SignTyp: *a cross linguistic database and dictionaries for sign languages*

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SignTyp is a research tool – a database of phonological and phonetic information. It is also a set of online sign language dictionaries, and the prompts used to create the dictionaries.

Goals for Online Dictionaries

- To collect 1000 signs each from 15+ sign languages (citation forms). Signers responds to the same prompts cross-linguistically

- To transcribe each sign in SignWriting - a notation system for signs created by Valerie Sutton

- To create 15+ sign online dictionaries

Goals for Research Database

- To convert Sign Writing transcriptions into a more granular analytic coding to enable phonetic/phonological analysis of the structure of signs

- To provide a comparative study of the phonological structure of 15+ globally diverse sign languages

- To test and develop sign phonology models

- To investigate the role of iconicity in phonological form

- To develop a cognitive model that generalizes over 'phonological' form in signed and spoken languages

Data Collection Process

Created more than 1000 prompts using over 5000 photos from personal collection or from Creative Commons licensed photos on Flickr. All prompts stored in pdfs on website. Multiple photos for each prompt helps clarify intended response.
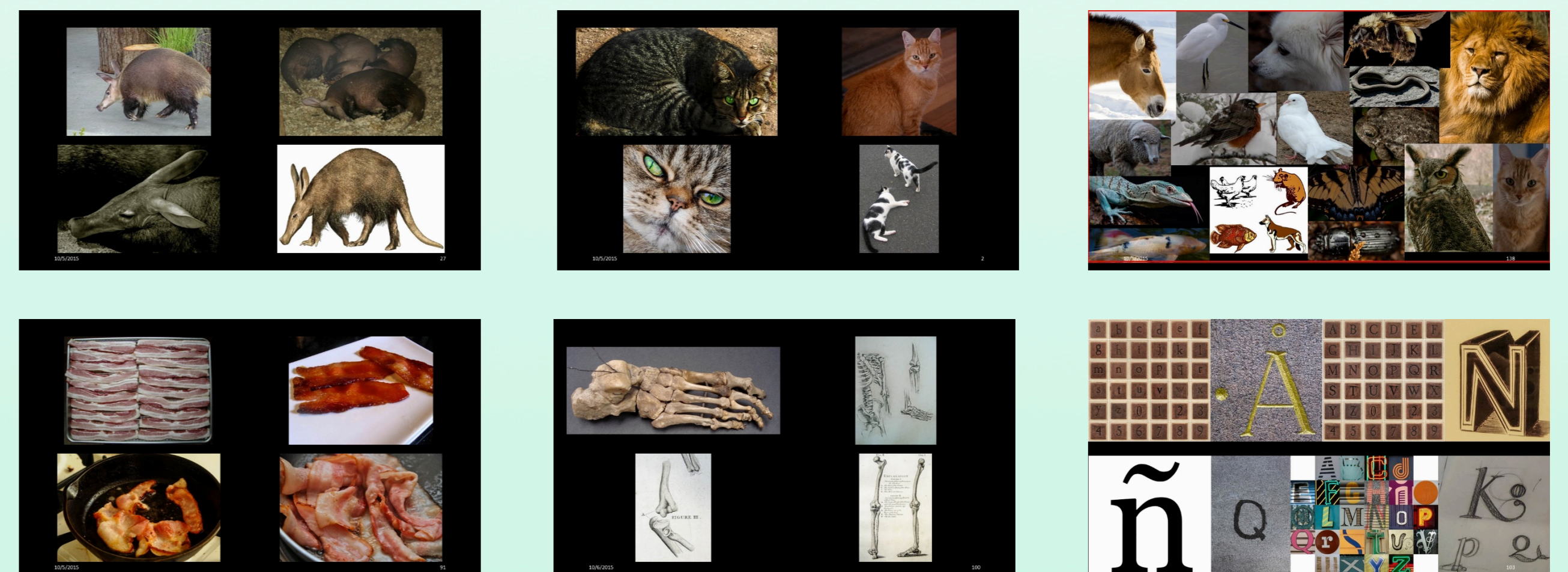
Prompts are the same for all languages – no text. Prompts cover numbers, letters, animals, nature, body, clothing, health, tools, buildings, roles, careers, recreation, vision, space, time, communication.

Signers are shown these prompts (by researchers or onsite collaborators) and their responses recorded. Sign languages collected to date from: Brazil, Croatia, Denmark, Ethiopia, France, Germany, Haiti, Honduras, Italy, Lithuania, Nepal, Nicaragua, Philippines, Portugal, Russia, Rwanda, Turkey, Uganda, United States. Videos stored on YouTube.
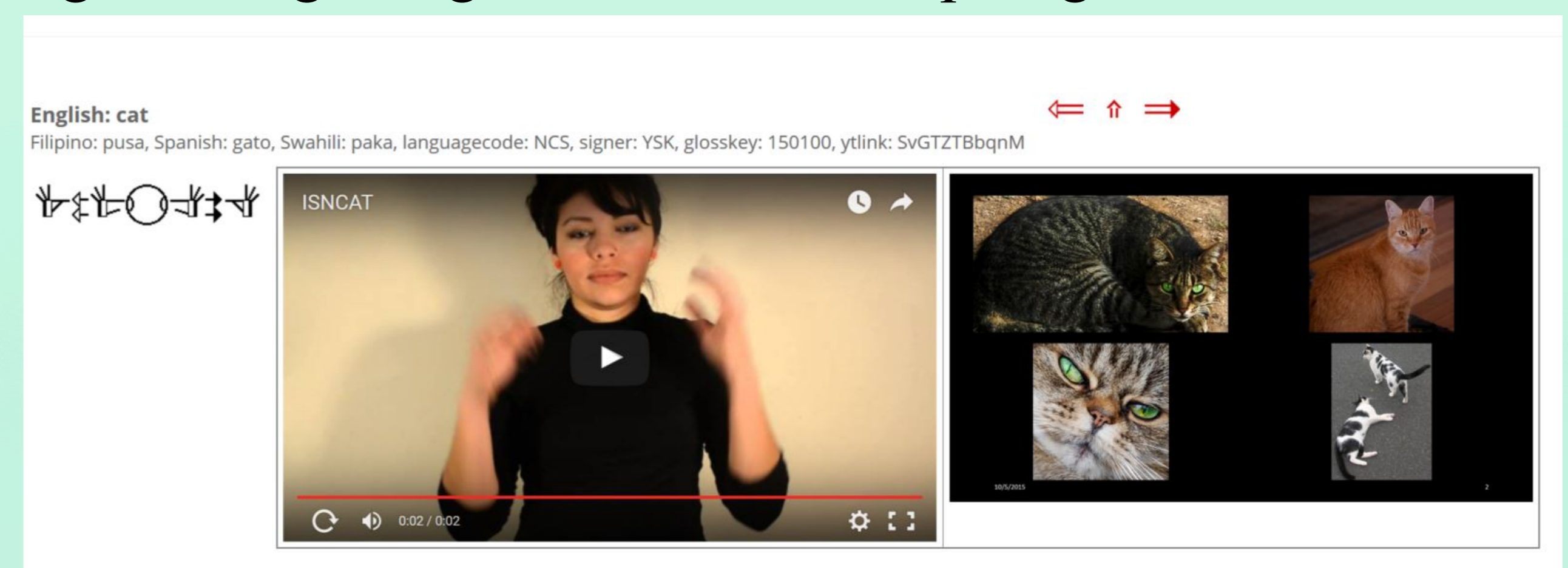
Signs are transcribed in SignWriting.

Prompt Examples

Dictionary Entry:
SignWriting + Signer Video + Prompt + glosses etc.

Each entry includes StructuredSignSpelling: information on hand-location-action relationships and sequence

SignWriting Symbol	Symbol Type	Articulator	Sign Number	Sequence within Sign
◯	Location	Right	1	1
◯	Location	Left	1	1
⍦	Handshape	Right	1	1
⍦	Handshape	Left	1	1
⍦	Action	Right	1	1
⍦	Action	Left	1	1
⍦	Handshape	Right	1	2
⍦	Handshape	Left	1	2

The SignWriting symbols and StructuredSignSpelling are used to create a phonological/phonetic database for researchers. A simplified version is shown below:

Country	entry id	Articulator	Seq	variable	SignWriting symbol	SignTyp translation
Nicaragua	150100001	right	1	location	S30006	right cheek
Nicaragua	150100001	left	1	location	S30002	left cheek
Nicaragua	150100001	right	1	handshape	S1d110	index and thumb bent at first knuckle, all others extended
Nicaragua	150100001	left	1	handshape	S1d118	index and thumb bent at first knuckle, all others extended
Nicaragua	150100001	right	1	action	S26a06	move rightward
Nicaragua	150100001	left	1	action	S26a12	move leftward
Nicaragua	150100001	right	2	handshape	S1d410	index and thumb bent at first knuckle, all others extended, index contacts thumb
Nicaragua	150100001	left	2	handshape	S1d418	index and thumb bent at first knuckle, all others extended, index contacts thumb
Nicaragua	150100001	sign	0	languagecode	NCS	
Nicaragua	150100001	sign	0	signer	YSK	
Nicaragua	150100001	sign	0	glosskey	Cat	

Website: www.signtyp.uconn.edu