

# When two tongues meet

Linguistic investigation of contact situations

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DLLD Ghent 3/3 — April 25, 2024

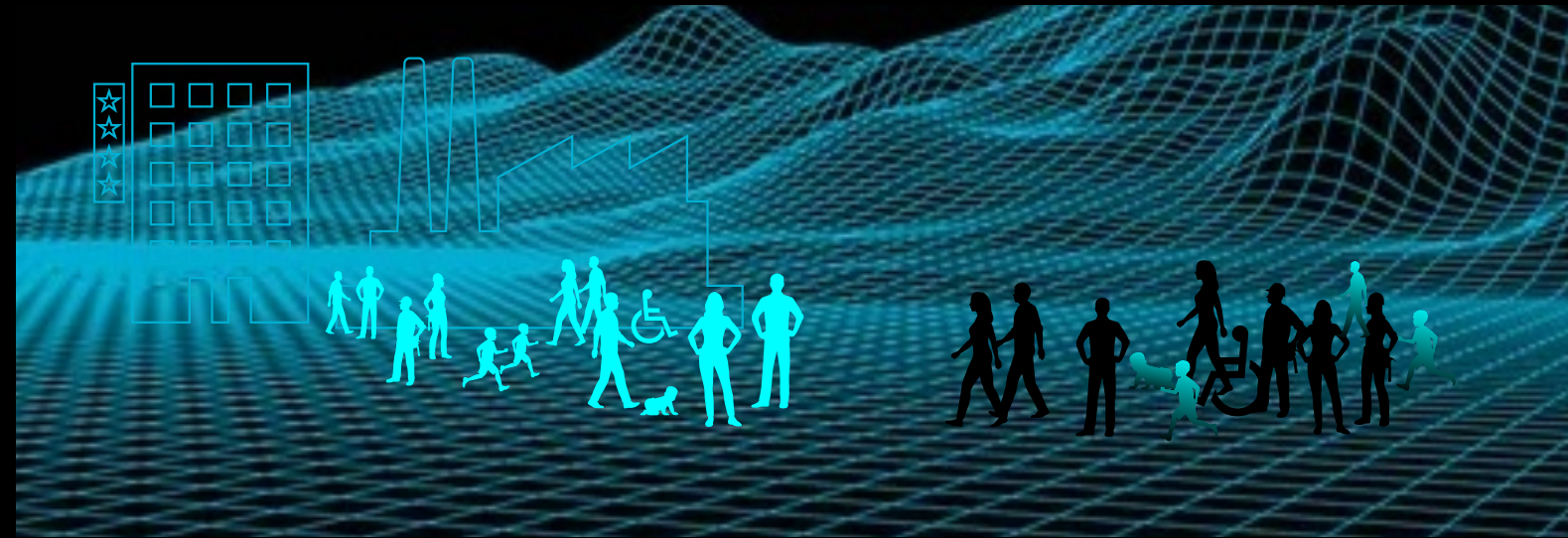




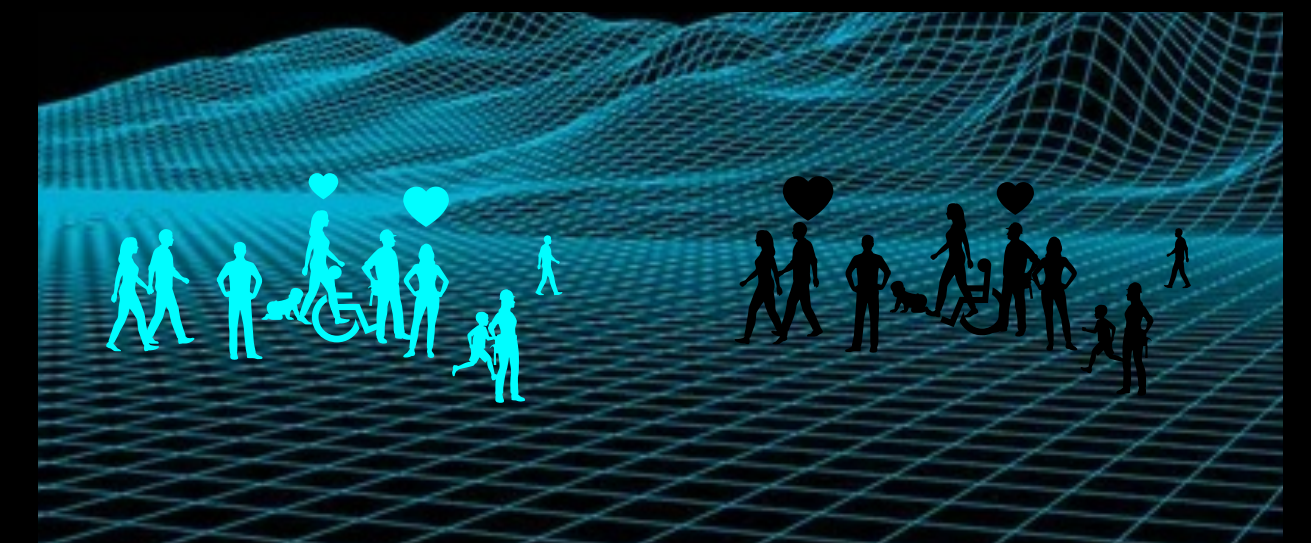
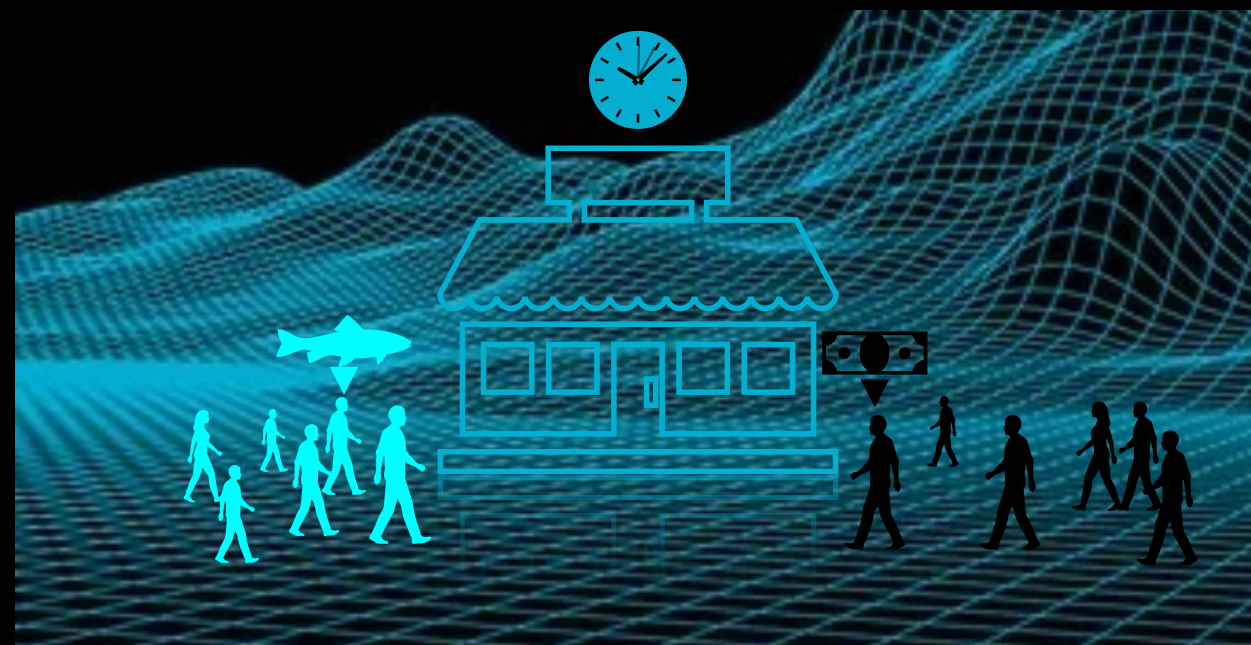
Previously in DLLD

## 1. Typology of contact ecologies





contact ecologies



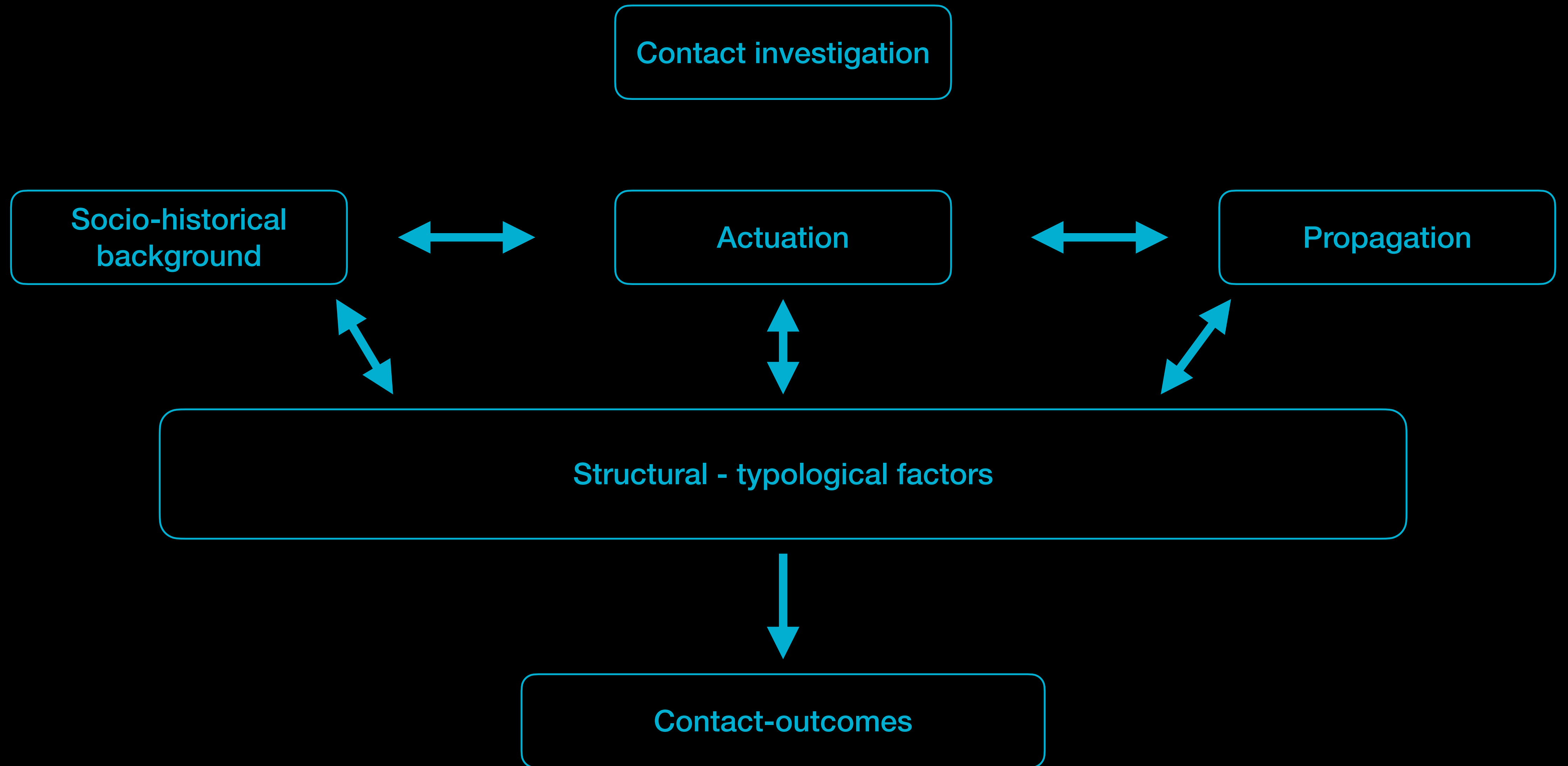


Previously in DLLD

1. Typology of contact ecologies

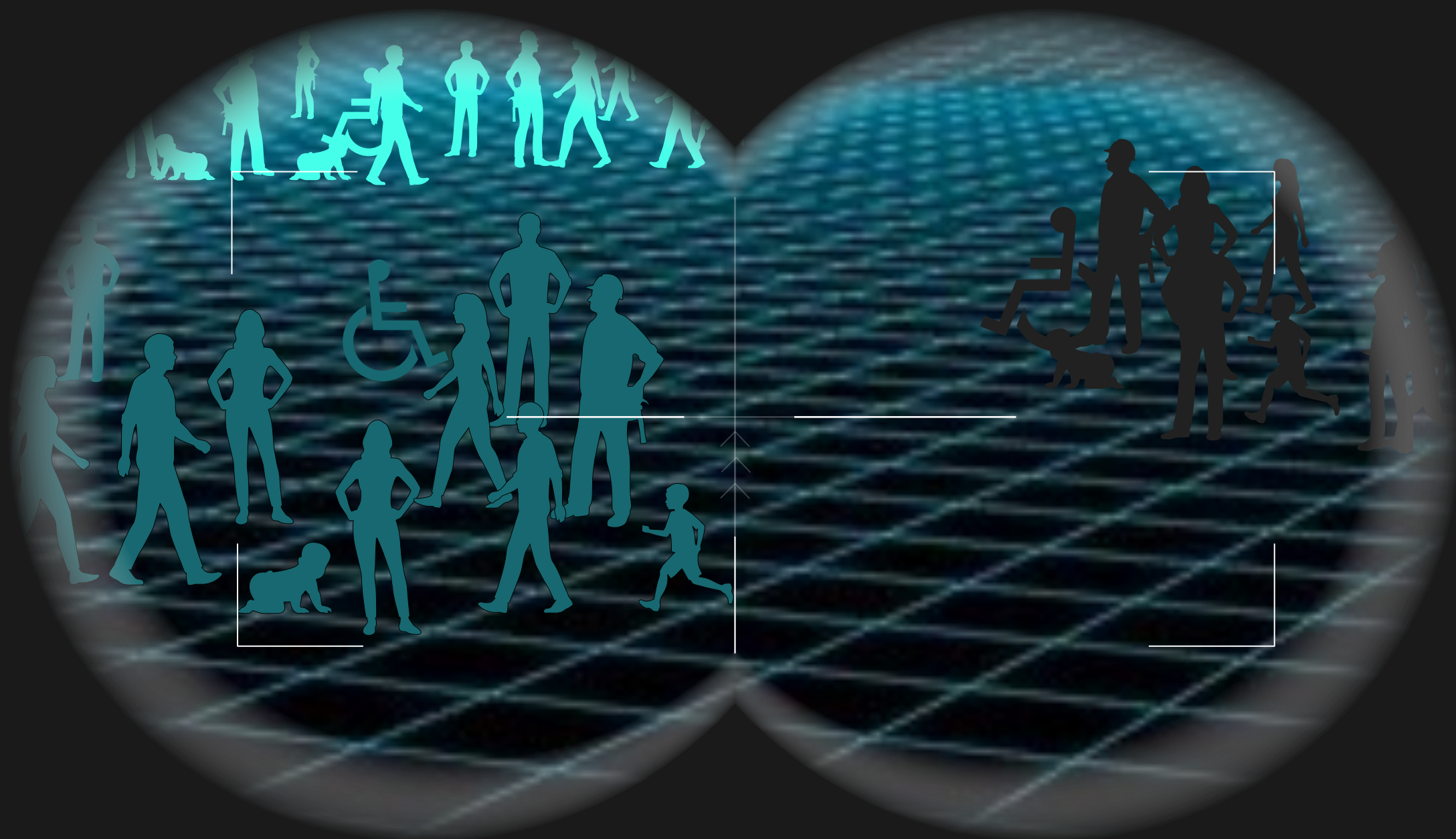
2. The way to proceed with investigating the outcomes





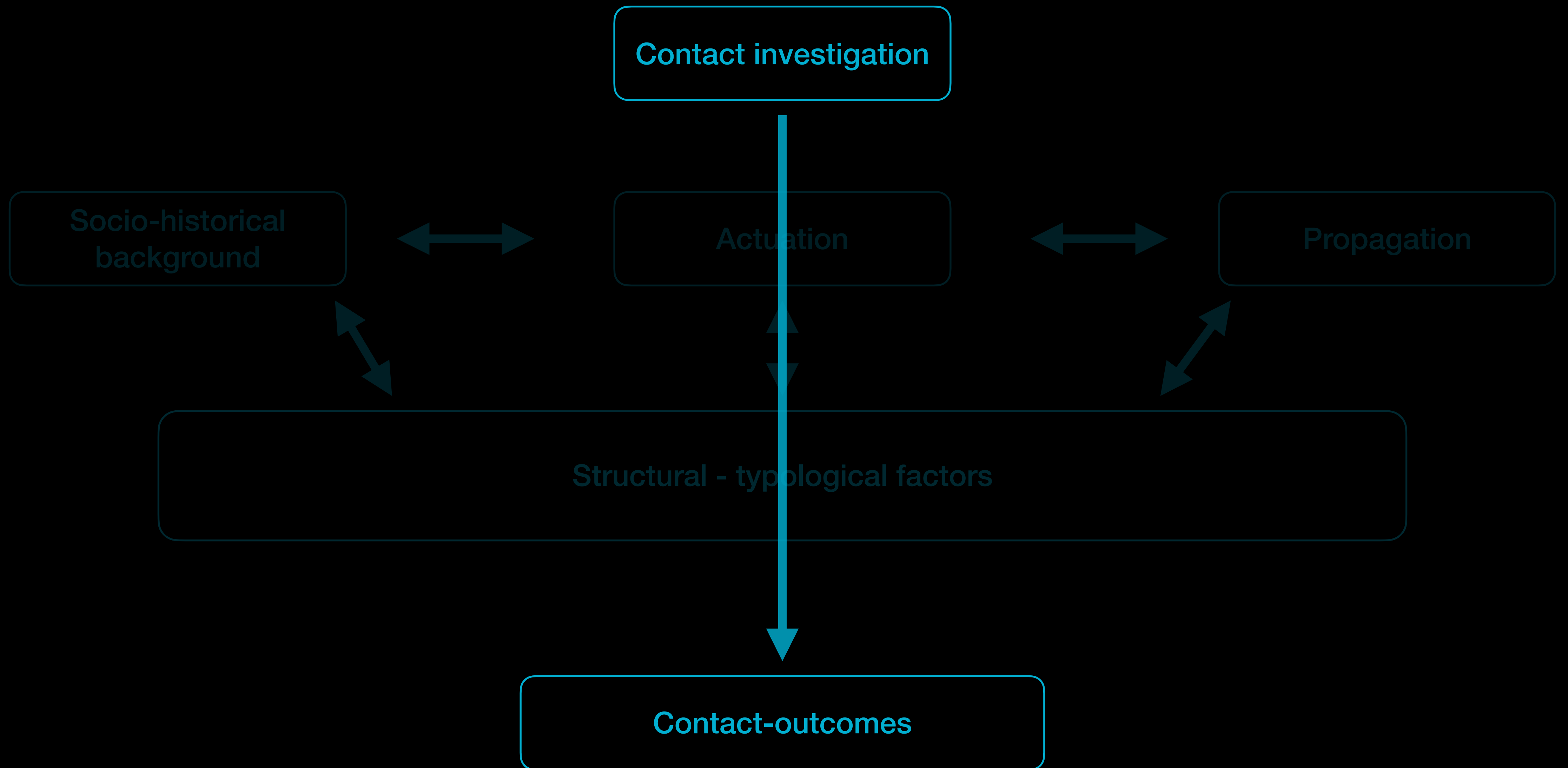


$\tau_n$



**What**







Language contact:



Language contact:

Part 3: drawing conclusions – big or small



# The things we'd known for a long time...

[...] *aer Graecum illud quidem, sed perceptum iam tamen usu a nostris, tritum est enim pro Latino.*

The word *aer* is Greek, but has already been accepted in the usage of our people, and is in fact commonly used as Latin.

(Cicer., *ND* 2.91, 1st c. BCE)





# The things we'd known for a long time...

[...] ἀπήγελλε δὲ αὐτὰ παχεῖα τῇ γλώττῃ καὶ ὡς Καππαδόκαις ξύνηθες, ξυγκρούων μὲν τὰ σύμφωνα τῶν στοιχείων συστέλλων δὲ τὰ μηκυνόμενα καὶ μηκύνων τὰ βραχέα. πολλοὶ μάγειρον πολυτελῆ ὄψα πονήρως ἀρτύοντα.

[Pausanias, who was born in Caesarea] delivered his declamations with a heavy accent, as is the way with Cappadocians, making his consonants collide, shortening the long syllables, and lengthening the short ones. Hence he was commonly spoken of as a cook who spoiled expensive delicacies in the preparation.

(Phil., VS 2.1γ, 3rd c. CE)



# The things we'd known for a long time...

*[...] iunguntur autem [...] ex nostro et peregrino, ut biclinium [...]*

Words are formed by combining native and alien elements, eg. bi-κλιν-ium.

(Quint. Ins. Or., 1.5.68, 1c. CE)





**... became a focus of systematic inquiry**

**1950s: the borrowing metaphor under inspection**

Haugen (1950); Weinreich (1953)

“the attempt by a speaker to reproduce in one language patterns which he has learned in another” (Haugen 1950:212)

“grammatical relations belonging to one language [that] occur in the speech of another language” (Weinreich 1979[1953]:30)



# ... became a focus of systematic inquiry

## loanwords

An intricate typology of loans (Haugen 1953, Muysken 1981, Wohlgemuth 2009)

- loanwords/loan-phrases (1), loanblends (2), loanshifts (3)

(1) tinini! 'fuck off!' < Turkish *dinini!* '@#!\$'

(2) **yarušturd**-a-u < Turkish *kariştirdi* 's/he mixed'  
mix-VRBLZ-1SG  
'I mix'

(3) irθin o ipno mu. < Turkish *uyku-m geldi.*  
came the sleep my sleep-my came  
'I am sleepy.'



Čuxuri



# ... became a focus of systematic inquiry

## loanwords

which can be fully integrated phonologically...

- illicit initial clusters in the original are resolved in Turkish

(4) a. p[ɰ]rasa ‘leek’ < Greek *prasa*

b. f[i]ren ‘brake’ < French *frein*

- [y] or [ø] in the original Turkish are replaced in Pontic Greek

(5) a. d[u:]ni ‘wedding’ < Turkish *d[y:]n*

b. [o:]retmenena ‘teacher (f)’ < Turkish *[ø:]retmen*



**... became a focus of systematic inquiry  
loanwords and the phonological changes they may bring**

...or not...

velar palatalization does not apply to words of Turkish origin in Greek of Phar.

(6) a. [tʃ]erato 'horn' < Med. Greek *keraton*

b. [k<sup>h</sup>]itapi 'book' < Turkish *kitap*



# ... became a focus of systematic inquiry loanwords and the phonological changes they may bring

...resulting in interesting phonological changes into the overall system.

- Armenian of Musadagh has /q/ on native words (e.g., *qənnil* ‘find’), possibly after many Arabic words with *q* (e.g., *dæqiqæ* ‘minute’)  
(Vaux 1998)





# ... became a focus of systematic inquiry

## loanword phonology

- how loan-phonology sneaks in through borrowed vocabulary (van Coetsem 1988, Peperkamp and Dupoux 2003, Peperkamp 2005, Kang 2011 Andersson et al. 2017)



# ... became a focus of systematic inquiry loanwords and the morphological changes they may bring

loanwords introduce interesting morphological material as well.

- Turkish reduplication in Arapgir Armenian

(7) a. shehet ‘good’ ~ **shep-shehet** ‘very good’  
b. čermak ‘white’ ~ **čep-čermak** ‘snow white’  
c. sev ‘black’ ~ **sep-sev** ‘pitch black’

(8) a. ep-eyi ‘superb’ < Turkish *ep-eyi*  
b. *kip-kirmizi* ‘blood red’ < Turkish *kıp-kırmızı*









# ... became a focus of systematic inquiry

## loan morphology

- loan-morphology abstracted from vocabulary (Weinreich 1953, Field 2002, Gardani 2008; 2021, Adamou 2012, Seifart 2015, among many)



# Hierarchies

## what is easy to go?

- nouns, conjunctions > verbs > discourse markers > adjectives > interjections > adverbs > adpositions > numerals > pronouns > derivational affixes > inflectional affixes

(Matras 2007, also Muysken 1981, Haugen 1950)

- adoption of new consonants > adoption of new vowels

(Matras 2009)



# **Lexical basis of structural change**

## **on the limits of change**

Does language mixing through lexicon extend beyond morphology/phonology?



# Lexical basis of structural change

## Adj-N order in Turoyo

Bagriacik & Eryilmaz (to appear):

(11) u **gawro** jarixo [N -Adj]  
the man tall  
'the tall man'

(12) u **jakişikli** **gawro** [Adj-N]  
the handsome man  
'the handsome man'



< Turkish *yakışıklı* 'handsome'

(also Cantone and MacSwan 2009)





# Lexical basis of structural change

## Differential Object Marking in Turkish

Bagriacik & Atlamaz (to appear):

- (15) Bir demirci- $\emptyset$                     arıyorum.                    [Non-specific NP]  
an iron.monger-NOM look.for.1SG  
'I'm looking for an ironmonger'  
(any ironmonger would do)'
- (16) Bir demirci-yi                    arıyorum.                    [Specific NP]  
an iron.monger-ACC look.for.1SG  
'I'm looking for a specific ironmonger.  
(someone I know but you probably do not)'

# Lexical basis of structural change

## Emergence of Differential Object Marking in Greek

Loss of morphological distinction between NOM ~ ACC in indefinite contexts and **V+O idioms as loans**.

(17) Pharasa  
ftenu yolčis  
do traveller.M  
'send off'

(18) Turkish  
yolcu et-  
traveller do  
'send off'



# Lexical basis of structural change

## P-stranding in Prince Edward Island French

King (2000):

(19) Quelle heure qu'il a arrivé **à**?  
what time that-he has arrived at  
'What time did he arrive?'

(20) Quoi ce-qu'il a parlé **about**?  
What that-he has talked about  
'What did he talk about?'

“borrowing a lexical item involves borrowing its syntactic properties, [which] has spread to [PEI French] prepositions in general” (King 2000:149).

# **Any other way? on the limits of change**

Is there any evidence for structural convergence without resorting to lexicon?



# Change without lexical items

## Phonology

Indirect evidence

- Many Greek dialects of Cappadocia lost interdentals:

(21) Misti

a. *dodeka* ‘twelve’, cf. Modern Greek *ᾠοᾠeka*

b. *[ç]eos* ‘God’, cf. Modern Greek *θεos*



# Change without lexical items

## Phonology

indirect evidence

- Turkish dialect spoken in Cunda allows V.CCV syllabification

(23) aklıma            geldi            Cunda: [a.klu.ma]            Standard: [ak.lu.ma]  
to.my.mind    it.came  
'I remember it.'



# Two questions

## Phonology

Both scenarios underline the existence of

L2 learners/non-dominant speakers who push-transfer from their L1/dominant language (van Coetsem 1998).

# Structural change under contact

A change presupposes an emerging disturbing factor or a cause in the system and the causal force of language change lies in language acquisition.

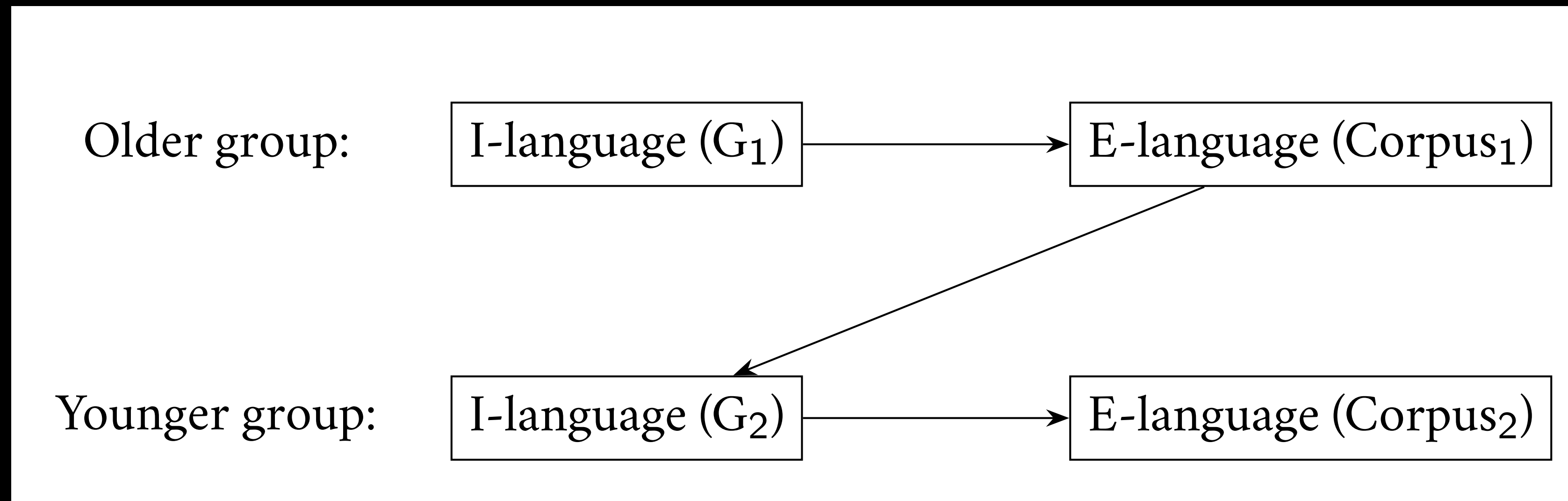
Heterogeneity in the linguistic evidence, *however introduced*, is a prerequisite for language change.

(Yang 2000: 241; Walkden 2017 for a good overview).



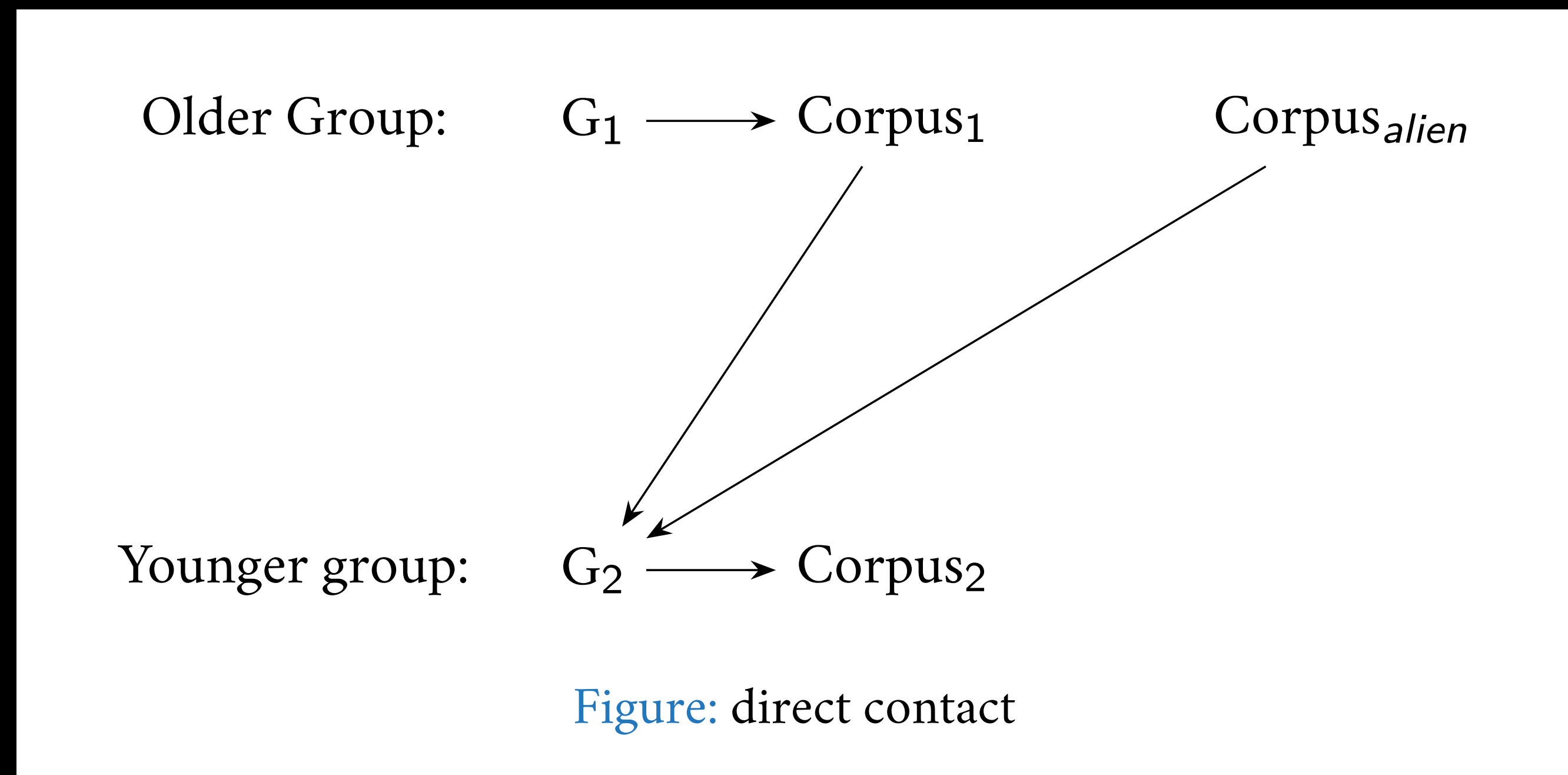
# Structural change under contact

(Andersen 1973)



# Scenarios

(Roberts 2021[2007])



PLD that contains significant quantity of tokens from a distinct system.



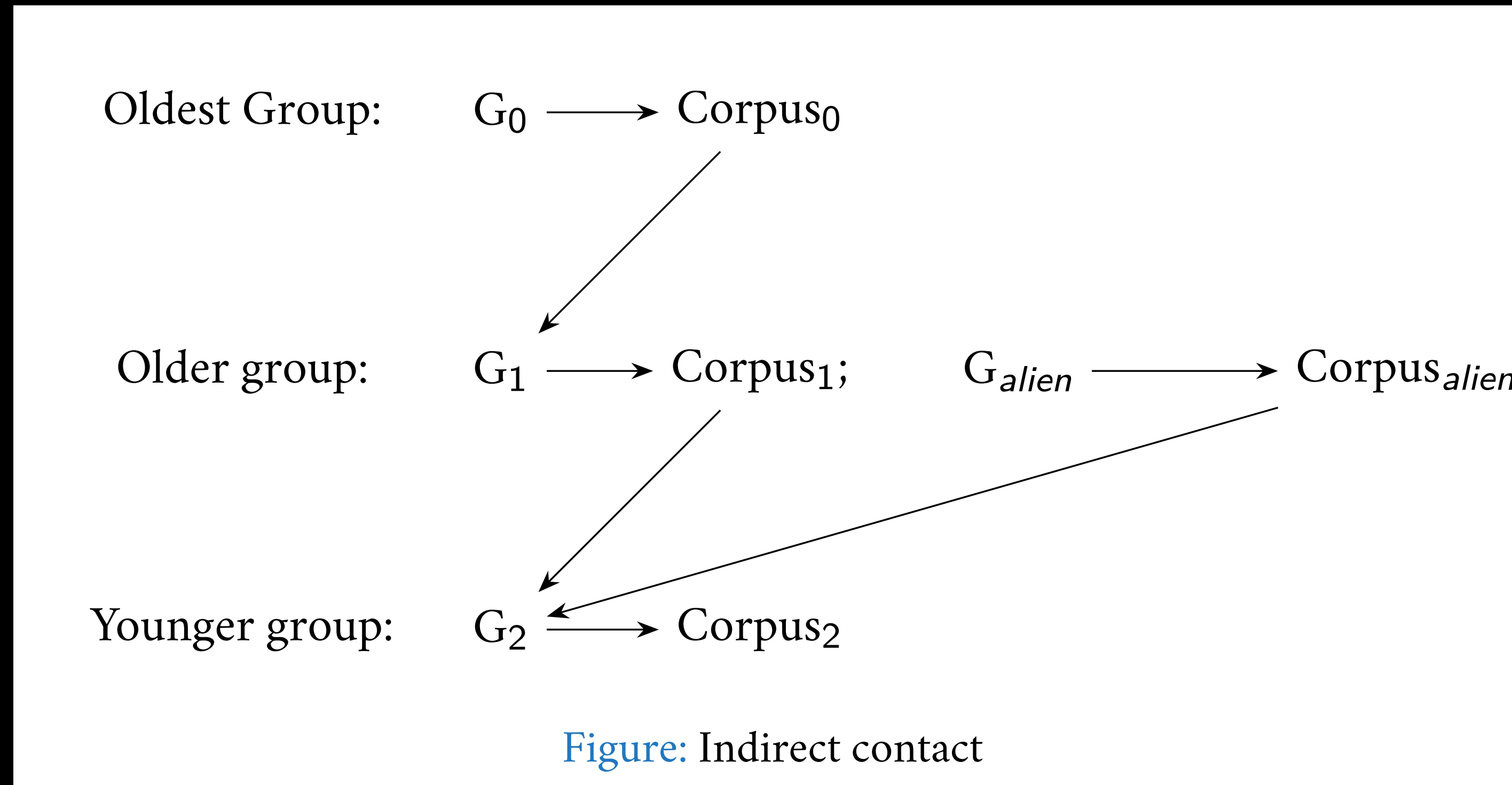
# Direct contact

The younger group is exposed to two distinct sets of PLD

- if from birth, bilingual acquisition: ‘cross-linguistic influence is part and parcel of bilingual development’ (van Dijk et al 2022), and ‘linguistic competence of a bilingual speaker must be regarded as unitary, not as two separate systems’ (López to appear)
- if sequentially, before the close off of the critical period, reduced input or intake (Polinsky 2015, Montrul 2016; Putnam and Sánchez 2013 a.o.)
  - Paradis’ (1993:135) notion of interference: a larger number of items to choose from will naturally result in a longer, more difficult search process for features.
- if in adulthood, L1 attrition under L2 effects (Gürel 2000, Tsimpli et al. 2004)

# Scenarios

(Roberts 2021[2007])



PLD that contains significant quantity of tokens from a distinct system.



# Indirect contact

The younger generation is exposed to the second language variety of the previous generation

- Under SL-agentivity, carry-over features can appear in the PLD, resulting in ambiguity & change (Sorace 2000, Guasti 2016:23-24, Winford 2003)

# Summary

## Heterogeneity

- under reduced input/intake (Putnam and Sanchez 2013), which may result in incomplete acquisition or attrition (Hakøansson 1995, Lambert and Freed 1982, Montrul 2002, Silva-Corvalán 1991, Tsimpli et al 2004 ), or
- under carry-over features from L1 to L2 in “imperfect” acquisition (Rothman and Slabakova 2018).
- L2-L1 cascade (DeGraff 1996; this may be defining for most if not all ‘ordinary’ contact situations (Aboh 2015, see also Winford 2003).



# Summary

Structural change due to contact and without lexicon should be omnipresent.

# Structural change under contact

[e]ach language is a mixture of languages. There is no such thing as the coherent dialect [...]

(Schuchardt 1884, cited in Morpurgo Davies 1998: 287-288, also Whitney 1881)



# Structural change under contact

“[...] anything goes, including structural borrowing that results in major typological changes in the borrowing language.”

(Thomason 2001:71)

As long as macro-level factors (e.g., prestige, community bilingualism) and language-internal factors (system compatibility) are in order.

# Structural change under contact

## Studies on contact-induced syntactic change

Hierarchies of pattern transmission (Weinreich 1953, Heath 1978, Treffers-Daller and Mougeon 2005, Matras and Sakel 2007; Johanson 1992, 2002)

(24) nominal constituents > copular predications > verbal predications

(25) modality > (phasal) aspect > future (> other tenses)

(Stolz and Stolz 1996, Ross 2001, Matras 1998 et seq)

# Structural change under contact skepticism

[i]t may be useful to recognize Celtic, Norman, Greek and Latin in the English vocabulary, but not a single drop of foreign blood has entered into the organic system of the English language.

(Müller 1862:68, cited in Mopurgo Davies 1998:198; also Meillet 1921)

syntactic borrowing is impossible or close to it.

(Lefebvre 1985, Prince 1988, Sankoff 2001)

Syntax is the limit.

(Silva-Corvalán 2008)



# Structural change under contact skepticism

[...] the case for direct borrowing of structure [...] has yet to be convincingly made.

(Winford 2003:64)

The extent to which [syntactic change due to contact] occurs and the constraints on the process are a matter of some controversy.

(Muysken 2010:720)

[w]hen the inference of contact-induced change is pursued systematically, it becomes increasingly difficult to justify.

(Poplack and Levey 2010:409)



# Changes in support

## VO ~ OV in Greek (again)

“The peculiar Turkish word order invaded Greek”

(Dawkins 1916, 198; Andriotis 1948, Anastasiadis 1976; Thomason and Kaufman 1988, Winford 2003:83)

OV → VO





# Changes in support

## VO ~ OV in Greek (again)

(26) Greek of Pharasa

a. I pseka piesin ton pandiko.  
the cat caught the mouse  
'The cat caught the mouse.'

[VO]

b. I pseka ton pandiko piesin.  
the cat the mouse caught  
'The cat caught the mouse.'

[OV]

(27) Turkish

Kedi fareyi yakaladı.  
cat mouse caught

'The cat caught the mouse.'

[OV]



# Changes in support

## VO ~ OV in Greek (again)

Corpus search (1862-1946; ~100000w)

	(S)V(S)O(S)	(S)O(S)V(S)
%	87,4	12,6

# Changes in support VO ~ OV in Greek (again)

1. Out-of-blue utterances (e.g., introductory clauses to narratives),
2. Generic statements, and
3. Answers to all-focus questions

all show that there is alternation between V(S)O (43%) and (S)VO (57%).

# Changes in support VO ~ OV in Greek (again)

V + O combinations from Turkish

(28) Greek of Pharasa [VO]

a. **dhitu ti**  
give ear  
'listen'

b. \* ~~ti-dhitu~~

(29) Turkish [OV]

a. \* **kulak ver-**  
give ear  
'listen'

b. \* ~~ver-kulak~~



# Changes in support

## VO ~ OV in Greek (again)

V + O combinations from Turkish

(28) Greek of Pharasa [VO]

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(29) Turkish [OV]

a. \* **kulak ver-**  
give ear  
'listen'

b. \* ~~ver-kulak~~

Why is the claim then?

# Changes in support VO ~ OV in Greek (again)

Weak copula in predicational structures

(30) Pharasa

a. i Nerkiza xekimi = ni. (OV, 79%)

Nerkiza doctor is

‘Nerkiza is a doctor.’

b. i Nerkiza ini xekimi. (VO, 21%)

Nerkiza is doctor

# Changes in support VO ~ OV in Greek (again)

Weak copula in predicational structures

(30) Pharasa

a. i Nerkiza xekimi = ni. (OV, 79%)  
Nerkiza doctor is  
'Nerkiza is a doctor.'

b. i Nerkiza ini xekimi. (VO, 21%)  
Nerkiza is doctor

Same results in Pontic, Romeyka and Cappadocian



# Changes in support

## VO ~ OV in Greek (again)

Phonological reduction of copulas render them as clitics and Asia Minor Greek is known to have a strict enclisis system (Sitaridou 2022).

e.g., pronouns:

(31) **idhin** =**mi**  
saw.3SG CL.1SG  
'she saw me.'

(32) \***mi**= **idhin**  
CL.1SG= saw.3SG

(33) (**mena**) **idhin** (**mena**)  
1SG saw.3SG 1SG  
'she saw me.'

# Changes in support

## VO ~ OV in Greek (again)

Bare NPs

(33) Pharasa

a. (In the winter), čočuxa ftenkani i nomati. (OV, 66%)  
children made the people

‘In the winter they would make babies.’

b. paradha ču xame, pikame takasi. (VO, 34%)  
money not have.1PL did.1PL barter

‘We did not have money, we would barter.’

Similar results in Romeyka

# Changes in support VO ~ OV in Greek (again)

Topicalization in Greek (also in Med. Greek)

(34) A: — Phos aghorase palto?  
‘Who bought a coat?’

B: — [Palto]<sub>TOP</sub> aghorase o Kostas.  
coat bought the Kostas  
‘Kostas bought a coat.’

Property	Modern Greek
[ <sub>TOPIC</sub> [ <sub>COMMENT</sub> ]]	yes
old information	yes
contrastive information	yes



# Changes in support VO ~ OV in Greek (again)

Dialect speakers facing ambiguous input:  $OV_{\text{TOPIC}}$  in Greek  $OV_{\text{NEUTRAL}}$  in Turkish:

(34) [**Palto**]<sub>TOP</sub> aghorase. (Greek)  
 coat bought  
 ‘He bought a coat.’

(35) [**Palto**]<sub>NEUT</sub> aldı. (Turkish)  
 coat bought  
 ‘He bought a coat.’

Property	Modern Greek	Turkish
[ <sub>TOPIC</sub> [ <sub>COMMENT</sub> ]]	yes	y/n
old information	yes	y/n
contrastive information	yes	y/n

# Changes in support VO ~ OV in Greek (again)

Dialect speakers facing ambiguous input:  $OV_{\text{TOPIC}}$  in Greek  $OV_{\text{NEUTRAL}}$  in Turkish:

(34) [Palto]<sub>TOP</sub> aghorase.  
coat bought  
'He bought a coat.'

Property	Modern Greek	Turkish	Dialect
[ <sub>TOPIC</sub> [ <sub>COMMENT</sub> ]]	yes	y/n	y/n
old information	yes	y/n	yes
contrastive information	yes	y/n	y/n

# Changes in support

## VO ~ OV in Greek (again)

Features relevant to syntax-discourse interface (focus/topic) are problematic for L2/heritage learners (Sorace 2005, 2011; Sorace & Fliaci 2006, Belletti et al. 2007, Montrul 2015)

Such formal feature in the target language, if not instantiated in the other language will cause learnability problems.

(Tsimplici 2007, Tsimplici & Mastropavlou 2007:215)



# Changes in support

## P-stranding in Ottawa Hull French

Poplack & Levey (2010), reporting Zentz (2006): P-stranding (36) is a structural extension of orphaning (37):

(36) Comme le gars que je sors **avec** . . .  
like the guy that I go.out with  
'Like the guy I'm going out with. . .

(37) ... il faut tu payes **pour**.  
it have you pay for  
'(if you want it before,) you have to pay for (it).'

# Changes in support

## Loss of ergativity in Kurdish

Dialect	non-past	past
Standard	DIR-OBL	OBL-DIR
Heritage	DIR-OBL	OBL-OBL

Split ergativity in Southwest Kurdish (Standard) and its loss in younger generations.

# Changes in support

## Non-past: standard & heritage

(38) Ez dikevım.  
I.DIR fall  
'I fall.' (intransitive)

(39) Ez te diwunım.  
I.DIR you.OBL see  
'I see you.' (transitive)

(40) Ti mi diwuni.  
you.DIR I.OBL see  
'You see me.' (transitive)

	Standard	Heritage
	NPST	NPST
SUBJ	DIR	DIR
OBJ	OBL	OBL



# Changes in support

## Past: standard

(41) Ez ketim.  
I.DIR fell  
'I fell.'

(intransitive)

(42) Mı tı diyi.  
I.OBL you.DIR saw  
'I saw you.'

(transitive)

(43) Te ez dim.  
you.OBL I.DIR saw  
'You saw me.'

(transitive)

	Standard		Heritage
	NPST	PST	NPST
SUBJ	DIR	OBL	DIR
OBJ	OBL	DIR	OBL

# Changes in support

## Past: heritage

(44) Ez ketim.  
I.DIR fell  
'I fell.'

(intransitive)

(45) Mi te di.  
I.OBL you.OBL saw  
'I saw you.'

(transitive)

(46) Te mi di.  
you.OBL I.OBL saw  
'You saw me.'

(transitive)

	Standard		Heritage	
	NPST	PST	NPST	PST
SUBJ	DIR	OBL	DIR	OBL
OBJ	OBL	DIR	OBL	OBL

# Changes in support

**Past: standard**

Ergativity in certain dialects of Kurmanji is in decay due to contact with Armenian and Turkish (see Gundogdu 2017).



# Changes in support

## Dependent Case (Marantz 1991)

(47) Dependent case rules

(a) ↑ If NP1 c-commands NP2, assign NP1 **ergative** (*upward case*).

(b) ↓ If NP1 c-commands NP2, assign NP2 **accusative** (*downward case*).

Unaccusative & Unergative ones (sole-arguments): No dependent case

# Changes in support

## Dependent Case (Marantz 1991)

Alignment	Case Pattern	Direction	DCC Rule
Accusative	NOM-ACC/ DIR-OBL	↓	downward
Ergative	ERG-ABS/ OBL-DIR	↑	upward
Tripartite	ERG-ACC/ OBL-OBL	↑ ↓	both
Unmarked	NOM-NOM/ DIR-DIR		neither

# Changes in support

## How is a split system learned?

The acquisition path for learning case patterns are guided by the DCT. For a Split ergative system, the following should be learnt:

### (48) Learning Task for Standard Kurdish (split ergativity)

- a. Learn downward dependent case rule (Accusative)
- b. Learn the upward dependent case rule (Ergative)
- c. Learn the context for the downward dependent case rule (Elsewhere)
- d. Learn the context for the upward dependent case rule (Past)



# Changes in support

## How is a split system learned?

Under the null hypothesis that the rules can be learned simultaneously or sequentially, the acquisition tasks leads to a variety of learning paths with various checkpoints, i.e., accepted hypothesis state. When the hypothesis is accepted, a checkpoint is created and it is maintained until it is revised.

It is essentially the same learning algorithm proposed in Biberauer et al 2014, Roberts 2021 [2007])

# Changes in support

## 2-checkpoint paths

In a 2-check point path, each of the dependent case rules (down or up) are learned simultaneously with their context specification.

	checkpoint	accepted	non-past	past
<b>Path 1</b>	1	$\downarrow C$	DIR-OBL	<i>DIR-DIR</i>
	2	$\uparrow C$	DIR-OBL	OBL-DIR
<b>Path 2</b>	1	$\uparrow C$	<i>DIR-DIR</i>	OBL-DIR
	2	$\downarrow C$	DIR-OBL	OBL-DIR

Table: 2-checkpoint paths.

# Changes in support

## Predictions of the 2-checkpoint paths

The intermediary checkpoints are also important.

In both paths, **DIR-DIR** show divergent attainment, which should be reflected at some point in monolingual data:

- The longitudinal study of Mahalingappa (2009), however, contains, 0 tokens of **DIR-DIR**.

2-checkpoint path further fails to predict **OBL-OBL**, which we see in Heritage Kurdish.

# Changes in support

## 3-checkpoint paths

In a 3-checkpoint path, one of the DC rules is learnt in two sequential steps:

1. First, a context-free variant is learnt.
2. Its context specification is made.

The other DC rule is learnt along with its context specification.



# Changes in support

## 3-checkpoint paths

	checkpoint	accepted	non-past	past
<u>Path 3</u>	1	↓	DIR-OBL	DIR-OBL
	2	↑ <sub>C</sub>	DIR-OBL	OBL-OBL
	3	↓ <sub>C</sub>	DIR-OBL	OBL-DIR
Path 4	1	↑	OBL-DIR	OBL-DIR
	2	↓ <sub>C</sub>	OBL-OBL	OBL-DIR
	3	↑ <sub>C</sub>	DIR-OBL	OBL-DIR
Path 5	1	↓ <sub>C</sub>	DIR-OBL	DIR-DIR
	2	↑	OBL-OBL	OBL-DIR
	3	↑ <sub>C</sub>	DIR-OBL	OBL-DIR
<u>Path 6</u>	1	↑ <sub>C</sub>	DIR-DIR	OBL-DIR
	2	↓	DIR-OBL	OBL-OBL
	3	↓ <sub>C</sub>	DIR-OBL	OBL-DIR

Table: 3-checkpoint paths.

# Changes in support

## 3-checkpoint paths

- Paths 4–5 generate **OBL-OBL** in non-past context – a pattern that does not define the heritage variety.
- Mahalingapa (2009) shows with monolingual data that **OBL-OBL** never appears in non-past contexts in acquisition, but
- **DIR-DIR** in non-past: 20/130, around age 3, suggesting **Path 6** is what is followed by the speakers.
- **DIR-OBL** in past: variety of Batman, which indicates that through Path 3, these speakers have shifted to a completely accusative system as their final attainment state.

# Changes in support

## 3-checkpoint paths

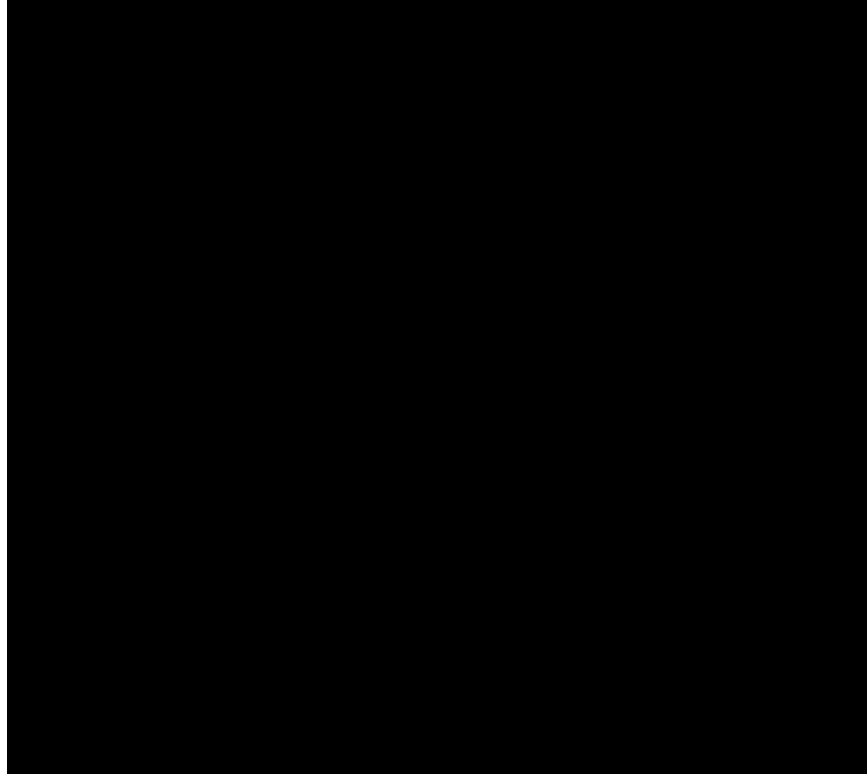
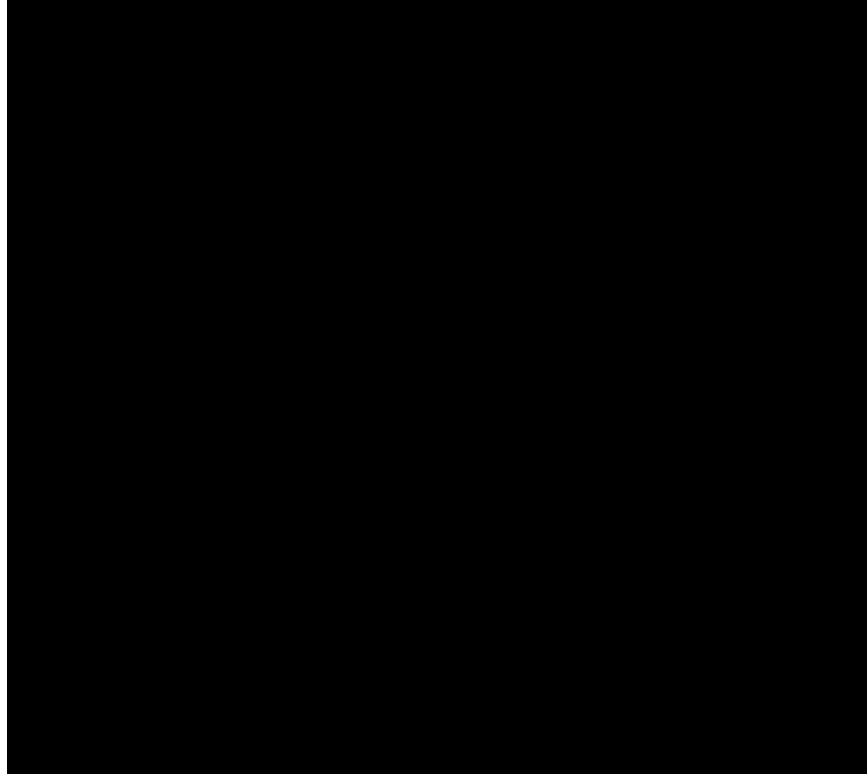
	checkpoint	accepted	non-past	past		
<u>Path 3</u>	1	↓	DIR-OBL	DIR-OBL		
	2	↑ <sub>C</sub>	DIR-OBL	OBL-OBL		
	3	↓ <sub>C</sub>	DIR-OBL	OBL-DIR		
Path 4	1	↑				
	2	↓ <sub>C</sub>				
	3	↑ <sub>C</sub>				
Path 5	1	↓ <sub>C</sub>				
	2	↑				
	3	↑ <sub>C</sub>				
<u>Path 6</u>	1	↑ <sub>C</sub>	DIR-DIR	OBL-DIR		
	2	↓	DIR-OBL	OBL-OBL		
	3	↓ <sub>C</sub>	DIR-OBL	OBL-DIR		

Table: 3-checkpoint paths.

heritage

# Changes in support

## 4-checkpoint paths?

both the DC rules and the context rules are learned sequentially:

- six possible paths, all converging with the ultimate standard grammar but
  - five overgenerate **OBL-OBL** in the non-past contexts.
  - three overgenerate **OBL-DIR** in non-past contexts,
  - one undergenerates by not predicting the **OBL-OBL** in past tense clauses.



# Changes in support

## 3-checkpoint paths

Upward dependent case is never learnt in two steps because it must make reference to a smaller subset (past only) as opposed to downward dependent case, which is operant on present, subjunctive, conditional and imperative.

# Changes in support

## 3-checkpoint paths

Why is the convergence problem?

- Problem with the nature of transition from checkpoint 2 to 3: this requires revision of an earlier learnt underspecified rule: Going from an underspecified rule to one that makes reference to elsewhere condition requires production, hypothesis and error-driven learning: The learner must realize that the grammar they acquired overgenerates (OBL objects in past tense clauses) and seek hypotheses to fix the overgeneralization problem.
- Heritage speakers have a reduced rate of production, which prevents them from realizing the overgeneration problem caused by the underspecified downward dependent case rule.
- The effect of Turkish?
  - There is no rule copying from Turkish: Kurmanji already has the accusative pattern.

# Summary

## food for skeptics

- Changes that are LARGELY internal (analogical levelling, underspecification of formal features, fossilization in the learning path etc.)

Lass' (1997:209): “an endogenous explanation of a phenomenon is more parsimonious, because endogenous changes must occur in any case.”

when Language A has two or more equally possible options one of which overlaps with an option also present in Language B, the speakers will opt for the most frequent option in the input (in contact situations, Johanson 2002, Silva-Corvalán 1994, Alferink 2015, in heritage speakers, Moro 2016, in simultaneous bilingual acquisition, Muller (2000), Nicolaidis (2006) et seq.

Contact reinforces an existing syntactic possibility (Sitaridou 2009,2014:52, also DeGraff 2005, Guardiano et al 2016)

# Summary

## Is it possible to argue against it?

Dichronic studies involve a look at the meso-level aggregation of change (Muysken 2007: 268), a time depth of min 200 years, where we rely on comparative data & historical sources, which are however imperfect: proving that the subset of strings that contribute to constituting a trigger for value Y of parameter  $\alpha$  was *not* present is difficult, Thomason 2001:93-94)

variability as inherent characteristic of all spoken languages (Poplack and Levey 2010).



# Further changes

Do we need to see complete restructuring of a system to be convinced that bilingual minds are capable of exploiting the same repertoire?

# More changes

## Turoyo

Purposelessness ‘reflexive’

(49) A: —mən kosaymat?  
what are you doing?

B: — ko-shota-no                      čay.  
PROG-drink.NPST-1SG tea  
‘I am drinking tea.’

B: —ko-shota-no=**li**                      čay.  
PROG-drink.NPST-1SG=**to.me** tea  
lit: ‘I am drinking to myself tea (because I have nothing else to do).’

# More changes

## Kurdish

Purposelessness ‘reflexive’

(50) A: what are you doing?

B: — Ez rudini-m-e.  
I sitting.down-1SG-COP  
‘I am sitting down.’

B: — Ez **xa ra** rudini-m-e.  
I self to sitting.down-1SG-COP.  
‘I am just sitting down (because I have nothing else to do).’

# More changes

## Greek of Pontus

### Contrastive verb doubling

- (51) Ta xortaræ eghrasa      ama **kser-athio** u      **kser-enane**.  
the grass    sunned.1SG    but    dry-NOM    not    dry-PST.3PL  
'I sunned the grass but they did not dry (contrary to expected).'
- (52) **almegh-ma** uć    eporena      n'    **almegh-a**.  
milk-NOM      not could.1SG      PRT    milk-PST.1SG  
'I could not milk (the cows, contrary to the expectation).'



# More changes

## Turkish

Contrastive verb doubling

(53) A: – What happened to her? \*(Did she have a car accident?)

B: – No, **düş-me düş-tü.**  
fall-NOM fall-PST.3SG  
'No, she fell down.'

(54) Ev-i **al-ma al-dı-m,** \*(kiralamadım).  
house-acc buy-NOM buy-PST-1SG I.am.not.renting.it  
'I bought the house, I am not renting it.'

(Sevgi 2021)

# More changes

## Laz

Embedded nominalizations (Demirok & Ozturk to appear)

(55) [Bere-**şı** didi kva o-t'ax-u-mu**şı**] mapxasinu.  
child-GEN big stone NOM-break-NOM-POS.3SG I.was.surprised  
'I was surprised that the child broke the big stone.'

(56) Xordza-k [sk'ani didi kva o-t'ax-u-sk'ani] gorums.  
woman-ERG your big stone NOM-break-NOM-POS.2SG wants  
'The woman wants you to break the big stone.'

# More changes

## Turkish

Embedded nominalizations (Demirok & Ozturk to appear)

(57) [çocuğ-un taşı kır-ma-sı] beni şaşırttı.  
child-GEN stone break-NOM-POS.3SG I.was.surprised  
'I was surprised that the child broke the big stone.'

(58) Kadın [sen-in taşı kır-ma-n]-ı istiyor.  
woman you-GEN stone break-NOM-POS.2SG wants  
'The woman wants you to break the big stone.'

# Summary

Such examples abound in the contact literature and well-documented in bilingual studies.



# Conclusions

1. The evidence accumulated points to one direction: contact, when evoked with all its processes, i.e., bilingual acquisition, SLA, attrition etc., impacts all levels of grammar.
2. Notions as borrowing, transfer etc. may seem to work when we know what we talk about but when we consider the large spectrum of processes and language maintenance in bilingual minds, they simply function as metaphors.
3. The linguistic repertoire such minds have is inherently complex/mixed because the input they've been exposed to is complex/complex.
4. Their creativity in such minds is certainly limited by constraints specific to the repertoire itself but the ultimate sedimentation depends on the ecology in which they survive.



**Thank you!**

