Mixed methods in linguistics

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UC **SANTA BARBARA**

Roadmap

- 1. What is linguistics?
- 2. Ethnography as qualitative method for linguistics research
- 3. Lina's Ph.D dissertation study
- 4. Zentella (1990) on mixed methods for codeswitching
- 5. Mixed methods for current and future sign language linguistics research?

What is linguistics?

Let's look at a few linguistics departments

- Gallaudet University: https://gallaudet.edu/linguistics/
- The University of Texas at Austin: https://liberalarts.utexas.edu/linguistics/
- University of California, Santa Barbara: https://www.linguistics.ucsb.edu/

Ethnography as qualitative method for linguistics research

"An in-depth analysis of a speech community's use of language in context can only be captured by participating in the life of the community and gathering natural speech from a wide variety of speech events and across a range of settings and speakers." (Zentella, 1990: 79)

Note: we can replace "speech" with "language" and "speakers" with "signers" or "users"

Ethnography allows a researcher to observe and document language use in different contexts by different users:

- Language use: daily conversations, ritual language, narratives...
- Users: children, parents, elders...
- Interactive patterns: dyadic, polyadic...
- Spaces: home, streets, classrooms, stores...





A few photos from my ethnographic fieldwork (2014-2015) in an indigenous community in Oaxaca, Mexico

My Ph.D dissertation

- Ph.D dissertation was the documentation & description of five families and their signing practices ("making hands") in an indigenous community in Oaxaca, Mexico
- Focus was on how deaf and hearing children became signers through daily interaction with their families
- Ethnographic fieldwork for one year, 2014-2015 (with follow-up trips in 2018, 2019, and 2022)
 - Weekly visits, video-recordings, photos, field notes, sociolinguistic interviews



A photo of me with one family from my ethnographic fieldwork (2014-2015)

Ethnographic research reveals variation in patterns of sign language use among families:

- Family structure
- Strong gender roles
- Familial attitudes and ideologies about spoken and signed language development
- Language socialization of deaf and hearing children
- Effort and willingness to make sense of communication





A few photos of one family from my ethnographic fieldwork (2014-2015)

My Ph.D study did not use any quantitative methods for my study:

- Difficult to quantify communicative input for comparing families
 - Transcribing and sampling issues
- Difficult to quantify child-directed input
 - AFAIK this has not been done for any child sign language research
- Difficult to compare elicited data among families
 - Eliciting data as a culturally unfamiliar activity
 - Eliciting data not representative of spontaneous language use

Zentella (1990)

- Dr. Ana Celia Zentella is a U.S. linguist and Professor Emeritus in the Department of Ethnic Studies at University of California, San Diego. Check out this website: https://ethnicstudies.ucsd.edu/people/zentella.html
- Zentella (1990) is an old but classic paper that explicitly discusses the integration of mixed methods – qualitative and quantitative – in a bilingual code-switching study taken from a larger ethnographic study

Zentella (1990)

- A "mixed methods" study (ethnography & quantification) of codeswitching in a bilingual Spanish-English community of Puerto Rican children and their families in East Harlem or "El Barrio" (New York)
- Zentella spent two years in East Harlem and observing language use among 34 children aged 5-12
 - 5 children and their families were observed in-depth
- The mixed methods were used to answer more questions about codeswitching and to corroborate some ethnographic observations



Major ethnographic findings

- 1. Community values both English and Spanish in all aspects of community life
- 2. English is the predominant language of children
- 3. Children learn to engage with codeswitching by age 5+
- 4. Language choice is influenced by:
 - Physical features: Spanish for Latinos and English for others
 - Gender: Spanish for woman and English for men
 - Age: Spanish for babies and the elderly, English for others

Major quantitative findings

100 hours of natural conversation in 34 children

5 children's 1658 switches coded for different variables and statistically analyzed for χ^2 tests in ... SPSS

Results were interpreted in context of ethnographic findings

- 1. Codeswitching occurs most at home and on the streets; see Table 1
- 2. Codeswitching occurs more *within* sentence boundaries than across sentence boundaries; see Table 2
- 3. Children codeswitch more in narratives and casual conversations; see Table 3

TABLE	ı.	Switches	per	Hour	ın	Community	Settings
	-		10.00				

	 Switches/Hours						
Bodega	30/	6					

33/6

239/20

1685/103

1383/71

Switches per Hour

5.5

5.5

12.0

19.5

Bodega Playground

Home

Street

Totals

TABLE 2. Grammatical Constituents Switched in Community Settings

	Bodega (%)	Playground (%)	Home (%)	Street (%)
Full Sentence	20	26	27	22
Object Noun	17	13	12	13
Independent Clause - Conjunction	13	19	9	13
Object Noun Phrase	7	3	8	6
Independent Clause + Conjunction	0	0	3	6
Subordinate Clause + Conjunction	7	3	3	4
Prepositional Phrase	3	0	3	3
Adverb	7	3	5	3
Filler	3	3	2	3
Subordinate Clause - Conjunction	0	0	4	2
Adverbial Phrase	3	3	2	2
Adjective	3	3	2	3
Imperative	0	0	.8	2
Verb Phrase	3	6	2	2
Tags	3	3	1	2
Others ^a	6_	15.3	14.8	15.2
Total (N)	(30)	(33)	(239)	(1383) = 1685

^a Includes coordinate and subordinate conjunctions, verbs, subject pronoun/noun phrase, relative clause, exclamations, predicate adjective, adjectival phrases, determiners, prepositions, miscellaneous.

TABLE 3. Code Switches in Speaking Styles by Five Speakers

Style	Paca	Linda	Maria	Sara	Eli	Total N/ Hours of Recording [Estimated]	Switches per hour
1. Casual Conversation	256	386	524	116	54	1336/70	19.1
2. Games	6	0	2	8	-a	16/10	1.6
3. Narratives	6	34	79	32	91	242/9	26.9
4. Buying	0	0	9			9/7	1.3
5. Language/Lessons	12	-	10	24	-	46/3	15.3
6. Taping/Interviewing	0	4	5	11	0	20/2	10.0
7. Jokes	_	_		14	0	14/1	14.0
8. Egocentric Speech	1		_1		_0	2/1	2.0
Total N	281	424	630	205	145	1685/103	

a - = Style not recorded.

Mixed methods for current and future sign language linguistics research?

Especially if translanguaging is involved?

