Building the ASL Signbank on the Shoulders of Giants

Julie A. Hochgesang (Gallaudet University), Onno Crasborn (Radboud University) & Diane Lillo-Martin (University of Connecticut)



GALLAUDET UNIVERSITY DEPARTMENT OF LINGUISTICS

UCONN | UNIVERSITY OF

Radboud University



Introduction

The concept of the ASL Signbank builds on the other Signbank databases, Auslan (Johnston 2001), British Sign Language (BSL) (Fenlon et al. 2014), Finnish Sign Language (FINsI) and Nederlandse Gebarentaal (NGT) (Crasborn et al. 2016). The source code for these sign banks is at http://github.com/signbank/

Home About - Signs - Feedback -			Search gloss Sea			Search	rch translation Sign search			
	LO	gout (Julie I	Hochgesang)							
ARTICULATE-SIGN	ASSIGN	DESIGN	PRODUCE	-SIGN	RESIGN	SIGN	SIGNboard	SIGNpaper	SIGN SIGN SIGN	1
Public View										Edit
	-	\		Lemma ID Gloss				PRODUCE-SIGN		
	125	6		Annotation ID Gloss			PRODUCE-SIGN			
				Trans	lation equi	alents		articulate- discuss, fl sign, sign,	sign, chat, conversi uency, fluent, produ , talk, to perform in :	atior uce- sign
								to propour	nce to sign someth	
	and a state			Sema	ntic Field			-	nce, to sign someth	ing
▶ 0:02 / 0:02	and a second	1		Sema	ntic Field			-	ice, to aigh aometh	ing
▶ 0:02/0:02		1	• ±	Sema Mor	phology			-		ing
▶ 0:02/0:02				Sema Mon Phon Mon	nology phosyntax			-	ice, to aign someth	ing
▶ 0:02 / 0:02			<u> </u>	Sema Mon Phot Mon	nology phology phosyntax guage & Dia	lect		-		ing
▶ 0:02 / 0:02		0	<u> </u>	Sema Mon Phon Mon Lang Rela	nology phology phosyntax guage & Dia	lect er Signs		-		ing
▶ 0:02/0:02		6	<u>• 1</u>	Sema Mor Pho Mor Lang Rela	ntic Field phology nology phosyntax guage & Dia tions to Oth	lect er Signs eign Sigr	15	-		ing
► 0.02 / 0.02 -			<u>•</u> <u>•</u>	Sema Mon Phon Mon Lang Rela Rela	nhic Field phology phosyntax guage & Dia titions to Oth titions to For juency	lect Ier Signs eign Sigr	15	-		ing
• 0.02/0.02			<u>•</u>	Sema Mor Phot Mor Lang Rela Rela Freq	ntic Field phology phosyntax guage & Dia ttions to Oth ttions to For quency lication Stati	lect ier Signs eign Sigr us	15			ing





Sign Language Acquisition: Annotation, Archiving, and Sharing (SLAAASh)

SLAAASh is an on-going effort to prepare corpora of sign language acquisition data to share with the research community, and eventually shared with other projects annotating ASL data (e.g., Philadelphia Signs Project).

Current aim: Serve as a consistent and constantly upgraded resource for ongoing annotation

Mid-term aim: Create shareable archive of child language resources

Long-term aim: Be an online usage-based sign language database to serve as a source for future ASL resources including dictionaries

Linked to ASL-LEX

ASL-LEX (Caselli et al. 2016) is a lexical database which includes subjective frequency and iconicity judgments on (to date)1000 ASL signs. We are building up both projects simultaneously. The goals of the ASL SignBank and ASL-LEX are somewhat different: the SignBank is based on usage data (e.g., ID glosses for signs are created as they occur in our child acquisition data), while the ASL-LEX project was designed to include signs representing the full range from high to low frequency and high to low iconicity, for use in psycholinguistic experiments. Despite these different goals, the projects are mutually reinforcing. Eventually, the actual frequency data from our corpora (in child signing and child-directed signing) will help to tie the

Home About - Signs - Feedback -	Logout (Julie Hochgesang) Search gloss Se			Search translation	 Current Status Linked to ELAN Over 2300 signs with complete descriptions in progress 		
Add New Sign						Jogrooo	
number of matches: 2313 out of 2313.	Annotation ID gloss	Translation equivalents	Handedness	Dominant Handshap	Nondominan e Handshape	t Location - major Tags	
	AMBULANCEoc	ambulance, siren	None	None	None	None	
	AMERICAN- INDIAN	American Indian, Indian, Native American	None	None	None	None	
	ANALYZE	analysis, analyze, assess, examine, study	None	None	None	None	
	ANDasym	and, also	OneHanded	None	None	None	
	ANDsym	and	None	None	None	None	







Philadelphia Signs Project, Janie Carter with Interviewer Fisher



ASL Internet Corpus (See Hou, Lepic, Wilkinson this workshop); Gallaudet classes using ASL data

Different data sets with which the ASL Signbank is already used

projects even closer together.

Linking actions

- * Alignment of glosses
- * Sharing phonological coding
- * Sharing iconicity ratings
- * Sharing lexical properties



The research reported here was supported in part by the National Institute on Deafness and Other Communication Disorders of the National Institutes of Health under award number R01DC013578 and award number R01DC000183. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Plans

Move to permanent US server

- "Informing the public about how to use/view ASL Signbank" Informing users about the nature of ASL SignBank: e.g., entries are produced by actors (not necessarily the signs they use); how it is different from a dictionary (no definitions)
- * ASL SignBank will have different levels of access
 - 1. Public access (simple access to sign movie and picture, ID gloss and translation equivalents like <u>http://bslsignbank.ucl.ac.uk/dictionary/</u>)
 - 2. User registration for more access to features like providing feedback on existing signs and contributing new signs
 - 3. Researcher access (current version)Lots more signs

This poster here: <u>http://bit.ly/</u> <u>HCLM2017poster</u> (or scan →) References here: <u>http://bit.ly/refsHCLM</u> (or scan →)



