



Cognitive Linguistics

and the Study of

Indigenous Languages

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Nishinomiya, Japan

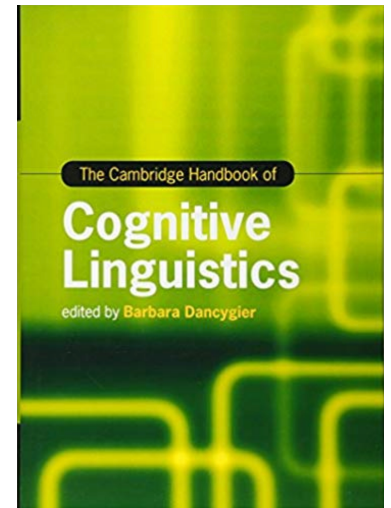
Partial pre-presentation versions

Rice, Sally. 2017. **The Study of Indigenous Languages**. In Barbara Dancygier (ed.), *The Cambridge Handbook of Cognitive Linguistics*, pp. 38-58. Cambridge: Cambridge University Press.

Rice, Sally. 2015. **The Cognitive Commitment and Endangered Language Pedagogy**. Presentation at the 13th International Cognitive Linguistics Conference, Northumbria University, Newcastle, 24 July 2015.

Rice, Sally. 2011. **Challenges to Studying the “Social-Interactional Engine” in Endangered Language Communities: Notes from the Canadian Field**. Presentation at the *Interactional Foundations of Language Workshop*, organized by Stephen Levinson & Nick Enfield at the LSA Institute, CU Boulder, 16-17 July 2011.

Rice, Sally. 2018. Talk 1: **Variation writ small: A corpus-based account of variation within a Dene (Athapaskan) speech community**. Talk 2: **Variation writ larger: How an ethos of esoterogeny may have spawned linguistic innovation and differentiation across a language family**. 3rd Wellsprings of Linguistic Diversity Forum Dialogue (Theme: “How does small-scale variation lead to typological diversity?”) 19 & 21 November 2018. Australian National University; Canberra, Australia.



The fertile soil of Indigenous languages

- | | |
|----------------|-------------|
| • Roots | 1960s–1970s |
| • Growth | 1980s–1990s |
| • Florescence | 2000s–2010s |
| • Regeneration | 2010s–2020s |





Paul Friedrich
Tarascan (P'orhépecha)
[isolate]

Ronald Langacker
Luiseño, comparative U-A
[UTO-AZTECAN]

The fertile soil of Native American languages

Tarascan/P'orhépecha
[isolate]

Atsugewi
[PALAIHNIHAN (HOKAN)]

Seneca, Onondaga
[IROQUOIAN]

Luiseno, comparative U-A
[UTO-AZTECAN]

Dene Sų́líné, Tsuut'ina
[ATHAPASKAN/DENE]

polysynthetic

- oral
- largely, small egalitarian societies
- interlocutors are familiars

Rice, Sally. 2017. **Phraseology and polysynthesis.**
In M. Fortescue, M. Mithun, & N. Evans (eds.),
The Oxford Handbook of Polysynthesis, 203-214.
Oxford: Oxford University Press.

- inflectional compression / fusion
- small root inventory
- allomorphy
- ambiguity
- suppletion
- underspecification
- opacity / figurativity / idiomaticity
- noncompositionality



The vanguard and their experience with ILs

Paul Friedrich

Wally Chafe

Len Talmy

Ron Langacker

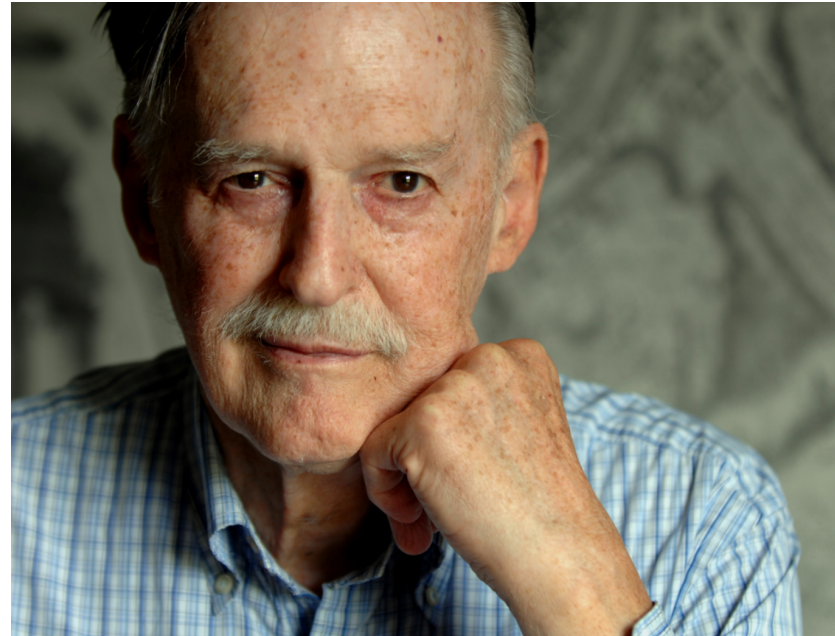


Paul Friedrich's IL contributions to CL

- 1927-2016
- PhD, 1957, Yale
- University of Chicago, Anthropology
- Tarascan (P'orhépecha) [isolate] suffixes of space
- **cross-domain metaphorical mapping**

*1969. On the meaning of the Tarascan suffixes of space. *IJAL Memoir* 23.

*1971. *The Tarascan suffixes of locative space: Meaning and morphotactics*. Indiana University Language Science Monographs, no. 9. Bloomington: Indiana University.



Paul Friedrich's IL contributions to CL

Some cross-domain referential and relational extensions of **Tarascan** spatial morphemes based on body-part terms [first row] (Friedrich 1969: 36-37).

DOMAIN \ suffix	-ŋaɾi	-mu	-ča	-ǧi
BODY	whole body, eye cheekbone, face, lap, shin	lip, mouth area	outer neck, inner throat, inside of mouth; upper calf	outside of head, hair, brains, toothtip, kneecap
ANAL-GENITAL	exterior surface of female genitalia	labia, vulva, vagina	penis	head of penis, semen
PSYCHO-SOCIAL	social 'face', memory, imagination, emotions	speaking, talking	desire, memory	conversation topic, profit in trade, social head
HOUSE PART	inside wall	door area	intersection of roof and wall (la barda)	gable, altar
TREE/ CORN PART	cob beneath husk, inner face of worked log	any bud, leaves around top of young cob	neck where root or shoot joins tuber or fruit	top of corn above cobs, tree tops, root tips above ground
POTTERY PART	inside of pot belly	lip, part attached to neck of pot	curve between mouth and belly of pot	cover of pot
other	cliff, hillside, liquid surface	cuff, hem, edge of town, hole, river	various neck-like, neck-related	hilltop, liquid surface
SIGNIFICATION (schema?)	flat, interior surface	edge, usually of an orifice	narrowing, usually of a longish object at intersection	top, above, exterior of upper surface



Paul Friedrich on working with ILs

I think that what really fired me was not just the book by Sapir but the essays by Edward Sapir, which are beautifully written and very profound and are still actually read and excite people today, although linguistics itself has changed a lot from the days of Sapir. I love[d] the idea of exploring and understanding an American Indian language, and that was part of the reward of going to Mexico. I first worked on the agrarian politics of the given region. But then, the second time I went, I worked exclusively on the language. That was very rewarding—deeply rewarding—because I got excited by these incredible words that they build with their structure.

(Friedrich & Pesman 2014: 17)



Wally Chafe's IL contributions to CL

- 1927-2019
- PhD, 1958, Yale
- UC-Berkeley, UCSB
- Onondaga, Seneca [Iroquoian], Caddo [Caddoan]
- semanticism over syntacticism / usage / interaction / verbalization

1962. Phonetics, semantics, and language. *Language*.

1965. Meaning in language. *American Anthropology*.

1966. Ethnographic semantics (multiple authors), *Current Anthropology*

1967. Language as symbolization. *Language*.

1968. Idiomaticity as an anomaly in the Chomskyan paradigm. *F of Lg*.

*1970. *Meaning and the Structure of Language*. (U Chicago Press)

1970. A Semantically Based Sketch of Onondaga. *IJAL Supplement*.

1973. Language and memory. *Language*.

1974. Language and consciousness. *Language*.

1980. The Pear Stories. (Ablex).

1987. Cognitive constraints on information flow. (In *Coherence & Grounding*)

1994. *Discourse, consciousness, and time*. (Chicago).

1996. How consciousness shapes language. *Pragmatics & Cognition*.



Wally Chafe's IL contributions to CL

- language, memory, and consciousness (given/new)
- discourse structure
- spoken vs. written forms of language
- verbalization (Pear Stories)
- schemas and imagery in language
- information flow
- prosody and intonation units
- evidentiality, epistemic modality
- grammaticalization



Wally Chafe's IL contributions to CL

Intonation Units

1. ... It's fúnny though,
2. ... I dó think that makes a difference .. but,
3. ... Í can recall ... uh-- ... a big undergraduate class that Í had,
4. ... where .. éverybody loved the instrúctor,
5. ... a--nd .. he was a ... real .. uh .. óld world ... Swíss-- ... guy,
6. .. this was uh .. a biólogy course,
7. ... a--nd he-- ... left áll of the-- sort of uh-- ... real cóntact with stú-
dents .. up to .. his assístants.
- (8. ... Mhm.)
9. ... A--nd .. he would come into cláss,
10. ... a--t .. uh-- you know three or f
11. .. precisely one minute after the hóur,
12. or something like thát,
13. ... a--nd he-- .. wou-ld .. immédiately open his ... nótes up,
14. ... in the front of the róom,
15. .. and he st
16. and évery ... évery lécture,
17. ... áfter the first,
18. .. stártd the same wáy.
19. This was .. u--m at Wésleyan,
20. when Wesleyan was still ... a mén's school.
21. ... So évery lecture after the first would begin,
22. ... Géntlemen,
23. .. ze lást time,
24. ve vere tálking about,
25. .. and then he would
- (26. (laughter))
27. ... But then .. you know he would just .. give a lécture,
28. ... a--nd .. there was no .. real interáction with the-- .. the students,
29. .. and then .. at .. at the énd,



Wally Chafe in Edmonton, Alberta, Canada
ICLC-12, 23 June 2013
Special Theme Session: *The Verbalization of
Experience: In Honor of Wallace Chafe*



Wally Chafe on working with ILs

Ever since my early fieldwork I have been convinced of the value of working in depth with one or more languages radically different from one's own. Getting one's hands dirty observing real speech, even in a familiar language but especially in an unfamiliar one, brings insights obtainable in no other way. I learned, too, that uncovering the mysteries of a language through fieldwork is the purest application of the scientific method. Observing a language in use, imagining explanations for why it has the shape it has, and seeing those provisional explanations confirmed, disconfirmed, or modified by further observations brings unequaled thrills of discovery, an experience that becomes less available each time a language dies. (Chafe 2002; emphasis mine)



Wally Chafe on working with ILs

Sometime in the early 1960s it became clear to me that meanings were as important to the structure of language as sounds, and perhaps more important—that language was fundamentally a way of associating meanings with sounds, the meanings determining in the first instance the shape that language took. To make this association with sounds possible, and to promote communication, it was necessary for each language to have its own way of organizing meanings, just as each language has its own way of organizing sounds. (Chafe 2002)



Ron Langacker on Wally Chafe (MSL)

MSL is...valuable because it focuses needed attention on several matters of central importance for future progress in linguistic theory and analysis. The importance of semantic structure requires no comment. Idiomaticity has vast implications for the relation between lexical and syntactic structure. Syntactic and semantic change is a neglected area that promises to shed much needed light on certain theoretical questions. Finally, it would be difficult to exaggerate the present importance of linguistic studies that go beyond the bounds of a single language family....

...I hope that linguists like Chafe, who combine the study of non-Indo-European languages with a lively interest in linguistic theory, will help to show us the way.

(Langacker's 1972 *Language* review of MSL)



Len Talmy's IL contributions to CL

- circa 1940/41
- PhD, 1972, UC-Berkeley
- UC-Berkeley, U Buffalo
- Atsugewi [Shasta-Palaihnihan, possibly Hoka]
- event conflation / FIG-GRD / force dynamics / windowing of attention

*1972. Semantic structures in English & Atsugewi (PhD diss)

1975. Figure and ground in language. BLS 1.

1977. Rubber sheet cognition in language. CLS 13.

1978. The relation of grammar to cognition.

1983. How language structures space.

1985. Force dynamics in language and cognition. *Cognitive Science* 12 (1).

*1985. Lexicalization patterns: Semantic structure in lexical forms.

1996. Fictive motion in language and 'ception. In *Language & Space*.

2000. *Towards a Cognitive Semantics* (Vols. 1-2), MIT Press.

2018. *The Targeting System of Language*. MIT Press.



Len Talmy's IL contributions to CL

analysis of the verbal semantics of Atsugewi

woq^hputícta

< 'w-uh-qput-íct-a

3SG S.FIGURE.FACTUAL.MODE-object.in.free.fall-dirtlike.material.moves-into.liquid-3SG S.FIGURE.FACTUAL.MODE

lit. **'it dirted into liquid'**

"dirt-like material, which was material in freefall (and which was the thing spoken about) , (in fact) moved into liquid"

"(it)-freebody-dirted-aliquid"

free gloss: **'the dirt fell in the water'**

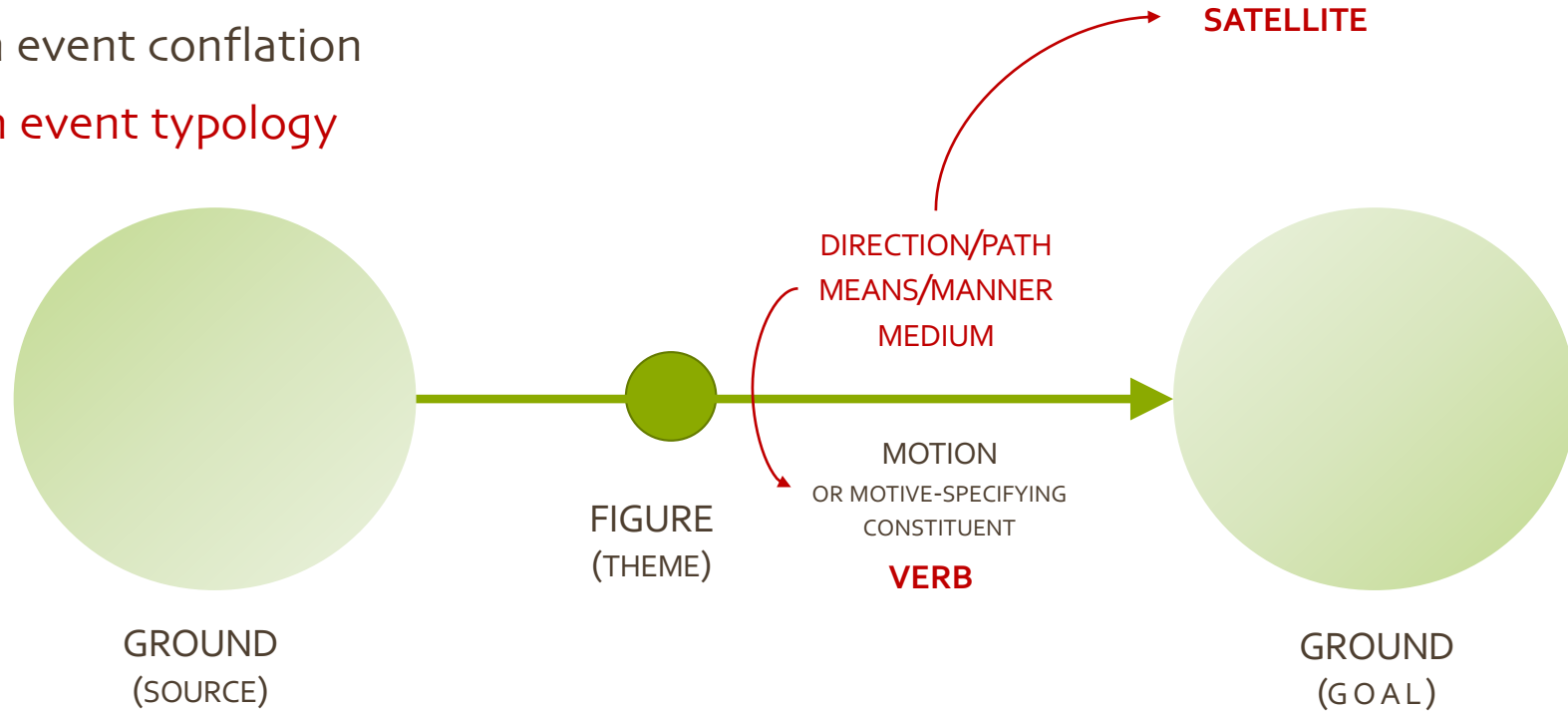
[Talmy 1972: 59-60]



Len Talmy's IL contributions to CL

motion event conflation

motion event typology



Len Talmy's IL contributions to CL

motion event conflation
motion event typology

Table 2. Talmy's (2000) motion event conflation pattern taxonomy with example **families/languages**.

(a) verb-framed languages	(b) satellite-framed languages	(c) mixed languages
verb expresses: MOTION MANNER	verb expresses: MOTION PATH	verb expresses: FIGURE MOTION
satellite expresses: PATH GROUND	satellite expresses: MANNER GROUND	satellite expresses: PATH MANNER
E.g., Indo-European (except for <i>Romance</i>), Finno-Ugric , <i>Chinese, Ojibwa, Warlbiri</i>	Romance, Semitic, Japanese, Korean, Polynesian, Turkish, Tamil, Caddo, Nez Perce	Athapaskan, Hokan, ASL

The examples in (4) illustrate the three language types based on default conflation patterns:

- (4) a. English: *I swung my leg off of the footstool.*
CAUSE MOTION/MANNER FIGURE PATH GROUND
- b. Spanish: *La botella entró a la cueva (flotando).*
the bottle moved.in to the cave (floating).
FIGURE MOTION/PATH PATH GROUND MANNER
'The bottle floated into the cave.'

- c. Navajo: *ch'é- 'éj'oot* [Young & Morgan]
horizontally out-non-compact matter moves independently
PATH-MOTION/FIGURE
'it (smoke/fog/cloud) billows horizontally out'

Rice, Sally. 2002. **Figure/Motion/Manner/Path Conflation Patterns in the Dene Sýliné Verb.**
Presentation at the Athapaskan Languages Conference; Fairbanks, AK; 16 June 2002.



Len Talmy on working with ILs

Perhaps not the least value of the [dissertation] as a whole is the extent to which it investigates Atsugewi, which, as a language as exotically distant from English, commends our studying it in its own right. For me, it has also been a pleasure to offer an account of a language towards which, if a linguist is permitted, I have come to feel a great affection. More significant for the main thesis of this [dissertation], however, is the fact that in comparing Atsugewi and English—as different from each other as two of the world's languages might be—one discovers and can characterize a core common to both. (Talmy 1972: 5)



Ron Langacker's IL contributions to CL

- 1942-
- PhD, 1966, University of Illinois
- UCSD
- comparative & historical Uto-Aztecan
- **imagery in grammar, construal, Space Grammar, Cognitive Grammar**

*1970. Review of *MSL, Language*.

1972. *Language & its Structure*.

1974. Movement rules in functional perspective. *Lg* 50

1975. (with Pam Munro). Passives & their meaning, *Lg* 51(4)

*1976. Sem Representations & the Lx Relativity Hypothesis, *F of Lg* 14(3)

1978. Form & meaning of the English auxiliary. *Lg* 54.

1982. Space Grammar, analyzability, and the English passive. *Lg* 54.

1987. *Foundations of Cognitive Grammar*, Vol. I, *Theoretical Prerequisites*. (Stanford).

1990. *Foundations of Cognitive Grammar*, Vol. II, *Descriptive Applications*. (Stanford).

1991. *Concept, Image, & Symbol*.



Ron Langacker's IL contributions to CL

semantics of comparative Uto-Aztecan

nikiiyittiwa

[Hopi]

niʔ-kiiyit*-tiwa

*compare: **paahi** 'water in a free state'

1SG-contained.water-see/find

3 inadequate free glosses:

- a. 'I saw the water. It was (in a) contained (state)'
- b. 'I saw the water, which was (in a) contained (state)'
- c. 'I saw the contained water'

Langacker, R.W. 1976. Semantic representations and the linguistic relativity hypothesis. *Foundations of Language* 14 (3): 307-357.



Ron Langacker on working with ILs

It is argued that 'semantic representations', the semantic objects determined by linguistic principles, cannot be equated with the primary structures manipulated in cognition, termed 'conceptual structures'. It is further argued, with lexical and grammatical examples from various languages, that semantic representations are not universal, even granted essential uniformity of cognition for all speakers and the viability of an informal notion of semantic equivalence between sentences. Semantic representations are not neutral characterizations of conceived situations; rather they portray situations through various 'images', so that the study of semantic representations cannot be divorced from the general problem of imagery and figurative language. One kind of syntactic change involves reanalysis of semantic representations, shifting the image they embody from one type to another (p. 307, emphasis mine).

Langacker, R.W. 1976. Semantic representations and the linguistic relativity hypothesis. *Foundations of Language* 14 (3): 307-357.



Ron Langacker on why ILs support the rejection of GG

- its overfixation on productivity in language
- its underestimating the role of fixed and semi-fixed expressions in language (idiomaticity)
- its strong rationalist/universalist predisposition
- its indifference to or ignorance of language-specific differences in language
- its emphasis on syntax to the virtual exclusion of the lexicon (especially since “lexicon is where convention predominates over creativity and thus lends itself maximally to the (support of) the Linguistic Relativity Hypothesis”)
- its emphasis on abstract representations and implausible analyses

Langacker, R.W. 1976. Semantic representations and the linguistic relativity hypothesis. *Foundations of Language* 14 (3): 307-357.



Ron Langacker on why ILs support the rejection of GG

"Virtually all language is figurative to some degree." (p. 321)

"Linguists cannot restrict their attention to sentences utterly lacking in imagery—this would leave them with very little subject matter, for even grammatical markers often have figurative properties." (ibid.)

"Moreover, I have not advanced a preconceived notion of the relation between language and thought, but rather one that has changed significantly over the years as I have learned more about the structure of diverse languages, the semantic structure of sentences, and the nature of language change." (p. 356)

Langacker, R.W. 1976. Semantic representations and the linguistic relativity hypothesis. *Foundations of Language* 14 (3): 307-357.



The vanguards' CL contributions from their study of ILs

- it all starts with meaning
- don't expect full compositionality or inter-language comparability in morphosyntax or semantics (others' analytical blueprints are inadequate and conventionalization happens)
- idiomaticity and figurativity are the norm in language, not exceptional, rarefied, or literary
- imagery is key aspect of understanding and representing morpho-syntactico-semantic organization
- construal plays a huge role in that organization; construal is relative to domains/frames; relevant, too, for subjectification
- metaphor/metonymy are huge factors in language change (& grammaticalization)
- language = categorization....and, thus, is organized around prototypes and extensions
- the best approach to morphosyntactic analysis is monostratal, constructional



First generation CL work on ILs (the 1980s)

Rob MacLaury (Zapotec)

Claudia Brugman (Chalcatongo Mixtec)

Monica Macauley (Chalcatongo Mixtec)

Colette Grinwald-Craig (Rama)

"west-coast linguistics"

Gene Casad (Cora)

Dave Tuggy (Náhuatl)

Ken Cook (Samoan)



First generation CL work on ILs (the 1980s)

- MacLaury's (1976, 1989) metaphor model of spatial artifactual paronymy in Zapotec

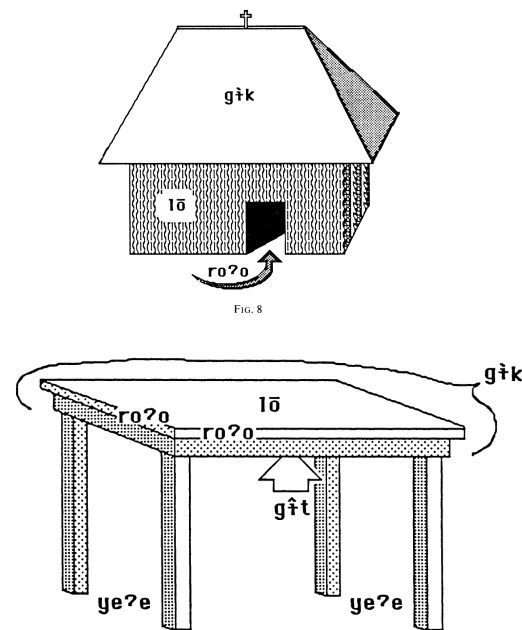
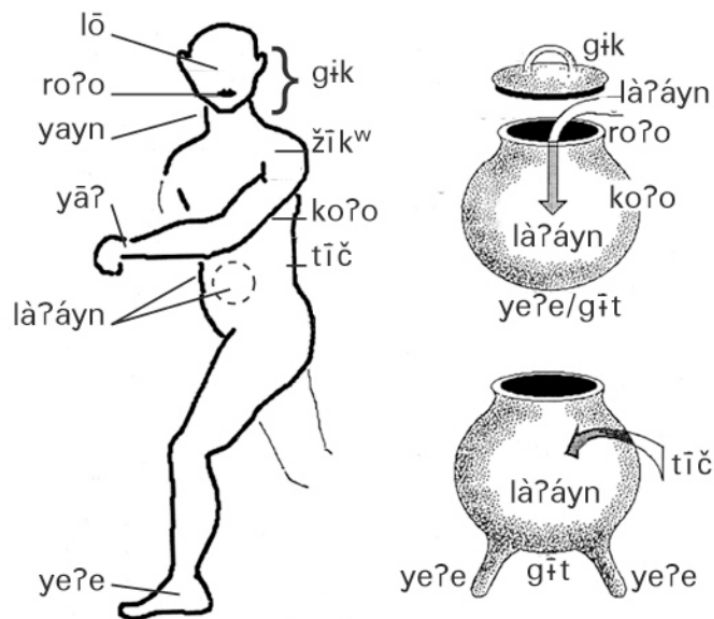


FIG. 12



First generation CL work on ILs (the 1980s)

- Brugman's (1983) study of body-part term polysemy & grammaticalization in **Chalcatongo Mixtec**

- a. **nũũ** maria face Maria 'Maria's **face**'
- b. **nũũ** ndàʔa-ri face hand-1SG 'my **palm**' (PARTITIVE)
- c. hìká wãã hižaa **nũũ**-mesa basket DEF be.located face-table 'the basket is **on** the table' (LOCATIVE-TOPOLOGICAL)
- d. hindi-rí **nuù**-maria stand-1SG face-Maria 'I am standing **in front of** Maria' (LOCATIVE-PROJECTIVE)
- e. ni-haʔa-rí **nuù**-ʔeʔe PERF-pass-1SG face-house 'I went **to** his house' (ALLATIVE)
- f. ni-xááʔa-ríʔn kili **nũũ**-seʔe-ro PERF-pass-1SG one horse face-son-2SG 'I gave a horse **to** your son' (DATIVE)
- g. ni-sátĩũ-rí **nuu**-monika PERF-work-1SG face-Monica 'I worked **for/instead of** Monica' (SUBSTITUTIVE)
- h. ni-s-naʔa-ríʔnuù-séʔé-ri' ha sátĩũ PERF-CAUS-know-1SG face-son-1SG COMP work 'I taught (**to**) my son to work' (BENEFACTIVE/ABSTRACT GOAL)



First generation CL work on ILs (the 1980s)

- Macauley (1982, 1985) and Craig-Grinwald (1991:455-492) on the semantics of GO and COME verbs in **Chalcatongo Mixtec** and **Rama**, respectively

a.	naas I 'I don't want to go get/for water'	sii water P	ba P	aa NEG	taak-iikar go-want	GOAL/PURPOSIVE POSTPOSITION
b.	tiiskama baby 'I'm going in order to see/look at the baby'	ni-sung- bang I-see-SUB		taak-i go-TNS		SUBORDINATOR
c.	tiiskama baby 'I'm going to look at the baby'	ni-sung- bang . I-see-ASP		c'. i-traat- bang 3-walk-ASP 'he is going to walk'		PROSPECTIVE ASPECT
d.	ni-tanang I-look 'I'm going to look at it'	ba -n-taak-i RP-P-go-TNS				RELATIONAL PRE-VERB
e.	mwaing 1PL 'let's drink our soup'	yairi soup	s-tuk- bang 1PL-drink-IMPER			PLURAL IMPERATIVE/HORTATIVE

Craig, Colette. 1991. Ways to GO in Rama: A case study in polygrammaticalization. In Elizabeth Closs Traugott & Bernd Heine (eds), *Approaches to Grammaticalization: Vol. II. Types of Grammatical Markers*, 455-492. Amsterdam/Philadelphia: John Benjamins.



First generation CL work on ILs (the 1980s)

- Casad, Eugene. 1982. *Cora locationals and structured imagery*. Doctoral dissertation; University of California, San Diego.
- Casad & Langacker 1982 (Inside & Outside in Cora)
- Casad, Eugene H. 2012. *From space to time: A cognitive analysis of the Cora locative system and its temporal extensions*. Amsterdam/Philadelphia: John Benjamins.

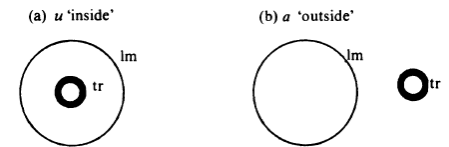


FIG. 1

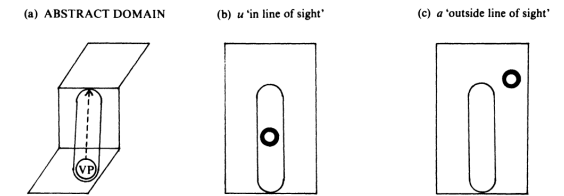


FIG. 8

inside/outside
in/out of line of sight
(in)accessibility

a-tyá-suuna káasu hece
outside-in-middle-pour basin in
'the water is pouring into the basin/pan' [VISIBLE]

u-tyá-suuna sa'ari cahta'a
inside-in-middle-pour pot inside
'the water is pouring into the storage jar' [INVISIBLE]

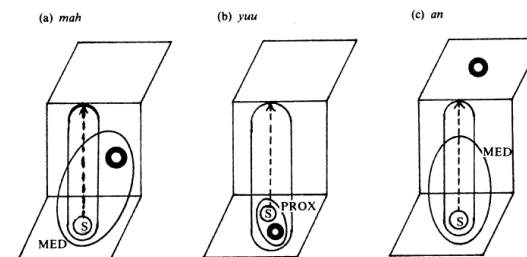


FIG. 9

m-a-h = MED-outside-face.of.slope
'away up there to the side in the face of the slope'

y-ú-u = PROX-inside-foot.of.slope
'right here at the foot of the slope'

á-Ø-n = outside-DIST-top.of.slope
'away up there on top of the slope'

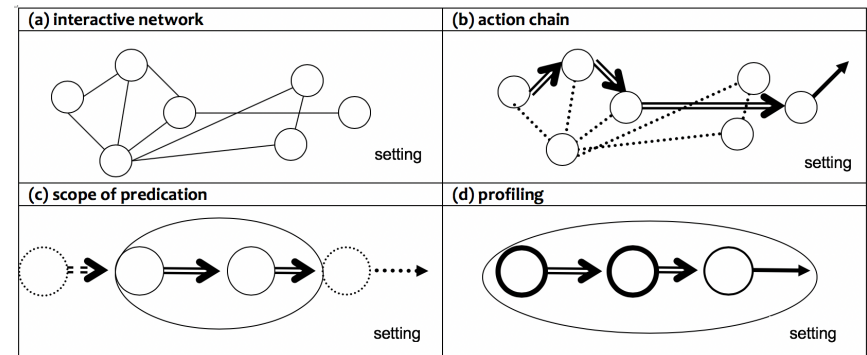
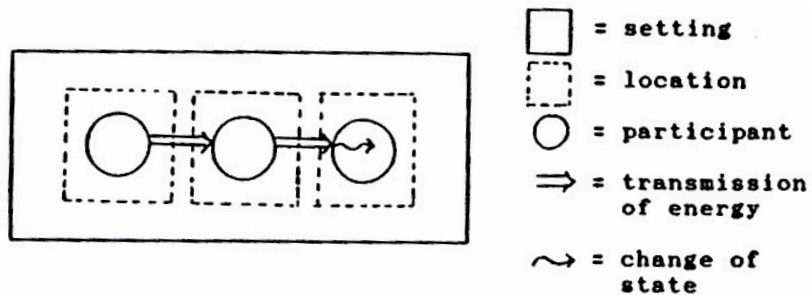
h=face : = foot n = top



First generation CL work on ILs (the 1980s)

- Tuggy (1981) on transitivity in Náhuatl (Space Grammar)
- Cook (1988) on transitivity in **Samoa**n (Cognitive Grammar)

(1)

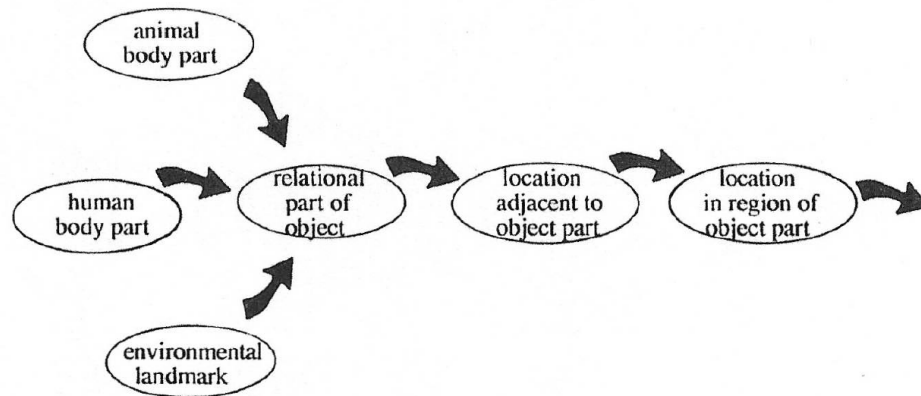


Cook, Kenneth. 1988. A cognitive analysis of grammatical relations, case, and transitivity in Samoan. Doctoral dissertation; University of California, San Diego (p. 9).



First generation CL work on ILs (the 1980s)

- Svorou, Soteria. 1993. *The Grammar of Space*. Amsterdam/Philadelphia: John Benjamins.



(A)

(B)

(C)

(D)

Figure 11: The evolutionary path of spatial grams from nouns

The Anthropomorphic Model

Body parts	Spatial grams	Example languages
face, eye, forehead mouth, breast/chest	> FRONT-REGION	Abkhaz, Bari, Bihari, Car, Halia, Haka Isl. Carib, Karok, Papago, Melanesian Pidgin, Tigre, !Kung
back	> BACK-REGION	Bari, Basque, Guaymi, Haka, Halia, Island Carib
head	> TOP-REGION	Abkhaz, Car, Chalcatongo Mixtec, Ewe, Finnish, Tigre
buttocks, hips, foot	> BOTTOM-REG	Bari, Chalcatongo Mixtec, Halia, Navajo, Shuswap
ear, flank, ribs, heart, (abdomen)	> SIDE-REGION	Abkhaz, Bari, Basque, Korean, Papago, Tigre
breast/chest, waist	> MEDIAL-REGION	Margi, Ossetic
heart, stomach, blood	> INSIDE-REGION	Abkhaz, !Kung, Papago, Tubatulabal
forehead, mouth	> EDGE	Ewe, Margi, Papago, Tarascan

The Zoomorphic Model

Body parts	Spatial grams	Example languages
head	> FRONT-REGION	Navajo, Maasai
buttocks, loins	> BACK-REGION	Papago, Maasai, Shuswap, Vai, Isl. Carib
back	> TOP-REGION	Chacobo, Chalcatongo Mixtec, Shuswap
belly	> BOTTOM-REGION	Chalcatongo Mixtec



First generation CL work on ILs (the 1980s)

- Svorou, Soteria. 1993. *The Grammar of Space*. Amsterdam/Philadelphia: John Benjamins.

The Environmental Landmark Model		
Landmarks	Spatial grams	Example languages
sky/heaven, summit, peak/ maintain, top/roof, cape	TOP-REGION	Basque, Ewe, Halia, Guaymi
ground, earth, soil root	BOTTOM-REGION	Hausa (50 other African languages: Heine 1989)
shore/land, house, hole	INSIDE-REGION	Abkhaz, Car
field, doorway	OUTSIDE-REGION	Abkhaz, Armenian, Breton, Gallic, Irish, Lithuanian, Latin, Greek, Persian
field, doorway	FRONT-REGION	Middle Welsh, (1 African lang.: Heine 1989)
track, trail, trace, footprint	BACK-REGION	Abkhaz, Guaymi, Island Carib, Navajo, Tigre, Middle Welsh
further bank	OPPOSITE TO	Bihari
fish dam	ACROSS	Karok
shore/land	ALONG	Guaymi
canyon	MEDIAL-REGION	Papago
road	VIA	Abkhaz
road	THROUGH	Palantla Chinantec
road	TOWARDS	Chalcatongo Mixtec
riverside	SIDE-REGION	Basque

The Verbal Model		
Verbal notions	Spatial meaning	Example languages
to be at, to rest, to see, to go (to sit), (to live)	REGIONAL	Ewe, Twi, Chinese, Korean, Yoruba, Halia, Bihari
to go, to see, to face, to take, (to come)	ALLATIVE	Halia, Ijo, Korean, Krio
to see, to point out, to look, to approach	TOWARDS	Bihari, Bikol, Halia
to go, to pass by, to come out, to remain, to stop	ABLATIVE	Bengali, Chacobo, Ijo, Krio, Korean
to enter	ALLATIVE-INTERIOR	Bikol
to be over, to see from a vantage point, to rise, (to climb)	TOP-REGION (up, over)	Halia
to fall, (to descend)	BOTTOM-REGION (down)	Ijo
to advance, to proceed, to look out, to get ahead	FRONT-REGION	Papago, Tigre (also in 6 African lgs reported by Heine 1989)
to be last, to follow, to draw behind	BACK-REGION	Papago, Tigre
to separate	MEDIAL-REGION	Tigre
to go around	CIRCUMFERENTIAL	Tigre
to approach, to touch, to stand/abide	PROXIMAL-REGION	Bihari, Papago
to see, to catch/hold	END-POINT LOCATION	Bihari
to pass, to give, to be	VIA	Bihari

(the verbs in parentheses were cited by Givón 1975, but no specific language examples were given)



Global CL work on ILs (the 1990s)

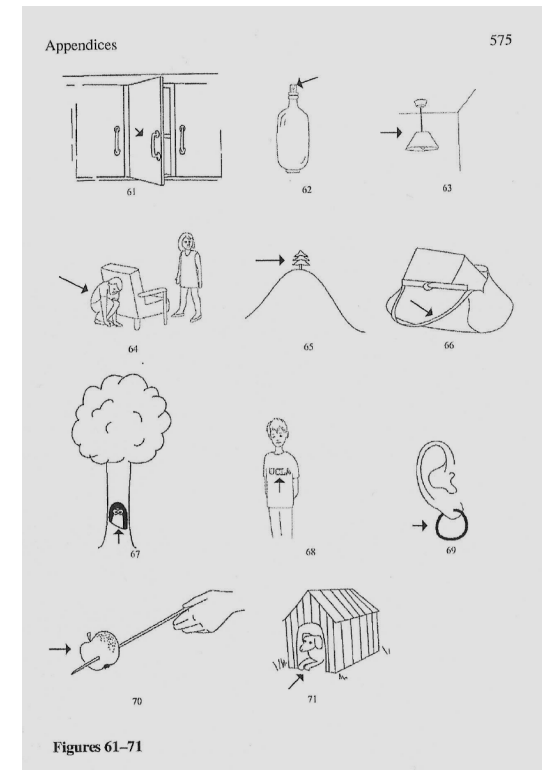
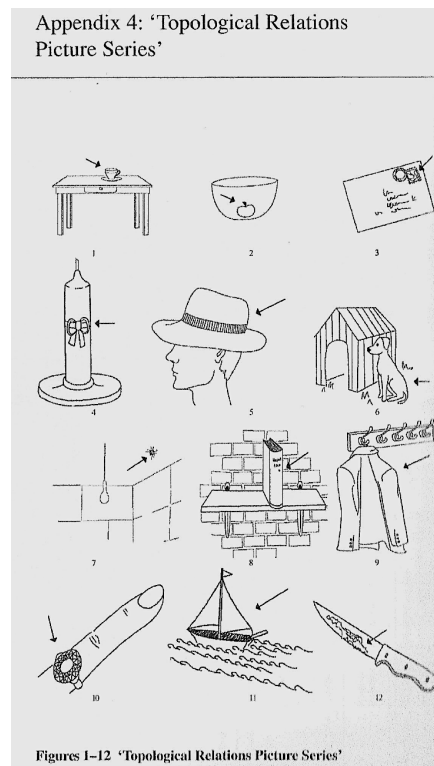
- MPI-Nijmegen (Language & Cognition Department, 1994-2017) under the direction of Stephen Levinson [**multiple ILs**]



Global CL work on ILs (the 1990s)

Levinson, Stephen C. & David Wilkins (eds.). 2006. *Grammars of Space: Explorations in Cognitive Diversity*. Cambridge: CUP.

TPRS: Topological
Relations Picture Series



Global CL work on ILs (the 1990s)

Levinson, Stephen C. & David Wilkins (eds.). 2006. *Grammars of Space: Explorations in Cognitive Diversity*. Cambridge: CUP.

Table 1.1 *Grammars of space – language sample*

Language	Language affiliation	Country where research was done	Number of native speakers
Arernte (Eastern and Central)	Australian, Pama-Nyungan	Australia	2,000
Jaminjung	Australian, non-Pama-Nyungan	Australia	100
Warrwa	Australian, non-Pama-Nyungan	Australia	2
Yélî Dnye	Papuan, Isolate	Papua New Guinea	4,000
Kilivila	Austronesian	Papua New Guinea	23,000
Tzeltal	Mayan	Mexico	200,000
Yukatek Maya	Mayan	Mexico	800,000
Tiriyó	Cariban, Taranoan	Brazil, Surinam	2,000
Ewe	Niger Congo, Kwa	Ghana	2,000,000
Tamil	Dravidian	India	70,000,000
			(world-wide)
Japanese	Isolate? / Altaic?	Japan	118,000,000
Dutch	Indo-European, Germanic	Netherlands	15,000,000
			(in the Netherlands)



Global CL work on ILs (the 1990s)

Levinson, Stephen C. & David Wilkins (eds.). 2006. *Grammars of Space: Explorations in Cognitive Diversity*. Cambridge: CUP.

Meira, Sérgio. Approaching space in Tiriyo grammar, 311-358.

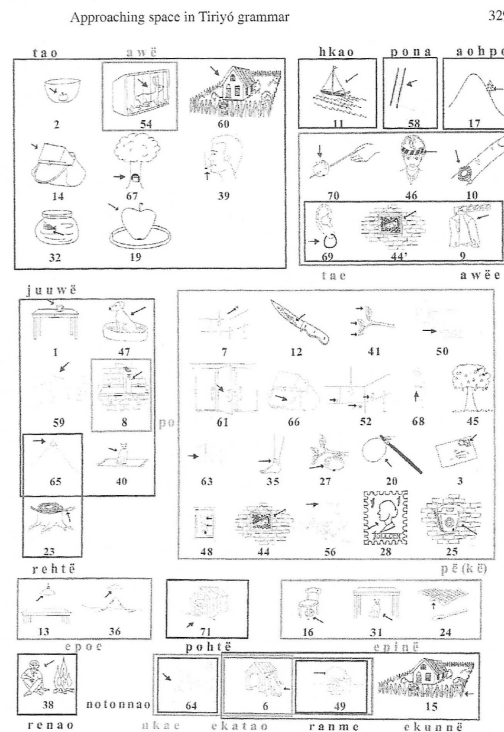


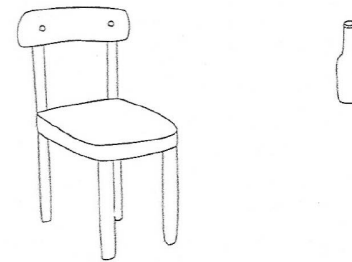
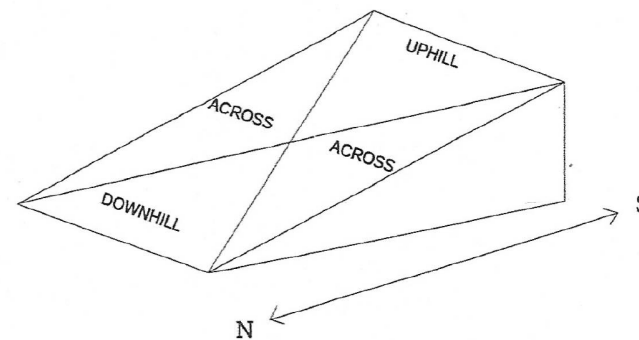
Figure 9.1a Venn diagrams with Y = 100% (unanimous agreement)



Global CL work on ILs (the 1990s)

Levinson, Stephen C. & David Wilkins (eds.). 2006. *Grammars of Space: Explorations in Cognitive Diversity*. Cambridge: CUP.

Brown, Penelope. A sketch of the grammar of space in Tzeltal, 230-272.



'The bottle is uphill of the chair'

Figure 7.5 The Tzeltal uphill/downhill system



Global CL work on ILs (the 1990s)

Levinson, Stephen C. & David Wilkins. 2006. Towards a semantic typology of spatial description. In Levinson & Wilkins (eds.) *Grammars of Space: Explorations in Cognitive Diversity*, 512-552. Cambridge: CUP.

BLC (Basic Locative Construction) Hierarchy

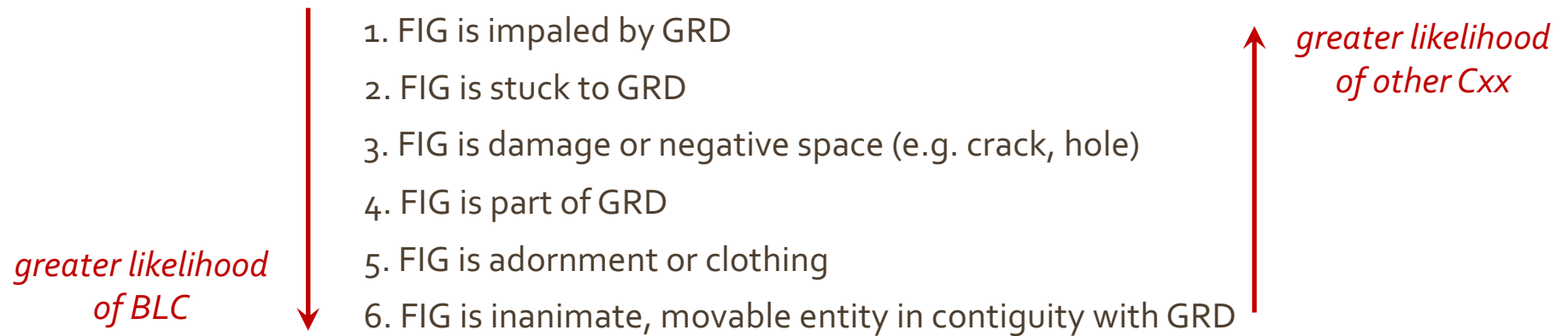
BLC		other construction
close contact		separation
independent FIG	attached FIG	FIG/GRD in part/whole configuration
contained FIG		contained GRD
inanimate FIG or GRD		animate FIG or GRD
small FIG relative to GRD		large FIG relative to GRD
FIG & GRD in stereotypical relation		FIG & GRD in unusual, atypical relation
canonical (3D) FIG	2- or 1-D FIG	negative space



Global CL work on ILs (the 1990s)

Levinson, Stephen C. & David Wilkins. 2006. Towards a semantic typology of spatial description. In Levinson & Wilkins (eds.) *Grammars of Space: Explorations in Cognitive Diversity*, 512-552. Cambridge: CUP.

BLC (Basic Locative Construction) Hierarchy



anim GRD ring on finger	>	FIG pierced apple on skewer	>	GRD pierced arrow in apple	>	adhesion stamp on letter	>	core scenes cup on table
----------------------------	---	--------------------------------	---	-------------------------------	---	-----------------------------	---	-----------------------------



Global CL work on ILs (the 1990s)

- David Wilkins & Semantic Typology of BP terms

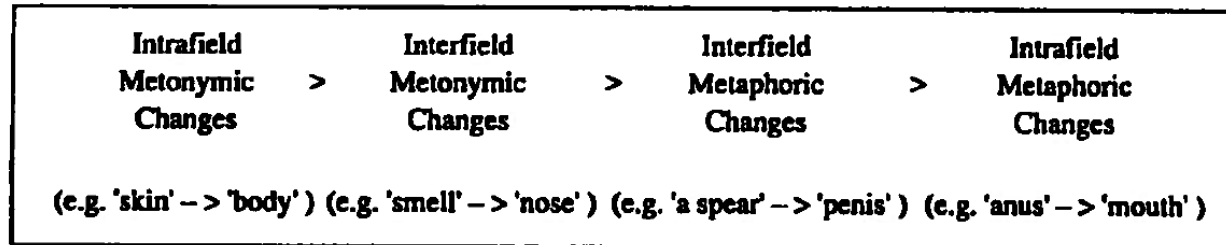
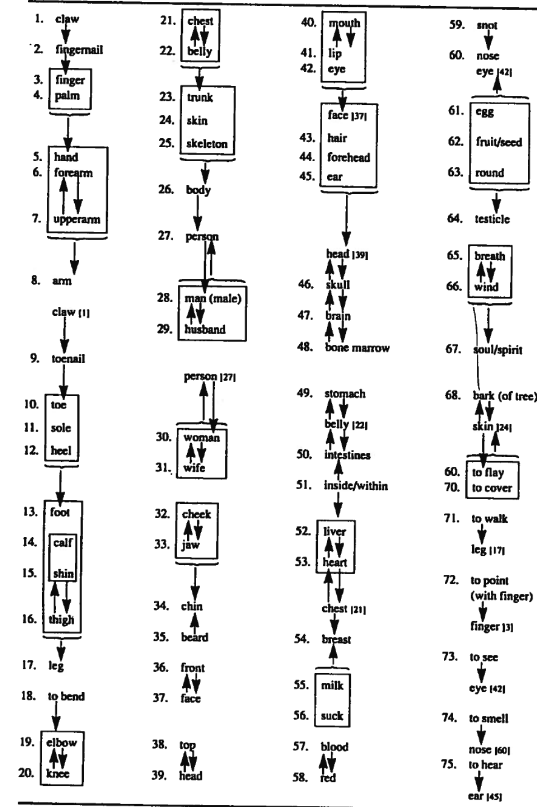


Figure 10-4. Hierarchical (from most to least frequent) representation of relative degree to which different classes of change give rise to terms for notions within the semantic field "parts of a person."

Wilkins, David. 1996. Natural tendencies of semantic change and the search for cognates. In Mark Durie & Malcolm Ross (eds.), *The Comparative Method Reviewed: Regularity and Irregularity in Language Change*, 264-304. Oxford: OUP. (pp 276, 284).

TABLE 10-1



Global CL work on ILs (the 1990s)

- Frantisek Lichtenberk (To'aba'ita)

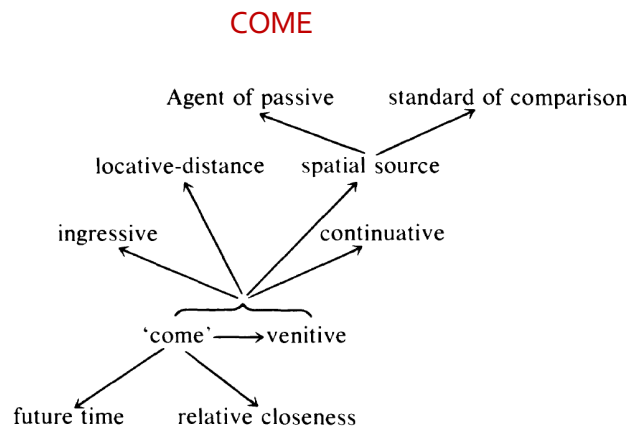


FIGURE 1. Grammaticalizations of COME forms.

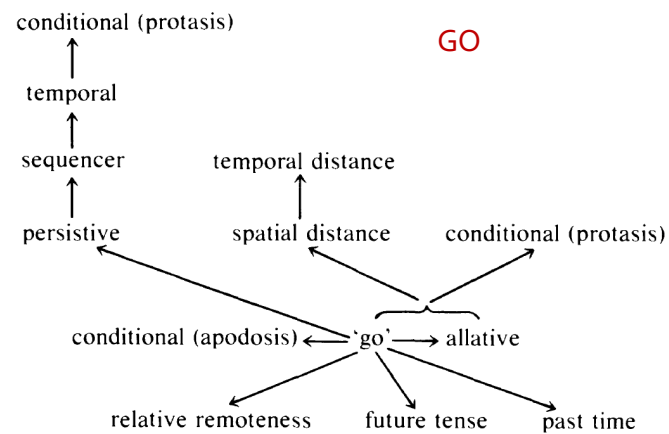


FIGURE 2. Grammaticalizations of GO forms.

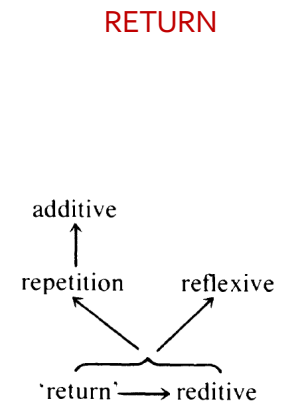


FIGURE 3. Grammaticalizations of RETURN forms.

Lichtenberk, Frantisek. 1991. Semantic change and heterosemy in grammaticalization. *Language* 67: 475-509.



Global CL work on ILs (the 1990s)

- Frantisek Lichtenberk (To'aba'ita)

Finally, this study has provided support for the view of meanings as essentially subjective and open-ended. It is human conceptualization of phenomena and of the relations among them, rather than some objective properties of phenomena, that is directly relevant to semantic/functional extensions and so to meanings as such. The meaning of a term is not restricted to its central aspect, its typical designation; rather, it subsumes all the aspects of the situations in which the term can be used. Even peripheral aspects of the total meaning of a term may become salient and thus provide motivation for an extension.

Lichtenberk, Frantisek. 1991. Semantic change and heterosemy in grammaticalization. *Language* 67: 475-509.



Global CL or CL-compatible work on ILs (since the 1970s)



North America

IROQUOIAN
HOKAN
UTO-AZTECAN

ATHAPASKAN

ALGONQUIAN

CADDOAN
POMOAN
ESKIMO-ALEUT
SALISHAN

WAKASHAN

Seneca, Onondaga
Mohawk, Cayuga
Atsugewi
Luiseño, Aztec
Cora
Náhuatl
Dene Sų́líné
Hupa
Koyukon
comparative DENE
East Cree
Michif
Caddo
Central Pomo
Yup'ik
Coeur d'Alene
various SALISHAN
various WAKASHAN

Wally Chafe
Marianne Mithun
Len Talmy
Ron Langacker
Gene Casad
Dave Tuggy
Sally Rice, Martin Thiering
Jocelyn Ahlers, Justin Spence
Melissa Axelrod, Chad Thompson
Sally Rice, Conor Snoek
Marie-Odile Junker
Leslie Morcom
Wally Chafe
Marianne Mithun
Marianne Mithun, Mike Fortescue
Gary Palmer, Roy Ogawa
Lindsay Morcom
Lindsay Morcom



South America

QUECHUMARAN
TUPI-GUARANÍ

Wanca Quecha Guaraní

Rick Floyd
Maura Velázquez-Costillo

Meso-America

isolate
OTO-MANGEUAN

CHIBCHAN
MAYAN

Tarascan/P'orhépecha
Ayoquesco Zapotec
Tlapazola Zapotec
Chalcotongo Mixtec
Copala Trique
Rama
Jacaltepec
Yukatec
Tzetal
Mopan Maya
Zinacanteco Tzotzil

Paul Friedrich
Robert MacLaury
Kristine Jensen de López
Claudia Brugman, Monica Macauley
Barbara Hollenbach
Colette Grinvald (Craig)
Colette Grinvald (Craig)
John Lucy, Jürgen Bohnemeyer
Penelope Brown
Eve Danziger
John Haviland



Global CL or CL-compatible work on ILs (since the 1970s)



Africa

NILO-SAHARAN
KHOISAN
NIGER-CONGO

Ik
various **KHOISAN**
Yoruba
various **NIGER-CONGO**
Wolof
Chaga
Chindali
Shona

BANTU

KWA

various **BANTU**
Ewe, Akan
Siwu

Bernd Heine
Bernd Heine
Mark Dingemanse
Bernd Heine
Gary Palmer
Michelle Emanatian
Robert Botne
Felix Ameka
Gary Palmer
Robert Botne
Felix Ameka
Mark Dingemanse

Pacific

MALAYO-POLYNESIAN

MELANESIAN
OCEANIC

POLYNESIAN

Palauan
Kilivila
Longgu
To'aba'ita
Manam
Vangunu
Paamese
various **OCEANIC**
Samoan
Hawai'ian

Michael Smith
Gunter Senft
Deborah Hill
Frank Lichtenberk
Frank Lichtenberk
Frank Lichtenberk
Simon Devylder
John Bowden
Ken Cook
Ken Cook



South & SE Asia

TAI-KADAI

DRAVIDIAN

Lao
Tai Khamti
Tamil

Nick Enfield
Doug Inglis
Eric Pederson

Australasia

PAPUAN (sic)

PAMA-NYUNGAN

NON-PAMA-NYUNGAN
GUNWINYGUAN

Yélŋ Dnye
Kalam
Nen
various **PAPUAN**
Guugu Yimithirr

Mparntwe Arrernte
Kuuk Thaayorre
Ungarinyin
Dalaban

Stephen Levinson
Andrew Pawley
Nick Evans
Nick Evans
Stephen Levinson
John Haviland
David Wilkins
Alice Gaby
Stef Spronck
Nick Evans



Embracing diversity & usage (the 2000s-2010s)

- MPI-Nijmegen (Language & Cognition Department, 1994-2017) under the direction of **Stephen Levinson**











Embracing diversity & usage (the 2000s-2010s)

- MPI-Nijmegen (Language & Cognition Department, 1994-2017) under the direction of **Stephen Levinson**



TLA Tools

	AMS	a tool to grant and deny the access to a (part of a) corpus.
	Annex	the Annotation Exploration tool in the MPI web-based framework for archive exploration and enrichment
	Arbil	Arbil is an application for arranging research material and associated metadata into a format appropriate for archiving.
	Browser/Catalogue	access the MPI archive through the web
	ELAN	Multimedia Annotator
	Imex	a tool for exploring images
	LAMUS	Language Archive Management and Upload System
	Trova	the annotation search tool in the MPI web-based archive framework

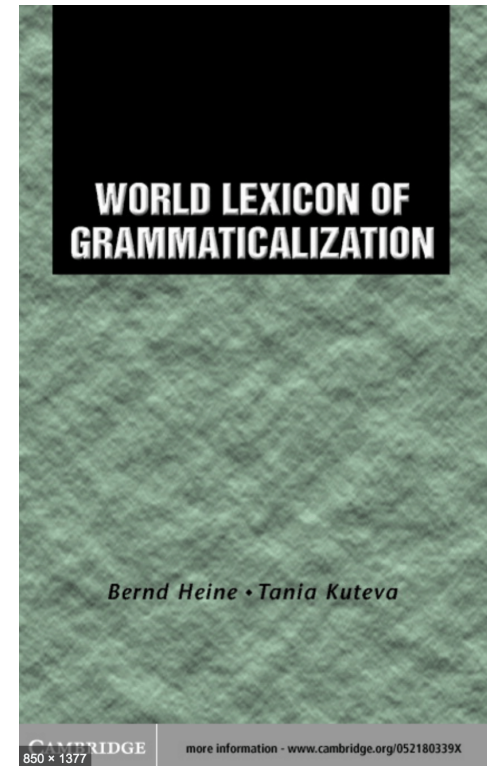


Embracing diversity & usage (the 2000s-2010s)

Heine, Bernd & Tania Kuteva. 2002. *World Lexicon of Grammaticalization*. Cambridge: CUP.

LEX > GRAM

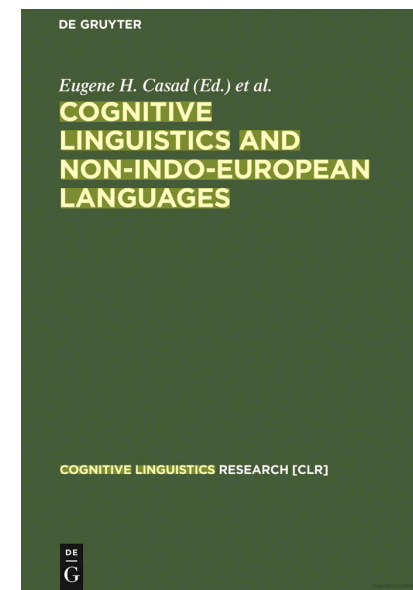
GRAM < LEX



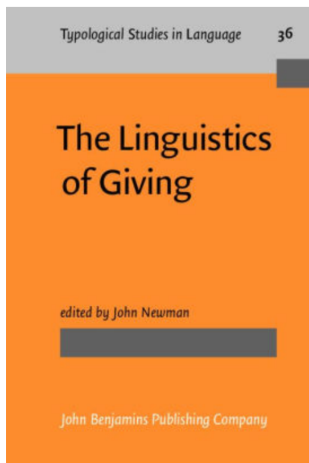
Embracing diversity & usage (the 2000s-2010s)

...[I]t has become increasingly evident that the world of non-Western languages offers a breathtaking opportunity to delve into a wide spectrum of empirical and theoretical issues, some of which are new—e.g. the shape of complex categories, and the semantics of metaphor and metonymy—and others that have hitherto resisted satisfactory explanations constructed in other linguistic theories—e.g. relativization, noun-classifier systems, causative constructions, serial verb constructions, and voicing morphology (Casad 1996). The concepts and descriptive devices of Cognitive Grammar have been remarkably useful in explaining non-prototypical structures, as well as more usual ones. It is expected that Cognitive Linguistics will be proven useful in the analysis of morphological and semantic patterns that are widely shared by both IE and non-IE languages (such as noun classifiers, factive nominalization, and container metaphors for all kinds of emotions), and also of patterns that are lacking or low in frequency in IE languages (such as spatial-psychological prefixes, anatomical prefixes and suffixes, inchoatives suffixes, aspectual infixing and reduplication, and lexical consonant clusters or vowelless words) [pp. 2-3].

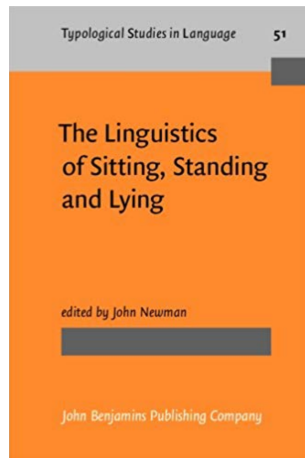
Casad, Eugene H. & Gary B. Palmer (eds.). 2008. Introduction—rice taboos, broad faces, and complex categories. In Casad & Palmer, 1-37.



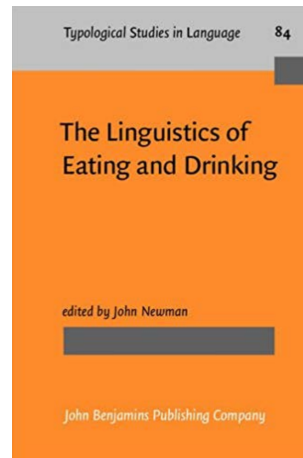
Embracing diversity & usage (the 2000s-2010s)



Newman, John (ed.). 1998. **The Linguistics of Giving.** John Benjamins.



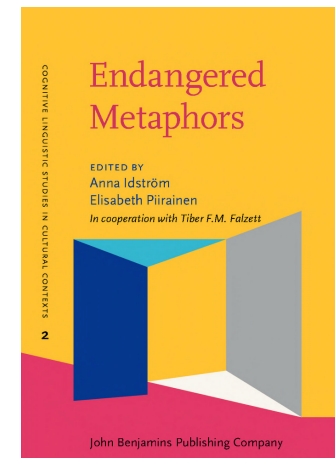
Newman, John (ed.). 2002. **The Linguistics of Sitting, Standing, and Lying.** John Benjamins.



Newman, John (ed.). 2009. **The Linguistics of Eating and Drinking.** John Benjamins.



Majid, Asifa, Melissa Bowerman, Miriam van Staden, & James S. Boster (guest eds.). 2007. **Special Issue on Verbs of Cutting and Breaking.** *Cognitive Linguistics* 18 (2).



Idström, Anna & Elisabeth Piirainen (eds.). 2012. **Endangered Metaphors.** John Benjamins.



Interlude: My story as a cognitive field linguist in Canada (1993-present)

documenting and eventually training
speakers of endangered, polysynthetic languages

embracing morphological
compression, semantic
underspecificity, suppletion,
wide-spread figurativity, massive
intersubjectivity marking, and
lots and lots of variation



overcoming the
“conceit of analyzability”



The Dene Language Family

- very large & complex sound inventories
- classificatory verb system
- polysynthetic, somewhat fusional
- verb = array of prefixes + final stem
- POS: V, N, particle (no articles, case, gender, or number)
- verb-centred (V heavy, N light)
- over-fixation on verb morphology
- no recognition of small stem inventory, little borrowing
- indifference to robust polysemy/semantic change
- total silence on grammaticalization
- analytical neglect of syntax, semantics, and narrative structure
- general neglect of conversational data, prosody, evidentiality, subjective expression
- complete ignorance of socio-cultural-historical factors



- relatively shallow (~2kya)
- wide & semi-discontinuous distribution
- 50+ languages at contact (~300ya)
- most of the remaining 3 dozen or so languages are highly moribund
- few monolingual speakers remain
- only a handful have child learners
- most speakers 60 and older
- most L2 efforts horribly anglocentric and unsuccessful



Dealing with compression & noncompositionality in the Dene Sų́líné verb

- (3) *begháyenilti* (Li 1946: 417)

be-ghá-ye-n-i-l-ti

3SG-for-3SGO-MOMENTANEOUS-1SGS-CLSF-handle.animate.object

‘I have given him/her to him/her’

- (4) *nįlostón* (author’s fieldnotes)

< nį-la-hu-s-tón

2SG-hand-OPTATIVE-1SGS-clasp

‘let me shake your hand’

- (5) *hų́lzé* (Li 1946: 414)

< he-ghwa-n-l-zé

INCEPTIVE-OPTATIVE-2SGS-CLSF-hunt/go

‘you will start to hunt’

Rice, Sally. 2017. **Phraseology and polysynthesis**. In Michael Fortescue, Marianne Mithun, & Nicholas Evans (eds.), *The Oxford Handbook of Polysynthesis*, 203-214. Oxford: OUP.



Widespread suppletion in the Dene Sų́líné classifier verbs

Nine variations on the theme '*handled X in a controlled manner*'

<i>naghes</i> ʔá <i>t</i>	'I'm carrying ROUND OBJECT ' (RO)
<i>naghes</i> tj <i>t</i>	'I'm carrying STICK-LIKE OBJECT ' (SO)
<i>naghes</i> te <i>t</i>	'I'm carrying ANIMATE OBJECT ' (AO)
<i>naghes</i> cheth	'I'm carrying FLAT/FLEXIBLE OBJECT ' (FFO)
<i>naghes</i> ti <i>t</i>	'I'm carrying CLOSED CONTAINER (W/ CONTENTS) ' (CC)
<i>naghes</i> ka <i>t</i>	'I'm carrying OPEN CONTAINER ' (OC)
<i>naghes</i> dzai <i>t</i>	'I'm carrying GRANULAR OBJECT ' (GO)
<i>naghes</i> te <i>t</i>	'I'm carrying PLURAL OBJECTS ' (PO)
<i>naghes</i> tle <i>t</i>	'I'm carrying MUSHY MATTER ' (MM)

handle X, carry X, give X, take X, pass X, hand X to, bring X, pick X up, put X down, put X away, turn X over, push X, open X, close X, cover X, tie X, break X, plug X, etc.



Lexical underspecification: the Dene Sų́łiné RO classifier verb

<i>beghániʔá ha</i>	'I'll give it (RO) to him/her'
<i>beghániʔa</i>	'I gave (RO) to him/her'
<i>(yati) beghániʔa</i>	'I gave him/her a word of advice '
<i>yúk'ehesʔá</i>	'I'm ironing (lit. 'pass RO on clothes')
<i>sįla nírésʔá</i>	'I'm raising my hand up'
<i>daghésʔá</i>	'I'm lying face up '
<i>bets'ésʔá</i>	'I'm facing him/her'
<i>ts'eʔát</i>	'The sun is shining ' (lit. 'RO continuously bright')
<i>bets'énihiʔá</i>	'I'm thinking about him/her/it' (lit. 'RO (my mind) goes to 3SG')
<i>xánuwiʔá</i>	'I'm obsessed with it' (lit. 'RO (my mind) extends out')
<i>ánihiʔá</i>	'I'm lonesome ' (lit. 'RO (my mind) is in the wild')
<i>bech'aniritʔá</i>	'I'm revulsed by it' (lit. 'RO (my mind) moves away from it')



Widespread figurativity: Some orientation metaphors in Dene Sų́líné

‘happy’	sini ye (it’s) in my mind
‘disappointed’	sinik’ech’a (it’s) away from my mind
‘stubborn’	ch’a njdhen s/he thinks away
‘ugly’	ch’a ahostj my appearance is away (=off-putting)
‘friend’	sets’eni the towards me one
‘lazy’	ts’udi sek’ enádher laziness is on top of me

Rice, Sally. 2014. Corporeal incorporation and extension in Dene Sų́líné [Athapaskan] lexicalization. In M. Brenzinger & I. Kraska-Szlenk (eds.), *The Body in Language: Comparative Studies of Linguistic Embodiment*, 71-97. Leiden: Brill.

Rice, Sally. 2012. “Our language is very literal:” Figurative expression in Dene Sų́líné [Athapaskan]. In A. Idström & E. Piirainen (eds.), *Endangered Metaphors*, 21-76. Amsterdam/Philadelphia: John Benjamins.



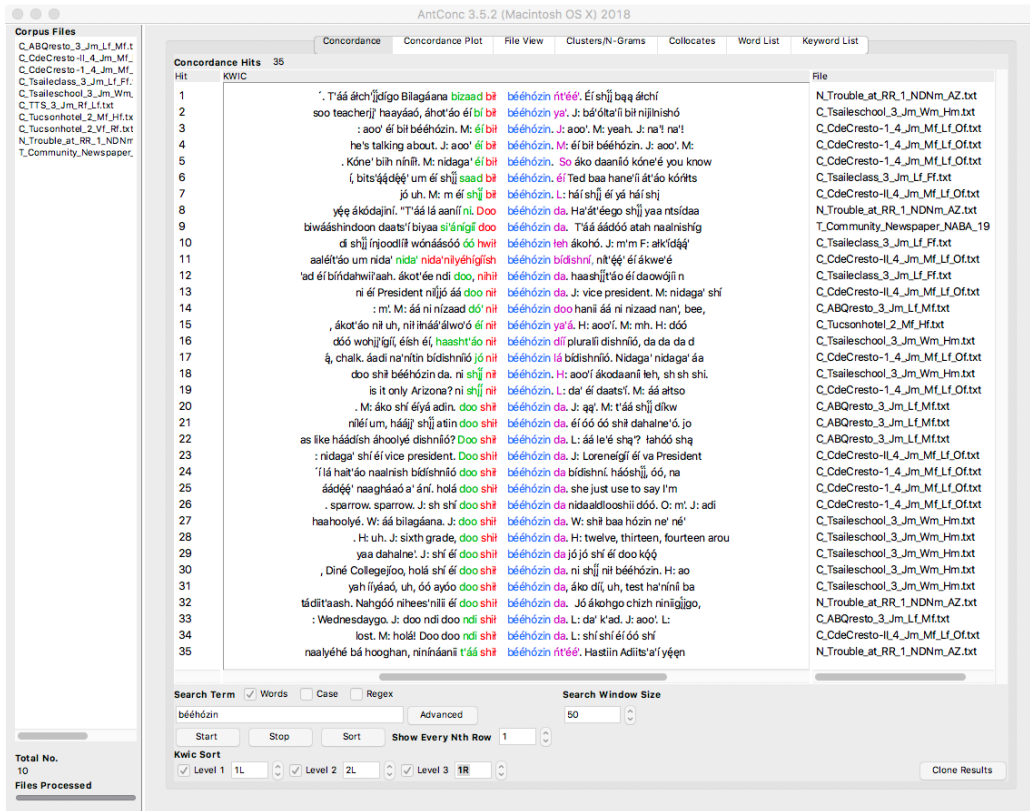
Widespread grammaticalization: Tsuut'ina demonstratives

TSUUT'INA	
DEM	<i>ʔiyí</i> <i>Tłi-chu</i> , <i>ʔiyí</i> <i>Tłi-chu!</i> , <i>xat'a damisiíʔás-gu</i> MED.DEM "Big-Dog" MED.DEM " Big-Dog" it.be PL.3SG.PERF.kick-GER 'that Tłi-chu, that Tłi-chu, we'd just be kicking at him'
FOC	<i>ʔat'iya ʔik'ó=ʔi natodàts'ist'os</i> DIST.DEM 3SG-fat= one.cuts.it.up 'that fat, you cut it up'
NMLZ	<i>ʔitł'adzitats'isgush=i</i> morning.one.boils= lit. 'that which one boils in the morning' 'porridge'
REL	<i>miyits'iyinizi(n)=i ʔách'ishʔish</i> 3SG-4-IMP.F.need= UNSPEC-4-make 'one makes what one needs'
SUBORD	<i>guja nagiyigust'i(n)=i gudinish</i> good 3SG-3PL-treat= it.used.to.be 'they used to treat him well'

Rice, Sally. In preparation. **The grammaticalization of Dene demonstratives.** (First presented at the ICLC-12 in 2013.)



Developing Dene corpora



Rice, Sally. 2018. **Reflections on documentary corpora**. In B. McConnell, A. Berez-Kroeker, & G. Holton (eds.), *Reflections on Language Documentation on the 20-Year Anniversary of Himmelmann 1998*, 142-156. Language Documentation and Conservation Special Publication 15.

Rice, Sally & Melvatha Chee. 2018. **Building and using Dene/Athapaskan language corpora: Two case studies.** 2018 *Dene/Athapaskan Languages Conference*. 31 May-2 June 2018. Tolowa Dee-Ni' Nation. Smith River, California, USA.



Documenting face-to-face, multimodal, interaction

The screenshot displays the ELAN software interface for documenting face-to-face, multimodal interaction. The main window shows a video of three people (two women and one man) sitting around a table, engaged in conversation. The interface includes a menu bar (File, Edit, Annotation, Tier, Type, Search, View, Options, Window, Help) and a toolbar with various playback and annotation controls. On the right, there are controls for the Audio Recognizer, including Volume (set to 90) and Rate (set to 100) sliders. Below the video, there are two audio waveforms. At the bottom, a transcription is displayed with linguistic annotations. The transcription is organized into tiers, with speakers' names and timestamps in brackets. The text is segmented into phrases, and some words are highlighted in yellow.

Elan - 2009-12-04-chp-Nora_Matchatis-Morning.eaf

File Edit Annotation Tier Type Search View Options Window Help

00:02:43.243 Selection: 00:02:29.990 - 00:02:30.070 80

Audio Recognizer Metadata Controls

Volume: 90 0 50 100

Rate: 100 0 100 200

31.000 00:02:32.000 00:02:33.000 00:02:34.000 00:02:35.000 00:02:36.000 00:02:37.000 00:02:38.000 00:02:39.000 00:02:40.000 00:02:41.000 00:02:42.000 00:02:43.000

Nora [55]

Nora trans [5]

Mary [146]

Mary trans [62]

Shirley [75]

Mary notes [5]

i 7ih natheshá ú kú Florestin bet hiya asá tulu ghit'as t'a etaxá sekwi dazil 7á yané honighil'í 7a ku sets'uné Ezudir su

the dress I put on and, Florestin, with her I went, EVID, by means of us two walk all of a sudden the children were yelling so I looked my grandmother Judit

su=picture this

My philosophical commitments

My core principles as a cognitive linguist

grammar is meaning
meaning is contextualized
usage (not structure) prevails
(inter)subjectivity pervades grammar
embodiment of conceptual categories
collocational entrenchment trumps everything

My core principles as a corpus linguist

constructions are mostly lexeme-specific
collocational & collostructional patterns are
genre- and mode-specific
spoken language is more interesting than written language

My core principles as a field linguist

we are in language documentation mode
(with most of the world's Indigenous languages)
we need to record as many speakers in as many interactional contexts,
talking about as many subjects as possible (and in multi-media)
and, ethically, we can't neglect our duty to help
support and sustain endangered language communities



My approach to language as a cognitive, corpus,
radical constructional, multimodal, field linguist



A linguistic expression (form/meaning pairing) is a construction....

....of varying size, category, analyzability, semantic transparency, and applicability
in particular usage contexts.



Repurposing CL for IL revitalization (the 2000s-2020s)

roots
growth
florescence
regeneration

an example
of
applied / translational
cognitive linguistics



The development of CILLDI and staying true to my CL commitments (2000-present)

roots
growth
florescence
regeneration

CILLDI

<https://www.ualberta.ca/canadian-indigenous-languages-and-literacy-development-institute>

Canadian Indigenous Languages and Literacy Development Institute

CILLDI is a 3-week summer school held at the University of Alberta for speakers, learners, and advocates of First Peoples' languages

now in its 20th year (over 200 courses have been offered to around 2,140 students representing 154 Indigenous communities in North America and beyond since 2000)

designed for Indigenous teachers, speakers, Elders, & community activists who are working in the area of revitalizing endangered languages

offers undergraduate and graduate courses in linguistics, language documentation, language education, and teacher training through the Faculties of Arts, Education, and Native Studies



The development of CILLDI and staying true to my CL commitments (2000-present)

roots
growth
florescence
regeneration

CILLDI

<https://www.ualberta.ca/canadian-indigenous-languages-and-literacy-development-institute>

Canadian Indigenous Languages and **Literacy** Development Institute



the Community Linguist Certificate

launched in 2007, a 6-course, 18-credit program delivered through CILLDI, leading to a provincially recognized certificate



The advent & challenge of the CLC (Community Linguist Certificate)

roots
growth
florescence
regeneration



community language programs aren't producing new generations of conversationally-proficient speakers

poor language curriculum design is one of the main culprits, as is the **lack of metalinguistic awareness** among community-based speaker/teachers

the available curricula for most (Canadian) Indigenous languages

- focus on topics with minimal conversational value or cultural relevance—numbers, colors, animals, body parts
- burden students with decontextualized language activities—memorizing verb paradigms, translation exercises



The challenge for the CLC (Community Linguist Certificate)

roots
growth
florescence
regeneration

put

*you-singular-individual
handle-sticklike-object*

the green pencil

*thing-that-one-marks-with
that-looks-like-a-leaf*

on the

onto-the-top-of

red square

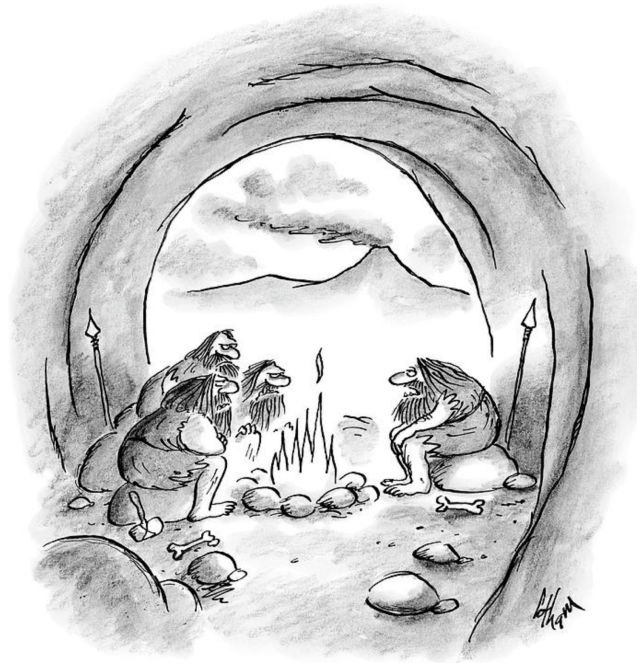
*thing-that-is-cut-twice
that-looks-like-blood*



Overcoming the “conceit of analyzability”

how to stop viewing a
language (“achronically”) as:

- homogeneous
- monolithic
- a structural abstraction
- complete
- objective
- categorical
- compartmentalized
- decontextualizable
- = text



G. Sampson, D. Gil, & P. Trudgill (eds.).
2009. *Language Complexity as an Evolving
Variable*. Oxford: OUP.

Frank Cotham
The New Yorker
28 May 2007

“We’ll start out by speaking in
simple declarative sentences.”



Overcoming the “conceit of analyzability”

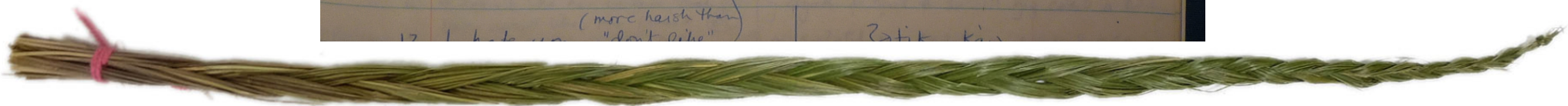
Albert
29 Jan 82
Questions
Engatwies
Pamies
76

Two approaches -
- viewing lang. on own terms (lang. particular generalizations)
- viewing lang. in regard to background in ling. theory

→ Facts, data ≠ evidence
“evidence is usually a carefully selected subset of data”

8. The child hates school.	a galak a ?atil a skul
9. The children hate school.	a rogalak a ?atirir a skul
10. Does the child hate school?	a galak n ?atil a skul?
11. Do the children hate school?	a rogalak n ?atirir a skul?
12. I hate you (more harsh than "don't like")	?atit kin

my **Field Methods**
field notes from
UCSD, 1981-1982



Overcoming the “conceit of analyzability”: the way out

Table 4. Contrasting tendencies of exoteric and esoteric languages
(after Thurston 1988, Grace 1997, Crowley 2000, & Wray & Grace 2005).

DOMAIN	<i>exoteric languages</i>	<i>esoteric languages</i>
SOCIETY	outsider-oriented open & stratified social group high degree of bilingualism	inward-focused closed & coherent social group low degree of bilingualism
MODALITIES	some literacy; multiple registers	orality only; few registers, but much variation
LEXIS	regular borrowing large lexicon	little to no borrowing over-reliance on the endolexicon
MORPHOSYNTAX	analytic regular	synthetic suppletive
SEMANTICS	transparent, literal isomorphic form-meaning pairings	opaque, figurative, idiomatic allomorphic and ambiguous pairings
L2 ACQUISITION	easy for adults to learn; many L2 speakers dictionary/grammar model best	difficult for adults to learn; few L2 speakers phrasebook model best

**can't use exoteric
assumptions on
esoteric languages**

Rice, Sally. 2017. Phraseology and polysynthesis. In Michael Fortescue, Marianne Mithun, & Nicholas Evans (eds.), *The Oxford Handbook of Polysynthesis*. Oxford: OUP.



Overcoming the “conceit of analyzability”: the way out

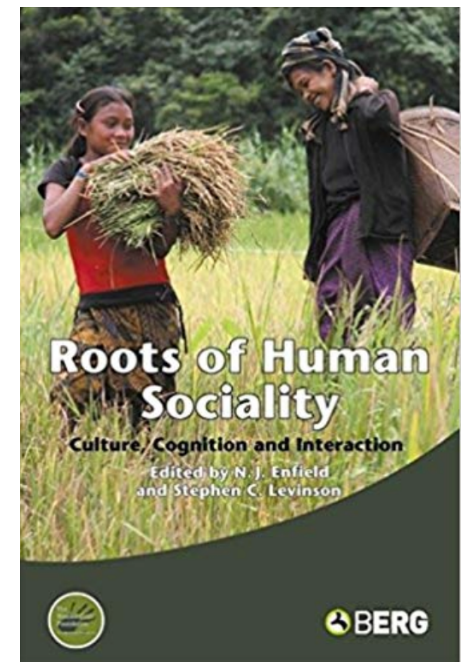
Analytical Hierarchy



LITERACY > ORALCY > SOCIALCY

Sociocultural Hierarchy

SOCIALCY > ORALCY > LITERACY



Reversing the literacy > oralcy > socialcy hierarchy at CILLDI

literacy is leaden (it can kill any focus on syntax, let alone narrative)

mere transcription is insufficient

language use studied in its proper social context is always more accessible to learners (and linguists)

discourse should be the proper starting point of documentation and second language teaching



Reversing the literacy > oracy > socialcy hierarchy at CILLDI



Because it's not what languages have, but what speakers do.

Doubling down on narrative and conversation...



Building metalinguistic competence from a CL perspective

roots
growth
florescence
regeneration

- oral languages look quite a bit different than written forms of language
- oral language is collocational and idiomatic
- much inflectional and distributional skewing inheres in speech
- speech is also heavily “inflected” for point of view and markers of intersubjectivity
- face-to-face communication is very tolerant of variation



Building metalinguistic competence from a CL perspective

roots
growth
florescence
regeneration

linguistic and cultural competence isn't enough to sustain threatened languages in the classroom

teachers and curriculum developers need support in their ability to:

- introspect (individually and collectively) about the lexical, grammatical, and functional patterns of one's own language compared to English
- understand the ways in which those patterns can be meaningfully and systematically manipulated in context
- externalize those insights through the use of basic descriptive linguistic analytical techniques and terminology



CILLDI training & the Community Linguist Certificate

roots
growth
florescence
regeneration

Short-term goals

- provide practical skills, hands-on data analysis, and a level of comfort working with technology
- give linguistic and sociolinguistic exposure
- help students create a community-ready portfolio through strategic elicitation and use of narrative and conversation
- provide networking opportunities with language activists from other communities
- act as a spring-board for future study and collaboration

Long-term goals

- develop a cadre of community-based and linguistically trained Indigenous language workers and activists in Canada
- encourage some speakers to consider further training in linguistics
- provide models of community-university collaboration for speakers and graduate students
- give undergraduate and graduate students an opportunity to tutor, TA, or teach CLC courses and build relationships with various communities



training scope of the Community Linguist Certificate

- the basics of linguistic analysis (compare & contrast)
- the special properties of (polysynthetic) First Peoples' languages
- the full range of linguistic phenomena (sound to discourse)
- best practices in language representation
- exposure to language documentation and data management technologies
- help with advocacy and funding resources



the 6 courses of the Community Linguist Certificate

LING 111 Introductory Linguistics

LING 211 Phonetics (articulation, orthography, transcription)

LING 212 Morphosyntax (word formation, lexicalization, lexicography)

LING 213 Sentence and Discourse Patterns (grammatical structure and text/conversation analysis)

INT-D 318 Language Documentation Techniques (the basics of computing, recording, digitization, data management, and corpus creation)

INT-D 311 Language Policy and Planning (the sociolinguistics of language loss; advocating for, funding, and managing a community-based language revitalization program)



LING 212 Morphosyntax of Canadian ILs

LING 213 Sentence & Discourse Patterns of CILs

These core linguistic analysis courses focus on the **guided use of linguistic discovery procedures** in order to develop essential metalinguistic competence in practitioners.



These procedures focus on the **constructional nature** of language, **linking form to meaning to context**, all of which takes place in a specific cultural setting.



LING 212 Morphosyntax of Canadian ILs (polysynthetic lgs)

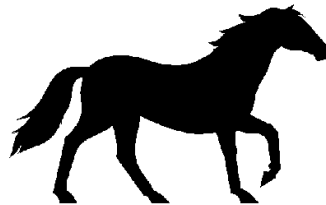
morphological analysis	lexical semantics	best practices for CIL dictionaries
<p>learning how words & constructions are formed in CILs</p> <p>studying inflectional & derivational relationships between constructions</p> <p>understanding the basics of parsing and glossing constructions into their component parts (interlinearization)</p>	<p>learning about semantic shift, polysemy, and grammaticalization</p> <p>traditional CIL strategies of word formation</p> <p>metaphor, metonymy, and other figurative meaning systems</p> <p>constructions for coining terms for new concepts</p>	<p>determining properties of the best dictionaries for CILs aimed at different audiences (speakers, learners, children)</p> <p>building a sample dictionary</p> <p>becoming familiar with dictionary-making software</p>



Lexicalization strategies (conveying the ubiquity of metaphor & metonymy)

roots
growth
florescence
regeneration

tj-cho
lit. **'dog-big'**
'horse'
(Dene Sų́liné)



miq'it-dahch'idittse
lit. **'on top of it-they sit'**
'horse'
(Hupa)



dinisch'ashi chachi-tsitt'a
lit. **'green poplar.tree-small'**
'broccoli'
(Tsuut'ina)



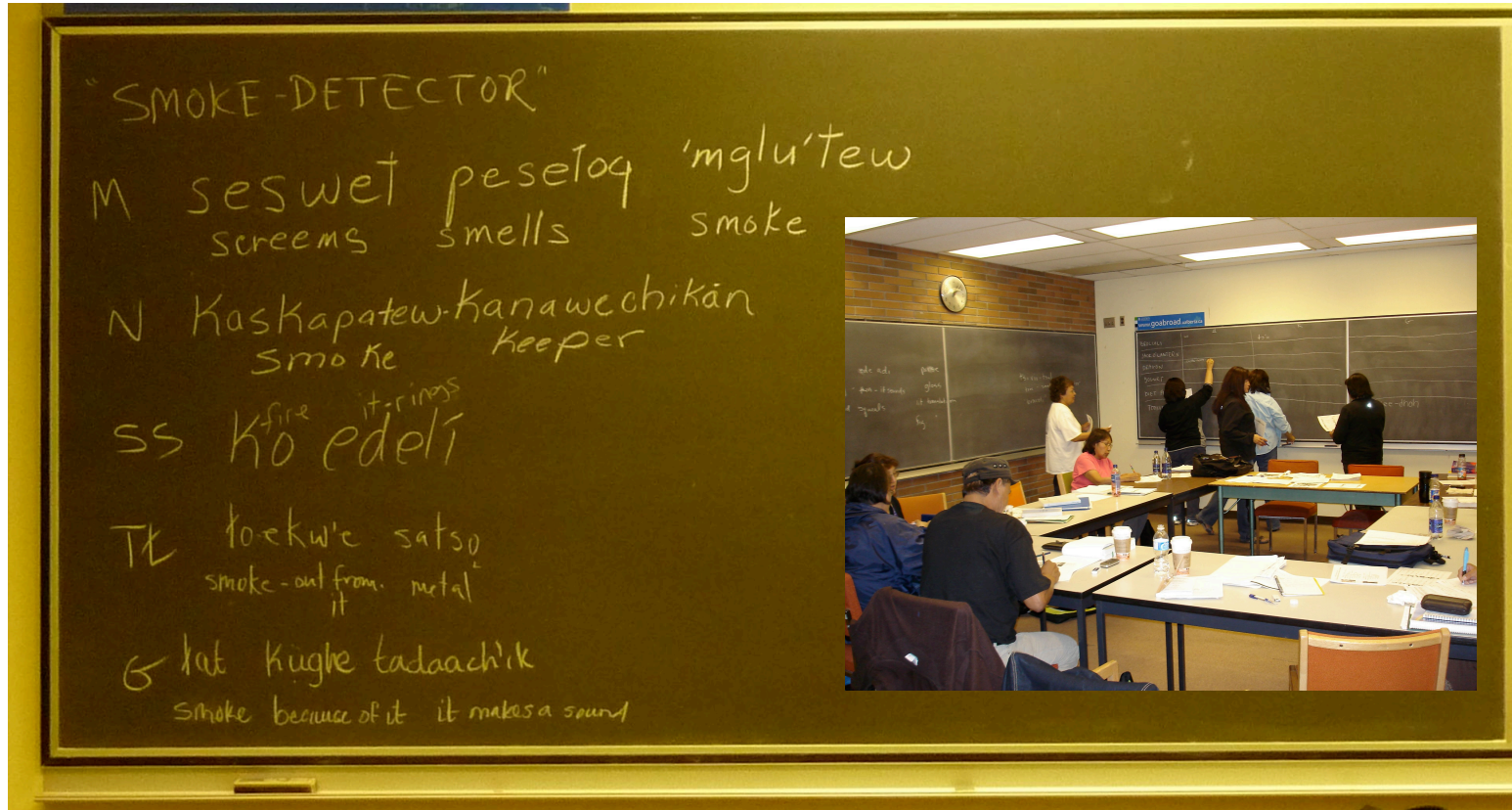
bek'echich'elyi
lit. **'that which people eat food on it'**
'table'
(Dene Sų́liné)



ómahkína-(m)otohon
lit. **'old man's heel'**
'pear'
(Blackfoot)



Lexicalization strategies (conveying the ubiquity of metaphor & metonymy)



Lexicalization strategies (conveying the ubiquity of metaphor & metonymy)

roots
growth
florescence
regeneration

Diné / Navajo

bił nijoobáí

bił nijoobáí=í

with.it one.spins=NMLZ

lit. 'one spins (around) with it'

fig. '**cell phone**'

Melvatha Chee, p.c.

Hupa

qi-ye:jo:-ne:wa:n

eel-its.tendons-looks.like

lit. 'it looks like eel tendons'

fig. '**spaghetti**'

Ahlers, Jocelyn. 1999. Proposal for the use of cognitive linguistics in Hupa language revitalization. PhD dissertation. UC, Berkeley (p. 118).



LING 213 Sentence & Discourse Patterns of CILs

sentence structure	meaning relations	discourse analysis
<p>understanding the devices your language uses for marking verbs and event participants in simple clauses (TAM & AGR)</p> <p>recognizing and describing different types of sentences, including complex clauses</p> <p>compiling fixed, phatic expressions that speakers use in particular interactional circumstances</p>	<p>analyzing grammatical markers used for different kinds of utterances, from statements and question to conditionals and hypotheticals</p> <p>taking stock of rhetorical devices that allow a speaker to indicate point of view, stance, or evidentiality</p>	<p>seeing how sentences in discourse are connected to make the overall narrative cohesive</p> <p>exploring different genres of narrative (personal history, traditional legends, oratory) and conversation</p>



LING 213 Sentence & Discourse Patterns of CILs

lexemes and phrasemes
for materials development

Poem 1	English gloss	Poem 2	English gloss	Pattern
k'aigué, k'aigué	caterpillar, caterpillar	dejúli, dejúli	mosquito, mosquito	NAME, NAME
deʔaz nashigh[tʰ]	you ate too much again	seghádarjdele	leave me alone	USEFUL EXPRESSION 1
k'aigué, k'aigué	caterpillar, caterpillar	dejúli, dejúli	mosquito, mosquito	NAME, NAME
net'a ch'ánahút'e	because of you, now it's ugly	net'a thitʰj ile	because of you, I don't sleep	USEFUL EXPRESSION 2



LING 213 Sentence & Discourse Patterns of CILs

YELLOW-HAIR AND THE THREE BEARS (in Tsuut'ina as written by Bruce Starlight)

the centrality
of connected
discourse

Taik'i mik'a ts'istini yi?i-la. ?astsa-hi ?ii tiyik'a diigaaz-la
three on it someone sleeps she saw the first one-that too much hard-it was
She saw three beds. The first bed was too hard.

?akaadi mik'a tats'ist'ini ?ii ?i tiyik'a.
the second one on it someone sleeps that too much
The next bed was too soft.

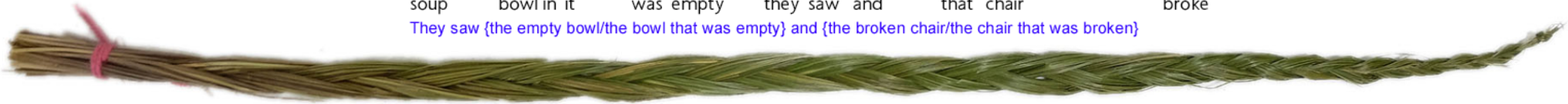
?anists'ii mik'a tats'ist'ini ?ii ?i guja-tii-la.
the last one on it someone sleeps that it was real good
The last bed was just right.

Yik'a nadatsiy-la ?uwa t'iya t4adinisti-la.
on it she lay down and then she fell asleep
She lay down on it and fell asleep.

Sitini go taik'i ninagha ninija-la:
she slept while three bears they came home:
While she was sleeping, three bears came home

guta, gwaa, ?uwa ninagha tsit4a
the father the mother and bear little
—a father bear, a mother bear, and a baby bear.

Tazili ?osa nit'o ch'iduwa ga?i-la ?uwa ?iyi mik'atatsi'isdo?ii k'aatuni
soup bowl in it was empty they saw and that chair broke
They saw {the empty bowl/the bowl that was empty} and {the broken chair/the chair that was broken}



LING 213 Sentence & Discourse Patterns of CILs

the centrality
of connected
discourse

Sets'en nágheni ani
to.me it.was.paid it.used.to.be
I used to be paid (that much)

Kú nani nádene zq hubinié
and some.of.them two.of.them for.sure they.were.happy
and some people, two of them for sure, they were happy (for my work)

Eyi sɣlagheritɬ'isaz sets'en nágheheɬni sɣ
those.ones five.dollars to.me they.paid EMPH
and they paid me five dollars

Diri Etienne enekwi bets'qkwié chu tth'i Səgú hulye eyi chu
this Etienne old.man his.wife and also Sagu he.was.called that.one and
this old man, Etienne, and his wife, and also a guy called Sagu,

Eyi sɣlagheritɬ'isaze seghqnila
those.ones five.dollars to.me.they.gave
those ones gave me five dollars.

Edí lacho koli hunqnila sets'édiʔa.
well.jeez big.job considering it.wasn't.very.much they.told.me that's.why
They told me it wasn't very much, considering what a big job it is (that's the reason why they gave me \$5)



LING 213 Sentence & Discourse Patterns of CILs

emphasizing “sociality”
(phatic & interactional
language use)

Adam@Home by Rob Harrell

June 28, 2015



LING 213 Sentence & Discourse Patterns of CILs

emphasizing “sociality”
(phatic & interactional
language use)

Pickles by Brian Crane

May 17, 2015



LING 213 Sentence & Discourse Patterns of CILs

roots
growth
florescence
regeneration

forcing conversation in
“blind” description task at
CILLDI



CLC Rules of Thumb (inspired by CL)

- a language is a living (and irregular!) system
- languages change over time and variation is normal
- languages aren't literal; they can be very redundant, and they often under-specify
- a language is not a list of words, a set of verb paradigms, or a collection of stories (don't stop your documentation and analysis there)
- linguistics is not about what languages have, but what speakers do and, thus, interaction is the best starting point for language documentation in service of revitalization
- teaching/memorizing samples of phatic and fixed expressions (as found in connected discourse) is more compelling and useful to young learners than learning word lists or verb paradigms
- a linguistic expression or construction is defined as any form/meaning pairing in context (since neither 'word' nor 'sentence' is fully adequate for describing many IL utterances)
- constructions can be of varying size, category, analyzability, semantic transparency, and acceptability in particular usage contexts
- constructions are mostly lexeme-, genre-, and mode-specific
- subjectivity is hard to turn off; some languages don't care about tense marking; Instead, they have to mark evidence and point of view and how the event unfolds

"it's all a matter of degree" -RWL

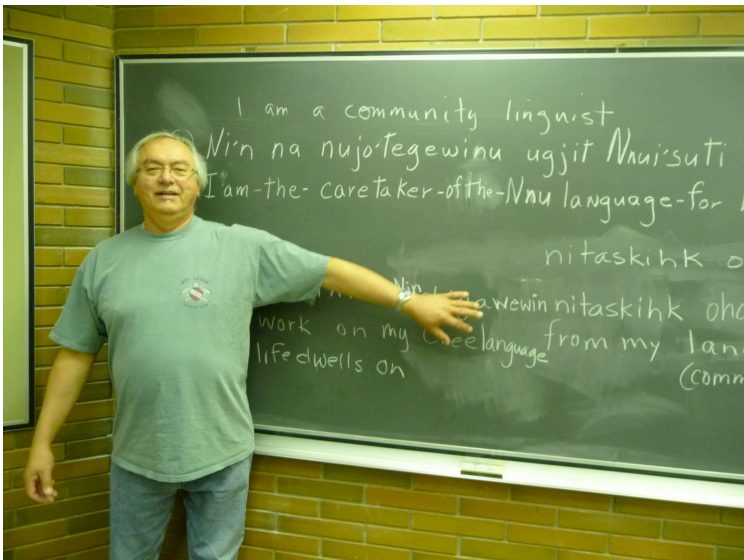
"it's all a matter of construal" -RWL



"just because it's intuitive, doesn't make it wrong" -RWL



As of 2019, CILLDI has graduated 124 students with the CLC.



Coming full circle and moving beyond now

- cognitive linguistics solidified in and emerged from the crucible of under-documented, spoken, and highly threatened Indigenous languages
- looking at IL data has long provoked a high degree of intellectual excitement and wonderment at the diversity and “special genius” of individual languages
- speakers and learners of threatened languages can come to appreciate this same excitement and wonderment when helped to approach their languages intuitively and from the perspective of meaning and usage—as advocated by CL
- the CL theoretical and methodological pivot to analyzing spontaneous language-in-use, multi-modality and the attendant focus on subjective and intersubjective phenomena, and to the development and use of corpora are all critically relevant for IL documentation and pedagogy
- speaking for myself, my IL work has been the best test of and tonic for my CL commitments
- in reminding the next CL generation about the last generation’s pivotal relationship to ILs, I hope the CL braid can remain strong by helping to support the sustainability and revitalization of highly threatened Indigenous and minority languages



Heartfelt acknowledgements for past discussions about cognitive linguistics and Indigenous languages to

Melissa Axelrod
Andrea Berez-Kroeber
the late Melissa Bowerman
the late Eugene Casad
the late Wally Chafe
Melvatha Chee
Chris Cox
Bill Croft
Ramón Escamilla
Nick Evans
Victor Golla
Alex Janvier
John Janvier
Dagmar Jung
Ron Langacker
Marianne Mithun
John Newman
Jorge Rosés Labrada
Mary Jane Sayazie
Pat Shaw
Conor Snoek
Justin Spence
Bruce Starlight
Martin Thiering
Chad Thompson
Valerie Wood
Tony Woodbury



*and endless gratitude to Indigenous speakers I've taught
and learned from about cognitive linguistics at*

CILLDI
Cold Lake First Nation
Tsuut'ina Nation
Alexis Nakoda Sioux First Nation
Piikani Nation

Repurposing CL for IL revitalization (the 2000s-2020s)

Rice, Sally. To appear. **Lexical semantics**. In C. Jany, M. Mithun, & K. Rice (eds.), *Handbook of Languages and Linguistics of North America* [The World of Linguistics Series, Vol. 13]. Berlin: Mouton de Gruyter.

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Rice, Sally. 2011. **Applied field linguistics: Delivering linguistic training to speakers of endangered languages**. *Language and Education* 25: 319-338.

