Leaving obligations behind: epistemic incrementation in preschool English

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In ambiguous contexts (ModalOnly: must + bare verb) children will prefer epistemic interpretations at higher rates than young adults from the same speech community.

Figure 1. Individual speakers plotted by the number of must responses given to the epistemic and actual scenarios.

Note. Quadrant a is a “contrast” to target for both sentence conditions. Quadrant b is “epistemic contrast”. Quadrant c is “epistemic contrast”. Quadrant d is “target contrast”.

(Quadrant = Epistemia Group + Participants. AllConsent=yes-true-single-0-1088.000)

English functional modals (aux, semi-aux) are variable-meaning (deontic, epistemic)[1]. Syntax affects flavour, the more historically innovative[8,7] (flavours) is interpreted higher structurally (2,10,9).

Dinosaurus must go lots of leaves. ...because his vet said so. ...because the trees are bare.

With bare verb (ModalOnly): 1) Dinosaurus must go lots of leaves. 2) Because the trees are bare. With grammatical aspect (ModalAspect): 2) Dinosaurus must have eaten. 3) Dinosaurus must be eating progressive.

Modal verbs show directional syntactic & semantic cyclic change in the historical record.

Lexical Verb → Functional Verb →

Deontic → Epistemic

In English today, must is used primarily epistemically; historically never have (got) to do most deontic work[14].

Study 3: Deontic Detection Task

Hypothesis: In ambiguous picture contexts (EPISTEMIC) children will avoid picking must (must is being replaced by have to in epistemic contexts) IN "TO ENGLISH"[10].

Children of age 3-6, have relevant concepts and variable-meaning in place.

Discussion

Main Claim: Learning biases may feed well-known patterns of language change: here Deontic → Epistemic incrementation and loss of older forms.

Study 1. Syos prefer epistemic interpretations of must for ambiguous bare verb sentences, above adult rates.

Study 2. 4 & 5yo Syos prefer not to mark sentences with must in epistemic contexts, contra adults.

Study 3. Children maintain deontic interpretations.

Why might preschool children overgenerate epistemic must?

In English, must sentences with grammatical aspect show must overly aspect marking: once kids reliably acquire grammatical aspect[20], they may overgenerate high epistemic interpretations.

[Subj=EPISTEMIC [T= Must [must-])]

[19, cf. 7]

[Baillargeon et al., 2001]

[16, cf. 13]

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References