Forms of multimodal language contact: mouthing constructions across signed languages

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Language contact, experimental syntax,
Dravidian languages, constituent order

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Language contact, syntax, Creoles,
Cabo Verdean Creole

Aims

▸ To motivate the mouthing construction

    ▸ by taking a semiotic repertoires framing

    ▸ through cross-linguistic investigation

    ▸ showing components of constructions are related

▸ To exemplify multimodal contact by describing 4 mouthing constructions

▸ To show functions of mouthing in mouthing constructions

Mouthing

- Movements of the mouth in sign languages that correspond with those made when articulating <u>specific</u>, <u>synchronic</u> spoken language words

  - Often associated with negative attitudes and ideologies because of association with spoken language

 - e.g. mouthings are not part of "real" ASL (Nadolske & Rosenstock 2007)

Semiotic Repertoires

▸ Semiotic repertoire (Kusters et al. 2017: 220–221)

  ▸ "departs from the idea that languages are bounded […] and that repertoires are merely linguistic (they are multimodal and embodied) [and] enables a holistic focus (addressing ideologies, histories, potential and constraints) on action that is both multilingual and multimodal"

allows us to admit structures typically considered to be part of separate systems for joint analysis/allows us to examine forms arising from multimodal contact i.e. the mouthing cxn

Mouthing Constructions (cxns)

▸ Mouthing cxns are multimodal multilingual cxns

▸ Mouthing cxn

 ▸ must have a mouthing

  ▸ "obligatoriness" of mouthing across constructions and in instances of production will vary

 ▸ *typically* has a manual sign
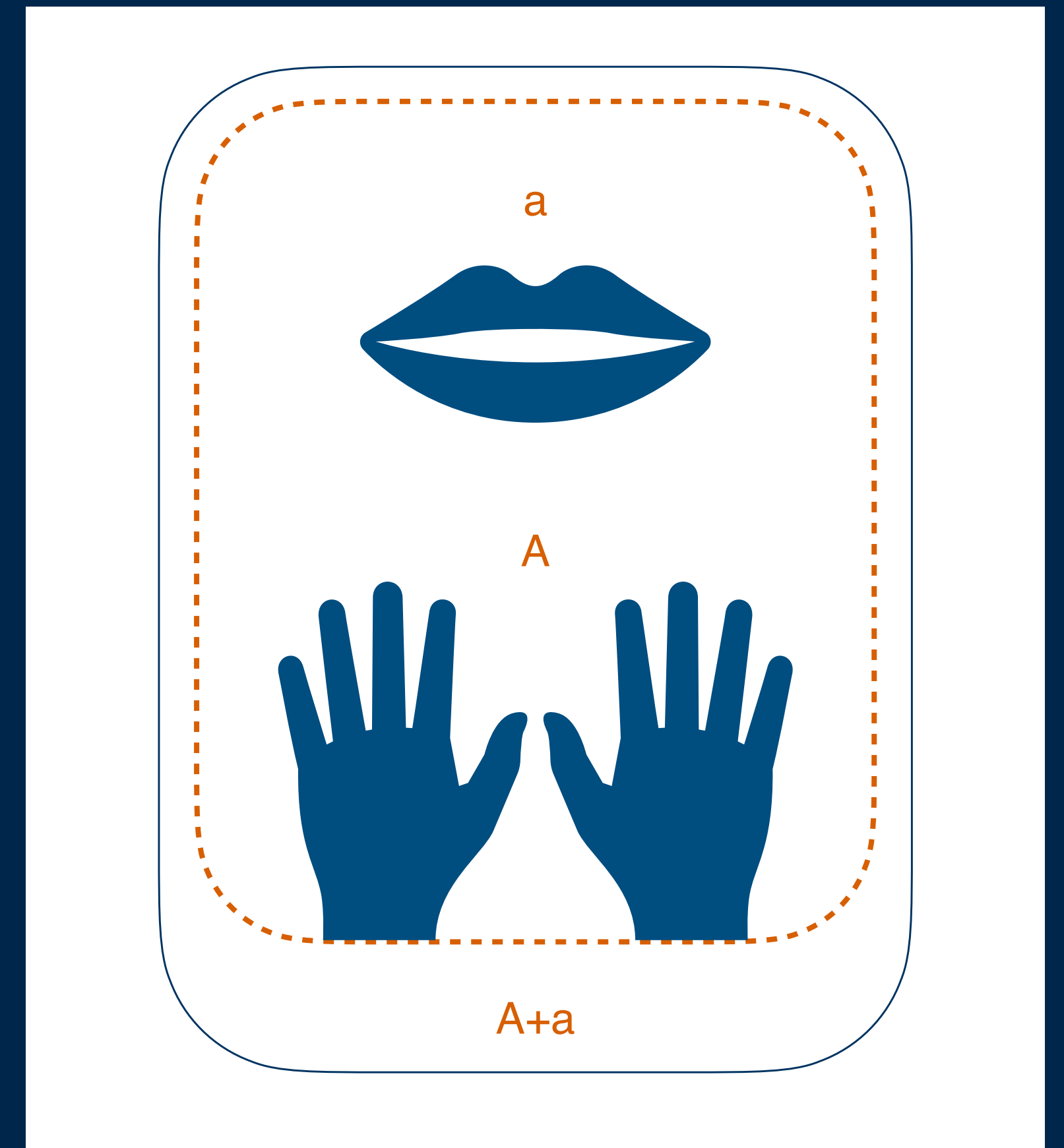
DHH people are multimodal multilinguals

Language users have multiple repertoires to draw from

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Deaf/hard-of-hearing people may not produce and perceive spoken language in the way hearing people do but this does not exclude them from having linguistic knowledge of ambient spoken languages that they can recruit

DHH people are multimodal multilinguals

▸ Channels

  ▸ mouth

  ▸ hands

▸ Resources

  ▸ manual signs

  ▸ manual alphabet

  ▸ mouth shapes, tongue movements

  ▸ spoken language orthography

Language users have multiple repertoires to draw from

Deaf/hard-of-hearing people may not produce and perceive spoken language in the way hearing people do but this does not exclude them from having linguistic knowledge of ambient spoken languages that they can recruit

Matter and Pattern in Language Contact

▸ Semiotic resources typically under consideration in language contact are traditional linguistic ones e.g. phones, affixes, words, syntactic frames etc.

▸ Matras & Sakel (2007) on contact-induced *change* ← form

   ▸ <u>Matter</u>: replication of phonological shapes (from a *source* language)

   ▸ <u>Pattern</u>: replication of patterns of distribution, grammatical and semantic meaning, formal-syntactic arrangement (from *recipient* language)

Congruence in Language Contact

▸ Baptista (2020) on contact-induced *emergence* ← mechanism

　　▸ Features that are selected are those that are perceived to be congruent in source and recipient languages

Method

‣ Keyword search for "mouth", "mouthing", "lip" to find potentially relevant sources

‣ If the descriptions of mouth actions matched my definition of mouthing, the source was included

‣ Sample is one of convenience

  ‣ No controlling for genetic relationships because available data is limited

Sample (N=37)

Deaf and rural sign languages in sample
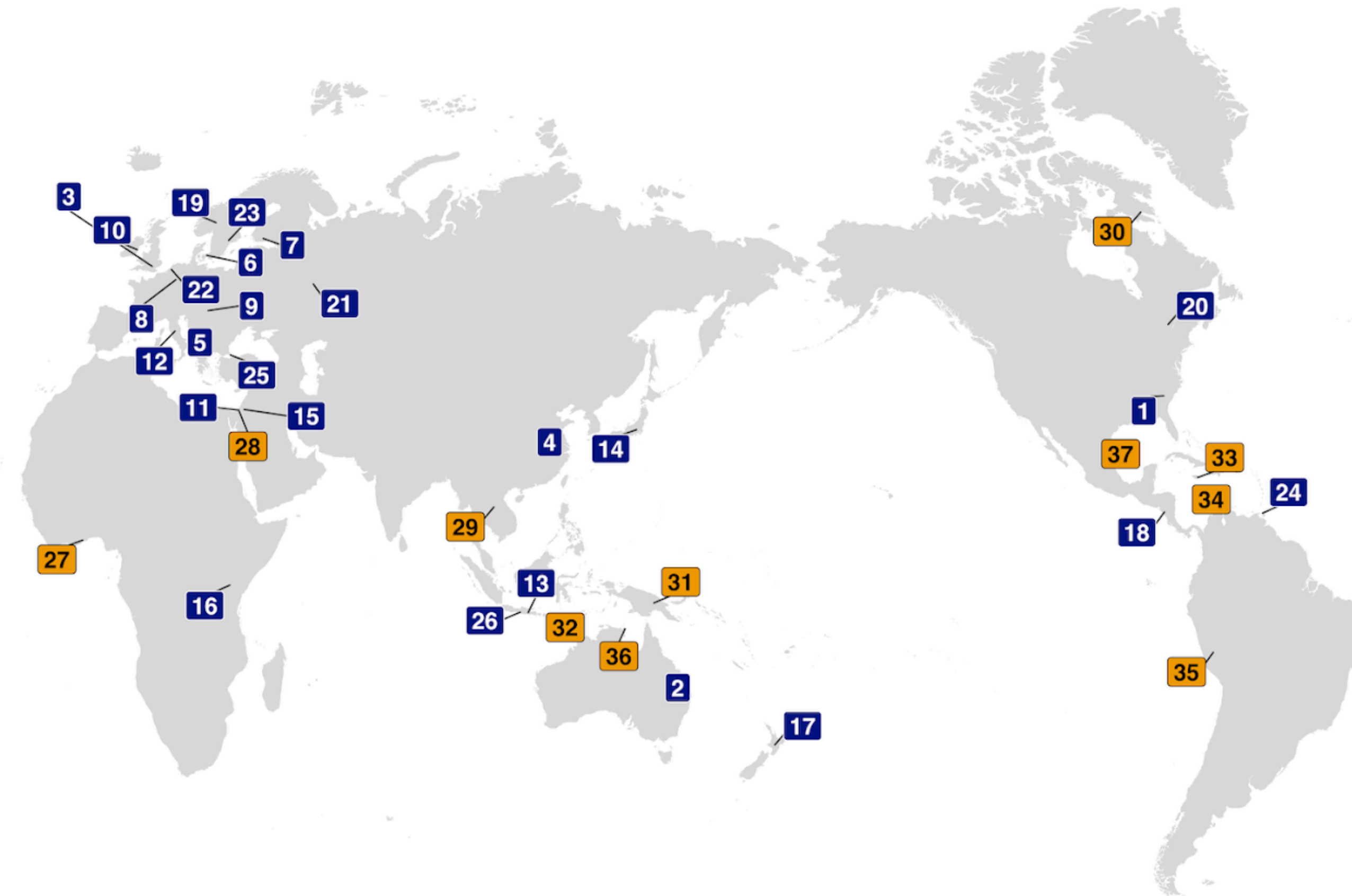
1. American SL, 2. Auslan, 3. British SL, 4. Chinese SL, 5. Croatian SL, 6. Danish SL, 7. Finnish SL, 8. German SL, 9. Hungarian SL, 10. Irish SL, 11. Israeli SL, 12. Italian SL, 13. Jakarta SL (BISINDO), 14. Japanese SL, 15. Jordanian SL, 16. Kenyan SL, 17. New Zealand SL, 18. Nicaraguan SL, 19. Norwegian SL, 20. Quebec SL, 21. Russian SL, 22. SL of the Netherlands 23. Swedish SL, 24. Trinidad & Tobago SL, 25. Turkish SL, 26. Yogyakarta SL (BISINDO), 27. Adamorobe SL, 28. Al-Sayyid Bedouin SL, 29. Ban Khor SL, 30. Inuit SL, 31. Kailge SL, 32. Kata Kolok, 33. Konchri Sain, 34. Providence Island SL, 35. Sivia SL, 36. Yolngu SL, 37. Yucataec Maya SLs

Coding

‣ Identified if:

   ‣ presence of mouthing

      ‣ coding: 1 = present, 0 = absent, ? = unreported, UC = unclear because of conflicting data

   ‣ what kinds of cxns mouthing appears in:

      ‣ >20 cxns found — 4 selected: morpho-phonological, morpho-syntactic, congruent, free
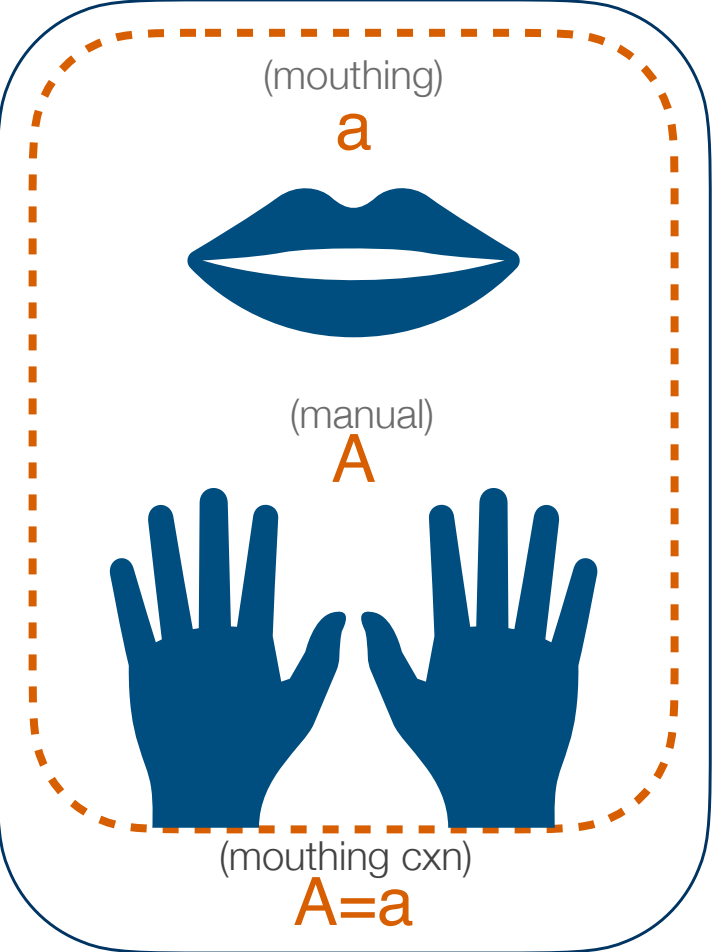
Presence of mouthing

Deaf and rural sign languages in sample
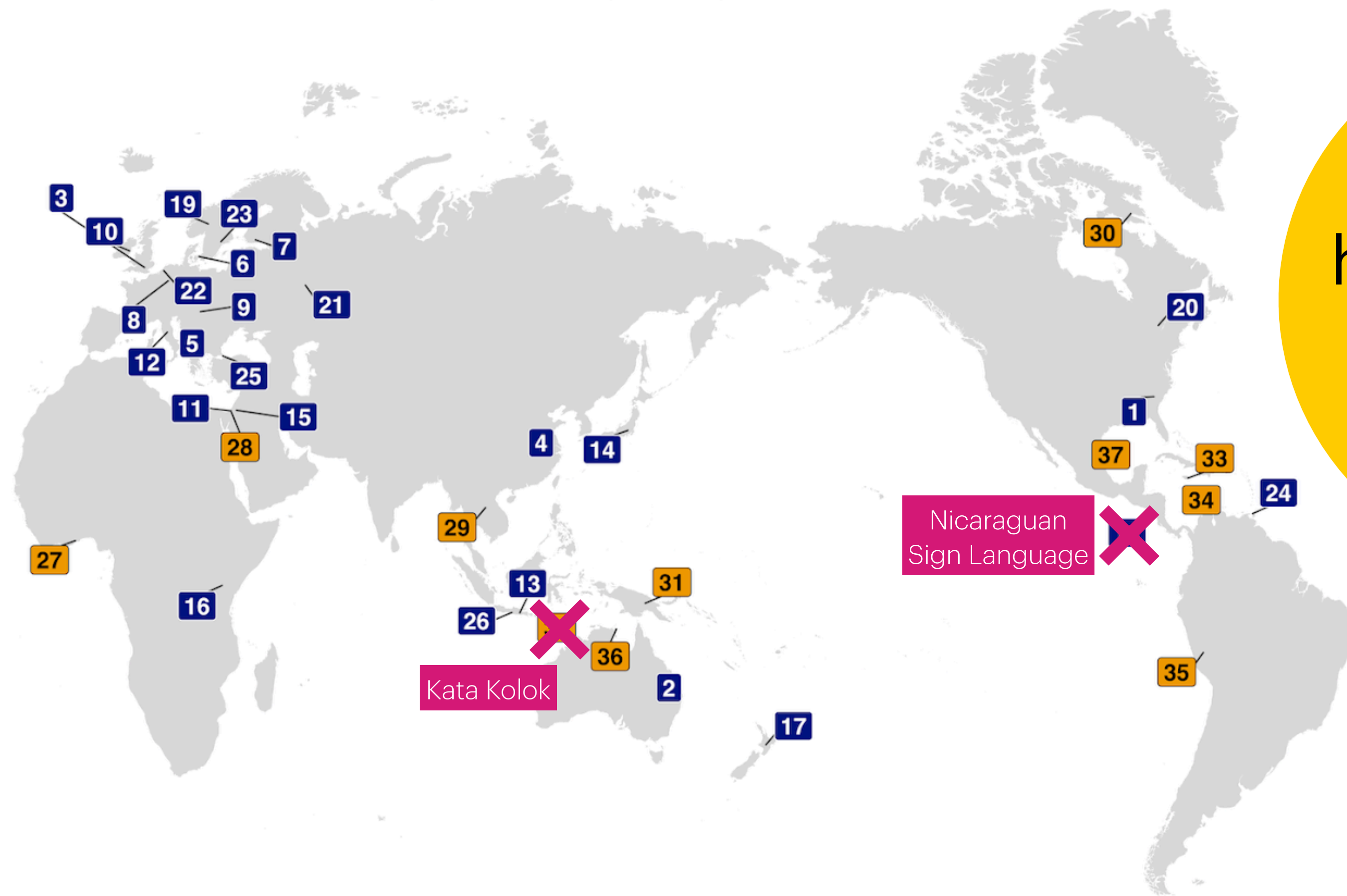
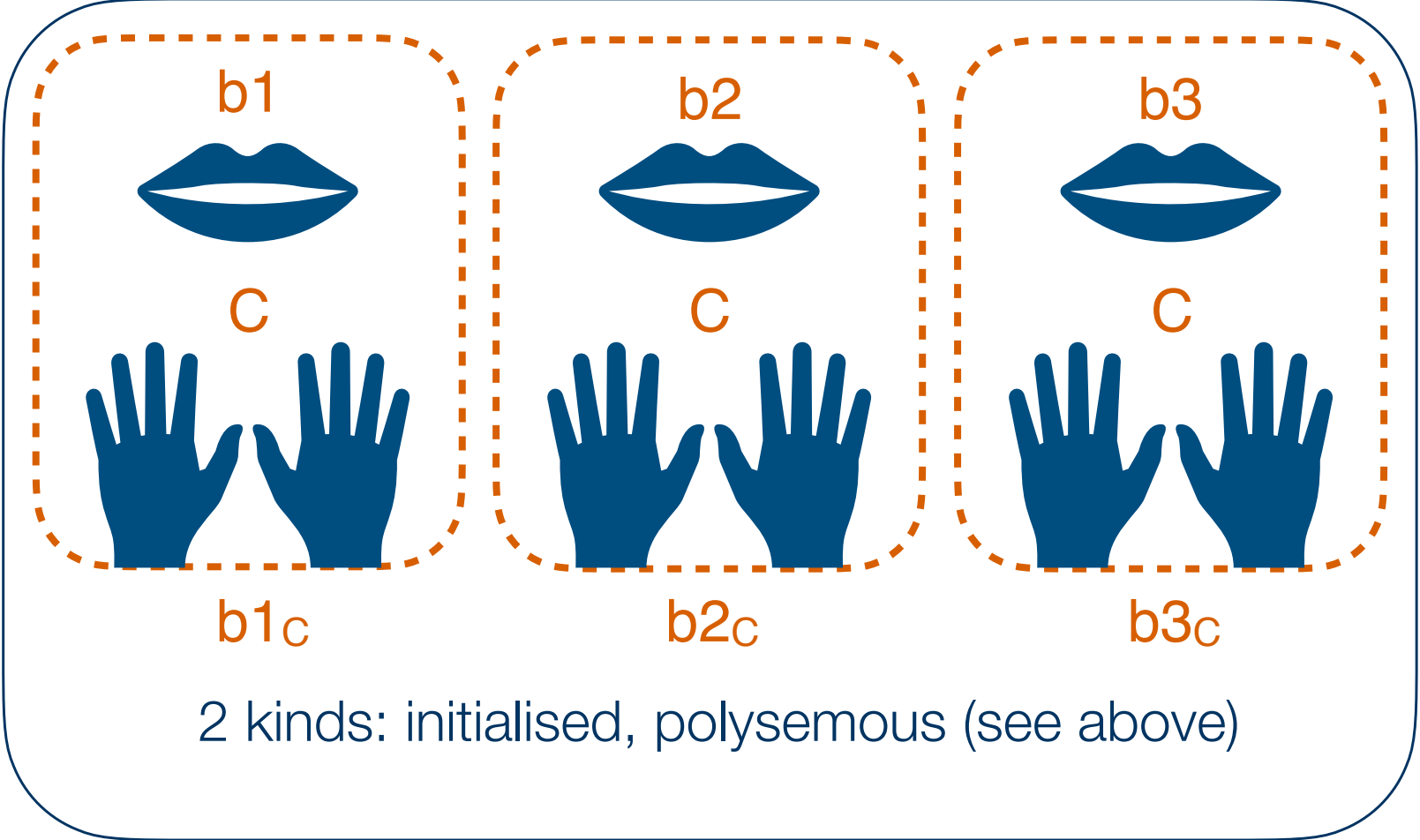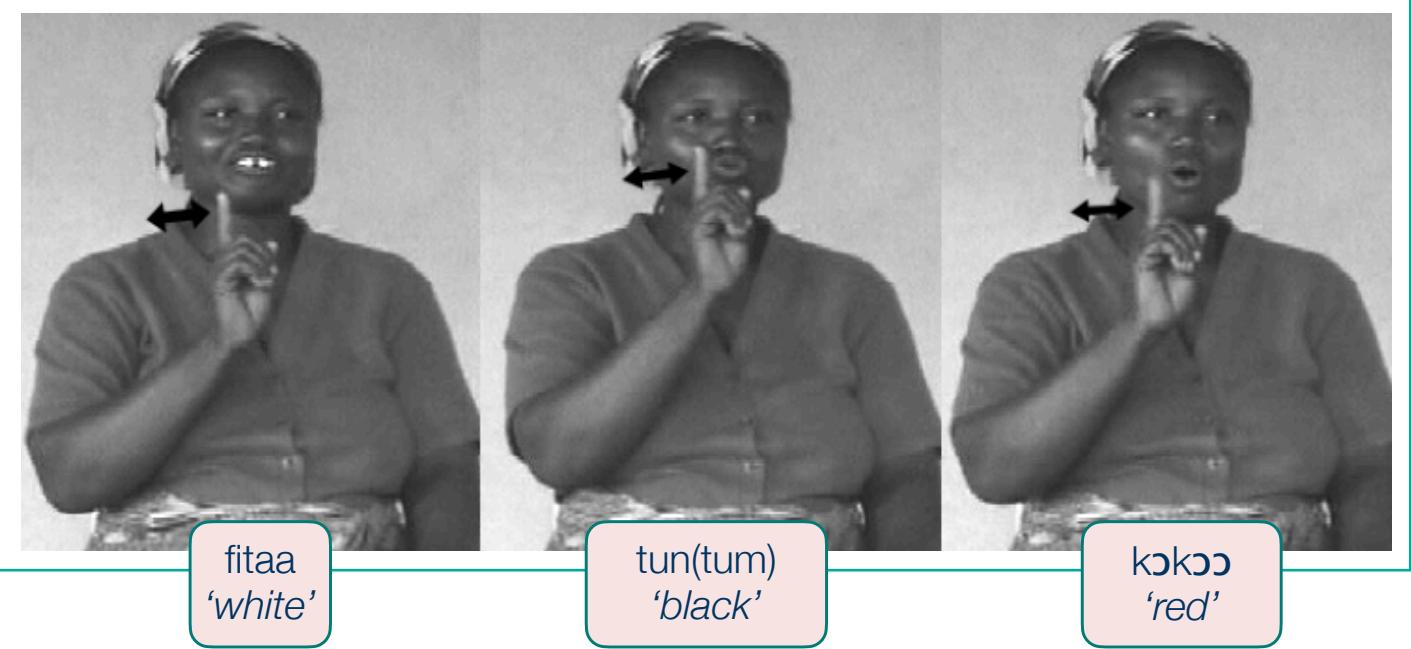mouthing is highly frequent cross-linguistically

Mouthing Cxns

CONGRUENT

(mouthing)
a

(manual)
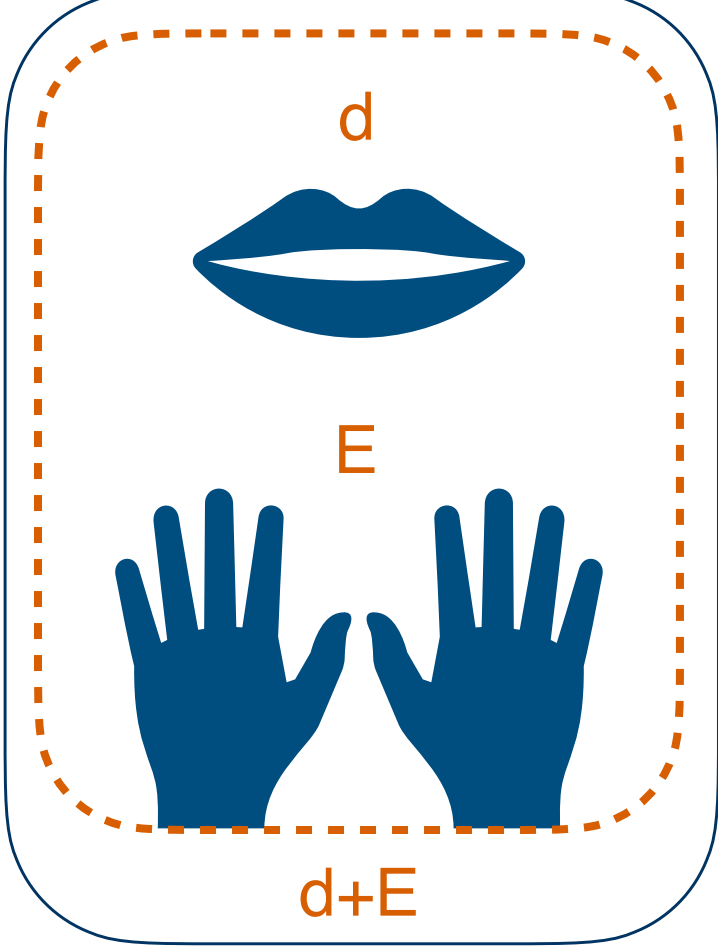A

(mouthing cxn)
A=a

MORPHO-PHONOLOGICAL

b1   b2   b3

C   C   C

b1c   b2c   b3c

2 kinds: initialised, polysemous (see above)

MORPHO-SYNTACTIC

d

E

d+E

FREE

f

f

Swedish SL

dop
'baptism'

Adamorobe SL

fitaa
'white'

tun(tum)
'black'

kɔkɔɔ
'red'

SL of the Netherlands

brood

ETEN

brood eten
bread eat
'eat bread'

Chinese SL

wei   sen   me   a
'why'   [filler]

Frequencies of mouthing cxns

cross-linguistic prevalence shows that these mouthing cxns are motivated

25 — Morpho-phonological
16 — Congruent
10 — Morpho-syntactic
5 — Free

Frequencies of mouthing cxns

Semiotic Repertoire approach allows us to find new units of analysis

	Value
Congruent	16
Morpho-phonological	25
Morpho-syntactic	10
Free	5
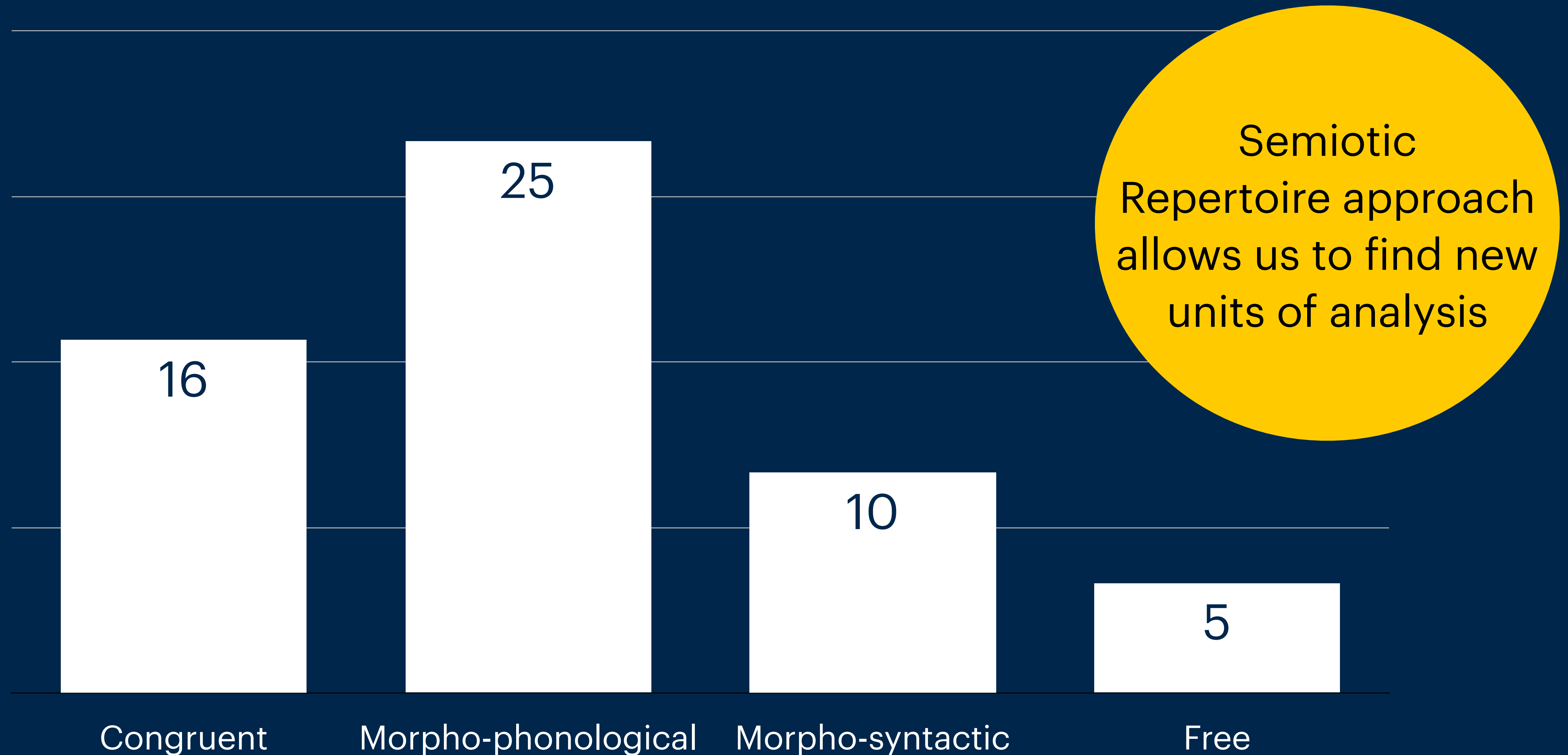
Congruent

‣ Manual sign and mouthing can be glossed with the same word

___*dom* (‘house’)

CL:HIGH HOUSE   CL:HIGH

‘There is a high building’

[RSL]
(Bauer 2018: 12)

dom
(‘house’)
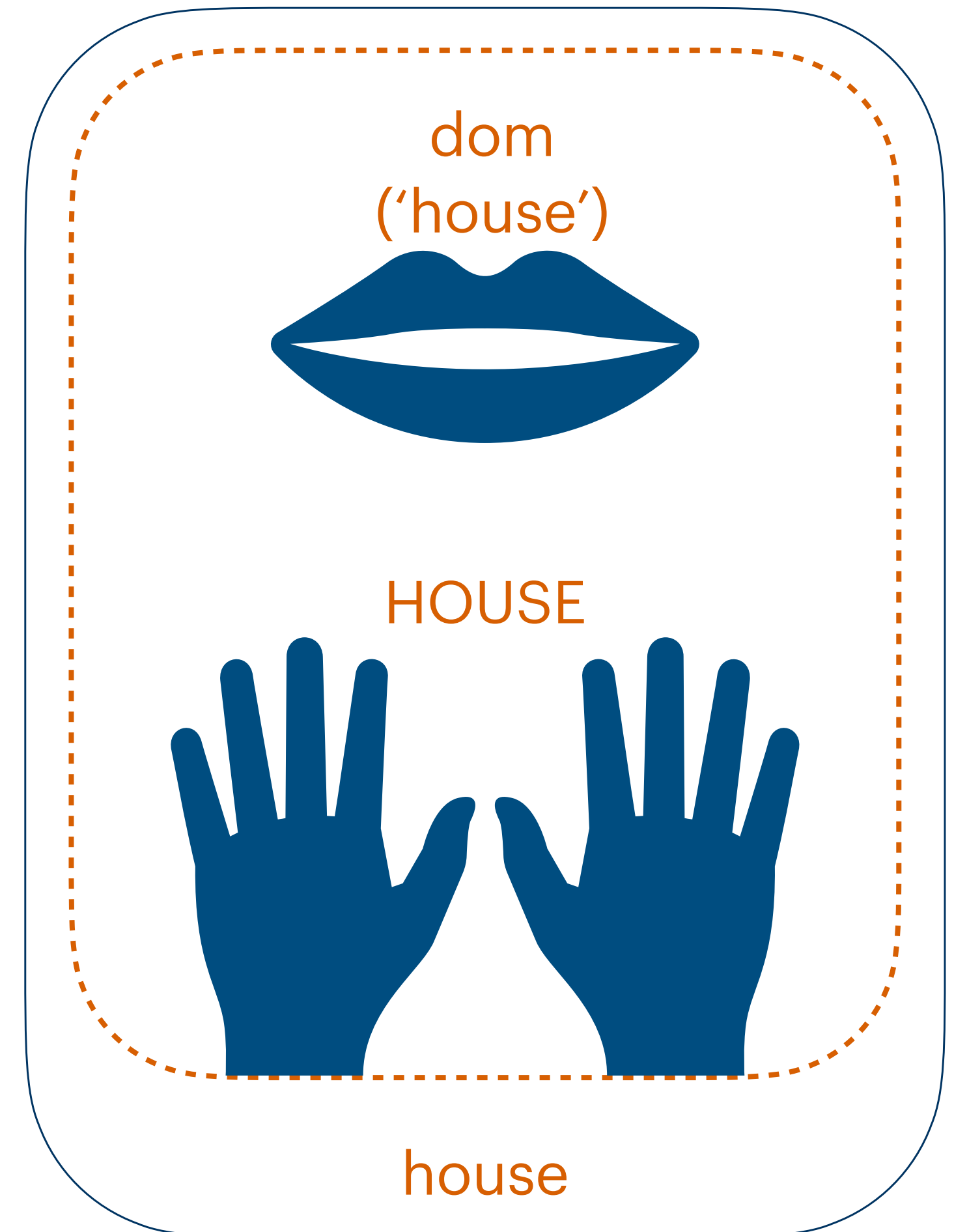
HOUSE

house

Congruent

▸ Semantic congruence identified between RSL sign for house and Russian word for house

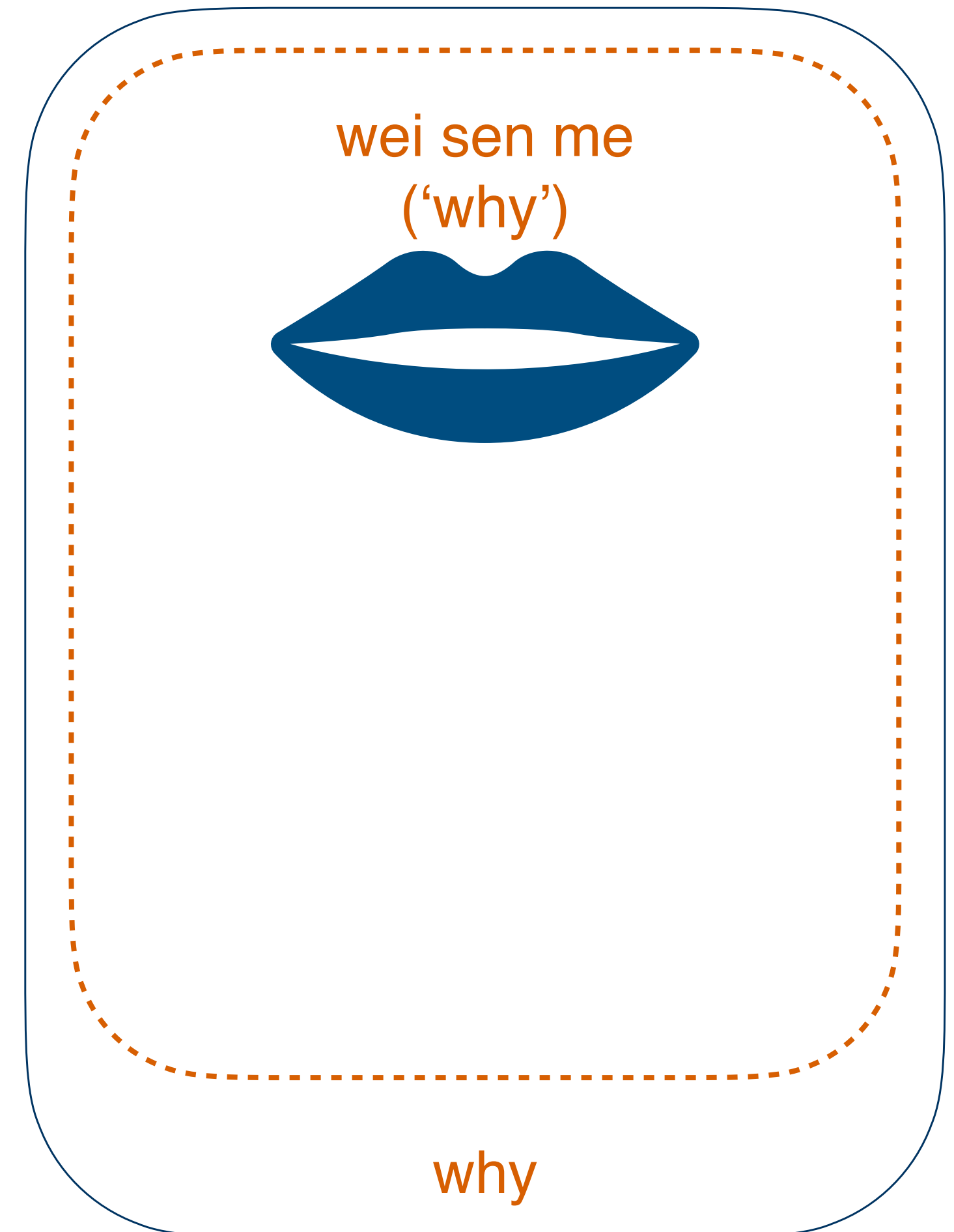▸ Matter replication in terms of primarily importing the *mouth articulations* of part or all of 'dom'

dom
('house')

HOUSE

house
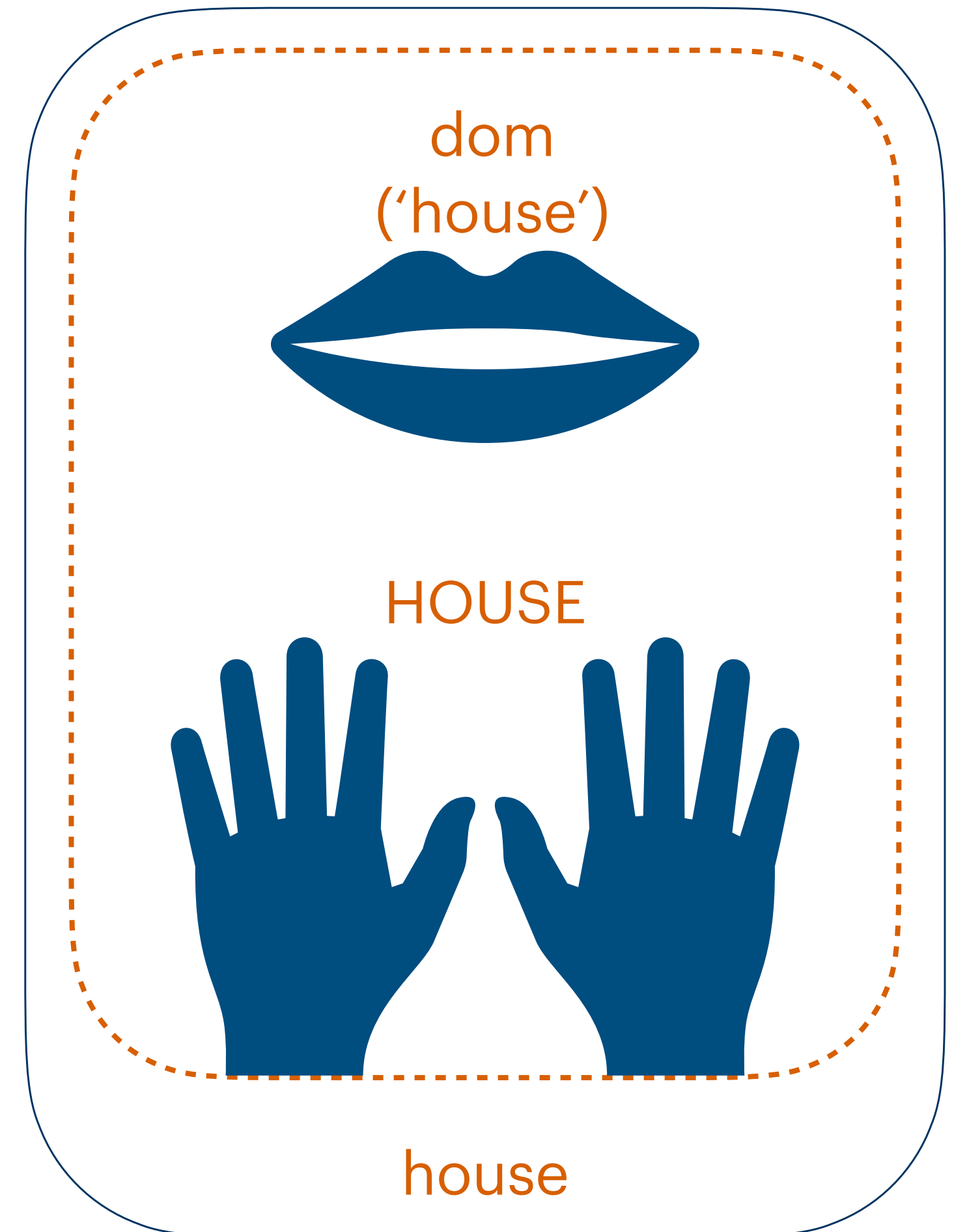
Free

▸ Mouthing without any manual sign

Chinese SL[4]

| wei | sen | me | a |
| | *'why'* | | [filler] |

[CSL]
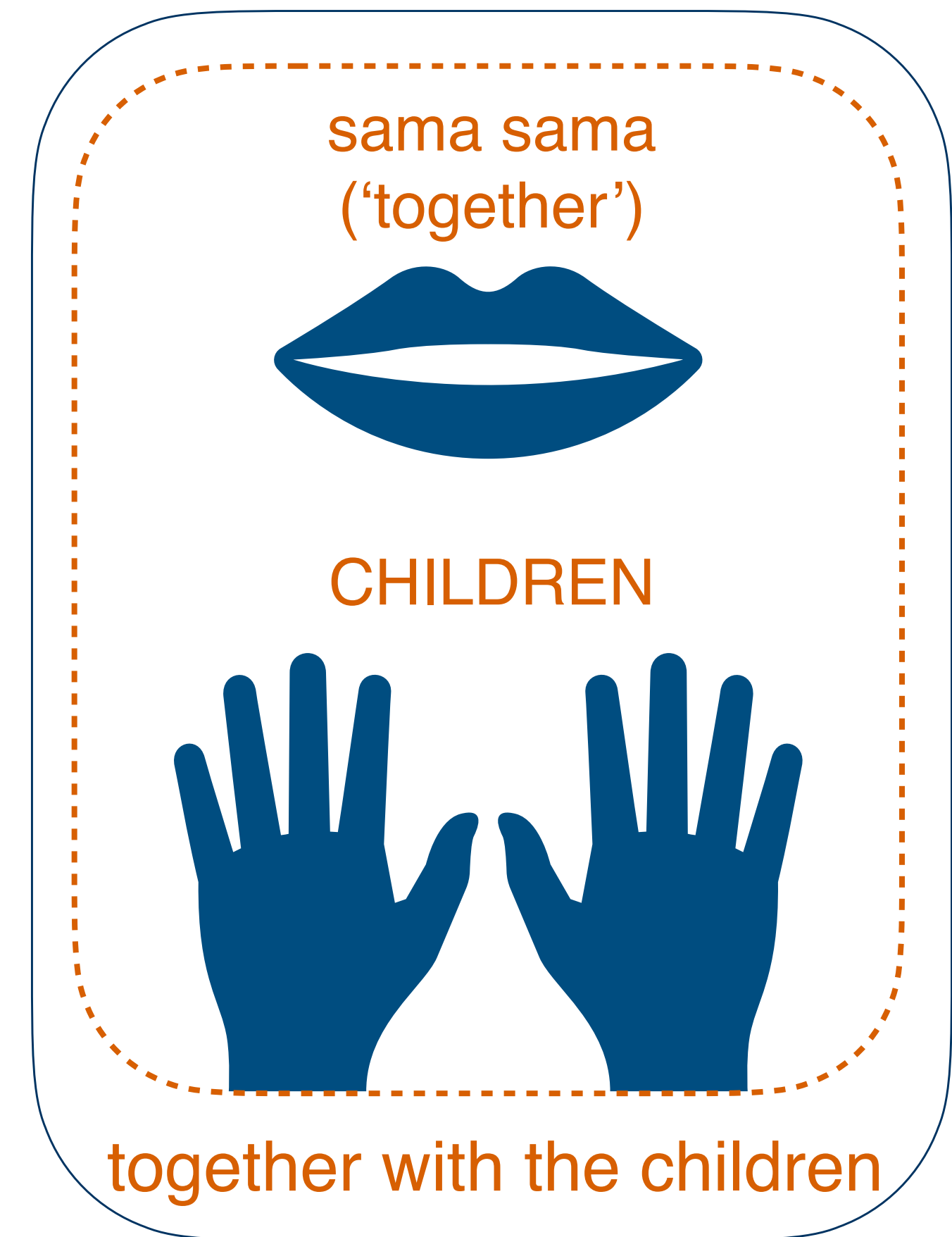(Lin 2019)

wei sen me
('why')

why

Morpho-syntactic

‣ Manual sign and mouthing have independent, specific meanings that combine to form a complex morpho-syntactic construction with a compositional meaning

sama sama (‘together’)

CHILDREN

‘Together with the children’

[JakSL(BISINDO)]
(Suwiryo 2013: 135)

sama sama
(‘together’)

CHILDREN

together with the children

Morpho-syntactic

▸ 13 concrete examples

▸ 6 types

nominal modifier

object complement

rød ('red')

GENSER ('pullover')

'Red pullover'
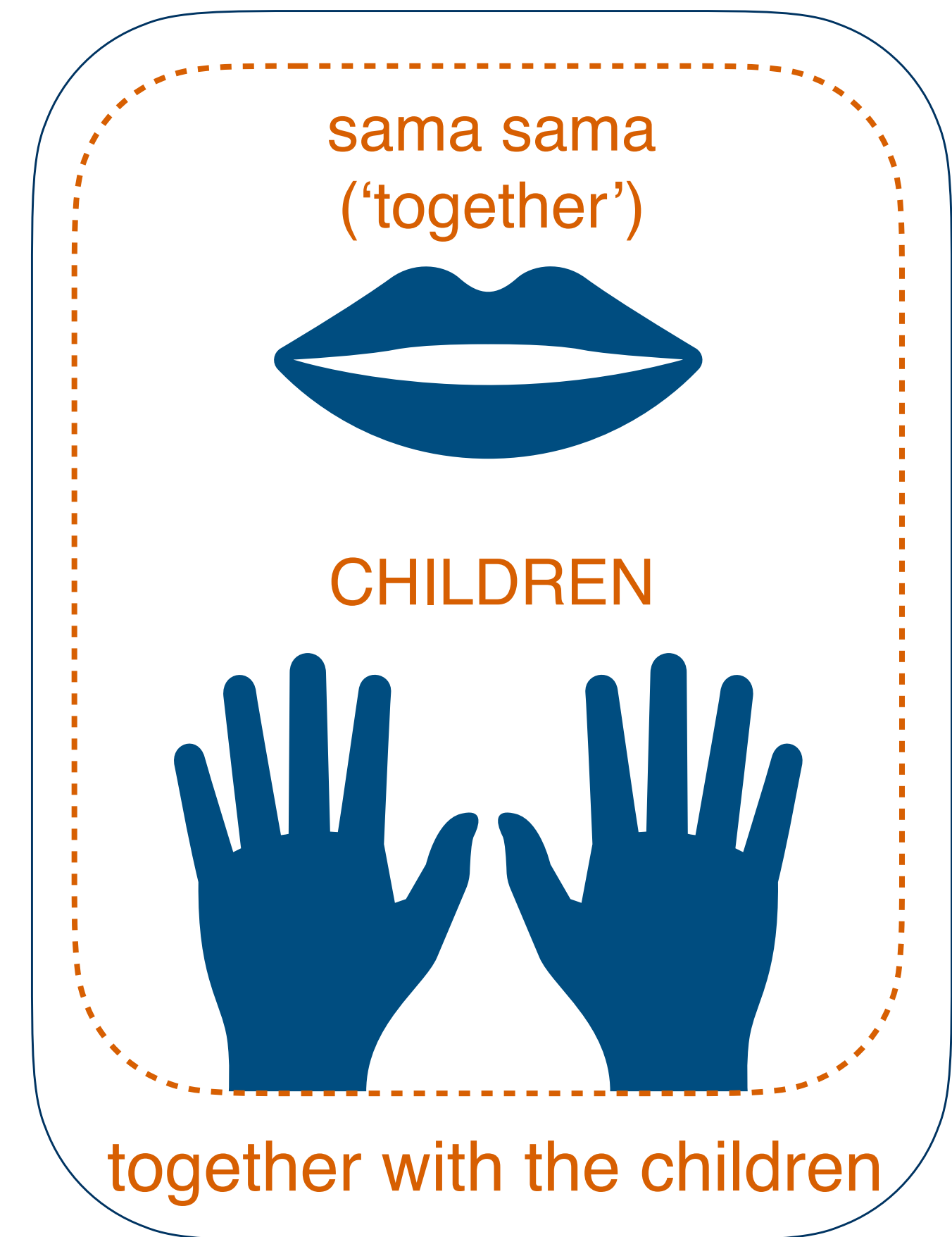
[NTS]
(Vogt-Svendsen 2001: 22)

brood ('bread')

ETEN ('to eat')

'eat bread'

[NGT]
(Crasborn et al. 2008: 48)

Morpho-syntactic

‣ Matter replication

‣ *Potential* tendency to map head onto the hands and dependent onto mouthing

  ‣ can be classed as pattern matching as there seems to be sensitivity to grammatical categories

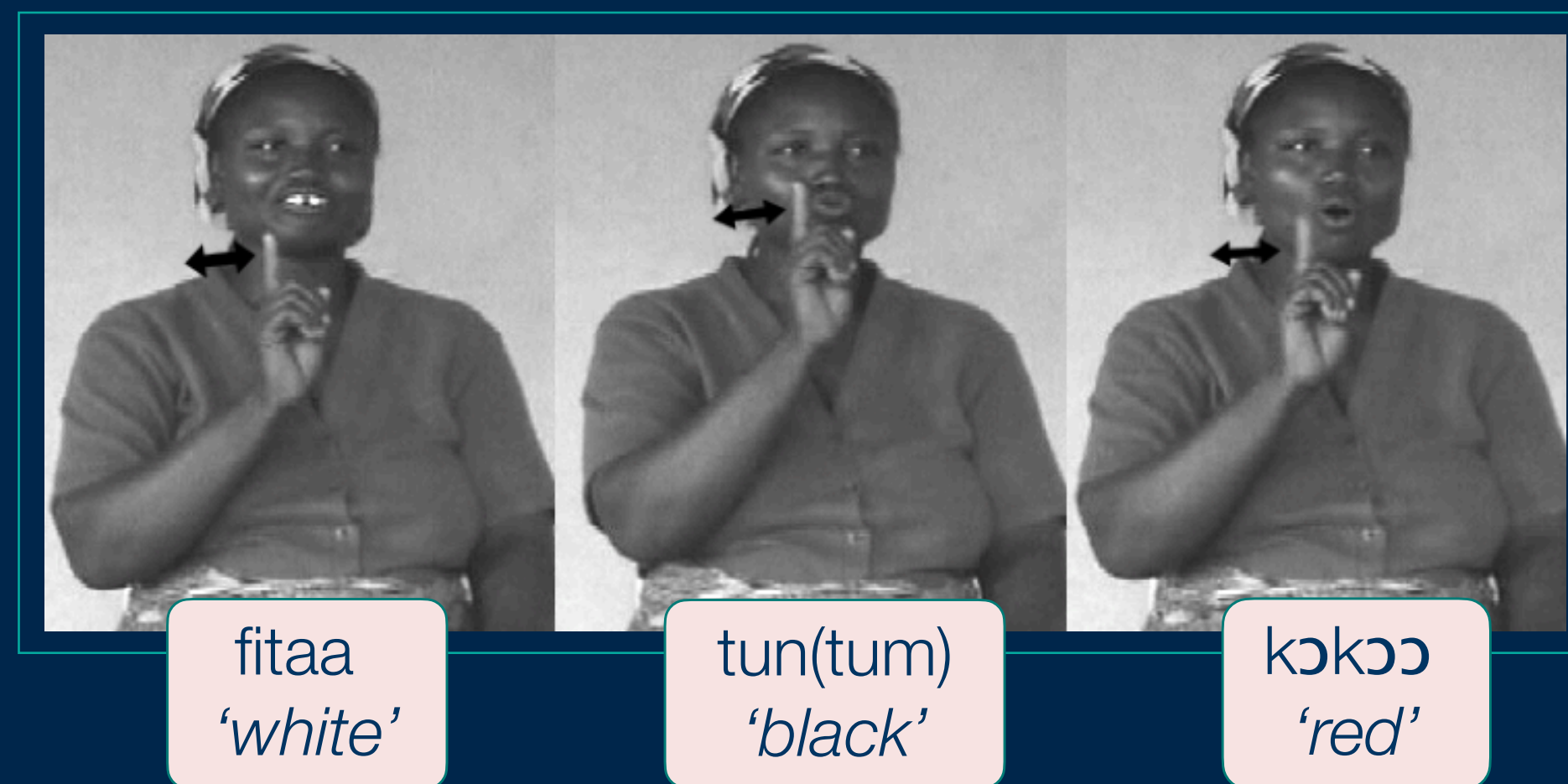sama sama ('together')

CHILDREN

together with the children

Morpho-phonological

▸ Manual sign is the same across the group with mouthings related in some predictable way to the manual sign

▸ 2 kinds that differ in how they are related to the manual sign
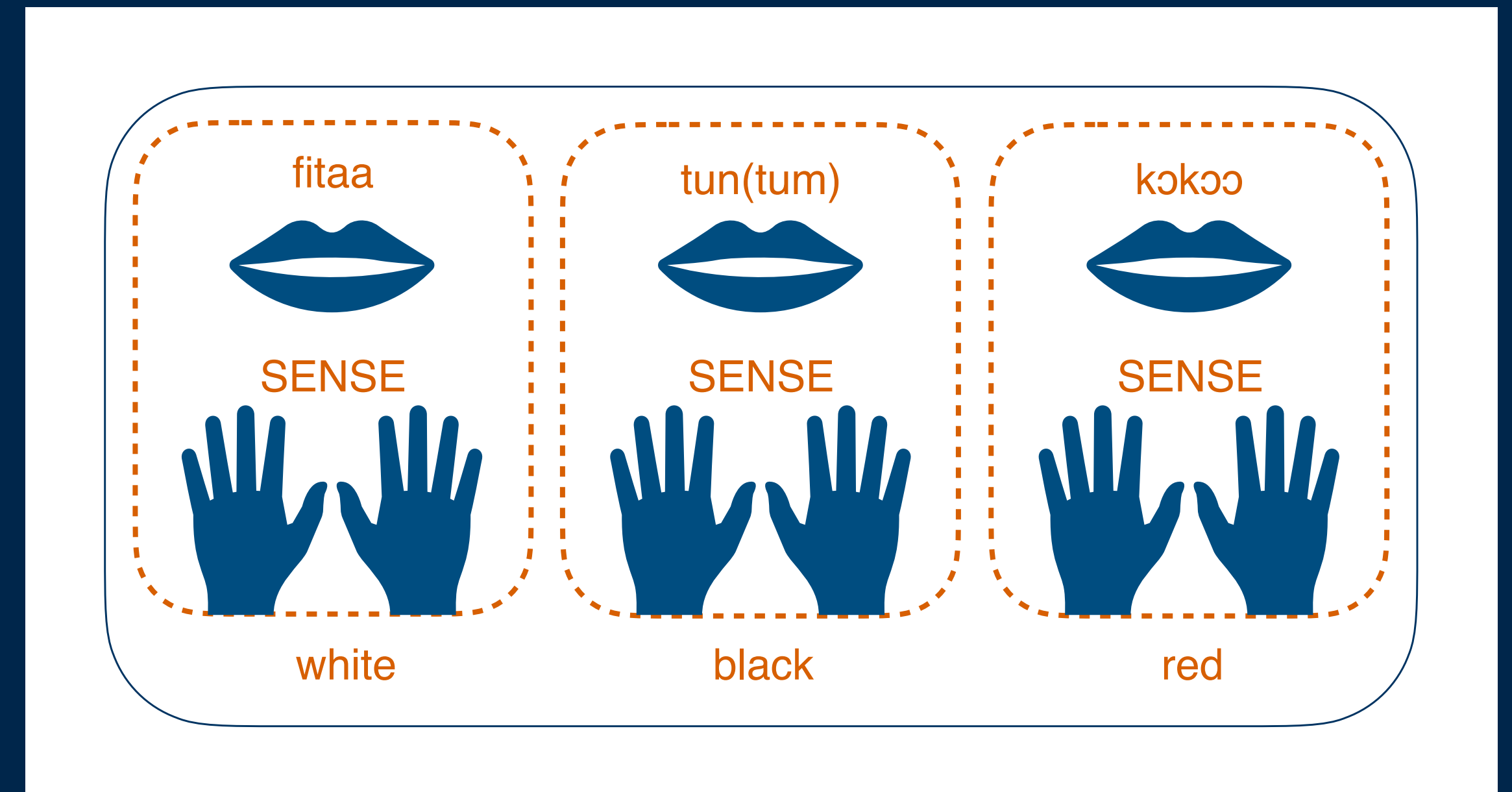
   ▸ polysemous

   ▸ initialised
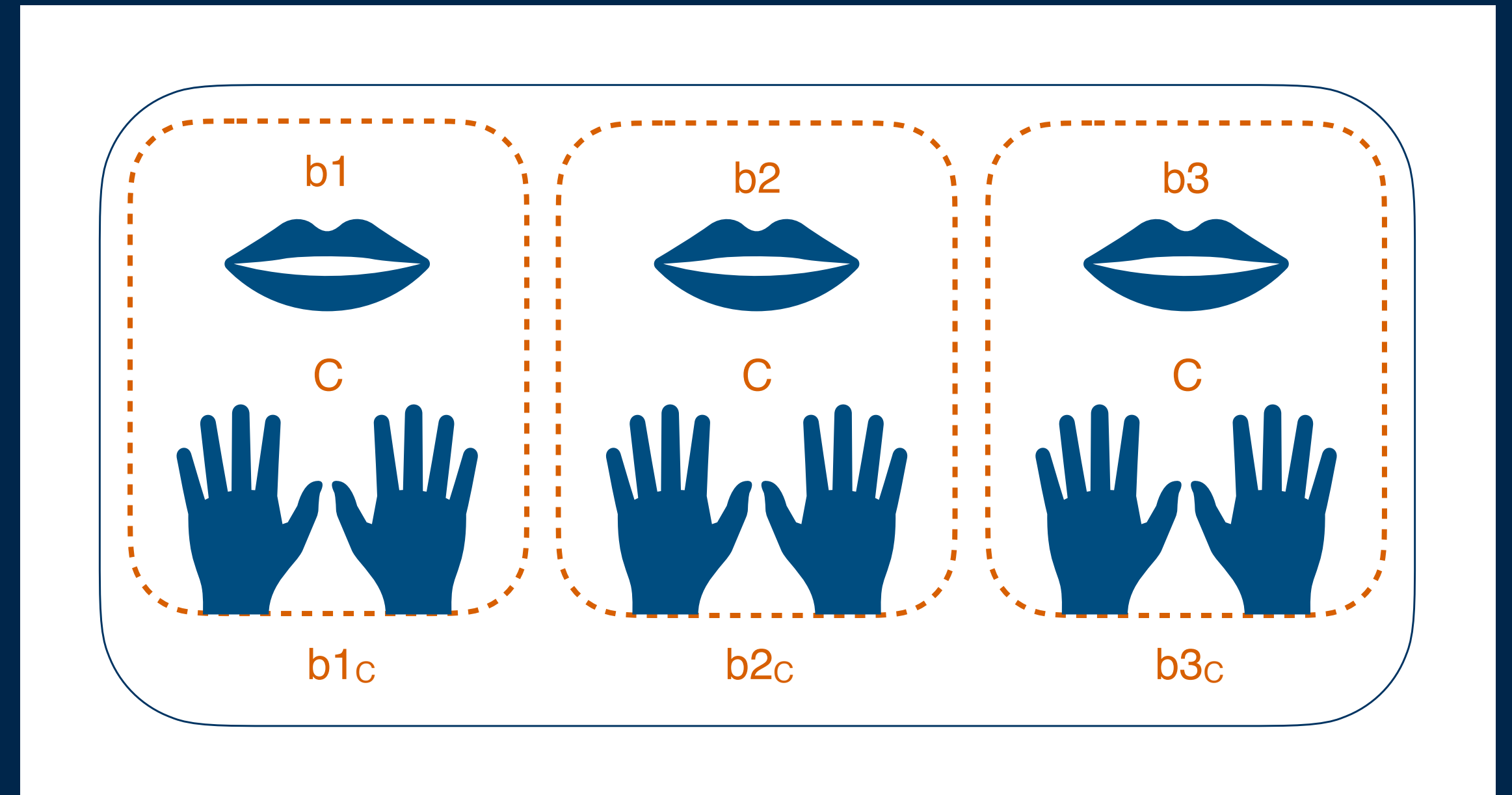
**Morpho-phonological | **Polysemous

▸ matter replication

▸ identification of congruence in meaning, the mouthing is a sub-type of the meaning of the manual form


fitaa
'white'

tun(tum)
'black'

kɔkɔɔ
'red'

[AdaSL]
(Nyst 2007)

fitaa

SENSE

white

tun(tum)

SENSE

black

kɔkɔɔ

SENSE

red

Morpho-phonological|Polysemous

‣ Examples:

   ‣ *wh*-words (*n=9*)

   ‣ kinship terms (*n=7*)

   ‣ colour terms (*n=3*)

‣ Potential origins → lexical sets are likely to be taught in groups

   ‣ On numerals in NZSL "may be more rapidly affected by school usage than is the case for the overall lexicon since numbers are explicitly and extensively rehearsed as a *conventional set of high-frequency vocabulary in the classroom*" (McKee, McKee & Major 2011)

**Morpho-phonological | **Initialised

▸ matter replication

▸ identification of congruence between first letter of written form of spoken word and manual alphabet handshape
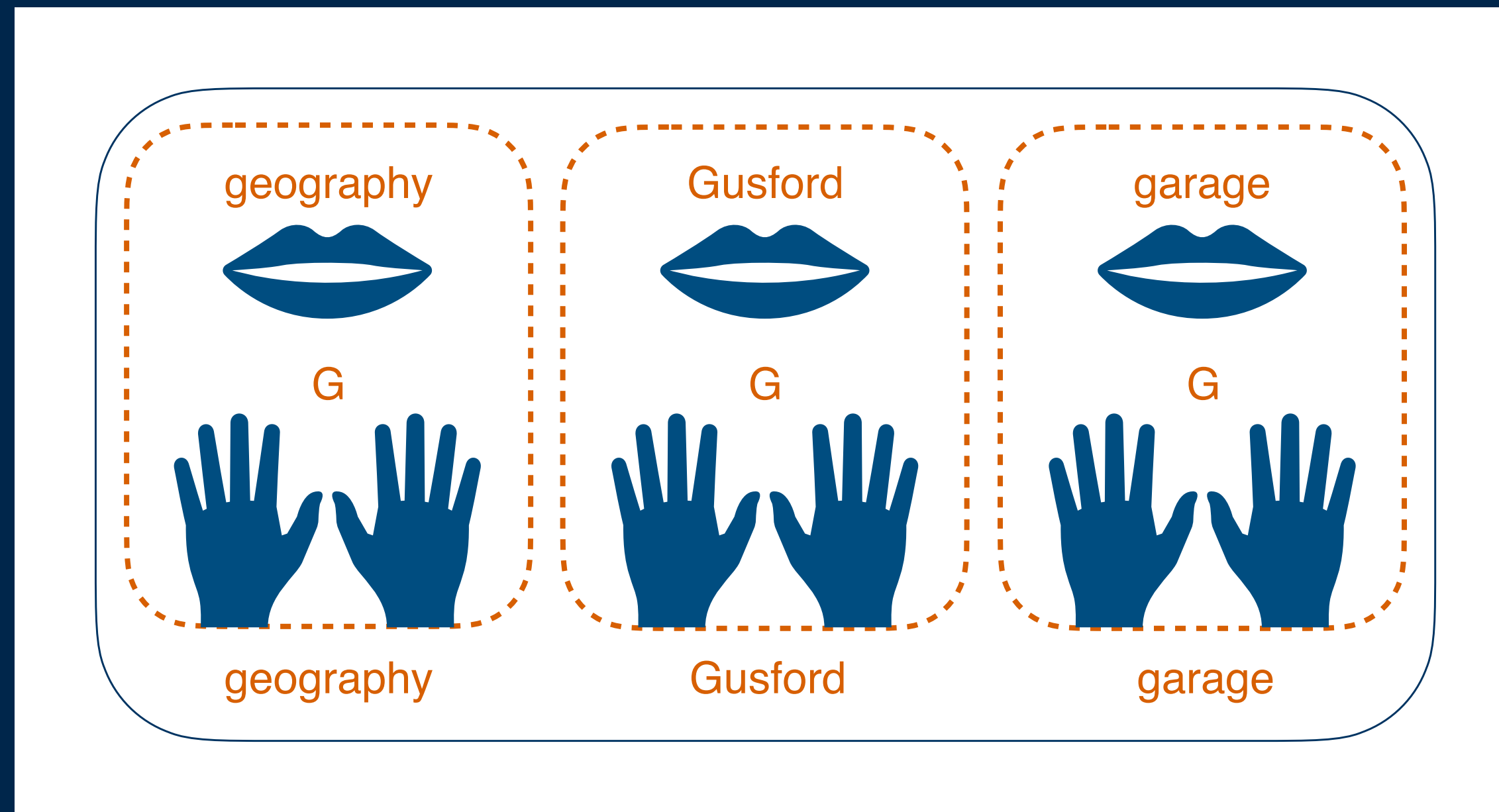
▸ coalesces spoken language phonetics and phonology, written language and sign language

▸ may be linked to teaching phonemes/written language

**Morpho-phonological | **Initialised

▸ matter replication

▸ identification of congruence between first letter of written form of spoken word and manual alphabet handshape

geography | Gusford | garage
G | G | G
geography | Gusford | garage
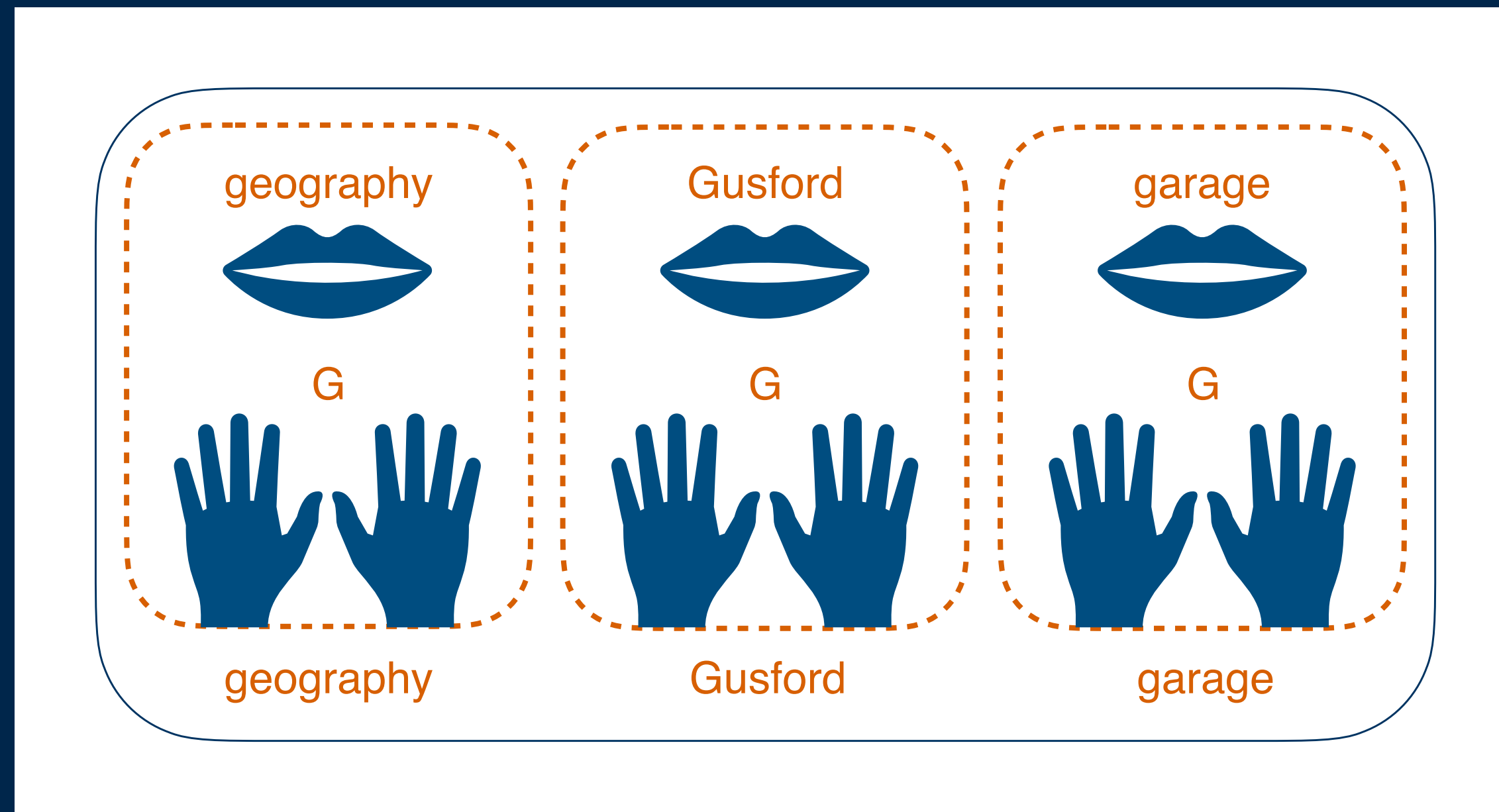
▸ coalesces spoken language phonetics and phonology, written language and sign language

▸ may be linked to teaching phonemes/ written language

   ▸ teaching LSB: pá ('shovel'), pé ('foot'), pó ('dust'), pau ('stick'), pia ('sink'), pua ('brace'), pão ('bread'), pião ('spinning top') etc. (Vieira & Molina 2018: 7)

Multimodal Contact Summary

▸ **partial matter replication occurs in all constructions** as some lip and tongue articulations from spoken language words are incorporated

▸ **congruence** occurs around **lexical** (congruent, polysemous) and **phonetic/phonological** (initialised) properties

▸ 1 modality referenced (i.e. spoken), free mouthing

▸ 2 modalities referenced (signed+spoken), congruent, polysemous and morpho-syntactic

▸ 3 modalities referenced (signed+spoken+written), initialised

Multimodal Contact Summary

▸ Functions

  ▸ supply the same content in different forms (congruent)

  ▸ identify a general meaning and specify it (polysemous)

  ▸ flag a spoken language form and specify it (initialized)

  ▸ identify a head and a dependent (morpho-syntactic)

  ▸ communicate when hands are occupied (free)

  ▸ backchannel (free)

Descriptive contributions

‣ Described different ways that multimodal resources may be combined, some of their functional properties and potential origins

Theoretical contributions

‣ Motivated the mouthing construction as unit of analysis by:

   ‣ showing cross-linguistically prevalence

   ‣ showing how elements of constructions are linked following Matras & Sakel (2007)'s and Baptista (2020)'s framing

Theoretical contributions

▸ Highlighted pattern replication and congruence that fall out of Matras & Sakel (2007) and Baptista (2020)'s spoken language contact work but is not explicit

 ▸ e.g. Matter replication implies replication of spoken word forms as the mouth must move to produce sound, but **mouth articulation as a semiotic resource is not explicit**

Theoretical contributions

‣ Demonstrated the utility of taking a Semiotic Repertoires framing

    ‣ Highlights DHH people as multimodal multilinguals or users of spoken and written language semiotic resources

    ‣ Identifies units of linguistic analysis that consider language use as it occurs in the "real world"

Thanks!

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