Referential Ambiguity in the Calculus
of Brazilian Racial Identity[1]

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*Categorizations elicited from 100 Brazilian informants through the use of a standard-
ized deck of facial drawings suggests that the cognitive domain of racial identity in
Brazil is characterized by a high degree of referential ambiguity. The Brazilian cal-
culus of racial identity departs from the model of other cognitive domains in which a
finite shared code, complementary distribution, and intersubjectivity are assumed.
Structurally adaptive consequences adhere to the maximization of noise and ambiguity
as well as to the maximization of shared cognitive order.*

THE COMPARATIVE STUDY OF RACE RELATIONS in Brazil and the
United States has brought to light important differences in culturally con-
trolled systems of "racial" identity. Many observers have pointed out the partial
subordination of "racial" to class identity in Brazil exemplified in the tendency
for individuals of approximately equal socio-economic rank to be categorized by
similar "racial" terms regardless of phenotypic contrasts, and by the adage,
"money whitens" (Pierson 1942, 1955; Wagley 1952; Harris 1956; Azevedo 1955).
Other aspects of the Brazilian calculus of "racial" identity lead to categoriza-
tions that are inconceivable in the cognitive frame of the descent rule which
underlies the bifurcation of the United States population into "whites" and
"negroes" (now, more politely, "blacks"). Experimental evidence indicates that
phenotypically heterogeneous full siblings are identified by heterogeneous "ra-
cial" terms. Children of racially heterogeneous Brazilian marriages are not sub-
ject to the effects of hypodescent; where the phenotypes are sharply contrastive,
full siblings may be assigned to contrastive categories (Harris and Kottak 1963).
It has also long been observed that the inventory of terms which defines the
Brazilian domain of "racial" types exceeds the number of terms in the analogous
domain used by whites in the United States (and probably by blacks as well).

The suggestion has been made that the most distinctive attribute of the
Brazilian "racial" calculus is its uncertain, indeterminate, and ambiguous out-
put. Subordination of race to class, absence of descent rule, and terminological
efflorescence all contribute to this result (Harris 1964a, 1964b). Several different

indications of the absence of a common shared calculus should be noted: ego lacks a single socio-centric racial identity; the repertory of racial terms varies widely from one person to another (holding region and community constant); the referential meaning of a given term varies widely (i.e., the occasions in which one term rather than another will be used); and the abstract meaning of a given term (i.e., its elicited contrasts with respect to other terms) also varies over a broad range even within a single community.

Clarification of the nature of the ambiguity in the Brazilian "racial" calculus awaits the development of cross-culturally valid methods of cognitive analysis. In this essay I report on a preliminary attempt to employ a test instrument to elicit the Brazilian lexicon of "racial" categories and to provide a measure of referential ambiguity and consensus with respect to the elicited terms.

The instrument employed consisted of a deck of 72 full face drawings constructed out of the combination of three skin tones, three hair forms, two lip, two nose, and two sex types. All other features were held constant. The drawings were presented in a standardized random order. Each respondent was permitted to glance at the whole deck before being asked to identify the first drawing. Initiation of response was achieved without using terms presumed to be part of the domain. In general, it was found that a question involving a request for the *qualidade* or *typo* or *raça* of the person depicted in the drawing was adequate to prime a response process. The word *"cor"* was used as a last resort.

The deck was shown to 100 native born adult Brazilians, 39 women and 61 men, at sites in five different states: Bahia 28; Alagoas 30; Pernambuco 12; Ceará 7; Brasilia 8; São Paulo 15. From occupational data and place of birth, the respondents can be classified into the following socio-economic strata: urban upper class 18; urban middle class 31; urban lower class 13; rural upper class 12; rural lower class 26. On the basis of objective criteria (photo portraits were taken of most respondents), their phenotypes can be classified as predominantly caucasoid 42; marked caucasoid/negroid mix 32; predominantly negroid 16; predominantly caucasoid/negroid/indian mix 6; other types 4. The size of the sample and its nonrandom nature obviously render all conclusions highly tentative.

The lexical productivity of the graphic stimuli exceeded expectations. In a strictly lexical count, the sample responded with 492 different categorizations. Twenty-five percent of the sample responded with 15 or more categorizations, with the range extending from 2 to 70 categorizations per respondent, and the median at 9 per respondent.

This diversity of response is the salient characteristic of the cognitive domain under study. Although under other circumstances, as for example, scientific chemical or botanical terminologies, large numbers of terms correlate with precise usage, this is not the case with Brazilian racial categories. Disagreement appears to be a fundamental characteristic of the domain defined by these terms. The most frequently employed terms were, in fact, applied to almost all

of the drawings, and each of the drawings was identified by at least 20 different lexical combinations.

It would be incorrect to conclude that this is a totally orderless domain. On the contrary, cognitive models can be constructed which maximize the order inherent in the raw data. The problem, however, is to provide a model which maximizes the order without ignoring the pronounced tendency towards ambiguity, which is also a real aspect of the raw data.

With this objective in mind, analysis of the drawings in relation to response patterns was undertaken, utilizing only the 12 most commonly employed terms, each of which occurred more than 100 times. These terms are: *moreno, branco, mulato, preto, negro, alvo, moreno claro, cabo verde, claro, sarará, escurinho, escuro.*
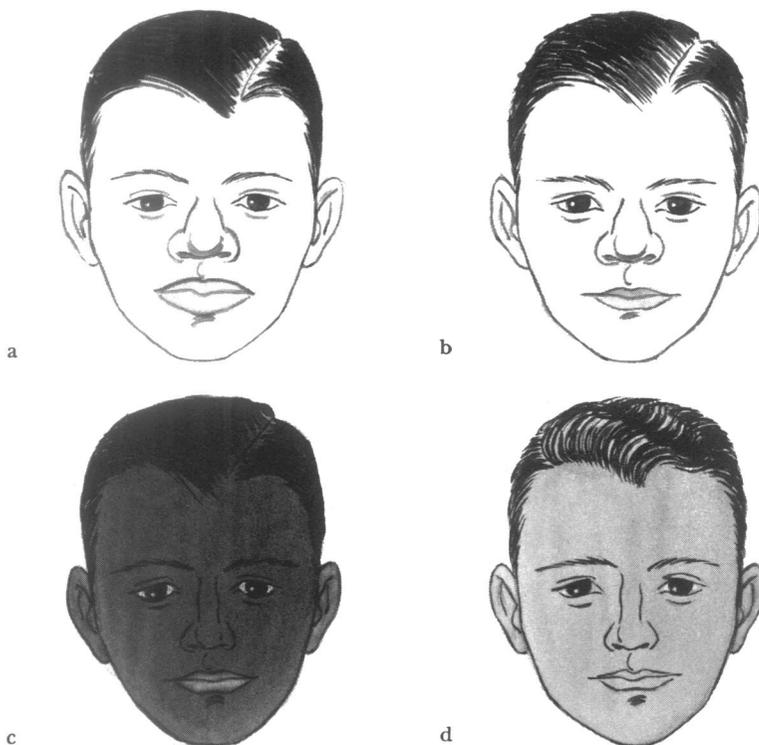
FIG. 1. Examples of male drawings, with their most frequent identifying terms: a) *alvo,* b) *claro,* c) *cabo verde,* d) *mulato.*

Figures 1 and 2 present the male and female drawings which were most frequently identified by some of the most popular terms.

It is apparent that each of the more popular terms has associated with it a particular combination of skin color, hair form, and nose and lip width. Were

this the only information available, these components could be used to define cognitive categories which would appear to be in complementary distribution in the manner of componential schemes now enjoying wide interest among anthropologists (see below). Thus a *branco* could be defined as an individual of male sex, light skin color, thin lips, straight to wavy hair, thin nose; a *preto,* as an individual of male sex, dark skin tone, thick lips, kinky hair, narrow or wide nose, etc.
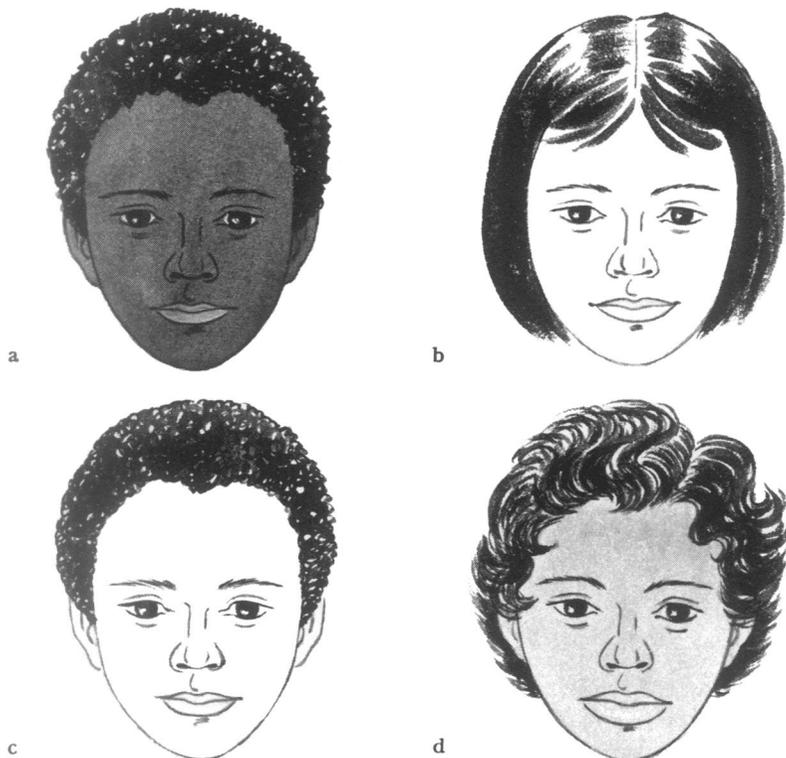
FIG. 2. Examples of female drawings, with their most frequent identifying terms: a) *preta,* b) *branca,* c) *sarará.* d) *morena.*

Such definitions, however, would neglect over 50 percent of the occasions which in fact furnished the stimuli for eliciting the terms *branco, preto,* etc. Moreover, such a scheme would leave no room for the fact that these terms for many Brazilians are not in complementary distribution. Indeed, almost every "key" term was found to be modifiable by another "key" term in the sample.

Among the more spectacular lexical combinations turned up by the presentation of the drawings, special note should be taken of:

branco africano	(white African)	mulato branco	(white mulatto)
branco amarelo	(yellow white)	mulato caboclo	(*)
branco indio	(Indian white)	mulato indio	(Indian mulatto)
branco mestiço	(mestizo white)	mulato mestiço	(mestizo mulatto)
branco nagó	(*)	mulato sarará	(*)
branco serará	(*)	negro branco	(white Negro)
caboclo preto	(*)	negro mulato escuro	(dark mulatto Negro)
claro branco	(*)	negro preto	(black Negro)
indio preto	(black Indian)	preto amarelo	(yellow black)
indio moreno	(*)	preto claro	(light black)
moreno caboclo	(*)	preto louro	(blond black)
moreno cabo verde	(*)	preto mestiço	(mestizo black)
moreno escuro claro	(*)	preto moreno	(*)
moreno mestiço	(*)	preto negro	(Negro black)
moreno preto	(*)	preto sarará	(*)
moreno sarará	(*)		

Attention should be directed toward the problem of translating these responses. Since the cognitive domain under discussion is radically unconformable with the experience of non-Brazilians, any gloss into English is misleading. To achieve operationally valid definitions of these terms, each should be paired with the drawings which elicited them. Nonetheless, since this would involve extravagant typographical displays on behalf of being precise about what is *ex hypotheosi* ambiguous, I have yielded to the expedient of glossing some of the conventionally more acceptable examples. The phrases marked with an asterisk contain terms for which any conventional glosses would obstruct the basic task of explicating the cognitive specialties of the Brazilian system.

The complexities involved in attempting any conventional gloss can be grasped by comparing curves of the frequencies with which particular pictures were paired with the most popular terms.

In Figure 3 the vertical axis was constructed by arranging the 36 male drawings in the descending order of frequency (from top to bottom) with which the term *branco* was applied to each. The horizontal axis indicates with what frequency each of the drawings was identified as either *branco, preto,* or both. The resulting curves show how certain drawings are called either *branco* or *preto* and seldom or never both *branco* and *preto;* while other drawings are termed both *branco* and *preto* with moderate to low frequency. The latter response is characteristic of almost half of the drawings. It should also be pointed out that the drawing which was most frequently termed *branco* was also the one drawing which was most frequently identified by any single term among all the drawings. Yet, the number of respondents calling that drawing by some term other than *branco* exceeded the number who identified it as *branco*.

In Figure 4 a similar procedure is employed to show the relationship between the frequency with which each of the female drawings was called either *branca* or *preta,* or both *branca* and *preta*. Although essentially similar to the
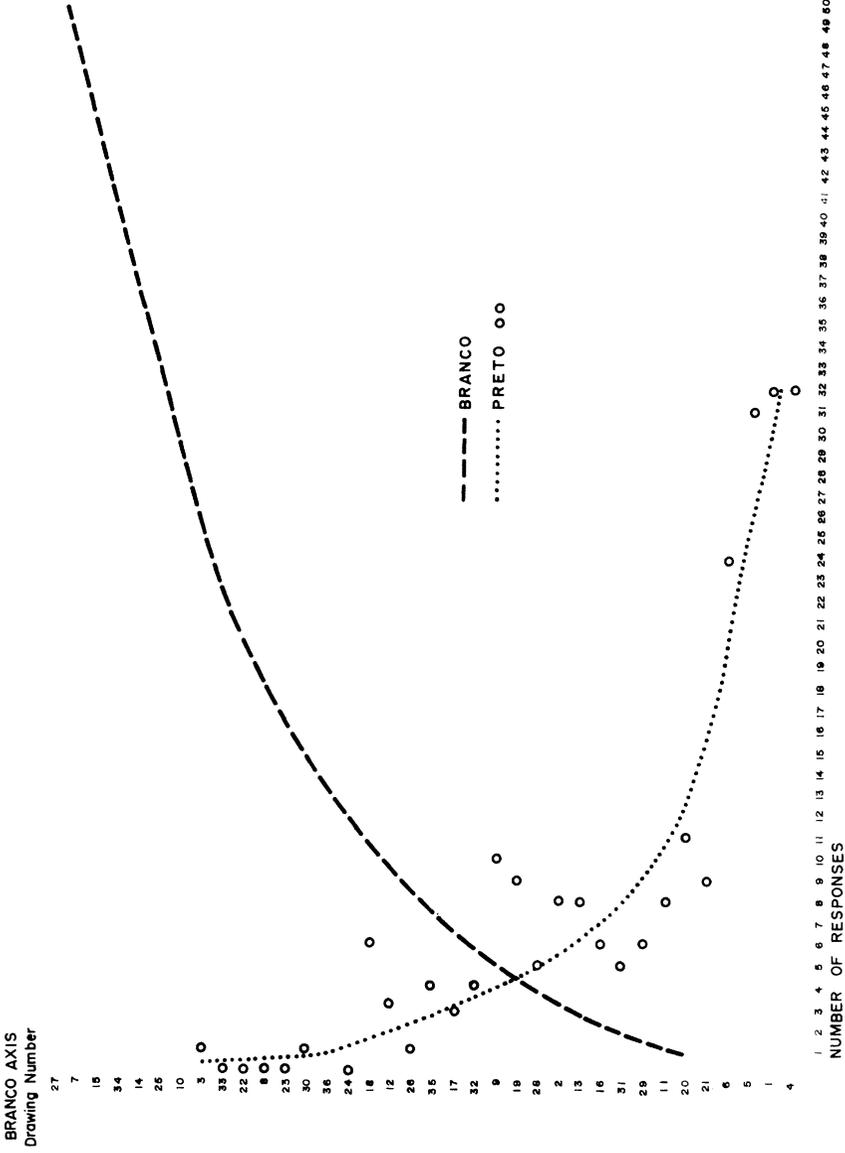
Fig. 3. *Branco-preto* comparison, male drawings.
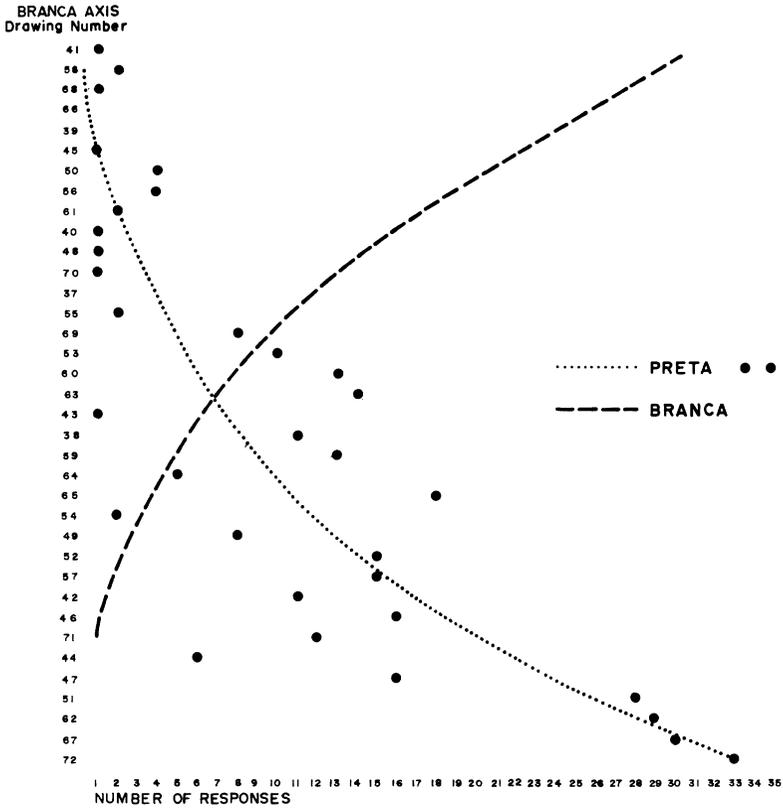
FIG. 4. *Branca-preta* comparison, female drawings.

branco/preto pattern, there appears to be somewhat greater overlap and scattering.

Figure 5 plots female drawings against male drawings for frequency of *branco* and *branca* identifications. In this graph, each female drawing is equated with the male drawing which it resembles in all diagnostics except sex. The parallel nature of the two curves indicates that an essentially similar calculus is at work in the case of both the male and female drawings, at least with respect to the *branco/preto* distinction.

In Figure 6 the frequency of *alvo* and *claro* identifications are plotted along the *branco/preto* axes. These terms show maximum contrast with *preto* and considerable similarity to *branco*. Nonetheless, we must guard against the conclusion that *branco/alvo/claro* are "synonyms" in some absolute sense. There are many operations which might be utilized to arrive at different measures of and, hence, different definitions of synonymy. One might insist, for example, that two terms were referentially equivalent only when they were applied to both similar and different stimuli with precisely the same frequencies. If *branco*
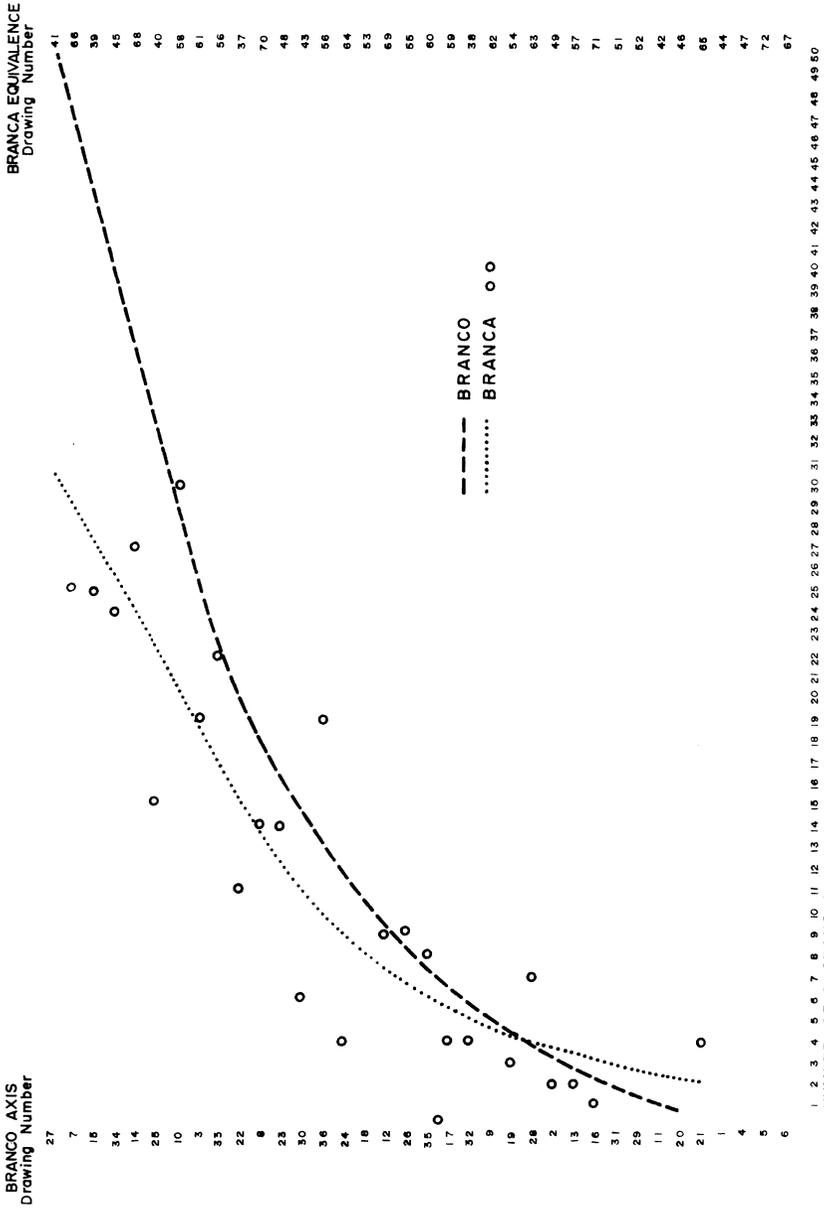
FIG. 5. *Branco-branca* equivalence, male-female comparison.

BRANCO AXIS
Drawing Number

ALVO   o o
CLARO   + +
PRETO
BRANCO

NUMBER OF RESPONSES
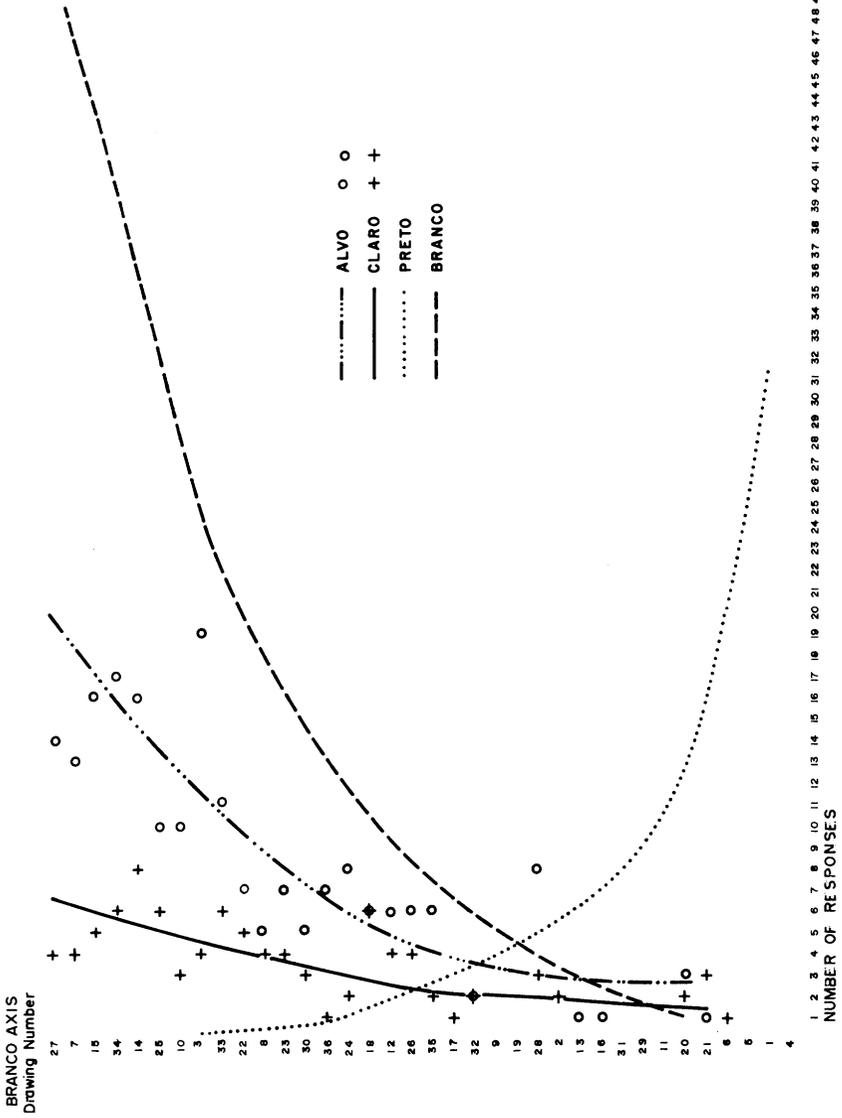
FIG. 6. *Alvo-claro* compared with *preto-branco*, male drawings.

and *alvo* mean precisely the same thing, why are they not elicited with precisely the same frequency? "Noise" introduced by the observational operations accounts for some, but not all, of the difference.

Figure 7 compares the terms *cabo verde, alvo, sarará. Cabo verde* and *sarará* tend to occur in complementary distribution with respect to each other, yet the relatively low overall frequency with which they occur limits our ability to confirm the trend. *Alvo,* however, overlaps markedly and systematically with both *cabo verde* and *sarará.* Since it has already been shown that *branco, preto, alvo,*
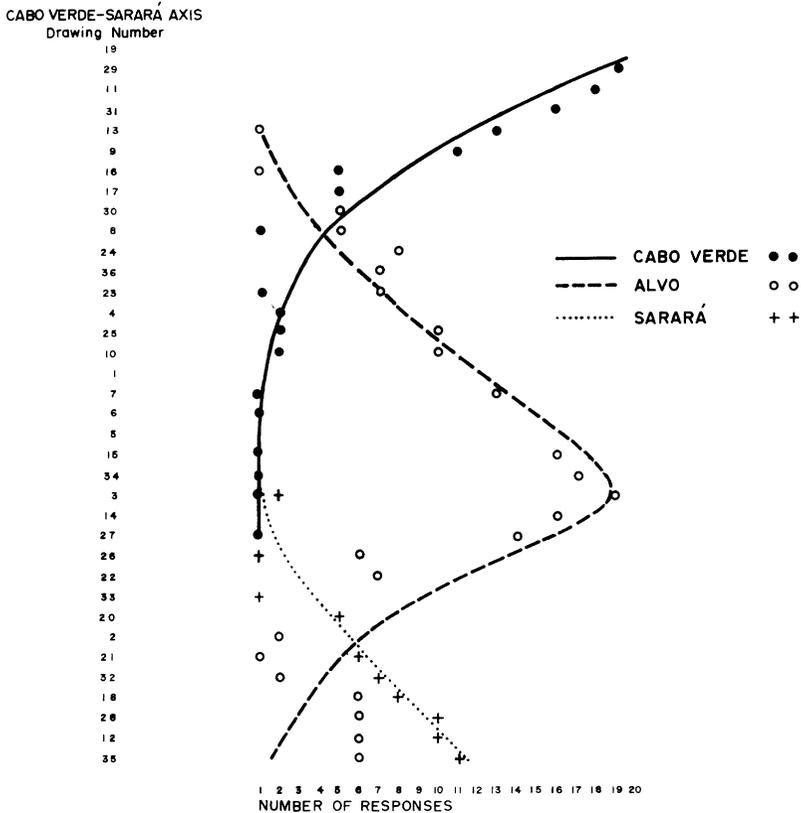
FIG. 7. *Cabo verde-alvo-sarará* comparison, male drawings.

and *claro* are systematically related along the same set of dimensions, we now can confirm the existence of a calculus by which the probability that a given drawing will be identified as either *alvo, branco, claro, preto, cabo verde,* or *sarará* can be stated.

With the generous assistance of Dr. Douglas White, I have attempted to discover the patterned relationship between these six terms and *moreno, moreno claro, moreno escuro,* and *mulato.* The relationship between *mulato* frequencies
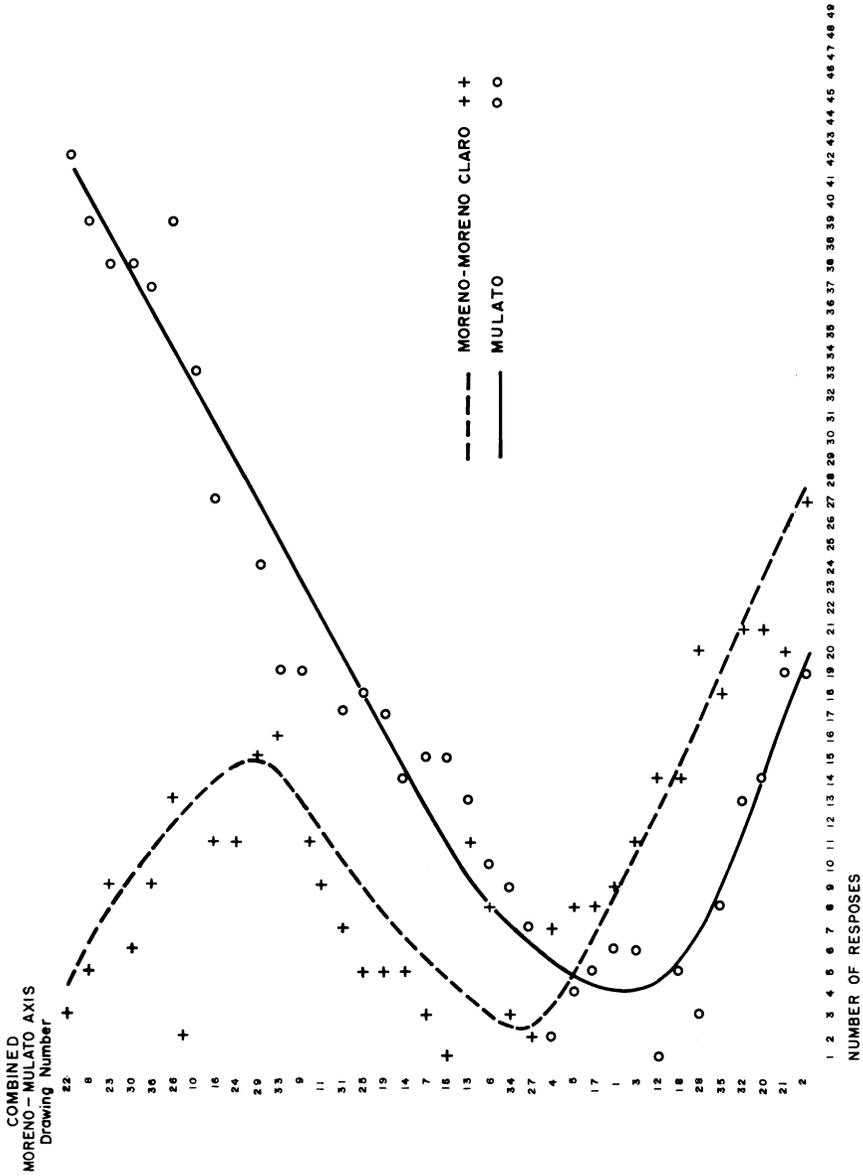
FIG. 8. *Moreno-mulato* comparison, male drawings.

and the sum of *moreno* and *moreno claro* frequencies was found to be that depicted in Figure 8. All of our attempts to relate these curves to the *branco/preto* axes have been unsuccessful. If there is an orderly principle by which *morenos* or *mulatos* are distiguished from *brancos, pretos, serarás, alvos, claros,* and *cabo verdes,* it is an extremely complex one. At the moment it seems as if Brazilians will call almost any combination of facial features by the terms *moreno* or *mulato* with a high but unpatterned frequency.

It should be noted, in conclusion, that this analysis of the calculus of "racial" identity in Brazil has been carried out in conformity with an epistemological and methodological model which challenges certain assumptions about cognitive domains now popular among anthropologists. According to the strategists of the New Ethnography (Sturtevant 1964; Frake 1964; Hammel 1965; Colby 1966) culture is the manifestation of a finite shared code, the code being a set of rules for the socially appropriate construction and interpretation of messages. This school has published numerous descriptions of what are alleged to be shared finite sets of rules which account for the terminological distinctions in several different domains. The principal domains studied have been: kinship terminologies (e.g., Hammel 1965; Lounsbury 1965; Goodenough 1965a; Romney and D'Andrade 1964; and Wallace and Atkins 1960); deference patterns (Goodenough 1965b); disease categories (Frake 1961); color categories (Conklin 1955); firewood categories (Metzger and Williams 1966); and the spacing of house sites (Frake 1962). The ambiguous output of the Brazilian racial calculus casts doubt on the assumption that the codes or rules associated with the abstract distinctions and actual identification of many classes of phenomena constitute intersubjectively uniform sets. Equally plausible is the assumption that actual classificatory performance is the expression of indeterminate and variable "competence" (cf. Chomsky 1966:4). This assumption is especially attractive if the prime social function of the rules is not the maintenance of orderly distinctions but the maintenance or even maximization of noise and ambiguity. Brazilian racial categories appear to constitute such a domain. Lacking caste distinctions based on racial identity, Brazilian social structure contains no evident practical requirements for achieving high levels of intersubjective "competence" with respect to raciological taxonomies. On the other hand, given the highly stratified nature of Brazilian society, there may be a positive, conservative structural reason for maintaining and maximizing the noise and ambiguity in the calculus under discussion. Objectively, there is a correspondence between class and race in Brazil (cf. Fernandes 1964); the more negroid the phenotype, the lower the class. Prevention of the development of racial ideology may very well be a reflex of the conditions which control the development of class confrontations. In the United States, racism and racial caste divisions have split and fragmented the lower class. In Brazil, racism and caste formation would unite the lower class. "Black power" in the United States lacks the revolutionary potential of the preponderant mass; "black power" in Brazil contains this potential. The ambiguity built into the Brazilian calculus of racial identity is thus, speculatively at least, as intelligible as the relative precision with which blacks and whites identify each other in the United States.

BIBLIOGRAPHY

AZEVEDO, THALES DE
    1955   *As Elites de Côr; un Estudo de Asencão Social.* São Paulo: Companhia
            Editora Nacional.

CHOMSKY, NOAM
    1966   *Cartesian Linguistics.* New York: Harper and Row.

COLBY, B. N.
    1966   Ethnographic Semantics: a Preliminary Survey. *Current Anthropology*
            7:3-32.

CONKLIN, HAROLD C.
    1955   Hanunóo Color Categories. *Southwestern Journal of Anthropology* 11: 339-
            344.

FERNANDES, FLORESTAN
    1964   *A Integração do Negro à Sociedade de Classes.* São Paulo: Faculdade de
            Filosofia, Ciências e Letras da Universidade de São Paulo.

FRAKE, CHARLES
    1961   The Diagnosis of Disease among the Subanun of Mindanao. *American
            Anthropologist* 63:113-132.
    1962   Cultural Ecology and Ethnography. *American Anthropologist* 64:53-59.
    1964   "Notes on Queries in Ethnography," in *Transcultural Studies in Cognition*
            (ed. by A. K. Romney and R. G. D'Andrade), pp. 132-145, *American An-
            thropologist,* Special Publication, vol. 66, no. 3, part 2.

GOODENOUGH, WARD
    1965a "Yankee Kinship Terminology: a Problem in Componential Analysis," in
            Formal Semantic Analysis (ed. by E. A. Hammel), pp. 259-287. *American
            Anthropologist,* Special Publication, vol. 67, no. 5, part 2.
    1965b "Rethinking 'Status' and 'Role': Toward a General Model of the Cultural
            Organization of Social Relationships," in *The Relevance of Models for
            Social Anthropology* (ed. by Max Gluckman and Fred Eggan), pp. 1-22.
            New York: Praeger.

HAMMEL, EUGENE
    1965   "A Transformational Analysis of Comanche Kinship Terminology," in
            Formal Semantic Analysis (ed. by E. A. Hammel), pp. 65-105. *American
            Anthropologist,* Special Publication, vol. 67, no. 5, part 2.

HARRIS, MARVIN
    1956   *Town and Country in Brazil.* New York: Columbia University Press.
    1964a Racial Identity in Brazil. *Luso-Brazilian Review* 1:21-28.
    1964b *Patterns of Race in the Americas.* New York: Walker and Co.

HARRIS, MARVIN, AND CONRAD KOTTAK
    1963   The Structural Significance of Brazilian Racial Categories. *Sociologia* 25:203-
            209.

KOTTAK, CONRAD
    1966   *The Structure of Equality in a Brazilian Fishing Community.* Unpublished
            Ph.D. dissertation, Columbia University, New York, New York.
    1967   Race Relations in a Bahian Fishing Village. *Luso-Brazilian Review* 4:35-53.

LOUNSBURY, FLOYD
    1965   "Another View of the Trobriand Kinship Categories," in *Formal Semantic
            Analysis* (ed. by E. A. Hammel), pp. 142-185. *American Anthropologist,*
            Special Publication, vol. 67, no. 5, part 2.

METZGER, DUANE, AND GERALD WILLIAMS
    1966   Some Procedures and Results in the Study of Native Categories: Tzeltal
            "Firewood." *American Anthropologist* 68:389-407.
PIERSON, DONALD
    1942   *Negroes in Brazil.* Chicago: University of Chicago Press.
    1955   "Race Relations in Portuguese America," in *Race Relations in World
            Perspective* (ed. by Andrew W. Lind). Honolulu: University of Hawaii
            Press.
ROMNEY, A. K., AND R. G. D'ANDRADE
    1964   "Cognitive Aspects of English Kin Terms," in *Transcultural Studies in
            Cognition* (ed. by A. K. Romney and R. G. D'Andrade), pp. 146-170.
            American Anthropologist, Special Publication, vol. 66, no. 3, part 2.
STURTEVANT, WILLIAM
    1964   "Studies in Ethnoscience," in *Transcultural Studies in Cognition* (ed. by
            A. K. Romney and R. G. D'Andrade), pp. 99-131. *American Anthropologist,*
            Special Publication, vol. 66, no. 3, part 2.
WAGLEY, CHARLES (ED.)
    1952   *Race and Class in Rural Brazil.* Paris: UNESCO.
WALLACE, A. F. C., AND J. ATKINS
    1960   The Meaning of Kinship Terms. *American Anthropologist* 62:58-80.

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