

Department of Linguistics, University of British Columbia Phonological Transcription of the Canadian Dictionary of ASL as a Language Resource

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The Canadian Dictionary of ASL (CD-ASL)

- Bailey & Dolby 2002; work began 1982
- Developed in conjunction with the *Canadian* Cultural Society of the Deaf
- Over 8,700 signs; many unique to Canada
- Focus on regional variation of signs across Canada: the Pacific (British Columbia), Prairie



🛨 🗙

Corpus file

Filter corp

Sort by:

Sign: RED

Transcription Process

- Sample of all entries from the CD-ASL
- Select signs that share a gloss with entries in the ASL-LEX database (Casselli et al. 2021; N = 2723)
- Transcribe all of the various entries from the CD-ASL for that gloss, using the *Sign Language* Phonetic Annotator-Analyzer (SLP-AA) software (Hall et al. 2022)

(Alberta, Saskatchewan, and Manitoba), Central (Ontario and Québec), and Atlantic (New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador)

See sample entry for RED below.

- Transcribe hand configuration, movement, location, contact, and relative orientation
- Consult with native signers to resolve ambiguities in text
- >2,000 signs have been transcribed so far



red: *adj.* the colour of blood. *He wore a red* shirt and white shorts for Canada Day.

SIGN: Vertical right 'ONE' hand is held with palm facing the body and tip of forefinger touching the lower lip. As the hand is then drawn very firmly forward at a downward angle, the forefinger crooks to form an **'X'** shape.

Sign to be coded: RED in ASL (from the CD-ASL)

				Sign Language Phonetic Annotator and Analyzer			
+ 🗙 🗔	N 5 C	D D					
	C	orpus					
orpus file: LREC_sample_corpus.slpaa				Generic x-slots allow for a representation			
ilter corpus entr	ries						
Entry ID	Gloss	Lemma	ID-Gloss	of the <u>timing</u> relations among modules.			
00092024-0	CIRCUMSTAN	HAPPEN	HAPPEN				
00092024-0	HAPPEN	HAPPEN	HAPPEN	RED - 00052024-02-16			
00022024-0	LAMP	LAMP	LAMP	Sign Type: 1h (moves)			
00092024-0	OUTCOME	HAPPEN	HAPPEN				
00052024-0	RED	RED	RED	x1			
00042024-0	UNDERSTAN	UNDERSTAND	UNDERSTAND	Hand 1			
ort by: alpha	by gloss (default)	 A→Z; 1 	→9	H1.Mov1			
				H1 Mov2			
Sign							
gn: RED				H1.Loc1			
Sign-level information Add movement module				(H1.Rel1)			
Sign type information Add location module			tion module				
X-slot information Add relation module			ion module	(H1.Config1)			
		Add orientation module		Hand 2			

[x1	1/4	1/3	1/2	2/3	3/4
1st ¼ x1	-	2nd ¼ x1	3rd	¼ x1	
1st ⅓ x	11st ½ x1		2nd ⅓ x1		2nd ½ x1
			x1 whole sign		
Select X		Select Y		Body parts	
● H1 Ar → H2 Ar	m1 m2	H2 • Existing module:	Location Movement	For H1 and/or H2:	Specify hand parts
Both hands Le As a connected unit Le	g1 g2	Leg1	no Location abbreviations implemented y	For Arm1 and/or Arm2:	Specify arm parts
Other Specify		Other Specify		For Leg1 and/or Leg2:	Specify leg parts
Contact	Direction of relation		Distance	between X and Y	
Contact manner	X and Y are crossed	X and Y are link	ea Horiz	zontal Vertical	Sagittal
Light Continuous Firm Intermittent	Horizontal	Vertical	Sagittal	Close Clos	se O Clos
Other	X ipsilateral to X contralatera	al to Y X below Y Y X in line with Y	X proximal to Y	Med.MedFarFar	I. O Med
Restore Defaults Save					Delete
Mayamant tuna			11		
Movement type Dercontual chan					
Shape			Dotai	ils of tl	he re
> Straight		Deta			
Arc			modu	ab) ال	ove)
Circle			move	mont	مام
Zigzag					JEIEU
🗌 Loop (tra	velling circles)	optio	ns (lef	t) in t
Other (s	pecity:)			- -	
Axis direc	tion		AA SC	ontwar	e, sno

elation and ction the SLPowing the coding for RED.

Add hand configuration module Add non-manual modul

Benefits:

- Detailed form-based transcription provides insight into:
 - **phonetic description** issues
 - phonological structure
 - find **minimal pairs**
 - calculate **lexical frequency** of phonological parameters
 - analyse **phonotactic restrictions**
- Digitized resource for Canadian ASL users:
 - searches for signs using form rather than English glosses
- Digitizing older sign language resources:
 - acknowledge past signers and research
 - preserve sign language data for research and education efforts
- SLP-AA is a user-friendly, GUI-based software
 - consistent transcription of any signed variety





https://github.com/PhonologicalCorpusTools/SLPAA *Click link / scan for access to the software and a recorded* demonstration!

Comments / Questions? <u>kathleen.hall@ubc.ca</u>

analysis component for easy search and comparison of signs

References:

Bailey, Carole Sue, and Kathy Dolby (eds.). (2002). The Canadian Dictionary of ASL. Edmonton: The University of Alberta Press.

Casselli, Naomi, Karen Emmorey, Zed Sevcikova Sehyr, Ariel Cohen-Goldberg, and Cindy O'Grady Farnady. (2021). ASL-LEX 2.0: Visualizing the ASL lexicon. PID https://asllex.org/.

Hall, Kathleen Currie, Yurika Aonuki, Kaili Vesik, April Poy, and Nico Tolmie. (2022). Sign language phonetic annotatoranalyzer: Open-source software for form-based analysis of sign languages. LREC2022.

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