

Black and White Signing Space: A Case of Convergence?

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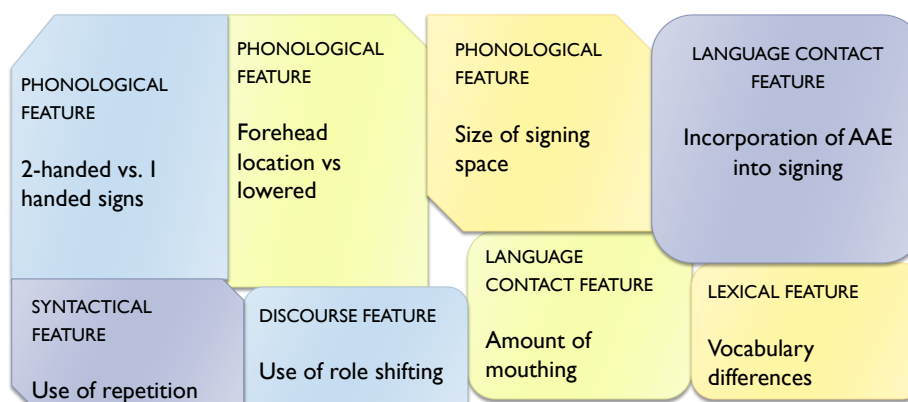
Black ASL study

- ▶ The objectives of the first large-scale study are:
 1. To create a filmed corpus of conversational Black ASL as it is used in the South. The focus is on the structure and history of Southern Black ASL because that region is where the most radical segregation occurred in the education of Black and White deaf children, creating the conditions for the development of a separate language variety.
 2. To provide a description of the linguistic features that make Black ASL recognizable as a distinct variety of ASL and of the history of the education of Black Deaf children.
 3. To disseminate the project findings in the form of teaching materials and instructional resources.

Black ASL as a variety

- ▶ Extensive research on African American English (AAE), with unique features identified at all levels of the language – phonology, morphology, syntax, lexicon – showing that AAE is a distinct variety of English (see Mufwene et al. 1998 and Green 2004 for reviews).
- ▶ Question of the unique features that have been identified for AAE could be identified for Black ASL as a distinct variety of ASL
 - ▶ Anecdotal reports about the existence of Black ASL, e.g. Hairston and Smith (1983) on “a Black way of signing”
 - ▶ Some confirmed differences in linguistic features in Black ASL in our study

Black ASL Mosaic



Previous studies and observations on signing space

- ▶ **Frishberg (1975)**
 - ▶ Diachronic research has shown that there is an historical tendency for signs to “move down” from the periphery to the central signing space.
 - ▶ **Lewis et al. (1995: 24)**
 - ▶ Mention the use of space in description of a person’s answer to a question as to why he is wearing African American clothing
 - ▶ **Aramburo (1989: 115)**
 - ▶ Reports that when Black Deaf Signers converse with Black Deaf Signers, they use larger signing space than they do with Black hearing, White Deaf, and White hearing signers
 - ▶ **Tabak (2006)**
 - ▶ Discusses black children’s signing at the BDO (Blind, Deaf, Orphan) school in Austin, TX
 - ▶ Reports that the signs produced by BDO students were larger than those of their white peers
 - ▶ Describes no data as the basis for this observation
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Research Question

- ▶ **Do Black signers use larger signing space than White signers?**
 - ▶ Test the claims made by Aramburo (1989) and Lewis et al. (1995)
 - ▶ Black Deaf signers use a bigger signing space
 - ▶ Black signers incorporate more body movement into their signing
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Data

- ▶ **Narrative genres**
 - ▶ Structured narrative with cartoon stories
 - ▶ The re-telling of wordless cartoons with a lot of action
 - ▶ Free narrative in a group conversation
- ▶ **Number of narratives**
 - ▶ 24 structured narrative video samples
 - ▶ 21 free narrative video samples
- ▶ Video samples were randomly selected with one target signer in each sample
- ▶ 50 signs/sample were extracted and analyzed
- ▶ All signs in the narratives were glossed in ELAN (EUDICO Linguistic Annotator)
 - ▶ ELAN is developed at Max Planck Institute (MPI)

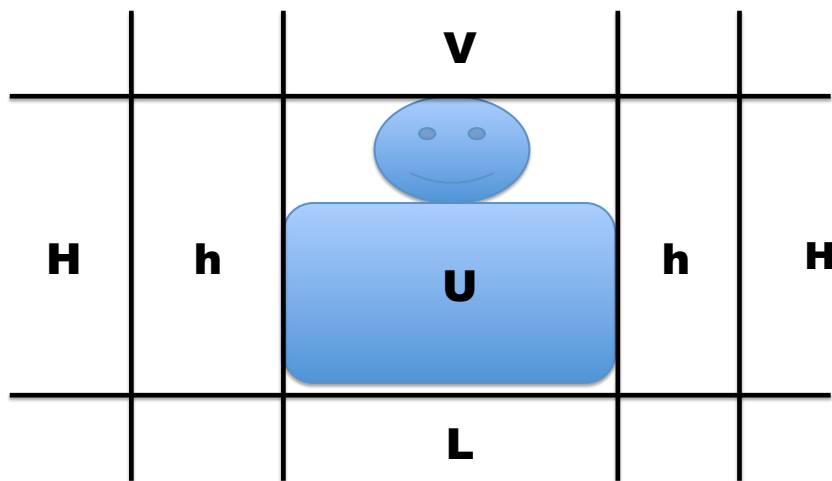


Data

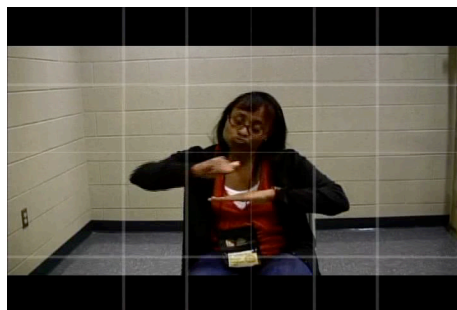
- ▶ **All plain and morphologically motivated signs were included in the analysis**
 - ▶ Examples of morphologically motivated signs
 - ▶ Intensification in signs
 - ▶ Indicating verbs
 - directional agreement between location points in space that represent referents
 - ▶ Depicting verbs (aka classifier predicates)
- ▶ **Imposed a transparent grid on each video-clip to mark the signing space.**
 - ▶ V: extends above the top of the head
 - ▶ L: extends below the waist
 - ▶ h: extends beyond the shoulders
 - ▶ H: extends beyond the raised elbows
 - ▶ U: within the boundary of the central signing space



Location Code



Signing space: elicited narrative example



Factors

Linguistic

- ▶ Grammatical category of signs were coded
 - ▶ Noun, adjective/adverb, plain verb, depiction/locative verb, indicating verb, function signs
- ▶ Intensity of signs
 - ▶ Tensions in the arms, torso movement, eye gaze at the co-interlocutor
- ▶ Genre
 - ▶ Structured narrative
 - ▶ Free narrative
- ▶ Areas of signing space

Social

- ▶ Age
 - ▶ Young (35 and younger)
 - ▶ Old (55 and older)
- ▶ Gender
 - ▶ Male
 - ▶ Female
- ▶ Race
 - ▶ Black
 - ▶ White



Distribution of variants

		Unmarked	Beyond shoulders (h)	Beyond raised elbows (H)	Above head (V)	Below waist (L)	T
Black	N	671	322	87	43	24	1147
	%	58.5	28.1	7.6	3.7	2.1	
White	N	724	268	49	36	23	1100
	%	65.8	24.4	4.5	3.3	2.1	
Total	N	1395	590	136	79	47	2247
	%	62.1	26.3	6.1	3.5	2.1	

The great majority of signs that extended beyond the usual signing space extended to the right or the left. Few extended above the head and below the waist.

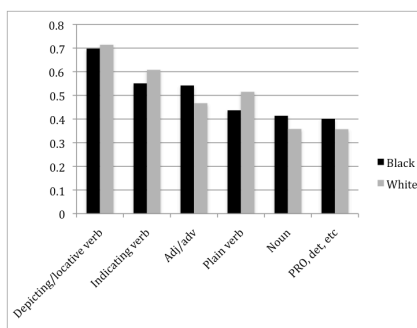
The variants that extended beyond the usual signing space were combined into a single variant.



Results of multivariate analysis

▶ Linguistic factors

- ▶ Grammatical category is significant for both Black and White signers
 - ▶ Depicting and locative verbs and indicating verbs were most likely to extend beyond the unmarked space.
 - ▶ Adjectives and adverbs slightly favored the use of a marked variant by Black signers but slightly disfavored by White signers.
 - ▶ Plain verbs, nouns, pronouns, and function signs were most likely stayed within the boundary of the unmarked space.
- ▶ Little difference in the results of intensity of signs between Black and White signers
- ▶ Black signers use more space in the structured narratives while White signers use more space in the free narratives



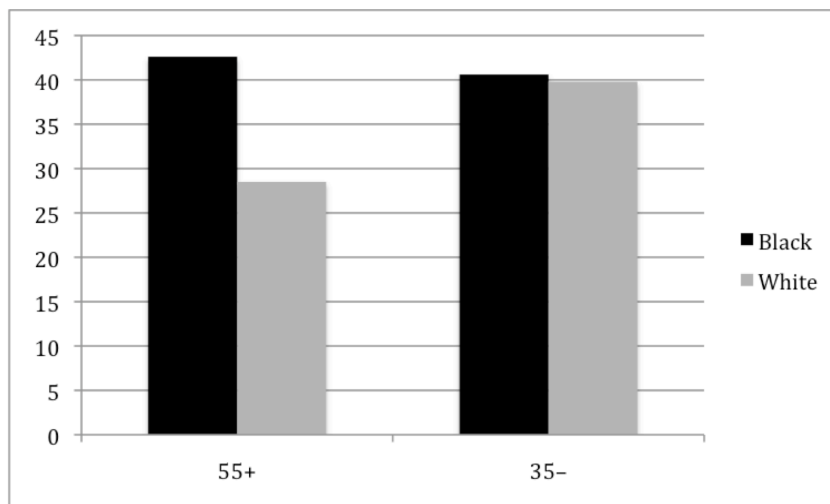
Results of multivariate analysis

Factor Group	Factor	N	%	Weight
Race	Black	1147	41.5	.539
	White	1100	33.5	.460
Age	Young (35-)	1202	40.3	.539
	Old (55+)	1045	35.2	.455
Gender	Female	1147	35.9	.468
	Male	1100	39.8	.531
Total	Input	2247	37.9	.368

Notes: application value = “marked” (extends beyond usual signing space); log likelihood = -1337.517, chi-square/cell = 1.2578.



Signing space: Race by age



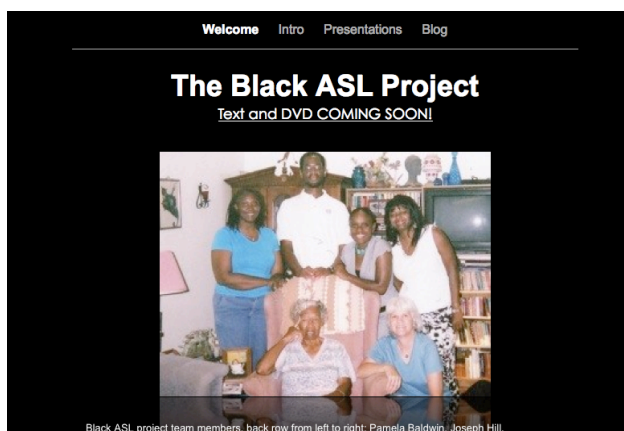
▶ Percentage of signs beyond the usual signing space

Conclusion

- ▶ The grammatical category constraint ranking is identical for both Black and White signers.
- ▶ The intensity factor shows similar results for both Black and White signers.
- ▶ The favorability of the marked variant in the structured and free narratives is unclear. Further work is suggested to see if this is an epiphenomenon.
- ▶ Results for elicited narratives show that Black signers and young signers are more likely to exceed the boundary of the signing space than are White signers and older signers.

Black ASL Project Website

- ▶ <http://blackaslproject.gallaudet.edu/>



The History and Structure of Black ASL: Research Team

- ▶ **Project Co-Directors**
 - ▶ Ceil Lucas, Linguistics, Gallaudet University
 - ▶ Carolyn McCaskill, ASL & Deaf Studies, Gallaudet Univ.
 - ▶ Robert Bayley, Linguistics, UC Davis
- ▶ **Graduate Research Assistants**
 - ▶ Joseph Hill and Roxanne King, Gallaudet University
- ▶ **Technical Consultant**
 - ▶ Randall Hogue, Gallaudet University
- ▶ **Community Representative and Archivist**
 - ▶ Pam Baldwin, Washington, DC



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