

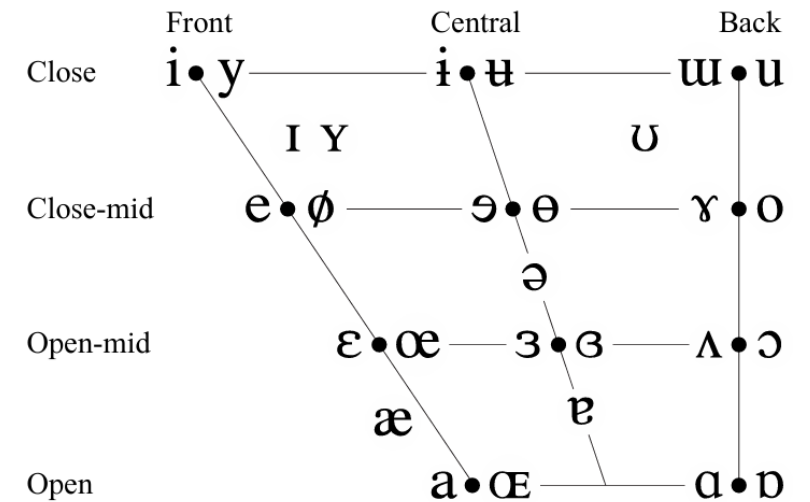
# Why **you** should be interested in phonology

Hassan Khan

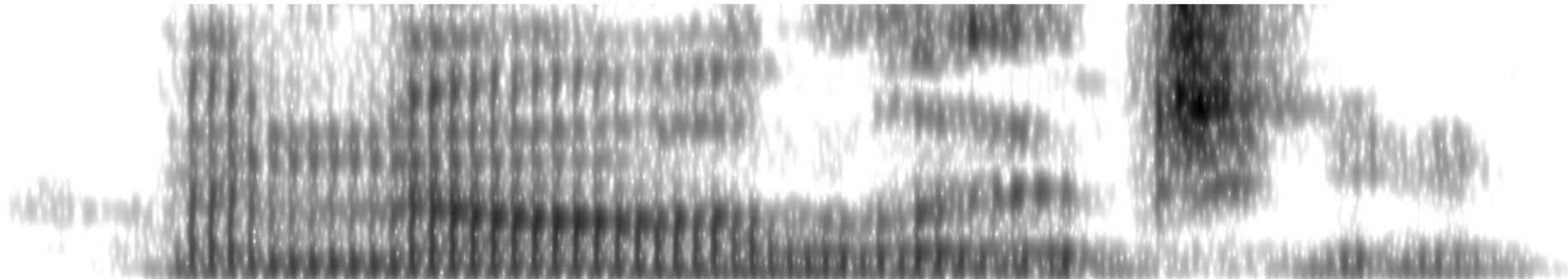
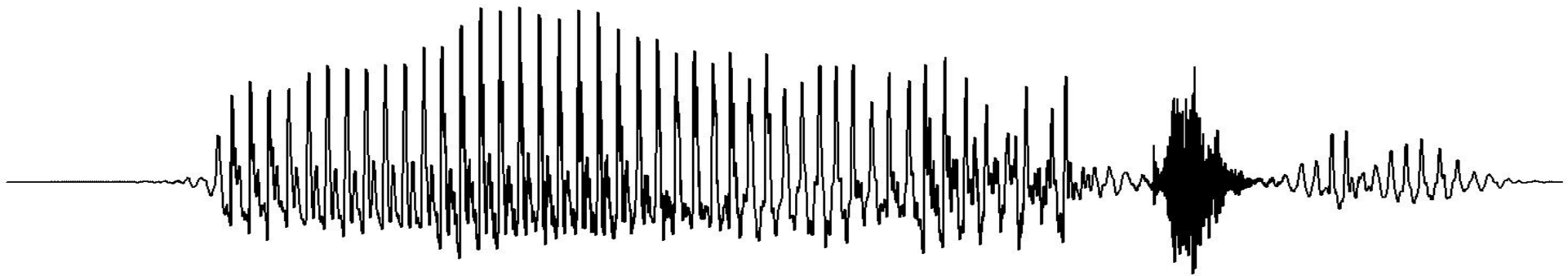
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	<b>p b</b>			<b>t d</b>		<b>ʈ ɖ</b>	<b>c ɟ</b>	<b>k ɡ</b>	<b>q ɢ</b>		<b>ʔ</b>
Nasal	<b>m</b>	<b>ɱ</b>		<b>n</b>		<b>ɳ</b>	<b>ɲ</b>	<b>ŋ</b>	<b>ɴ</b>		
Trill	<b>ʙ</b>			<b>r</b>					<b>ʀ</b>		
Tap or Flap		<b>ⱱ</b>		<b>ɾ</b>		<b>ɽ</b>					
Fricative	<b>ɸ β</b>	<b>f v</b>	<b>θ ð</b>	<b>s z</b>	<b>ʃ ʒ</b>	<b>ʂ ʐ</b>	<b>ç ʝ</b>	<b>x ɣ</b>	<b>χ ʁ</b>	<b>ħ ʕ</b>	<b>h ɦ</b>
Lateral fricative				<b>ɬ ɮ</b>							
Approximant		<b>ʋ</b>		<b>ɹ</b>		<b>ɻ</b>	<b>j</b>	<b>ɰ</b>			
Lateral approximant				<b>l</b>		<b>ɭ</b>	<b>ʎ</b>	<b>ʟ</b>			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.



phonology

p

t

k

[LIPS]

[TONGUE\_TIP]

[TONGUE\_BACK]

p

t

k

[LIPS]

[TONGUE\_TIP]

[TONGUE\_BACK]

p

t

k

b

d

g

[LIPS]

[TONGUE\_TIP]

[TONGUE\_BACK]

[-voice]

**p**

**t**

**k**

[+voice]

**b**

**d**

**g**

Underlying Representation

$/{}^1wɑ.təɪ/$

$/{}^1bʌ.təɪ/$

Rules

$t \rightarrow r / V_{[+stress]}-V_{[-stress]}$

$əɪ \rightarrow ə̃$

Surface Representation

$[{}^1wɑ.rə̃]$

$[{}^1bʌ.rə̃]$





phonology

Handshape  
Orientation  
Location  
Movement



WINDOW  $CL_{WE}$  (B)-OPEN  
'A window opened.'



GRANNY WINDOW  $CL_{HL}$  (SS)-OPEN  
'A granny opened the window.'

MS1



RH: LS (*dog*)

LH:

Non-manuals:

MS 2



INDEX: self (*dog*)

CA (*holding*)

MS 3



INDEX (*bird*)

CA (*holding*)

MS 4



LS (*bird*)

CA (*holding*)

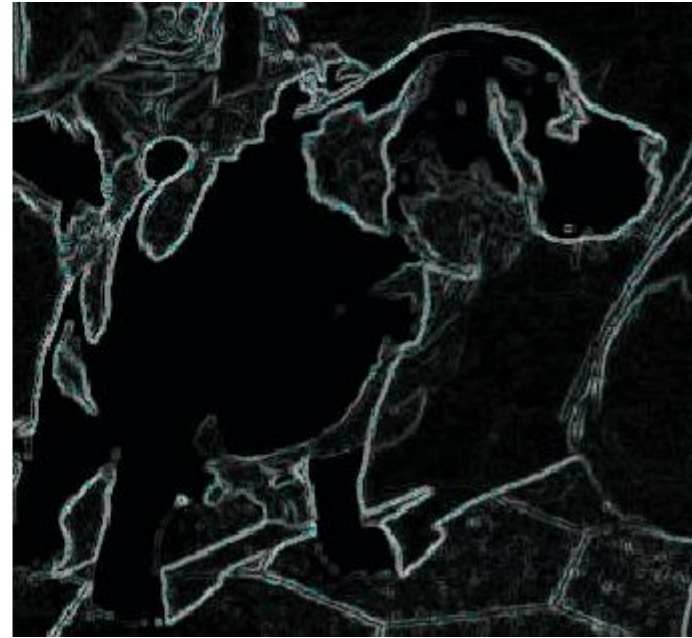
MS 5



LS (*peck*)

CA (*holding*)

(*head-dog, face-bird*)



phonology?

Luister en typ het woord.



tuin

de

OK

# References

Boersma, Paul & David Weenink. 2024. *Praat: Doing phonetics by computer*. <http://www.praat.org/>

Kimmelman, Vadim, Vanja de Lint, Connie de Vos, Marloes Oomen, Roland Pfau, Lianne Vink, and Enoch O. Aboh. 2019. Argument structure of classifier predicates: Canonical and non-canonical mappings in four sign languages. *Open Linguistics* 5(1). 332-353.

Odden, David. 2011. Rules v. Constraints. In John Goldsmith, Jason Riggle, & Alan C. L. Yu (eds.), *The Handbook of Phonological Theory*. Blackwell Publishing Inc.

Slonimska, Anita, Asli Özyürek, and Olga Capirci. The role of iconicity and simultaneity for efficient communication: The case of Italian Sign Language (LIS). 2020. *Cognition* 200.