascending gener.)		
- <i>apù</i>	'a person's relative who is removed from him by two or more generations	Eighth in rank
(of a descending gener.)		

Comparison of this listing with our former listing indicates that criteria (1) and (2) are basically valid. The informant, however, further distinguishes by assigning higher rank to members of ascending generations than he does to members of descending generations. From this it appears that a third criterion is valid for the system, i.e.:

(3) An ascending generation of a given distance from Ego is higher in rank than a descending generation of the same distance from Ego. For example, *anggam* (parent's *suled*) parent's *suled* is higher in rank than *enaken* (child of one's *suled*).

It is possible to adjust our numerical values by adding the number 1 to the values of kinship terms which occur in descending generations so that the relative ranking will also reflect criterion 3:

Ego	$1 \times 1 = 1$	First in rank
<i>amey</i>		
or	$2 \times 2 = 2$	Second in rank
<i>iney</i>		
<i>anak</i>	$2 \times 1 + 1 = 3$	Third in rank
<i>suled</i>	$1 \times 4 = 4$	Fourth in rank
<i>anggam</i>	$2 \times 4 = 8$	Fifth in rank
or		
<i>ayà</i>		
<i>enaken</i>	$2 \times 4 + 1 = 9$	Sixth in rank
+ <i>apù</i>	$3 \times 15 = 45$	Seventh in rank
- <i>apù</i>	$3 \times 15 + 1 = 46$	Eighth in rank

Affinal Kinship

Affinal kinship also may be displayed by utilizing further derivations of the basic matrix. In Figures 3 and 4 Ego occupies a block outside the matrix, and Ego's spouse occupies the cell in which Ego occurred in Figures 1 and 2. The blocks in these displays represent the consanguinal kin of Ego's spouse, and his spouse's kin. The other cell outside the matrix labeled *iras* represents a spouse, male or female, of Ego's spouse's *suled*. An equal sign (=) signifies a marriage relationship. Figure 3 repre-

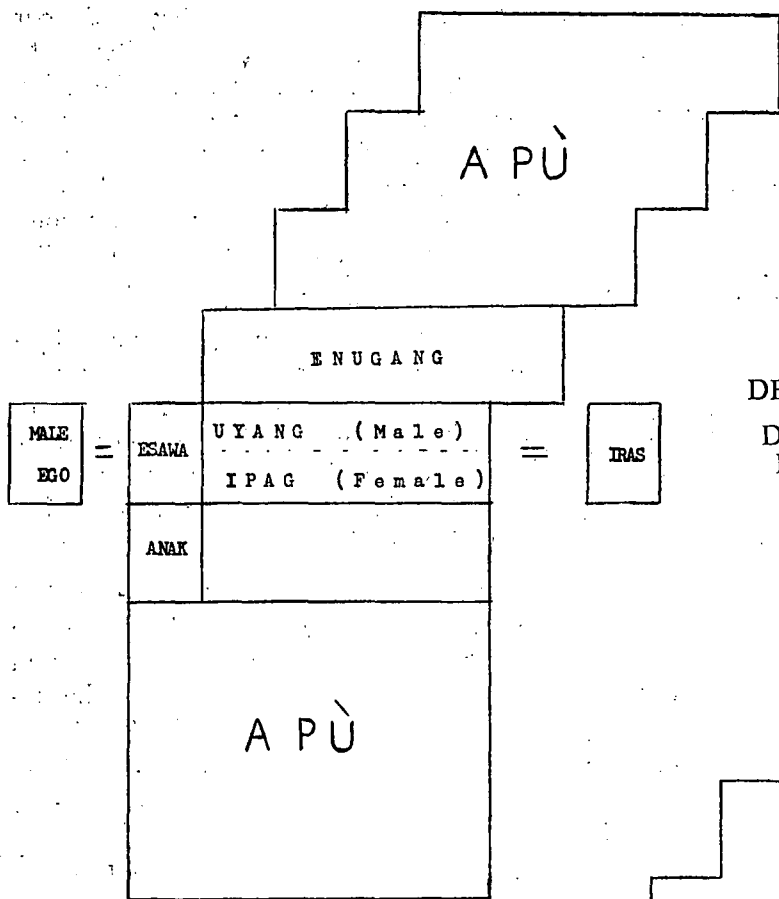


FIGURE 3
DERIVED MATRIX II
Displaying the Afinal
Kin of a Male Ego

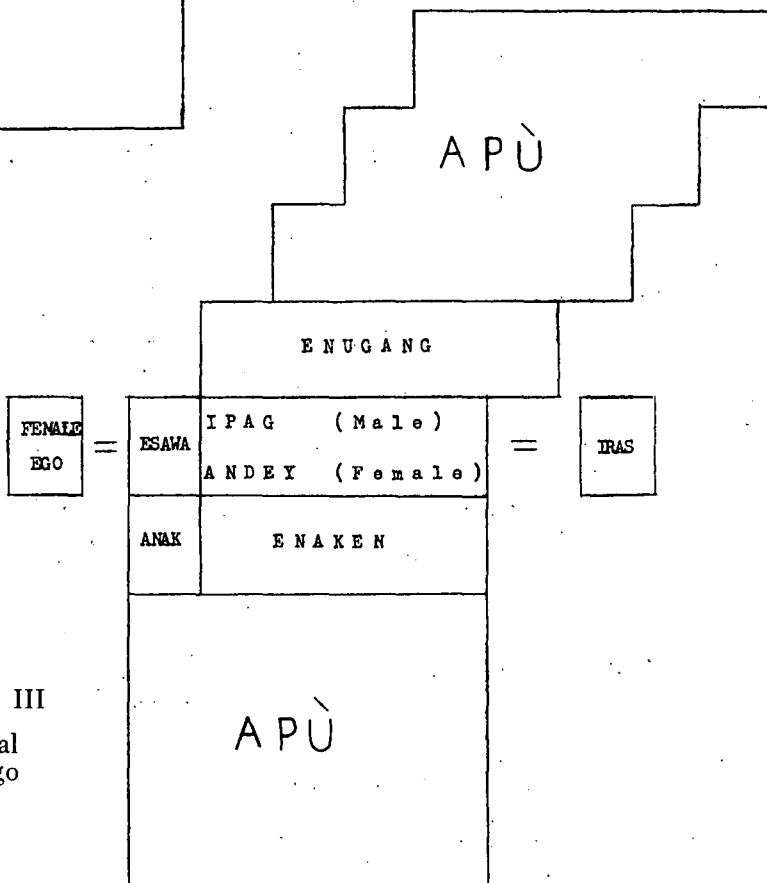


FIGURE 4
DERIVED MATRIX III
Displaying the Afinal
Kin of a Female Ego

sents Ego as male; Figure 4 represents Ego as female.

It is possible to demonstrate exhaustively all other affinal relationships by shifting Ego's position from block to block in successive derivations of the display in Figures 3 and 4, but for our purposes a briefer verbal description will suffice. In Figures 3 and 4 Ego's terms for all individuals in G1 are reciprocal. (Their terms for Ego are the same as Ego's terms for them.) Individuals in the block in G1 labeled *enuang* call a male Ego *mekeamung*. A female Ego is called *ambey*. Ego uses his spouse's terms for relatives in all other blocks, and they, in turn refer to Ego and his spouse with identical terms except where sex distinctions are required. All individuals in Ego's consanguinal matrix refer to the individuals in Ego's spouse's consanguinal matrix as *belai* and vice versa.

No attempt is made in this paper to apply the ranking theory discussed earlier to the affinal kinship system displayed in Figures 3 and 4. Doubtless some ranking exists which is analogous to that of the consanguinal system, but further study will be necessary in order to illuminate this.

In summary, matrix technique applied to Manobo kinship results in dimension-

al displays which give a rapid insight into the structure of the system. Symmetrical patterns become apparent which may have implications concerning possible symmetrical structures in other areas of human behavior. Patterns of ranking are also revealed in the structuring of the kinship terminology which reflect folk reaction to individual kin-

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The Social Responsibility of the Rural Church

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It is pleasant to have these days of fellowship with you — you who are the sociologists of the Republic of the Philippines. You surely sense in this annual gathering that your research and

teaching is second to none of all the college and university disciplines. For by the nature of sociology you are charged with the continuous study of people and their institutions. It is a foregone con-