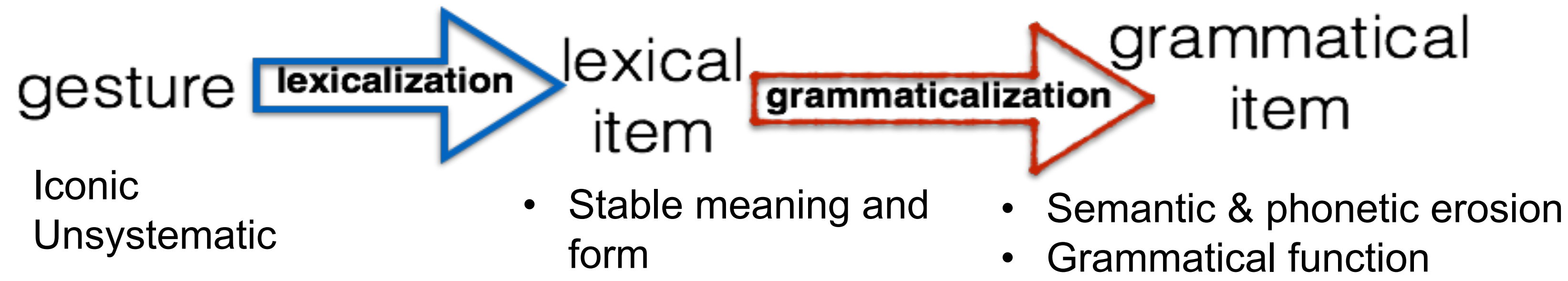# Time Will Tell:
Dynamics of Grammaticalization & Lexicalization of TIME-PASS in Israeli Sign Language

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Linear View

Grammaticalization is a process by which lexical words become grammatical markers
Sign languages start with gestures (Hopper & Traugott 2003, Johnston & Schembri 2010, Pfau & Steinbach, 2006)

gesture → **lexicalization** → lexical item → **grammaticalization** → grammatical item

- Iconic
- Unsystematic

- Stable meaning and form

- Semantic & phonetic erosion
- Grammatical function

PREDICTIONS

Grammaticalization follows lexicalization

Dynamic View

- Both the lexicon and grammatical organization originate with holistic events
- Events are broken down into systematic lexical and grammatical elements (Croft 2010, Chafe 1997)
- Event structure reflected in prosody: Intonational Phrase is the key

gesture → **lexicalization** → lexical item
gesture → **grammaticalization** → grammatical item
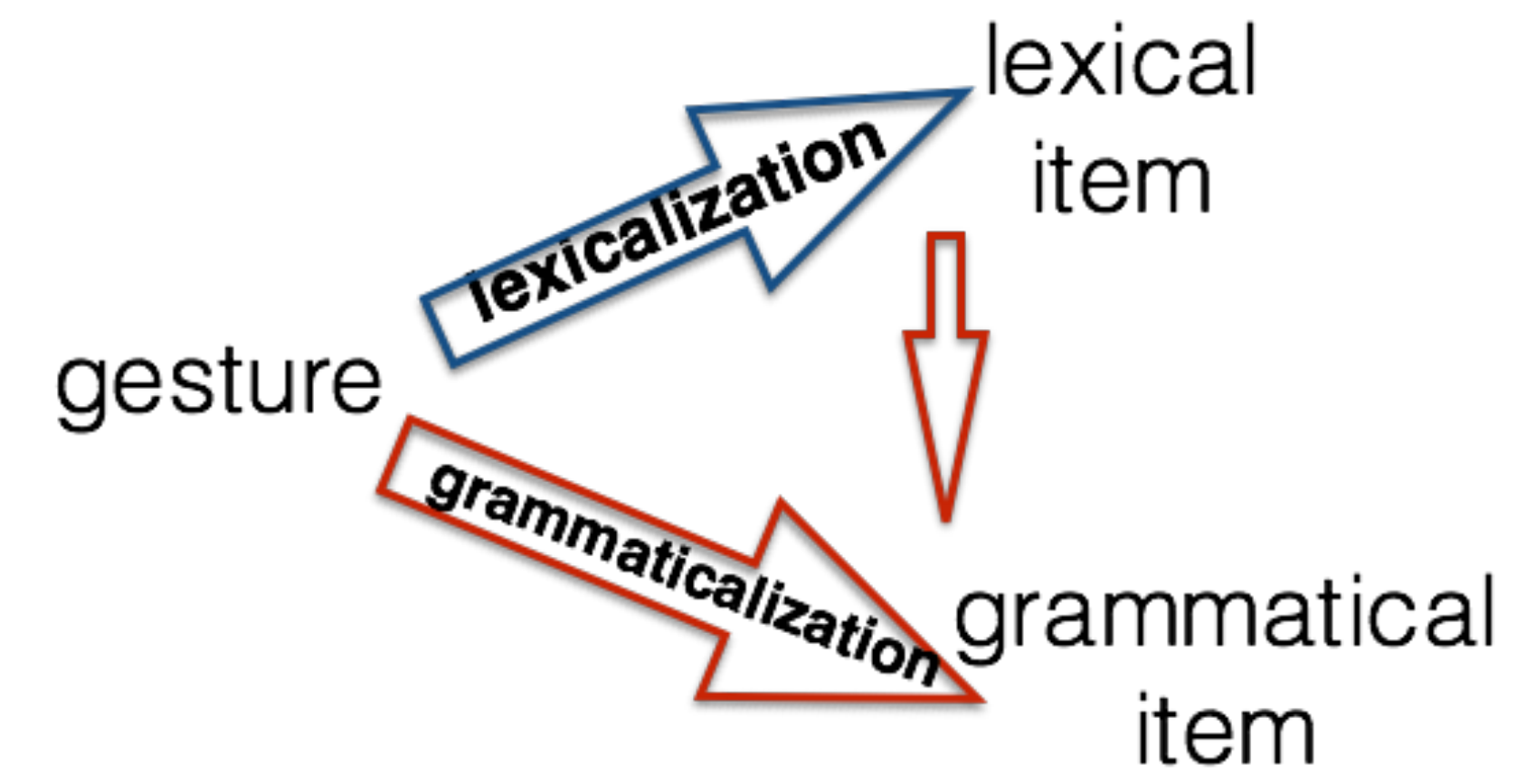
PREDICTIONS

The process is dynamic.
Lexicalization and grammaticalization are interdependent

or

Methodology

- Israeli Sign Language (ISL) is young, ~ 90 years old (Meir & Sandler, 2008)
- 27 spontaneous narratives of deaf ISL signers
- 196 tokens of TIME-PASS identified, (133 from older, 63 from younger signers)
- Three functions of TIME-PASS are coded and distinguished by manual, non-manual behaviour and context (Table 1)

Results

Participants
17 aged 55+ (Older group)
10 aged 18-54 (Younger group)

Table 1. Coding & Results: Three functions of TIME-PASS

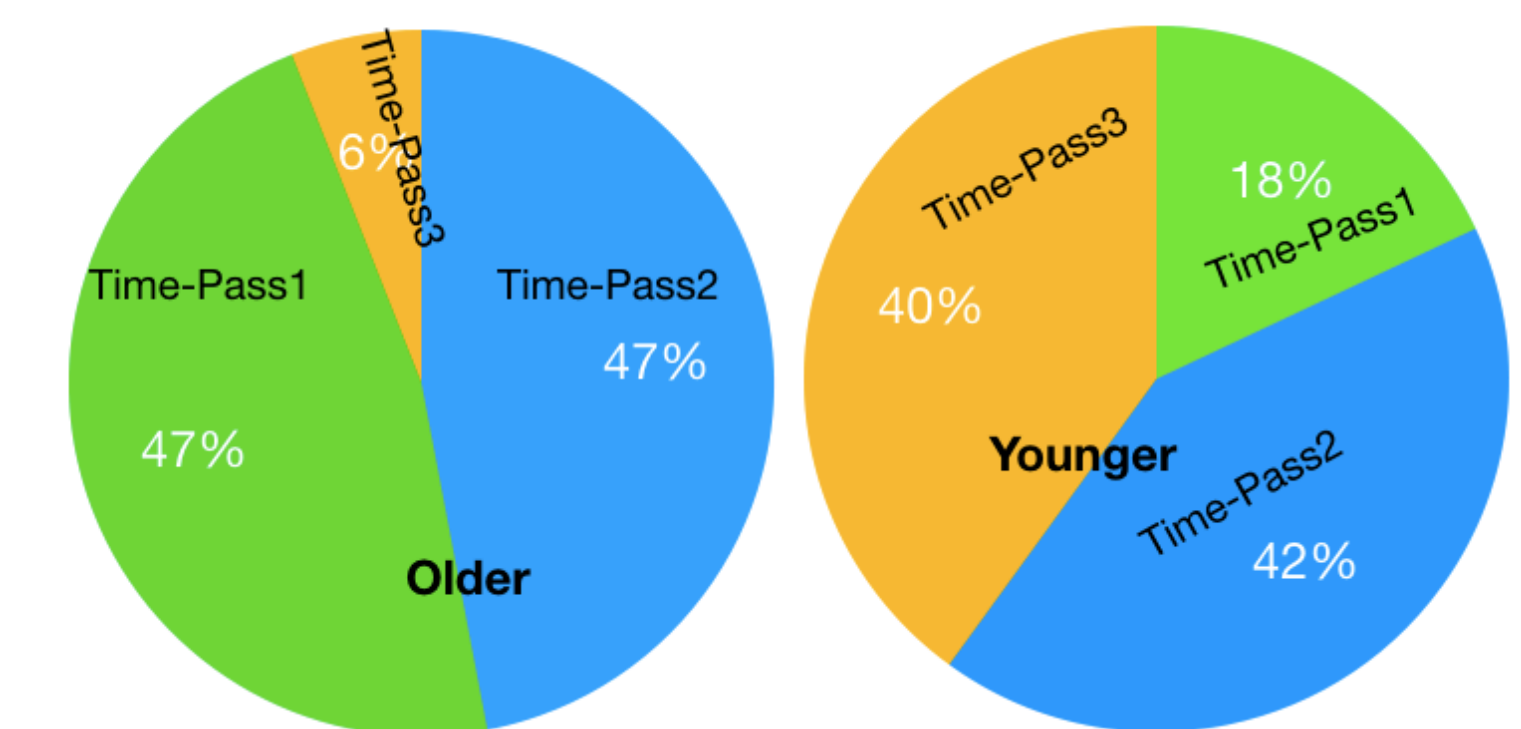|		TIME-PASS1	TIME-PASS2	TIME-PASS3
Timing	Position in IP determined by timing	Stand-alone IP	IP-initial	syntax-determined
Manual	Reduplication	2+	1	dependent on prosodic phrase structure
	Handshape	lax 5	lax 5	crisp bent 5
Non-manual	Head movements	head down	head up	dependent on prosodic phrase structure
	Facial expressions	mouth open	brow raise	mouthing
Context	Time expressions	No	Yes	No
	Discourse markers	Yes	No	No
	Specific lexical/ grammatical environment	No	Predicates with end points, clause initial	Contrastive; with predicates/ arguments

Generational change:
- Gestural episode divider TIME-PASS1 **decreases** in use
- Lexicalized TIME-PASS3 **increases** in use
- Grammaticalized TIME-PASS2 **persists**

Chart 1: Frequency of TIME-PASS categories

Older: Time-Pass1 47%, Time-Pass2 47%, Time-Pass3 6%
Younger: Time-Pass1 18%, Time-Pass2 42%, Time-Pass3 40%

Discussion and Examples from the Data

- Grammatical item persists across generations
- Lexicalization becomes more robust over time
- Over time, gestural discourse-oriented TIME-PASS1 drops in frequency

AGAIN | TIME-PASS (x3) [torso tilt, head nods, open mouth] | FEVER | SKINNY | PALE

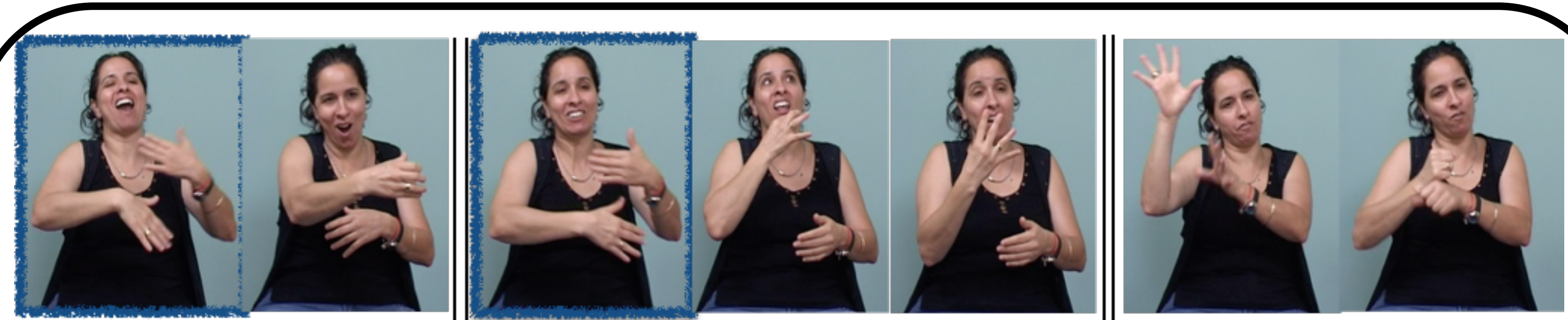*Mother was pregnant again all the while, I continued to be sick.*

Gestural TIME-PASS1 has a discourse-pragmatic function

- Separates background (circumstantial) information from foreground (main events)
- Comprises its own intonational phrase
- Reduplicated X 4 (continuative)
- Head thrusts + mouth open

grammaticalization

head back
TIME-PASS | DAY-CARE | TIME-PASS | AGE | FOUR | QUIT | JOB

Later I put her into day care. Then when she was 4, I quit my job.

Grammaticalized TIME-PASS2 connects two individual events

- Introduces new intonational phrase and new proposition.
- Head up, beginning of intonational phrase (Dachkovsky et al., 2013)
- Followed by time expression (AGE-FOUR), and resultative predicates (change of state)
- Phonetically reduced

- Specific lexical items emerge after holistic message is broken and re-organized into compositional ARGUMENT-PREDICATE structure
- Prosody plays important organizing and packaging role in this process

lexicalization

HEARING-AID | TECHNOLOGY | TIME-PASS [torso forward mouthing]

Hearing aid technology is making progress

Lexicalized TIME-PASS3 'progress, advance' (N, V)

- Specific (abstract) meaning
- Placement according to syntax
- Functions as the predicate of 'hearing aid technology'
- Mouthing of Hebrew word [mitkadem] (advances)
- Lengthened as IP final (Nespor & Sandler, 1999)

Conclusions

- The process of language emergence is not linear, but dynamic (Meir & Sandler in press)
- In a new language, lexicalization and grammaticalization are interdependent – two facets of the same process
- Lexical and grammatical items are **"carved out"** of the event structure
- Prosody plays important organizing role in this process

References

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