## 13. CLASSIFICATION AND COSMOLOGY

Starting point today is famous work from 1902 by Emile Durkheim (already mentioned) and Marcel Mauss: we have excerpts in reading
Q. What is the root problem D\&M address?

Origin of ability to categorize, to divide up the world mentally into different kinds of things. Basic issue, basic problem in philosophy
Two basic tendencies, to find origin of perception and classification in world itself, i.e. we soak it up from what is out there, or to see categories in some way as already implanted within us
Perennial issue in Greek and European philosophy, in modern psychology
Q. What is their answer? It is neither, rather found in society. This answer fits Durkheim, who was sociological imperialist, explained everything through society
Q. What is the logic of their argument?

1. They assume that world was originally a blur, indistinct
2. assume that categorizing is not a natural ability
3. first categories that presented to primitive people are groups in society
4. changes in society lead to increasingly complex categories
5. we can trace evolutionary changes in society through study of living primitives, who represent different stages in evolution. (Few anthros today believe this.)

They begin with Australian aborigines, who then thought to be simplest society (actually very complex classifications and kinship system); division of society into just two parts. Classification of everything else follows, division of everything in world into two groups, like two human groups
(True that there are societies divided into two sides, typically one must marry person from other side, but not true that they are necessarily simple societies.)
-Then more complex tribal societies (Zuni, Sioux), where more than two groups, and categories also anchored to landscape
-then complex premodern civilization, China, same kind of classification, but no longer tied to particular groups
-and then to modern classifying, where detached from both concrete groups and from religion

Whole argument bogus. Original indistinction in premodern thought or at stage of life is a myth. Some perceptual abilities we are born with.
Also, before one can perceive and categorize groups as distinct, one must be able to perceive and categorize in general. How could one discern that there are two separate groups unless one could already perceive difference and number? D\&M partially concede this, say 'Well, maybe there was a little practical categorizing,' but once you make that concession, whole argument implodes.
-And the evolutionary sequence is imaginary.
-Introduction to translation of volume by Rodney Needham shows that their scholarship was generally shoddy

But paradox: they were wrong and slipshod but still very fertile source of ideas and theories
Didn't explain cognition or categorizing in general, but did start study of what came to be called symbolic classification, i.e. complex arrangements of symbols into wholes We have already had a taste, with hummingbird example and others

Often, as D\&M show, divisions in one domain are replicated in another: divisions of color correspond to divisions of birds and divisions of seasons and quarters of universe and sections of town and parts of house and parts of body and parts of universe and so forth.
Varies between societies just how relentlessly consistent they are, and how much build into complex structures.

We have reading from Hertz, who was member of D\&M's group
Q. What does Hertz add to argument? ---recognition of almost universal differentiation between right and left, favoring of right hand.
Differentiation in treatment of the hands and what is done with them
And in all orientations of all sorts
Q. In what ways do we favor the right side in our society.

Details vary from society to society: one tribe in Sudan sometimes tie left hand for while to discourage use. But preference for right, opposition between sides universal Q. How does Hertz explain this? As follower of Durkheim, he insists on primacy of social elaboration of this difference, even if its ultimate origin might be in physiology.

Hertz also points us towards importance of opposition as one symbolic structure, whether or not it is found in an elaborate classification: opposition is often what going on between two elements in symbolism: not likeness or association but being set against each other. As fundamental as metaphor, metonym or liminality.

Nature of opposition may also vary:
May simply be contrast, set off against each other
But may also be more fundamental logical or social contradiction (we will explore later)

## Examples of symbolic classification in preindustrial "tribal" societies

Complex symbolic classifications are found in many tribal societies. One example from Northwest Amazon, group called Cubeo, described by anthro named Irving Goldman (1963, The Cubeo).
Live up and down rivers, in longhouses in clearings on riverbanks, whole community lives in one house
Men marry women from another community

Basic opposition is men versus women, us vs. them, but tied to other oppositions in complex ways
Jungle vs. river, river is more them rather than us.
Gardens vs. river. Gardens where raise manioc, they belong to women, so gardens associated with women. esp. rapids in river, rocks, said to be home of ancestors. Agriculture (in gardens) vs. fishing and hunting---hunting associated with river because men go in canoes, hunt near river.
Adultery vs. licit sex. Adultery takes place in gardens, marital sex near river. In-laws, affines vs. us---resident in-laws are the women in garden Jaguar vs. ancestors---one from forest, dangerous, other from rocks in river

So the oppositions are lived, they are keyed to the environment and they make sense in people's lives

Another tropical forest group but in Guianas of northern S. America, called Trio (Peter Riviere, 1969, Marriage among the Trio)
Similar concern with us/them, inside/outside. Also tied to environment, but in different way. Not river people.

Wary of outsiders but also drawn to visit them
Basic divisions in Trio system are:
inside/outside
us/others
our river/far river
village/forest
house/clearing
Connected to seasons, in part because how they interact with outsiders depends on seasons:
wet season (when rivers flooded, people stay at home, no travel) / dry seasons (travel, contact)
softness (ground soft, people act "soft") / hard (ground hard, act "hard" with outsiders) still / active
wood / stone
home fire (limited, controlled, warmth in rainy season) / burning fields (uncontrolled, big, do burning in dry season)

Similar elements used in Trio classification as in Cubeo, but arranged in quite different way
Like Cubeo, makes sense in terms of environment, lived as well as thought
Obviously, in a desert environment or place with no dry season, would have to be different

## In complex premodern and modern societies

D\&M were correct, symbolic classifications also found in complex societies
In fact, in preindustrial states like Aztec, Maya, traditional China, premodern Europe, there is often a small literate elite, priests or clerks, who have the time and interest to make increasingly elaborate systems
Very typical of such societies
Traditional Chinese symbolic classification, with four quarters, yin/yang, pervasive through Chinese culture: in medicine; in divination (I Ching); layout of towns and houses (Feng Shue)
Has persisted through huge changes in politics and other aspects of culture, tenacious
In Europe, doctrine of humors, basis of medicine, from Greek physician Galen Four-part classification
The different humors had all sorts of correspondences in different domains:
blood / choler / melancholy / phlegm
understanding / opinion / perception / intellect
air / fire / earth / water
moist / hot / dry / cold
child / youth / maturity / age
fevers / vomiting / consumption / pneumonia
optimistic / ambitious / pessimistic / apathetic
Curing consisted in large part of counteracting imbalances between the humors
Mostly been supplanted in western culture, but remnants remain: for one kind of private school with own mystique and methods, a booklet told teachers they could figure out students’ personalities according to humors.

Many other European examples:
pre-Socratic philosophers of Greece, before Socrates, Plato, and Aristotle
Explained nature of world, changes, thru combinations of qualities like warm \& hot etc.
Astrology, still strong today, and alchemy both completely wrapped up in symbolic classifications. Ditto modern "reflexology", correlates parts of foot with parts of rest of body
Medieval and renaissance magic too, esp. form of Renaissance magic called natural or platonic. Inspired by revival of interest in Plato.
Also dominant mode of scholarly thought of medieval period, scholasticism, what
Nicolás Wey Gómez here at MIT called transcendental semiotics.
Famous analysis of the $16^{\text {th }}$ century encounter between Cortes and Aztec King Moctezuma by theorist Tzvetan Todorov, saw as clash between traditional, oral, religious worldview (symbolic classification) and modern, pragmatic, literate one. (1982, The Conquest of America)

Wrong in two ways: early literacy often promoted rather than discouraged scholastic thinking, and $16^{\text {th }}$ century Spaniards often still medieval mindset. Wey Gómez shows that Columbus completely caught up in what we would see as mysticism, scholasticism.

Also at much more humble level. Peasants and townspeople in both Mediterranean world and Latin America often ascribe to a classification of foods into hot and cold, treatment for illnesses by balancing and counteracting food and disease temperatures.
Symbolic hot and cold, often doesn't correspond to our ideas of temperature. One version:
Hot foods include: tortillas, toast, crackers, eggs, rice, lard, ice (sic)
Cold foods: beef, sweet potatoes, squash, oranges, watermelon
Also depends on whether cooked in pot or on griddle vs. cooked in oven
Variety of things other than food divided up this way in hot/cold dichotomy:
envy / fear
high fever / respiratory illness
money / needles
sun / moon
black animals / frogs, toads
Phrenology, $19^{\text {th }}$ century "science". tried to localize different aspects of thinking and feeling in different parts of brain, much like modern brain science, except it had no basis in fact or experiment. Term paper by student many years ago in this class (Cynthia Willey) showed that phrenology based on symbolic classification Different regions grouped by oppositions and divisions and locations:
Instincts, passions, impulses were lower in head; moral/religious sentiments higher Back and low, occipital lobe, location for selfishness frontal lobe, intellect, sentiment
Moral organs bunched together "like a band of brothers"
In many areas can see a transition from symbolic, scholastic thinking to modern science and philosophy. One helps lead to other. To this extent D\&M correct.
Some figures transitional. Isaac Newton, persistent claims that he wrote a secret astrological treatise turn out to be a myth, but he was "into" alchemy and theological questions like the dimensions of King Solomon’s temple and Biblical chronology

In effect, we can see that some features of modern science can be found in premodern thought
One is close observation of nature. Many examples, e.g. Hummingbird poem, great knowledge of planets, sun's path, habits of animals.
Other is system-building, theorizing. Large, complex classifications, maps of the universe.
Only thing that not there skeptical attitude, rigorous hypothesis testing
But in some ways Maya priest not that different from modern cosmologist or theoretical physicist.

Also symbolic classifications can be very satisfying: feeling of completion, structure, stability, wholeness
Probably why so persistent
After all, there was absolutely no factual basis for Galenic medicine, none at all, but it lasted for a couple of thousand years

## Levi-Straussian Structuralism

In decades after WWII, French social anthropologist, Claude Lévi-Strauss (now very senior), elaborated Durkheimian ideas
His system known as structuralism, though there are other varieties of structuralism L-S looked for something like a symbolic classification, but at much deeper level, unconscious: person in culture might not even recognize or be able to talk about

L-S inspired by many things besides Durkheim \& Mauss, esp. by linguist Jakobson, who we discussed above
J. and L-S were together in NYC during WWII

L-S inspired by depth and rigor of linguistic analysis, specifically borrowed J's emphasis on binary, dual oppositions
At first L-S made very close, somewhat naive analogies with linguistics
But then moved away on own
L-S said there were underlying structures, but likely to be abstract, more like mathematical formula, with many possible transformations, than an obvious symbolic classification
These structures at deep level in all sorts of things, explored by L-S in different works: Systems of alliance through marriage exchanges; "totemic" classifications of animals; ritual; cosmology; and especially mythology. Produced series of books exploring deep structures in S. and N. American mythologies
Was very trendy for some years, among intelligentsia in general as well as anthros in particular----though few actually understood very well. Douglas and Tambiah articles among those partially inspired by L-S.

L-S was inconsistent. In several places said such structures more typical of pre-industrial societies. "Cold" societies, vs. "hot" modern ones. Other places he stated or implied that universal.

Structuralism since passed out of fashion. But I think has much to offer, if one is careful and skeptical. We will try our hand at structural myth analysis.

## Testing Structuralism

Problem with L-S's structuralism, also with lot of symbolic anthropology, is how do we test, make sure?
In literature, notorious how many different interpretations are imposed on a single work. If we want to move past assertion, how do we test our own conclusions?
Q. What is answer offered by James Fox in reading? First, find relatively mechanical way to establish connections between symbols.
Q. How does he establish connection for Indonesian culture he studied? Through parallelism, arrangement of ritual verses into pairs. Was discovered by Biblical scholar in $18^{\text {th }}$ century, found that much of Old Testament written in verse, and that those verses were arranged in pairs, synonymous or semi-synonymous: spears into pruning hooks, swords into plowshares.
Since then found to be important structure in religious poetry of many societies. So Fox used computer to find most frequent pairings, and then arranged the pairs into a structure
One of most satisfying aspects of work was that confirmed previous, more intuitive analysis
This option not always open, but encourages us not to take issue of validation for granted

