

Anthropological Linguistics

Anthropology places great stress on the role of culture in shaping human behavior. Culture defines what we consider family, food, music, games, science, religion, etc.

Language is a central part of cultural expression and cultural acquisition.

In looking at proto-Indo-European we've seen the degree to which reconstructed language reflects the culture of its speakers

We've also looked briefly at the degree to which language variation reflects the social construction of individual identity.

The Whorf Hypothesis asks about the degree to which language colors our perception of events. Whorf had a deep interest in the structure of Native American languages.

Linguistic work in the U.S. has long been occupied by the description of Native Am. languages
Jefferson was keenly interested in collecting information about Native Am. languages
Unfortunately, most of the data he collected from various sources was dropped into the Potomac in a boat accident

Franz Boas was responsible for re-invigorating the investigation of Native Am. languages
He was trained as a physicist, and insisted that each language needed to be described on its own terms rather than using the lexical paradigms inherited from Greek and Latin

He noted many differences in basic language structure (e.g. from Hymes p. 123)

English: The man is sick.
definite, single present

Kwakiutl (direct translation): definite man near him invisible sick near him invisible
(idiomatic): 'That invisible man lies sick on his back on the floor of the absent house.'

Eskimo: (single) man sick.

Ponca (Siouan): The moving single man sick.

Need to decide whether the man is moving or at rest.

Navajo provides another example of this diversity (Hojjer—in Hymes, p. 142)

Navajo verbs are composed out of a base and a theme

A theme can be used with more than 100 different bases

Animate motion themes (humans, animate & natural objects considered animate)

-há:h 'one moves'	-ká:h 'several move'
-ʔà:š '2, few move'	-zé:h 'group moves'
-łó:š 'move on all fours'	-t'á:h 'fly'
-yè:d 'run'	-ʔè:ł 'float'

-bá:s ‘roll’

You find many abstract uses of movement themes in Navajo, e.g. -há:h ‘one moves’

Oà:-nà-...-há ‘to be busy’ (lit. ‘One moves continuously about with reference to it’)

ʔé:h-...-há:h ‘one dresses’ (lit. ‘One moves into clothing’)

ho-...-há:h ‘a ceremony begins’ (lit. ‘A happening moves’)

ná-...-há ‘one lives’ (lit. ‘One moves about here and there’)

ʔánì:-nà-...-há ‘one is young’ (lit. ‘One moves about newly’)

yìsdá-...-há:h ‘one is saved’ (lit. ‘One moves to safety’)

There are 12 themes for picking up objects; all contain the prefix nâidì:- ‘3rd person causes it to move upward’

-ʔà:h -round solid object -kà:h -rigid container with objects in it

-tì:h -long, slender object -có:s -fabric-like object

-tè:h -one animate object -zò:d -bulky object

-ní:ł -a set of objects -žó:š -parallel objects

-jā:h -an unspecified mass -lé: -rope-like object

-jò:l -wool-like mass -lé:h -mud-like mass

These themes also serve as the basis for some nouns

hàní:bá:z ‘full moon’ (lit. ‘A hoop-like object has rolled out’)

nà:lcò:s ‘a paper, letter’ (lit. ‘A fabric-like object is moved about’)

Native American languages also contain unusual morphological forms

Columbian Salish ‘out of control’ reduplication

resembles a passive with some verbs

cə̀kək ‘he got hit’

k’íp’ə̀p’ ‘he got pinched’

but not others

q’wál’l’x ‘tree drying up’

kp’ə̀rrq’n ‘I turn it inside out’

łáqqlx ‘he fell on his rear end’ (< ‘he sat down’)

xwə̀rrpm ‘he’s nervous’ (< ‘shake, shiver’)

Reduplication marks an out of control agent in accidents, spontaneous occurrences, natural phenomena (ice jam, birth), lack of control (drunk, sobbing), effort & patience (dressing) and miscellaneous events (bent over with cramp, dirty)

Clearly Native American languages call for an event parsing that is different from that of Standard Average European

Whorf’s hypothesis is that language structure influences the way speakers view the world

We dissect nature along lines laid down by our native language. The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary, the world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds—this means largely by the linguistic systems in our minds.

Whorf has been derided from all sides
linguists have criticized his description of Hopi
anthropologists have attacked his description of the Hopi worldview
psychologists have experimentally tested the idea and found it wanting

Today many scholars regard the hypothesis as disproven

Get an idea of Whorf's disfavor from [Geoffrey Pullum](#) (1991) 'The great Eskimo vocabulary hoax'

But see comments by [Tony Woodbury](#).

The main problem with Whorf's hypothesis is figuring out a way to test it
Most tests have focused on lexical differences, especially in color words
Whorf, himself, stressed differences in grammatical structure rather than differences in vocabulary

It's pretty easy to borrow any words we need from other languages

At least experiment looked at the effect of structural differences
Carroll & Casagrande (1958) examined the effect of Navajo shape classification using the 'pick up' verbs we looked at earlier
They gave children 2 objects, e.g., rope and stick; then showed them a third object and told them to group it with one of the other 2 objects
C&C assumed that the Navajo children would be influenced by shape classification
They thought the English-speaking children would be influenced by color (although many experiments have shown that English-speaking children pay more attention to shape than color)
They found that the English-speaking children classified by shape as often as the Navajo children

Experimental work on the Whorf hypothesis has moved through several cycles
Experiments before the seventies tended to support the hypothesis
Experiments in the seventies tended to disprove the hypothesis
Recently, the pendulum has swung back in the other direction, as evidenced in the File

Kay & Kempton (AA 1984) performed one of the more recent supportive experiments
They examined color naming in English and Tarahumara
Tarahumara has one blue/green basic color term: *siyóname*

Experiment 1

K&K asked subjects to look at an array of 3 color chips

They asked subjects which of the 3 chips was the most different from the other two, e.g.

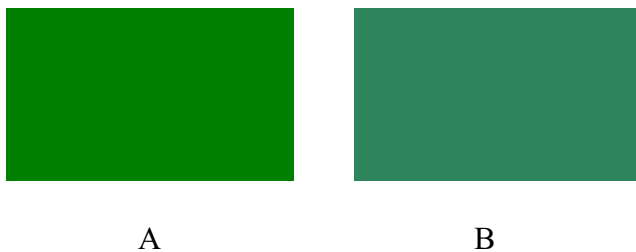


They thought English speakers would have a strategy that the Tarahumaras didn't; the English speakers might unconsciously classify A & B as green and C as blue, so C would be different
K&K found polarization effect with 29 of 30 English cases,
but only 13 of 24 Tarahumara ~ 50% chance level

Experiment 2

K&K found they could make the effect disappear by having subjects label the middle chip as green or blue.

They put the chips in a box with a sliding door so only 2 chips could be seen at a time



With the door at one end they told subjects the middle chip was bluer than the other chip
With the door at the other end they told subjects the middle chip was greener than the other chip



They then asked subjects which difference was greater—the difference in greenness or blueness
This time the subjects could not resort to a language distinction since they had already labeled the middle chip as green and blue
The English subjects responded like the Tarahumaras

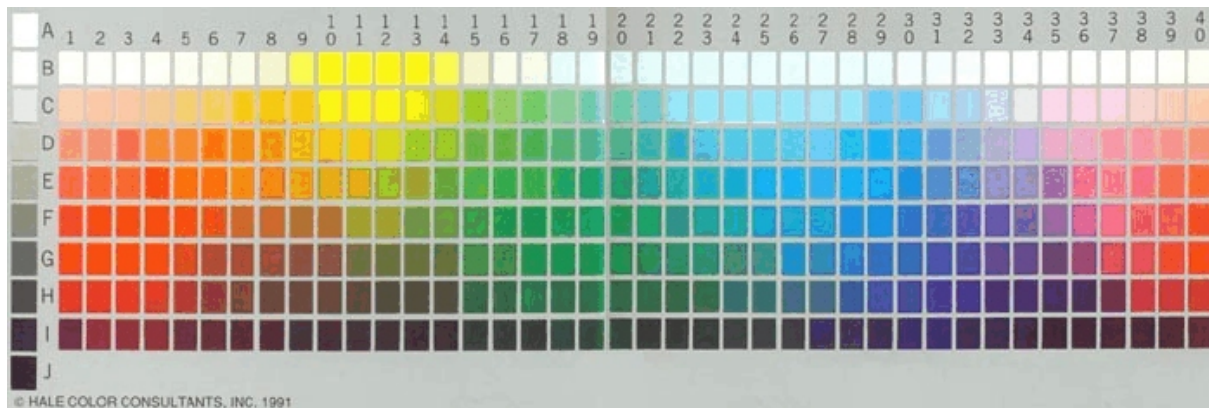
Experiment 1 can be viewed as a categorization experiment
Which category does this color belong to?

Experiment 2 is a discrimination experiment
What is the difference in greenness and blueness?

Cultural and linguistic contrasts depend on categorization, not simple discriminations
So testing the Whorf hypothesis has to involve categorization rather than discriminations

K&K disconfirm the strong view of linguistic relativism—both groups could make the same discriminations

Most experiments assume an external reality drawn from Standard Average European scientific tradition
with color, experiments use the “standard” set of color chips



Then treat language as the dependent variable and see how language encodes the pre-given reality

This approach misses the structure of semantic distinctions present in the language

Zuni (American Southwest) has 2 terms for yellow

one is a verb that refers to things becoming yellow by ripening or aging

the other is an adjective that refers to things that have yellow substances applied to them

Hananoo (Philippines) has terms for black, white, green and red

these terms also refer to darkness, lightness, wetness and dryness

Testing the extensions of color terms with the standard set of color chips washes out the specific connection to other cultural domains

And eliminates differences in categorization that lie outside the domain of pure color perception

One of the more recent experiments examined structural differences between English and Yucatec

John Lucy thought that numeral classifiers in Yucatec Maya would attract attention to substances

rather than objects
ʔun-tz'it kib' 'one long thin candle'

Perhaps Yucatec speakers would give greater priority to substances, e.g. wax
He gave three objects to subjects and asked them 'Is item X more like A or B?'

English	{	small plastic box	}	Yucatec
		small cardboard box		
		piece of cardboard		

English speakers showed a preference for form-based classifications
Yucatec speakers showed a preference for substance-based classifications

Texts

It would be a mistake to conclude that anthropological linguistics was exclusively concerned with testing some version of Whorf's hypothesis. One tradition that extends back to Boas is the collection of texts. Texts demonstrate how specific linguistic features are used in context, and show how linguistic differences occur simultaneously on many levels.

IV The Woman with an Eagle Nagual

William L. Wonderly. 1946. Zoque Texts on the Nagual Concept. Tlalocan II (no. 2):97-105.
English translation by Clifton Pye

(The story of María Chamula, an old woman who lived on the San Sebastián farm during the time of the tiger nagual. She was a Tzotzil, and her husband was the only one on the farm who did not want to hunt the tiger because he knew that the animal was the nagual of a person.)

1. ijtu teʔ yomo.
Ø/it-wə teʔ yomo
3ABS/exist-iCOM the woman
There was a woman
Había una mujer.

2. teytyeʔ nə ijtu panetzaʔmə.
tey teʔ /nə Ø/it-wə pane/tzam-ʔə
there the _fact /PROG 3ABS/exist-iCOM priest/speak-x
who lived there in San Sebastián.
Allí vivía en San Sebastián.

3. i chəkpa inək yachaʔkuy
i(Sp) y/tzək-pa inək yatzi-ʔaj-kuy
and 3ERG/do-iINC IRREAL bad-VERS1-INSTR
and who did evil.
Y hacía maldades ?

4. teʔ jyamapit,
teʔ y-jama-pit
the 3ERG-nagual-by
with her nagual
por medio de su nagual,

5. porke jamaʔoyeteʔ inək.
porke(Sp) jama-ʔoye teʔ inək
because nagual-good the _fact IRREAL
because she had a strong nagual
porque era de nagual fuerte.

6. i chəkpa inək tajpi,
i(Sp) y/tzək-pa inək tajpi
and 3ERG/do-iINC IRREAL eagle
and she became an eagle
Y se hacía águila,

7. i witpa inək tzuʔkəsi.
i(Sp) ʔ/wit-pa inək tzuʔ-kəsi
and 3ABS/travel-iINC IRREAL night-on
and moving by night
y andaba de noche.

8. i pyaʔtpa kristiano nə wyijtuwə,
i(Sp) y/paʔt-pa kristiano /nə y/wit-wə-wə
and 3ERG/find-iINC person /PROG 3ABS:DEP/travel-postAUXi-REL
she encountered people out walking
Encontrando una persona andando,

9. keyepya minba,
ʔ/key-ey-pa ʔ/min-pa
3ABS/glide-ITER-iINC 3ABS/come-iINC
she came gliding in
venía planeando,

10. kyenuʔka minba chonhu,
y/ken-wə-ʔk-an ʔ/min-pa y/tzonh-wə
3ERG/see-iCOM-when-already 3ABS/come-iINC 3ERGD/meet-postAUXi
when she had seen she would meet someone
cuando veía que la venía a topar

11. jutək nə myanhu.
jutək-k /nə y/manh-wə
where-to /PROG 3ABSd/go-postAUXi
where she went
donde iba.

12. sunba tyenayu teʔ kristianoʔs kyopajkəsi,
ʔ/sun-pa y/tenay-wə teʔ kristiano-ʔis y/kopak-kəsi
3ABS/want-iINC 3ABSd/land-postAUXi the person-ERGc 3ERG/head-on
she would want to land on the person's head
Quería pararse sobre la cabeza de la persona.

13. waʔytyij chəkjayu teʔ yachaʔkuy.
waʔy tij y/tzək-jay-wə teʔ yatzi-ʔaj-kuy
in_order_to just 3ERG/do-INDIR-iCOM the bad-VERS1-INSTR
to do them harm
para hacerle maldad.

14. pero pyaʔtu mas jayaʔunepə.
pero(Sp) y/paʔt-wə mas(Sp) jayaj-ʔune-pə
but 3ERG/find-iCOM more husband-child-REL
but she encountered someone that was more man
Pero encontró a uno que era más varón.

15. kyoʔməyu juka teʔ pəʔnis teʔ kyopajkəsi
y/kom-ʔəy-wə juka teʔ pən-ʔis teʔ y-kopak-kəsi
3ERG/post-HAVE-iCOM if the man-ERGc the 3ERG-head-on
she stopped on the man's head
Creía que sobre la cabeza del hombre

16. nə pyokspajku:
/nə y/poks=pak-wə
/PROG 3ABSd/sit=lay-postAUXi
she was sitting
se estaba sentando.

17. i nyeʔkə nə pyokspajku,
i(Sp) y-neʔkə /nə y/poks=pak-wə
and 3ERG-self /PROG 3ABS/sit=lay-postAUXi
and she was sitting
Y ella se estaba sentando,

18. i teʔ pəʔnis juntamente chəkəpəʔjayu teʔ tiro.
i(Sp) teʔ pən-ʔis juntamente(Sp) y/tzək-V-pəʔ-jay-wə teʔ tiro(Sp)
and the man-ERGc together 3ERG/do-x-COMPL-INDIR-iCOM the shot
and the man suddenly shot her
cuando el hombre de repente disparó un tiro (con la escopeta que cargaba en el hombro).

19. i teytyij kunu.
i(Sp) tey tij 0/kun-wə
and there just 3ABS/fall-iCOM
and she just fell there
Y allí mismo cayó;

20. juntamente sitiʔtzuʔkumu
juntamente(Sp) 0/sitit=tzuʔkum-wə
together 3ABS/fly=leave-iCOM
suddenly she flew away
en ese momento salió aleteando,

21. i keyepya manhu.
i(Sp) Ø/key-ey-pa Ø/manh-wə
and 3ABS/glide-ITER-iINC 3ABS/go-iCOM
and glided away
y se fué planeando.

22. nuʔku te, tyəjkaʔnhojmo ? teʔ tajpi,
Ø/nuʔk-wə te y-tək-ʔanh-ʔojmo teʔ tajpi
3ABS/arrive-iCOM the 3ERG-house-mouth-in the eagle
The eagle arrived at the house
El águila llegó a la casa,

23. i nə nyuʔku teʔ anhgoyj,
i(Sp) /nə y/nuʔk-wə teʔ anhgoyj
and /PROG 3ABSd/arrive-postAUXi the patio
and arriving at the patio
y llegando al patio

24. tey kunu.
tey Ø/kun-wə
there 3ABS/fall-iCOM
there she fell
cayó ahí.

25. pijcheʔka kyenyaju teʔ yomo
pijcheʔka y/ken-yaj-wə teʔ yomo
then 3ERG/see-3PL-iCOM the woman
Then they saw the woman
Entonces vieron a la mujer

26. ənhu teʔ ənhguʔyojmo
Ø/ənh-wə teʔ /ənh-kuy-ʔojmo
3ABS/sleep-iCOM the /sleep-INSTR-in
sleeping in the bed
durmiendo en la cama;

27. Tziʔpoʔtu teʔ yomo,
Ø/tziʔ=poʔt-wə teʔ yomo
3ABS/give=x-iCOM the woman
the woman fell
se cayó la mujer,

28. kunu najsojmo.
Ø/kun-wə nas-ʔojmo
3ABS/fall-iCOM ground-in
She fell on the ground
cayó en el suelo.

29. manhu kyenyaju,
Ø/manh-wə y/ken-yaj-wə
3ABS/go-iCOM 3ERG/see-3PL-iCOM
They went to see her
Fueron a verla,

30. kaʔuwaʔndeʔ.
Ø/kaʔ-wə-waʔa teʔ
3ABS/die-iCOM-already the_fact
she was already dead
y ya estaba muerta.

31. pijcheʔka nəmyaju,
pijcheʔka Ø/nəm-yaj-wə
then 3ABS/say-3PL-iCOM
so then they said
Entonces dijeron:

32. kyojamateʔ tyujayaju.
y-kojama teʔ y/tuj-jay-yaj-wə
3ERG-nagual the_fact 3ERG/gun_shoot-INDIR-3PL-iCOM
It was her nagual that they shot
–Es su nagual al que tiraron.

Abbreviations

3ABS 3rd person absolutive agreement in an independent clause
3ERG 3rd person ergative agreement in an independent clause
3ABS:DEP 3rd person absolutive agreement in a dependent clause
3ERGD 3rd person ergative agreement in a dependent clause
ERGc ergative case marker
3PL 3rd person plural suffix

PROG progressive verb
iCOM completive aspect in an independent clause
iINC incompletive aspect in an independent clause
postAUXi incompletive aspect following an auxiliary verb
IRREAL irrealis marker (it didn't take place then and there)

INSTR instrumental derivational suffix
ITER iterative suffix (the action repeats)
INDIR indirect (or applicative) suffix, e.g., give me a hand
(from give a hand to me)
VERS1 versive suffix (it turns nouns and adjectives into verbs)
REL relative clause marker (it turns phrases into relative clauses)
HAVE the verb have
COMPL completely

References

- Hoijer, H. 1964. In Hymes (ed), *Language in Culture and Society*, p. 142.
Hymes, Dell, Ed. 1964. *Language in Culture and Society*. New York: Harper & Row.
Kay, P. & Kempton, W. 1984. What is the Sapir-Whorf hypothesis? *American Anthropologist*
86.65-79.

Pullum, G. K. 1991. *The Great Eskimo Vocabulary Hoax and Other Irreverent Essays on the Study of Language*. Chicago: University of Chicago Press.

Whorf, B. L. 1956. *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*. Cambridge, MA: MIT Press.

William L. Wonderly. 1946. Zoque Texts on the Nagual Concept. *Tlalocan II* (no. 2):97-105.