Tagalog Concepts of Causality: Disease

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This is the third in a series of articles on cognitive mapping in the Tagalog area.[1] The research on which these papers are based was conducted from 1966 through 1968 in the municipality of Marilao, Bulacan. Within Marilao, three sites were studied: the poblacion, or town proper, and the two barrios of Loma de Gato and Tabing Ilog. In each of the three sites a 20-per-cent sample of household heads or their delegates was drawn (Loma de Gato, 33, Tabing Ilog, 43; poblacion, 90; total, 166). The samples were drawn randomly, but non-native speakers of Tagalog were replaced.

As stated in an earlier paper (Himes 1967:138–40), Marilao proved to be an advantageous site for several reasons, one of which is the distribution of medical personnel and facilities. Loma de Gato, some seven kilometers distant from the population center, does not have a health clinic or resident physician, but a nurse employed in Manila does live in the barrio. As far as this writer knows, there is only one practicing herbalist (*albularyo*) residing in Loma, although many older persons possess a degree of herb lore that approaches the specialist's knowledge. Loma, moreover, contains within its boundaries several acres of woodland, mostly secondary forest, which is rich in many of the plants needed in herbalist curing.

In contrast to this, residents of the town proper and its neighboring barrios such as Tabing Ilog enjoy ready access to doctors, dentists, pharmacies, and a health clinic, as well as to all types of traditional healers. Many of the plants, vines, grasses, and trees essential to the rural pharmacopoeia do not grow in the more heavily settled area. When this fact is added to the availability of doctors and pharmacies, it contributes to a preference for Western medicine, even among herbalists, in cases which rural residents, even laymen, would treat with herbs. One further note on the availability of medicines is in order: it is possible to buy nearly all patent medicines in a pharmacy without a doctor's prescription. Thus, when an informant is asked how a certain disease is treated, he is likely to answer in terms of highly specific pharmaceutical names. The same person will state that he consults no one in particular when the disorder in question befalls him. The reason for this is a prior, once-for-all-time

consultation with a doctor, a nurse, a pharmacist, or some sufferer of the disease who suggested the medication. Once the brand name of the medication is known it can be purchased over the counter without a prescription.

Purpose and Procedures

The purposes of the research are ethnographic and theoretical. The former, because little has been written in the past half-century on the Christian lowlanders of Luzon, whereas a great number of studies has been made among the mountain peoples of Northern Luzon. My theoretical interests lie primarily in the linguistic aspects of cognition, which I take to mean the ways in which a group of people perceive the universe they live in. More specifically; I am interested in the structuring of lexical domains and the relationship between the linguistic structure and that part of the universe to which the lexicon is applicable. In an attempt to discover similarities and differences in domain structuring, several domains of relative unrelatedness were studied, namely, kinship terminology, disease, property, and time. With reference to the cognitive domain of disease, the questions to be answered are these:

(1) What is perceived as disease, and is this a culturally valid domain?

(2) What are the diseases which are perceived and named, and can these diseases be ranked somehow with regard to cognitive saliency?

(3) For each specific disease, what causes are attributed?

(4) Is there a structure within the disease domain which is similar to that found in other domains? If so ...

(5) Does this structure tell us anything about notions of causality or about some more general thought process concerning relationships?

I shall attempt to answer these questions in the order given, after a brief statement on the techniques that I employed. Although the approach varied somewhat from one domain to another, the overall bias is that of ethnoscience, more evident perhaps in the eliciting procedures than in analytical techniques. An eliciting procedure differs from an analytical technique largely in the extent to which the informant is involved; both involve making clear the procedure used and following logical steps. Componential analysis is one analytical technique. Its usefulness, I feel, is limited to lexically bounded domains, such as kinship terminology of reference.[2] Even in such a domain, however, the analysis is easier to perform and has more meaning before the culture is learned thoroughly, just as it is easier to phonemicize a language before one has become very familiar with it. With regard to eliciting procedures, on the other hand, ethnoscience serves a more generally useful function. If the goal of the investigation is the discovery and elucidation of a belief system, caution must be

exercised to avoid biasing the data. Open-ended questioning which focuses on the taxonomic structure provides for this caution while still eliciting responses comparable from one person to another.

Most of the data were gathered in the interview situation.[3] However, all observations of therapy made during the course of the research indicated that what people said and what they did were not very far apart. It is, of course, impossible to ascertain if a person truly believes what he says about the etiology or cause of a disease. But without prying into the little black box of a man's mind one must take most assertions as parts of a belief system, rather than elements of a cleverly conceived fraud.

The order of events in disease interviews was as follows. First the informant was asked to mention disease names in free recall. The terms were then sorted according to whatever criteria the informant wished to use. Finally a more-or-less rigid schedule was followed to elicit specific data about each disease: diagnosis and diagnostician, etiology, therapy and therapist. In these interviews, as in all the others, the informant was free to choose whichever language he preferred, Tagalog, English, or a combination of the two.

Identification, Grouping, and Causes of Disease

That there is a culturally valid domain more or less equivalent to that of disease is unquestionable. When asked to discuss this domain or to recall specific disorders, informants evidenced no hesitation or confusion whatever. It is, moreover, a common theme of conversation, discussion, and argument. There is a term, *sakit*, which covers any and all phenomena considered 'disease' in English. This is not a one-to-one correspondence, however, since broken bones, snake bite, and all other disorders are as much sakit as are pneumonia and ringworm. Sakit is, then, any physiological or mental disorder, or abnormal condition of the mind or body. At other levels of the taxonomic hierarchy and in other grammatical structures, the word sakit means 'pain' as opposed to 'well-being' (*lusóg*) and 'general debility' (*hina*), and it means 'general pain, ache' as opposed to 'sharp pain' (*hapdi, kirót*) and 'numbness' (*manhid, ngalay*). At the topmost level, with the meaning of disorder, sakit contrasts with the cover terms of other domains, such as *sala* or *kasalanan*, which includes 'sin,' 'crime,' 'error,' and 'breach of etiquette.' Sakit has reference to disorders located in the body. The soul (*kaluluwá*) is not affected by sakit; it is affected by kasalanan. Medicine (*gamot*) is the primary treatment for sakit; prayer and the sacraments of the Roman Catholic Church are among the primary treatments for kasalanan. The soul is the major concern of the churches and the clergy, the body is the concern of the medical professions and professionals. Figure 1 represents a portion of the taxonomic structure relevant to the uses of sakit.

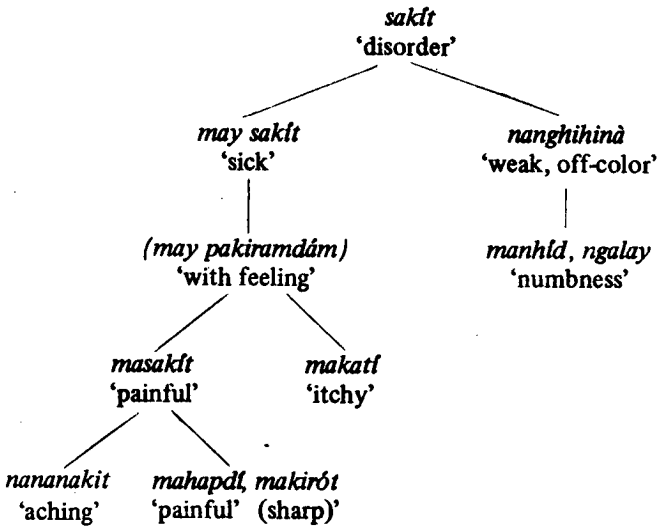

Figure 1. A portion of the taxonomic structure, in tree form, relevant to *sakit*

The purposes in asking informants to name disorders in free recall were: (1) to satisfy my curiosity as to what people first thought of when hearing the word sakit; (2) to observe the frequency with which specific disorders were mentioned; and (3) to prevent a skewing of the data in favor of what the outsider may want to hear. Frequency and saliency of recall tend to coincide; that is, those diseases most often recalled tend to be recalled first. The 10 most frequently recalled diseases for each barrio appear in Table 1. My third reason for approaching the disease domain open-endedly needs no explanation. For if I were to supply disease names myself, asking the informant to discuss disorders such as 'bewitchment and wandering-wind,' he might well react in one of two ways. Either he would ascribe to me an interest in a particular kind of disorder (superstitious diseases, diseases carried on the wind, and so on) or he might react as would the average New Yorker if asked to explain the humors and the vapors.

The total number of disorders recalled is approximately 235 (Loma, 115; Tabing Ilog, 116; Poblacion, 198). Most of these disorders are well known throughout the world; a few are peculiar to Southeast Asia, to the Philippines, or to the Central Tagalog area. These will be explained as they are mentioned.

Table 1

Ten most frequently recalled disorders mentioned by informants in Marilao (Bulacan) Poblacion and Barrios Loma de Gato and Tabing Ilog, 1968.

Rank	*Loma de Gato*	*Tabing Ilog*	*Poblacion*
1	influenza	fever	influenza
2	cold	tuberculosis	tuberculosis
3	fever	influenza	fever
4	malaria	cold	cancer
5	ulcer	cancer	pneumonia
6	tuberculosis	ulcer	ulcer
7	pneumonia	measles	high blood pressure
8	El Tor*	chicken pox	cold
9	appendicitis	stomachache	asthma
10	asthma	appendicitis	heart disease

*El Tor is an infectious gastrointestinal disease, similar in symptoms to cholera.

After he had mentioned disorders in free recall, the informant was asked to sort the recalled terms into piles of terms which belonged together, using whatever criteria he wished. This test had been developed in the earlier kinship investigation, where its major purpose was to elicit sorting criteria which might be identified with the components of a componential analysis. The sorting test was readily accepted by informants, where other tests (triads test, for example) were rejected, and the results proved to be productive.

With reference to disease, the most frequently used sorting criterion is location on the body (and systematic groupings). Disorders are grouped together and separated from others because they are all on the skin, or inside the body, or in the region of the head, or all have relevance to the blood, and so on. A large number of less frequently mentioned criteria are also used; these include prevalence, scientific v. superstitious diseases, diseases that must be treated by a doctor v. those which may be treated by an albularyo or by oneself, and many others. Another sorting criterion, more often used than the latter and only slightly less common than location, is one which involves a progression of disorders. This is quite often a statement of cause and effect: one disease leads to another or to others. The progression need not be causal, however; in some cases it is merely a statement that several diseases manifest first a single symptom. For example, fever precedes measles and flu, or gastroenteritis, ulcer, and ectopic pregnancy originates in stomach ache. That many people group dis-

orders in terms of a progression has proved useful in the analysis of causal relationships.

Even more important, most people do not use a single criterion in the sorting, but rather a combination of several. Thus, a list of seven terms may be grouped into four piles:

Pile	*Term*	*Reason given*
1	fever	"usually leads to flu"
2	headache cough asthma	"they co-occur"
3	measles hives	"appear on the skin"
4	cold sore	"affects children"

None of the sorting criteria–location, co-occurrence, age of patient, progression–are used throughout the sort, but rather the groupings are made (on the basis of whatever criteria) and then rationalized according to the most salient characteristic shared by the disorders in the groups. This does not represent a series of binary divisions, such as internal v. external, children v. adults. Instead, a decision is made, and it is apparently based on a number of criteria handled simultaneously.

Moreover, the rationale for having created a group of terms is often pluralistic. Thus, a group containing measles, chicken pox, breast tumor, and dandruff may be reasoned out as follows: they all appear on the outside of the body, they are all caused by neglect or unsanitary habits, and they all contain fever. One may well agree that fever does not necessarily accompany dandruff, and that part of this explanation is therefore incorrect. However, equivalence occurs frequently in the data and, in fact, in Philippine culture generally.[4] Stated as a rule, it takes the form: Things (or people) which are associated with one another in one way are equated in another. This rule indicates that once a grouping is made, its differentiation from other groupings no longer being necessary to explain, some important thing may be said about the group whether or not it is true of each group member.

Before going further into the patterns followed in the sorting exercise, I would like to discuss causes attributed to specific diseases. This information is drawn principally from the third part of the interview procedure, the schedule designed to elicit certain facts or beliefs about each of the disorders recalled: the description, etiology, therapy, diagnostician, and therapist. For each disorder recalled, the informant was asked the cause, or *dahilán.* Answers to this question may be grouped into four categories.

First, the cause is not known, the informant does not know the cause, or the disorder "just appears," "just comes out," and so on.

Second, the cause is located in some specific incident or condition, such as snake bite, heredity, accident, eating bad food, contact with bad women, and so forth.

Third, the disorder comes from another disorder. Here a problem arises. Although the question calls for a cause (*dahilán* ⟨ *dahil* 'because' + *-an* 'locative indicator'), informants often answered in terms of an origin or beginning, *pinagmulán* (⟨ *mulâ* 'beginning,' source' + *pag*-WR-*an* with *-in-* 'completed action, object focus affix set denoting "to do to" ').[5] Thus, a likely answer to "What causes flu? " is *"sipón ang pinagmulán"*: "common cold is the source." When this term pinagmulán is understood, then it is reasonable to consider that a single disease such as malaria may have several origins such as mosquito bite, fever, cold weather, and so on. From the reverse vantage point, a single disorder or condition may result in more than one disease. When this idea is expressed, the words used are *mauwí* 'to make one's home' or *uuwián* '(future) going-home place' and *tuluyín* 'to go on until (some point beyond the destination)'. Thus fever may 'make its home' in either malaria or meningitis, and either T.B. or bronchitis or whooping cough is the "going-home place" of cough.

Fourth, the most frequently mentioned cause of specific disorders is a combination of two conditions, one of which is a state of the body and the natural phenomenon. The principle involved is the Chinese menu choice: one from column A and one from column B. The two most common states of the body mentioned are hunger and fatigue, although others do occur: the state of having just awakened, being overheated, and so on. Column B is composed of a number of natural phenomena and the exposure of the body to them; the most common are being rained on, exposure to dew, the passage of time, exposure to heat or cold, and exposure to the wind. If the body is more or less in a normal state, and the natural phenomenon occurs suddenly, sickness may follow. In these cases, the suddenness or unexpectedness of the occurrence is either made explicit (*biglâ* 'suddenly') or it is expressed in the affixes *ma*-WR *-an*, a variant of the object focus affix *-in-* meaning 'to have done to oneself suddenly, involuntarily or unexpectedly.' Thus, a cause of the common cold is *náulanan akó*: 'I was suddenly or unexpectedly rained on.'

To summarize what has been said about the causes of specific diseases, several patterns are noticeable. Either a single cause is indicated or no cause is indicated. In the majority of cases, the disease is the outcome of some other disorder or disorders, or it is the end result of a situation in which the body encounters some natural phenomenon in an unexpected and/or deleterious

way. A single disease may have its origins in more than one other disorder, and a single disease may lead to more than one disorder. When a preexisting disorder is not involved, then, a condition of the body, such as hunger or fatigue, together with an encounter with something outside the body, such as rain or heat, is considered the origin of the disorder. The body, being otherwise normal, encounters the natural phenomenon unexpectedly or suddenly.

The question may arise here as to whether there is a substantial difference between this concept and the Western notion of having a low resistance to disease. "Low resistance" in the West is caused by lack of sleep improper or irregular eating habits, excessive use of alcoholic beverages, and the like. The Westerner, it appears to me, is as much predisposed to illness under these conditions as is the Filipino to those singled out as disease causes: hunger *plus* getting rained on, fatigue *plus* exposure to dew, just having awakened *plus* getting wet, and so on. The difference between the two is one of emphasis and not one of kind. In the West, it is believed that low resistance, together with coming in contact with whatever happens to be going around–flu, cold, or whatever–will lead to illness. The Filipino emphasizes not the germs plus low resistance but rather the correct timing (*tiyempo-tiyempo*) of the two most important elements in the development of low resistance–internal predisposition and external mitigating circumstances.

This does not mean that the germ theory of disease causation is totally absent in the Tagalog belief system, although it may have a distinctly Filipino flavor. Some informants do mention 'germs' and 'virus' (English words) or *krobyo* and *mikrobyo* (⟨ Spanish *microbio*) or *maliliit na hayop* ('small animals, insects, germs') as disease causes. The traditionally recognized cause of some skin diseases, some intestinal parasites, and some diseases localized is the combination of fatigue and stepping in dirt or mud; in the present belief system of some individuals, these disorders are caused by stepping on germs while fatigued.

Disease Causation and Worldview

The patterns of disease causation may be diagrammed as follows:

(1) $? \rightarrow X$ The cause of disorder X is not known.

(2) $Y \rightarrow X$ The disorder X is the direct result of a specific incident Y; e.g., Vietnam Rose is the direct result of contact with bad women.[6]

(3) $\left|\begin{matrix}A\\B\\C\end{matrix}\right| \rightarrow X$ The disorder X is
disorder A and/o
malaria comes fr
of seasons.

(4) $A \rightarrow \left|\begin{matrix}X\\Y\\Z\end{matrix}\right|$ The disorder X *o*
sults from disord
'make its home'

(5) $A + B \rightarrow X$ The state of the b
ture B, leads to di
getting wet, causes
ish, to cause spasm

(6) $B + S \rightarrow X$ The state of natu
lead to disorder
weather may lead

To these should be added another pat
an illness or performs an irresponsible acti
state:

(7) $A + I \rightarrow X$ The state of the b
action on the par
order X; e.g., *pilay*
shirt when one is
lifting a heavy ob

These patterns (Nos. 1–7) are not for t
(with the exception of No. 1) they may b
be expressed graphically:

(8) $\left|\begin{matrix}A\\B\\C\end{matrix}\right| \rightarrow \left|\begin{matrix}X\\Y\\Z\end{matrix}\right|$ Disorder X *or* dis
by or proceed fr
B and/or C. For
ache may result f
when tired; gettin
ping in water wh
one is overheated
washing one's feet
ly upon awakenin

(3) $\left|\begin{matrix}A\\B\\C\end{matrix}\right| \rightarrow X$ The disorder X is caused by, and/or progresses from, disorder A and/or disorder B and/or disorder C; e.g., malaria comes from mosquito bite and/or the change of seasons.

(4) $A \rightarrow \left|\begin{matrix}X\\Y\\Z\end{matrix}\right|$ The disorder X *or* the disorder Y *or* the disorder Z results from disorder or symptom A; e.g., fever may 'make its home' in measles or meningitis or malaria.

(5) $A + B \rightarrow X$ The state of the body A, together with the state of nature B, leads to disorder X; e.g., hunger, together with getting wet, causes *pasmá* (< Spanish *pasmar* 'to astonish, to cause spasms').[7]

(6) $B + S \rightarrow X$ The state of nature B, if it occurs suddenly (S), may lead to disorder X; e.g., sudden exposure to cold weather may lead to whooping cough.

To these should be added another pattern, wherein the individual neglects an illness or performs an irresponsible action when the body is in an abnormal state:

(7) $A + I \rightarrow X$ The state of the body A, together with neglect or some action on the part of the individual (I), leads to disorder X; e.g., *pilay-hangin*[8] results from removing one's shirt when one is overheated; miscarriage results from lifting a heavy object during pregnancy.

These patterns (Nos. 1–7) are not for the most part mutually exclusive, but (with the exception of No. 1) they may be simultaneously true. This idea may be expressed graphically:

(8) $\left|\begin{matrix}A\\B\\C\end{matrix}\right| \rightarrow \left|\begin{matrix}X\\Y\\Z\end{matrix}\right|$ Disorder X *or* disorder Y *or* disorder Z may be caused by, or proceed from conditions or disorders A and/or B and/or C. For example, pasma or cold or stomachache may result from cold, rain, or stepping in water when tired; getting caught in the rain when tired; stepping in water while hungry; stepping in water while one is overheated; ironing clothes when one is tired; washing one's feet when tired; and bathing immediately upon awakening.

The following pattern does not normally occur:

(9) $\left|\begin{matrix}\text{not-A}\\ \text{B}\\ \text{not-C}\end{matrix}\right| \rightarrow \left|\begin{matrix}\text{not-X}\\ \text{Y}\\ \text{not-Z}\end{matrix}\right|$ Condition B is the sole cause of disorder Y; disorder Y is the only disorder caused by condition B.

The expression "not normally" is used advisedly. There are some informants who do express themselves in terms of necessary and sufficient conditions as disease determinants. These people tend to have a high educational attainment or a thorough exposure to city life or both. They include lawyers, real-estate agents, nurses and medical technicians, the wife of a doctor, and a sprinkling of interested nonprofessionals.

The patterns expressed in No. 4 and No. 8 use the "exclusive or" with reference to disease outcomes. Fever may 'make its home' *either* in malaria *or* in meningitis. In a given case of fever, the outcome will be one or the other, but not both. When both disorder X and disorder Y can occur as the result of the same causes in a single case, they are combined into one term, one disease.

(10) A + B = AB Disorders A and B together constitute disorder AB. Thus, when fever and cold co-occur, they are considered one disease 'fever-cold' (*lagnát* + *sipón* = *lagnat-sipón*)[9]. Bronchitis (*brongkitis*) plus pneumonia (*pulmonyá*) constitutes one disease, *brongkonomonya.* Vomiting, together with diarrhea, is called 'vomiting and diarrhea' (*nagtataé't nagsusuka*), or *arriba y abajo* (< Spanish 'up and down'), or 'gastroenteritis.'

The pattern expressed in No. 8 still stands as the primary one.

Finally, mention should be made of fatalism. Some responses indicate, either explicitly or implicitly, that fate or chance governs the occurrence of sickness. Some diseases just occur, they cannot be avoided; some people are merely luckier than others in the enjoyment of good health. These responses tend to be heard in reference to childhood diseases and to disorders such as the common cold, tumors, cancers, and other conditions which continue to puzzle Western medicine men.

Some people, Filipinos and Westerners alike, tend to draw the fate line closer to the disease than do others. In answer to the question "Why did your child contract malaria?" a man may attribute the disease immediately to fate or to the will of God. Often this cannot be pursued further; God, after all, works in wondrous ways. Others may attribute the disease to the bite of an affected

anopheles mosquito, the bite in this case being random or chance. Or the mosquito bite may be the result of a walk in the woods at the proper (or improper) time of the year, and so on.

A related problem may be faced here also, that of whether Tagalogs should be categorized as having a personalistic or mechanistic worldview. It has been claimed by social scientists in and about Manila that Filipinos resemble many peoples throughout the world in maintaining a belief that the world and particularly the fate of man are governed by personal beings which continually intervene or meddle in the affairs of men. In some parts of the Philippines, disease is blamed on ancestral spirits who afflict their descendants for having neglected a ritual or for some similar reason. In other areas, disease is more often attributed to nature spirits who take offense at something done by mortals (neglecting to leave the first fruits of the hunt or fishing expedition, urinating in the wrong place, and so on) or who inflict discomfort on man simply because it is in their nature to do so.

In Marilao, at least, such beliefs appear to be absent. The only purposeful disorder inflicted by a spirit is *lamán-lupâ* or *námatandâ*.[10] This is caused by having accidentally harmed a forest spirit in an anthill (*nunó sa punsó*), tree, or vine. The only purposeful disorder caused by man, other than those resulting from disputes and the like, is bewitchment.[11]

Accidental causation, either by man or by nature, is overwhelmingly the norm. A case in point is the disorder known as *uhiyá* or *usóg* (when adults are afflicted) and *bales* (when children are afflicted).[12] The word *uhiyá* is derived from the Spanish *ojear*, which means 'to eye' or 'to inflict the evil eye (on someone).' In Marilao, the person is affected by being greeted by someone when he is hungry and overheated. The person who causes the affliction is quite unaware of it. What came to the area as an intentionally induced disorder has become a fortuitous combination of events or conditions.

Disorders caused accidentally by creatures other than man fall into the category of snake bite, virus infection, and the like. Those caused by nature are myriad. Wind, rain, cold, and all the conditions mentioned above fall into this category. In addition, many diseases are attributed vaguely to *panahón*, which means any number of things referring to transience: time, weather, season, era, menstrual period, and so on. *Panahón*, with all its components, is quite impersonal. Transience is in the nature of the universe and it is indifferent to man and to individual men. Further, belief in immanent justice appears to be limited to small children (cf. Flores 1964). Statements to the effect that one is punished or rewarded immediately in accordance with his behavior are completely lacking from the data. Also, statements to the effect that one gets rained on because somebody up there doesn't like him are quite absent. Getting rained on is one of those things that sometimes happen on an otherwise nice day.[13]

The Tagalog, then, does not see himself as singled out, because of his actions or in spite of them, to be the object of suffering inflicted by greater forces. He views himself instead as a part of the cosmos as likely to be rained on as is a mango tree. He may also be a causal agent since there are some things in the environment which can be changed. The Tagalog may not possess the scope—or the audacity—to try changing the weather but, with care and prudence, he can usually avoid its bad effects. This viewpoint appears to me to be as mechanical as that attributed to the Westerner. The difference lies not in whether or not the things which control the world are personal or mechanical, but rather in whether man is superior, inferior, or equal to them. Whereas the Westerner may see himself as superior to his environment, the Tagalog considers himself at least equal to it.

Contrast Between Tagalog and Western Thinking

From the disease data we may conclude that the one-cause/one-effect pattern is rare. The expression that A alone leads to B alone is limited to a few people who have had extensive contact with the Western life style found in Manila or to situations, such as snake bite, where the causal relationship between two events is immediately observable. The stating of alternative contributing factors to an illness and the expression of origins and progressions without causal reference (in the Western sense) indicate that events may be seen as related to each other without the one being the necessary and sufficient cause of the other. In short, Tagalog Filipinos do not codify and perceive reality in lineal terms, to use Dorothy Lee's (1959) wording. The Tagalog words used to express cause and those used to express result support this condition.

Dahilán does not mean necessary and sufficient cause. It means instead one of a number of possible causes; it also means 'attributed cause' or 'excuse' as in "He was late; what excuse (dahilán) did he give?" *Sanhí* means cause in the sense of motive or goal, as in "the cause for which we are fighting." Effect is either the Spanish derivatives *epekto* (⟨ *efecto*) and *resulta* or verbal forms meaning outcome, possible or expected outcome, and so on (*kinalabsán, kálalabsán, kináhinatnán, kahihinatnán,* ⟨*labás* 'to come out' and *datíng* 'to arrive').

The expressions recently created by the Institute of National Language to mean 'cause and effect' are:

sanhí at búnga	'motive and fruit'
puno't dúlo	'beginning and end' ('trunk and extremity').

Neither of these, I feel, quite conveys the notion of an event or a thing which by itself necessarily brings about another event or thing.

I should also like to question the applicability and usefulness of the principle of binary opposition, or rather the extension of this principle in a linear

sequence. Binary opposition appears in the taxonomic structures of both English and Tagalog at the lowest level. Both language-culture complexes contain, for example, the following taxonomic cells:

pox	
chicken pox	smallpox

parent	
father	mother

The linear extension of this principle in English creates an opposition to the higher level term (pox, parent) which is in turn dichotomized.

pox		tumor	
chicken pox	smallpox	benign	malignant

parent		child	
father	mother	son	daughter

This is not true of Tagalog, wherein the higher level contrast, when made, persists at the lower levels without further division. Thus, ideas expressed most easily in English (and probably in most Indo-European languages) in terms of a 2 x 2 table are expressed in Tagalog (and perhaps in most Philippine languages) in terms of a 1 x 2 table:

father	mother
son	daughter

as opposed to

father	mother
child	

summer	winter
spring	fall

as opposed to

hot season	rainy season
(September–February: no term)	

This appears in verbal categories as well (voice and mood in English, focus in Tagalog), and probably at lower levels of the linguistic hierarchy.

When progression within the cell is conceivable, the English pattern shows a preference for one-to-one movement: a son becomes a father, a daughter becomes a mother; tubercle bacillus leads to tuberculosis, and whatever it is that the anopheles mosquito carries leads to malaria. In the Tagalog pattern a child becomes either a mother or a father, fever becomes malaria or flu.

This is not to say that Westerners think only in terms of twos and Tagalogs only in terms of threes. The theme of triples and thirds runs rampant through Western thinking, according to Dundes (1968), but this usually takes the form of a trichotomy, a division into three equal parts each of which is mutually opposed to the other two. Diagrammatically, this may be represented as in Figure 2, the three spaces being filled with the appropriate terms: knife-fork-spoon, Father-Son-Holy Ghost, Paleolithic-Mesolithic-Neolithic, and so on.

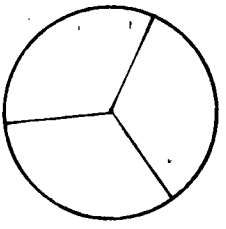

Figure 2. Trichotomous division.

The Tagalog pattern of three represents, by contrast, two binary divisions, one of which applies to the whole set and the other to half of it. In Figure 3, the generation dichotomy, that between parent and child, applies to the entire set, and the sex dichotomy, that between males and females, applies only to the parent half of the set. The son-daughter distinction does not occur except as 'male child' v. 'female child' (*anák na lalaki, anák na babae*).

	Male	Female
Parental generation	*amá*	*iná*
Filial generation	*anák*	

Figure 3. The basic Tagalog pattern, exemplified by nuclear family terms.

The Western pattern is then one of dichotomies and trichotomies. If the former is operative, the principle of binary opposition is extended to every level. If two elements belong somehow to the same universe, and one of these elements is known to be dichotomized, then, it is assumed that the other element is similarly dichotomized. Disease and sin, for example, may be parts of a universe, "bad things." There are two kinds of disease: serious and light,

curable and incurable, and so on. There must also, then, be two kinds of sin: forgivable and unforgivable, mortal and venial, and so on. Just as kinds of disease may be dichotomized (chicken pox v. smallpox), so may kinds of sin and crime be dichotomized (white lies v. black lies, petty theft v. grand larceny). When the alternate Western pattern is operative, it takes the form of a trichotomy, and the three constituent parts are in mutual opposition. Knives, forks, and spoons are the three mutually exclusive components of the 'silverware' set. At lower levels the trichotomous division appears to persist: forks come in three general kinds (salad, dinner, and dessert) as do spoons (table-, soup-, and tea-).

The Tagalog pattern contrasts with both of the Western patterns. There is a dichotomy at one level, but not necessarily at another. The result is a threefold structure, but not a trichotomy. It corresponds in its essentials more closely with the ternary structures described by Lévi-Strauss (1963) developed by other methods and for other purposes. The significance of this for Filipino culture is this: what is true of one member of a set, in terms of containing component elements, is not necessarily true of another member of the set at the same level. Figure 4, a rewriting of Figure 1, is a graphic representation of how this rule applies to the set *sakít*.

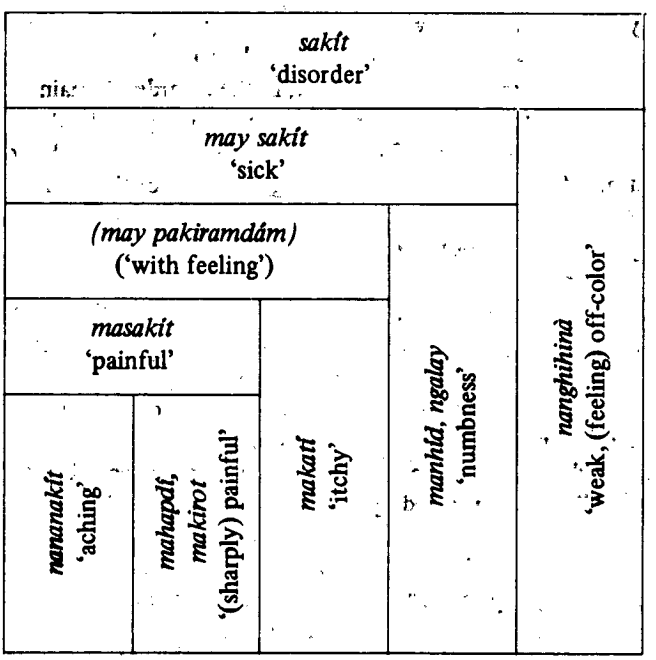

Figure 4. A portion of the taxonomic structure, in chart form, relevant to *sakít*.

There is a paradox posed by the simultaneous presence of this rule and the one mentioned earlier which states that what is generally true for most members of a set is assumed to be true for all. The difference between the two, however, that of the level at which one is speaking, is a very important one. Compared with sins, disorders are painful; indeed, 'disorder' (sakít) connotes 'painful' (*masakít*). At a lower level, say, skin disorder as opposed to internal disorder, it is not assumed that all disorders involve pain, skin disorders being more generally itchy. Here, it may be stated that all skin disorders are itchy, even though some members of this set may involve pain (*sugat* 'wound, lesion') or may involve no noticeable sensation at all (*purlak* 'piebaldness').

Summary

There is a Tagalog lexical domain with the cover term *sakít*, which includes all mental and physiological disorders. Some 235 specific disorders were recalled by informants in three research sites in Marilao, Bulacan. Combining frequency of recall and order of recall, it is possible to rank the disorder terms in an approximation to cognitive saliency. Specific diseases are caused by, (a) no known factor, (b) a single factor or incident, (c) any one of a number of abnormal bodily states in combination with any one of a number of natural phenomena, (d) sudden or unexpected exposure to a natural phenomenon, and (e) any combination of two of the above except (a). Specific disorders originate in other disorders, and they themselves lead to further disorders.

The minimal meaningful structural unit, in the disorder domain, is a three-fold cell containing two dichotomies, one of which applies to the entire set and the other to only half of it. This structure is replicated in other domains, such as that of referential kinship terminology, seasons of the year, and at the lower linguistic levels, such as that of verbal affixes.

Causality, in general, is not so dominant as it is in Western thinking. Instead, disorders occur in progressions, which may or may not be causal, from each other or from outside factors. The notion that one thing is the necessary and sufficient cause of another is virtually absent. A number of factors, either singly or in combination, lead to any one of several conceivable outcomes. Fatalism exists in Tagalog concepts of suffering more or less to the same extent that it does in the West: man suffers illness, and some men appear to suffer illness, and some men appear to suffer more than others, but the chance occurrence of illness is mitigated by personal responsibility in caring for one's health.

There is a strong predisposition toward stereotypy, in some contexts, in that members of a group formed for one reason are equated for other reasons. This co-occurs with another cognitive feature, applicable in other contexts, which provides for the reduction of one group member but not for another, at least not in the same terms.

Appendix

Questions asked in the disease interview

1. Recall as many diseases as you can, and mention each to me.

   Isipin ninyó ang lahát na sakít na nalálaman ninyó at isá-isá ninyóng sabihin sa akin.

2. Sort these slips of paper into piles or grouping which seem to belong together. Sort them into as many or as few groupings as you like.

   Pagsamásamahin ninyó ang mga papél na ináakala ninyóng dapat ipagsamasama. Maari kayóng gumawâ ng kahit na iláng grupo o tumpók na papèl na gusto ninyóng gawín, kahit na marami o kaunti.

3. What is the reason or idea that you had when you arranged each pile or group?

   Ibigáy ang inyóng katuwiran kung bakit ninyó ipinagsamasama ang mga papél na iyán sa bawat tumpók o grupo.

4. Give the location or part of the body particular to this type of disease.

   Saán-saáng bahagi o parte ng katawán nakikita o napápansín ang sakít na ito?

5. Give a description of this disease.

   Anú-anó pô ang napápansín o naráramdamán sa sakít na itó?

6. What causes this disease?

   Anú-anó pô ang mga dahilán ng sakít na itó?

7. What are the medicines or what is the therapy used?

   Anú-anó pô ang mga gamót na alam ninyóng ginagamit sa sakít na itó?

8. Whom do you consult for this disease?

   Sinu-sino pô ang mga manggagamot na inyóng kinukunsulta o sinasangguni sa sakít na itó?

Notes

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1. See Lynch and Himes (1967) and Himes (1967). These sources contain background to the area studied, relevant maps, and preliminary findings in the kinship domain.

2. See Hjelmslev (1957) on structural analysis.

3. The interview questions are provided in the appendix.

4. See Lynch (1970:19). Also, note the interchangeability of group members as group designator, with the pronominal marker *siná*, as in *siná Monica*, 'Monica and her group' (Monica not necessarily being the leader).

5. WR signifies word root, which in this case is *mulá*.

6. Vietnam Rose is a strain of gonorrhea highly resistant to treatment. It was brought to the Philippines by American military personnel on rest-and-recreation leave from Vietnam.

7. *Pasmá*, often itself the cause of other disorders, involves general debility, localized pain, and fever. The exact nature of pasmá depends on which part of the body is affected.

8. *Pilay-hangin* ('wind-sprain') is the sensation of having a broken bone, sprain, or broken blood vessel, but the pain moves from place to place within the body.

9. This may be synonymous with 'influenza' (*trangkaso*).

10. This involves general debility, severe pain in any part of the body, localized fever, often with 'delirium' and the appearance of insanity. The pain experienced by the patient corresponds to the part of the forest which was injured.

11. No cases of bewitchment were reported during the course of the field work. This appears not to be a widespread and firmly held belief in Marilao, and the term 'bewitchment' (*kulam*) is used almost exclusively in a joking sense.

12. This involves severe gas pains and stomach ache.

13. For what it is worth, the word *Diyós* (⟨ Spanish *Dios*, 'God') is not treated grammatically as a person but as a thing. It takes the impersonal article *ang* instead of the personal *si*: *si Juan* 'John,' *si Nanay* 'Mother,' but *ang silya* 'the chair,' *ang nanay* 'the mother,' *ang Diyós* 'God.'

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