

# What's a question to start with? Auxiliaries in input to English early talkers

**BACKGROUND:** Subject-auxiliary word order in statements appears early and target-like in English acquiring children, leaving few clues as to how children distinguish these structures from auxiliary-subject orders used as questions.

**PAST FINDINGS:**

- Mapping clause types to speech acts appears to be a learning problem achieved very early (Zaitso et al. 2021; Pronina et al. 2021).
- Rule and exception learning are subject to the same stochastic principles across all modules (Yang 2012, Culbertson and Schuler 2019).
- Pragmatic prosody can be adult-like early on (Prieto et al., 2012) but proves to be unstable up to age 11 (Patel & Grigos, 2006).

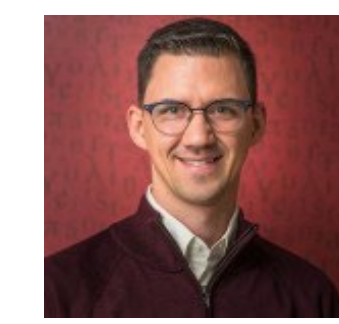
**RESEARCH QUESTIONS:**  
 RQ1: What morphosyntactic and prosodic cues are early talkers using at 2;3-2;7?  
 RQ2: How do children use auxiliaries and how does this relate to the input?  
 RQ3: What can all this tell us about the acquisition of speech-act categories?

**HYPOTHESIS (theory):** Speech act mapping is input-dependent and principally influenced by adult morphosyntax and pragmatics.

**HYPOTHESIS (empirical):** Some children postulate non-adult orders for questions.



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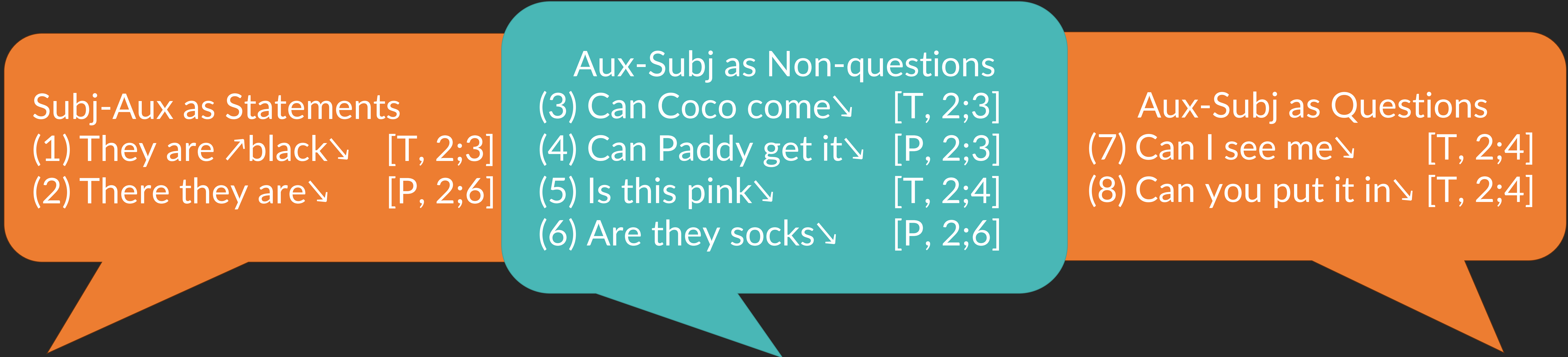


**NEW DATA:** Two early talking neurotypical British English children, Teddy and Paddy (audio recordings and diary data) aged 2;3-2;7 show Aux-Subj in both questions and statements for a protracted time.

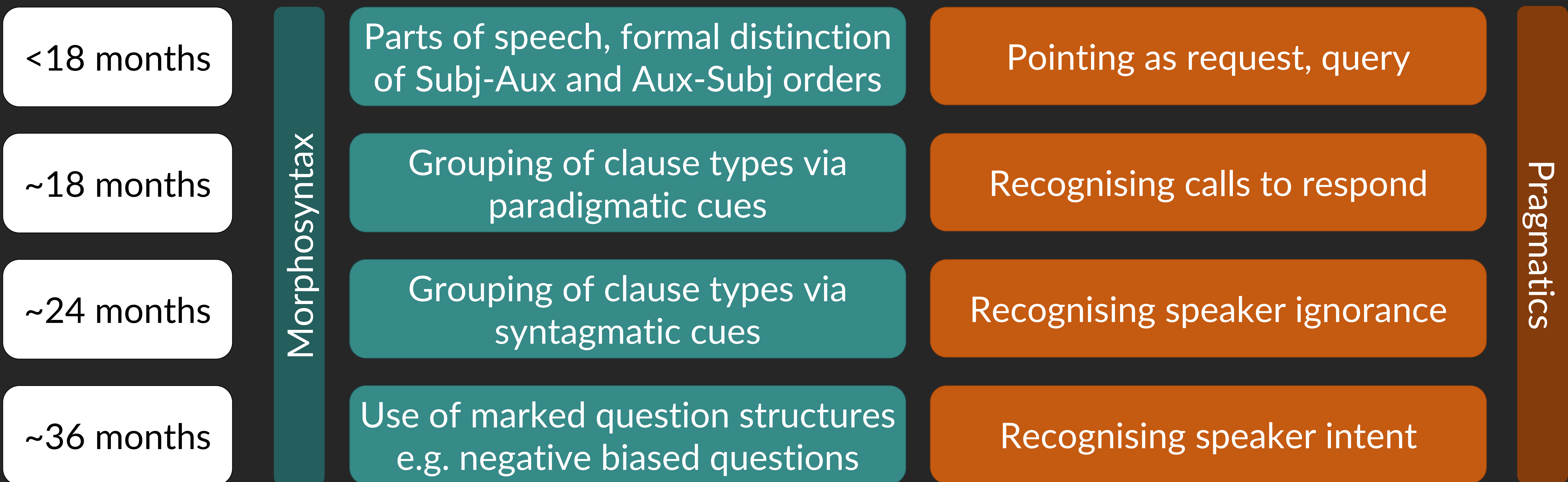
**GAPS WE FILL:**

- Cross-comparison of morphosyntax, prosody and pragmatics in both input and output.
- Longitudinal investigation of speech acts used by child-caregiver dyads.

# Acquisition of auxiliary placement in English tracks *how* caregivers use questions



*Speech act development builds on a host of linguistic & cognitive skills.*



**RQ1: Morphosyntax**

	Total utterances	Auxiliaries	
		Initial	Medial
Teddy	2731	15	50
Caregivers	5213	1009	734

	Total utterances	Auxiliaries	
		Initial	Medial
Paddy	571	43	2
Caregiver	922	41	147

- Teddy/Paddy hear more auxs, more often in Aux-Subj order, than similar early talkers (Eve/Naima, CHILDES).
- Paddy postulates general Aux-Subj rule
- Teddy postulates two lexically-based rules (Woods et al 2021).

**RQ1: Intonation**

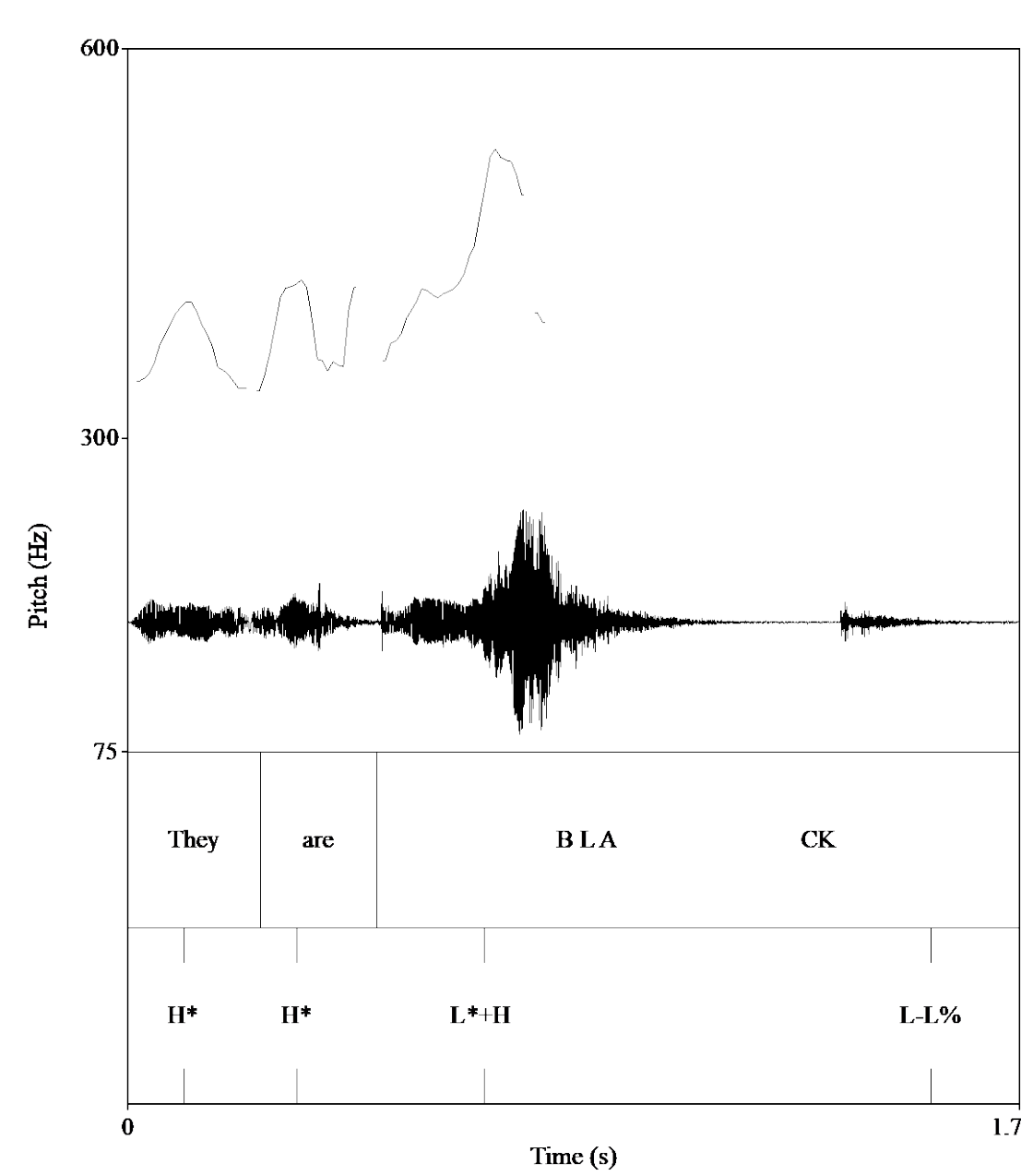


Figure 1: SubjAux construction with focus rise-fall: "They are BLACK"

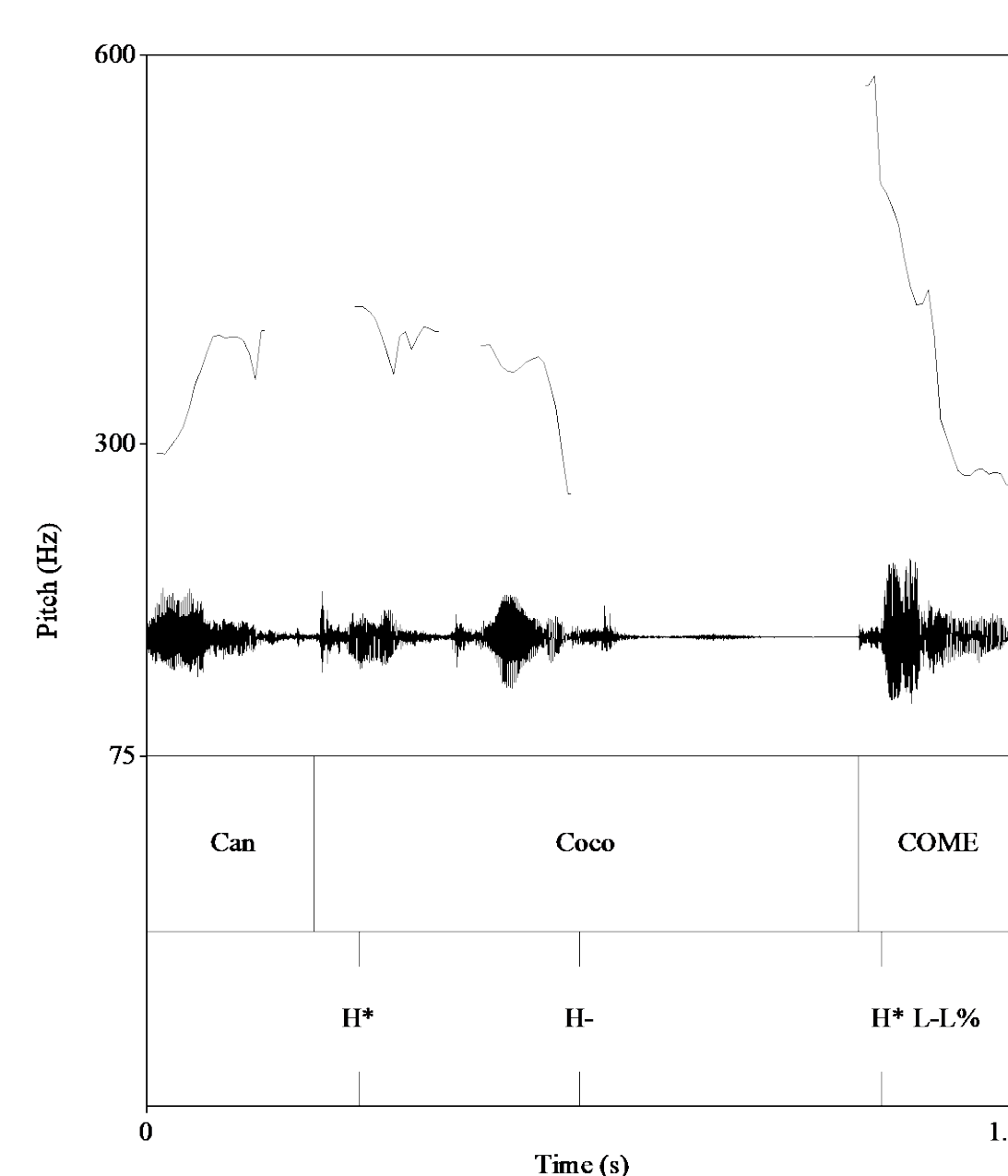


Figure 2: AuxSubj construction (narration) with fall: "Can Coco COME"

- Intonation is mainly used for focus marking rather than speech act distinction.
- Most Aux occur with a fall (73%) or a rise-fall (16%) for Teddy; Paddy only uses falls.
- Contours on both constructions appear to closely mirror adult input ('test questions').

**RQ2: Pragmatics**

Subj-Aux	Teddy	Teddy FAT	Paddy	Paddy MOT
Assertion	82%	54%	2%	78%
Reading	-	22%	-	-
Narration	14%	<1%	-	-

Narration = recasting, "active listening", verbalizing co-actions

Aux-Subj	Teddy	Teddy FAT	Paddy	Paddy MOT
Suggest	-	22%	7%	24%
InfoQ	13%	14%	2%	15%
Narration	26%	16%	-	2%
Test	-	8%	13%	40%
Assertion	33%	10%	43%	7%

NB: FAT AuxSubj assertions near-exclusively tagQs

➤ Children track non-InfoQ uses of AuxSubj

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**Aux-Subj as Non-questions**

- (3) Can Coco come↘ [T, 2;3]
- (4) Can Paddy get it↘ [P, 2;3]
- (5) Is this pink↘ [T, 2;4]
- (6) Are they socks↘ [P, 2;6]

**Subj-Aux as Statements**

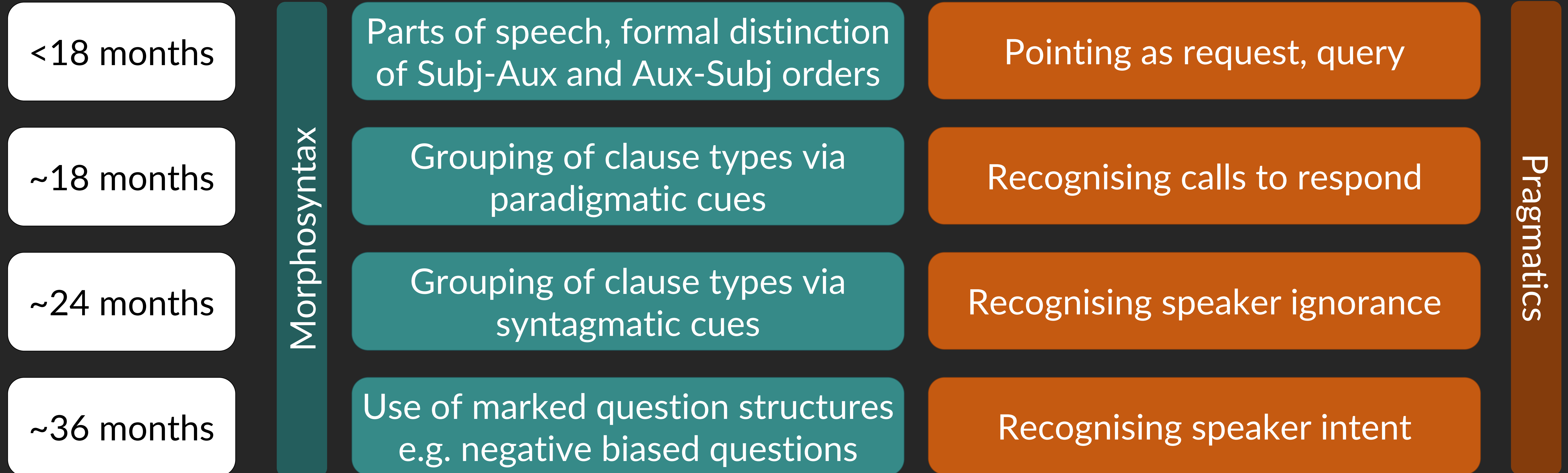
- (1) They are ↗black↘ [T, 2;3]
- (2) There they are↘ [P, 2;6]

**Aux-Subj as Questions**

- (7) Can I see me↘ [T, 2;4]
- (8) Can you put it in↘ [T, 2;4]



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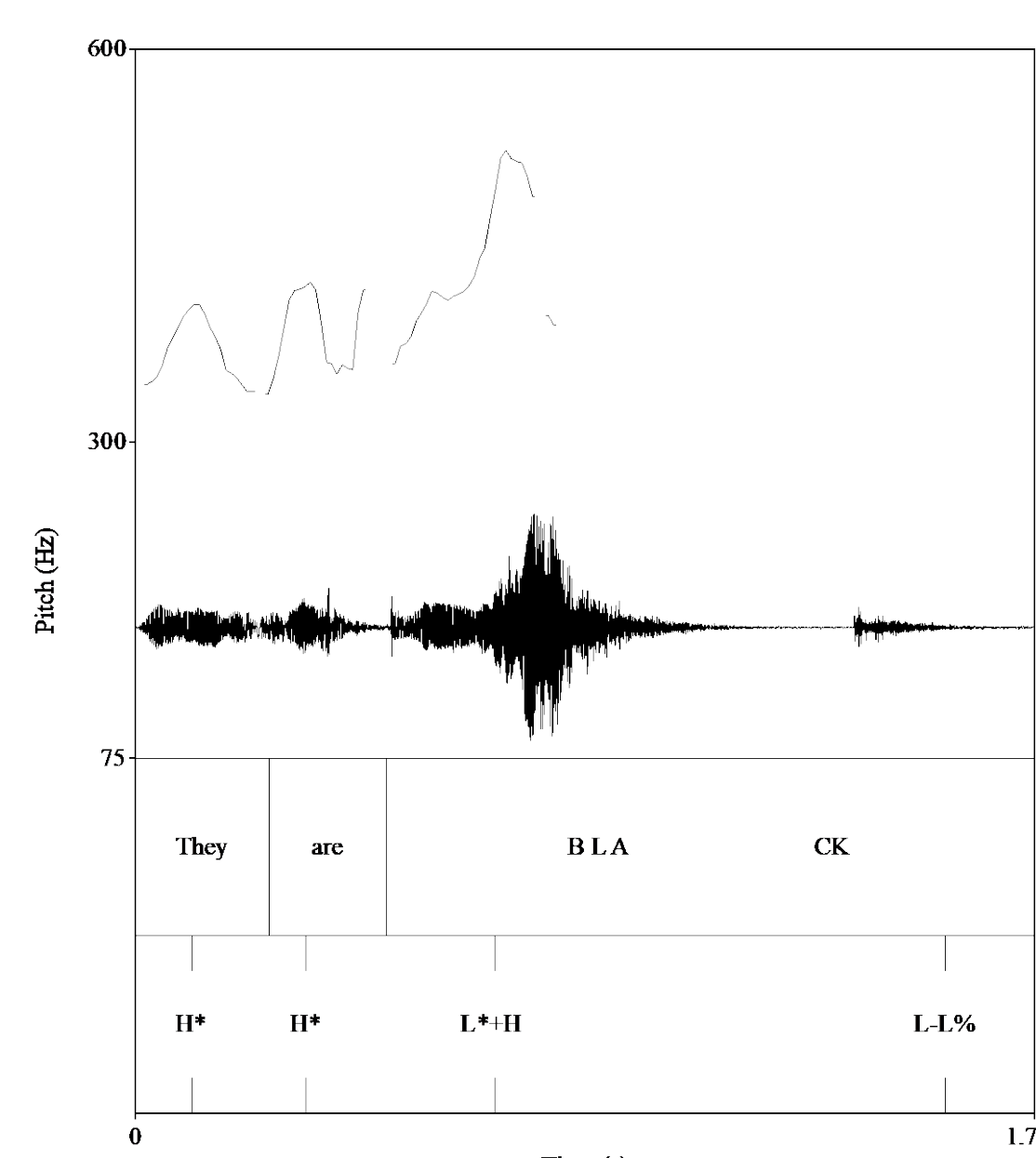


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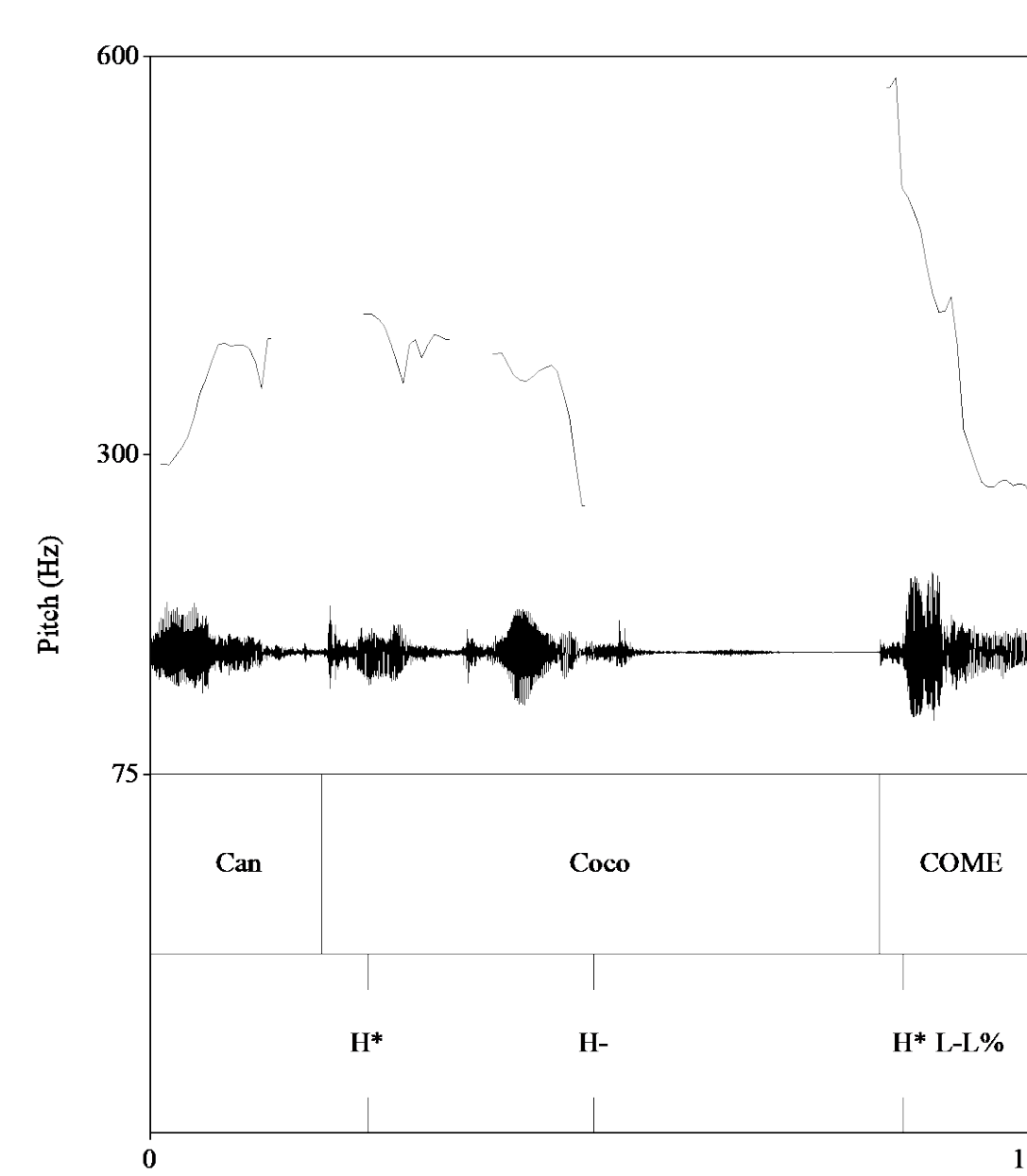


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