Where do 'maybe's come from? Ailís Cournane, NYU and Sandrine Tailleur, UQAC

Modal verbs (MVs; e.g., must, fr. devoir) have been central to theories of historical syntax and semantics. Syntactically, MVs originate as main verbs and get reanalysed as functional verbs or auxiliaries ($V > [v > T]_{MV}$) (Lightfoot 1979, i.a.). Semantically, MVs are first attested with root meanings and gain additional epistemic meanings (inferences from knowledge/evidence), becoming variable-flavour MVs (Root > Epistemic) (Traugott 1989, i.a.). These repeated, unidirectional, change pathways are part of the modal cycle. We use historical data from MVs in English and French to highlight a less-studied late-stage modal cycle reanalysis from biclausal constructions with variable-flavour MVs like mayT and Fr. pouvoirv (It may be that p), into epistemic adverbs (Eng. maybe, Fr. $peut-\hat{e}tre$) (Ex. 1). We link the historical data to child modal development patterns, arguing that the historical and acquisition data are consistent with acquisition-driven theories of syntactic reanalysis (e.g., van Gelderen, 2011).

(1) lexical verb (V) + infinitive → modal + (stative) verb →adverb/'conjonction'

peut cel estre p (OF) → il/cela peut estre que (MF) peut estre (MF)→ peut-être

biclausal → monoclausal → adjunct (phrase)

We situate this work amidst a broader puzzle: modal adverbs in Indo-European languages commonly develop from possibility MVs (Ex.2) like *can*, but not from necessity MVs like *must*.

(2) Eng. maybe, Fr. peut-être, Nor/Swe. kansk(j)e, Dan. måske, BCS. možda, Dut. mogelijk, ...

While the reanalysis we describe is robust, it seems to produce *maybes* and *peut-êtres*, not *mustbes or *doit-êtres. This despite (a) epistemic necessity adverbs existing from other sources (probably, Fr. sûrement), and (b) no syntactic difference between possibility and necessity MVs.

We propose that two L1 acquisition facts may explain this historical reanalysis: first, the priority and persistence of epistemic adverbs on the learning path, as the most grammatically accessible means of expressing epistemic thoughts (Cournane 2015), and the child bias towards possibility forms, contra input patterns (Dieuleveut et al. 2019), and the late comprehension and command of biclausal structures (deVilliers & Roeper 2016). These child learning biases for the modal expressions in their input may explain where *maybes* come from: children's developing grammars may treat input "It may be that p" as simpler, "maybe p".

We start with the historical pathways of both epistemic elements in English and French, which has never been reconstituted in detail, using resources like the *OED* and the *Dictionnaire du Moyen Français*. We already know that semantic interpretation for variable-flavour MVs is constrained by syntactic factors (Brennan, 1993; Hacquard, 2006; Roberts, 1985), and biclausal modal verb constructions (*It may be that* p) key epistemic readings by combining the MV with (a) expletive subjects, (b) stative verbs, and (c) explicit high scope over the embedded proposition. These constructions are the source for reanalysis in both English and French.

For both English and French, children can readily represent epistemic language at age 2 (cf. Papafragou, 1998), but only with adverbs, no epistemic MVs nor embedding attitude verbs (e.g., *think, know*). This priority of adverbs is not explained by input frequency (Cournane, 2021). Children also persist in relying more on adverbs for epistemic talk than do adults (Eng. Cournane, 2015; O'Neill & Atance, 2000, Fr. current study), into the peer-aligned preschool years (Labov, 2001), when child analyses may be reinforced in the peer group and actuate into the E-language (Cournane, 2017).

In sum, using historical and acquisition evidence, we propose that early child modal learning biases (biases towards adverbs and possibility modals, and protracted command of complex syntax) may explain the historical reanalysis of only the possibility MVs across Indo-European into *maybes*, to the exclusion of the necessity MVs.

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Historical Data

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