Acquiring (illocutionary) complementisers

Preliminary insights from child Catalan and Spanish, and beyond

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1. Introduction

- Acquisition of **complementisers** and subordination typically taken to be a crosslinguistically **relatively late phenomenon** in child language (e.g., Armon-Lotem, 2005; Clahsen and Penke, 1992).
- Earliest forms include so-called *preconjunctionals*. The emergence of subordinators, such as Catalan and Spanish *que*, is a later development.
  - ▶ Often accounted for via 'bottom-up' approaches to syntactic development, whereby the CP is acquired last (Radford, 1988; Rizzi, 1994; Friedmann et al., 2021; Diercks et al., 2023).

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  - ▶ Often accounted for via 'bottom-up' approaches to syntactic development, whereby the CP is acquired last (Radford, 1988; Rizzi, 1994; Friedmann et al., 2021; Diercks et al., 2023).
- However, notable **gap** in acquisition data so far → acquisition of ***illocutionary complementisers*** in Ibero-Romance (Corr, 2016, 2022).
  - ▶ Complementisers that do *not* function as a subordinator and instead introduce non-embedded matrix clauses, with several **illocutionary functions** → *apparent* cases of **insubordination** (see Corr, 2018; Trotzke and Villalba, 2021).

(1) Subordinating complementisers

    a. *Li   he   dit* **que** *aquesta tarda   vaig a Barcelona*   (Catalan)
       CL.IO= AUX.1SG told that this   afternoon go.1SG to Barcelona

       'I have told him/her that I'm going to Barcelona this afternoon.'

    b. *No podía   creer* **que** *hubiesen   ganado la   lotería* (Spanish)
       not can.IMPF.3SG believe that AUX.SUBJ.IMPF.3PL won   the lottery

       'He/she couldn't believe that they'd won the lottery.'

(2) Illocutionary complementisers

    a. *Ai,* **que**   *t'atrapo!*   (Catalan)
       hey that.EXCL CL.DO=catch.1SG

       'I'm coming to get you!'   (Corr, 2016, p. 88)

    b. *No hagas   esto,* **que**   *luego mamá se   enfada* (Spanish)
       not do.SUBJ.2SG this that.CONJ then   mum   CL.REFL= get.angry.3SG

       'Don't do this, because then mum gets angry.'

1. Introduce *illocutionary* complementisers, including their typology in Ibero-Romance and their syntactic properties.
2. (Selective overview of) approaches to syntactic development.
3. Results of a *corpus study* with CHILDES on 5 Catalan and 5 Spanish children, comparing emergence of illocutionary *vs* embedding complementisers and testing the approaches' predictions.
4. Preliminary look at Italo-Romance data and its potential insights.

2. ILLOCUTIONARY COMPLEMENTISERS IN IBERO-ROMANCE

- A conspicuous property of Ibero-Romance is the use of the complementiser *que* to introduce *matrix* clauses with a range of illocutionary functions (besides its use as a subordinator).

- Four types, largely following Corr (2016): *exclamative*, *quotative*, *conjunctive* and *interrogative*.

(3) **Exclamative *que***

Alça,	***que***	*ho*	*has*	*llençat*	*tot*	*al*	*terra!*	(Catalan)
hey	that.EXCL	CL.DO=	AUX.2SG	throw.PART	everything	on.the	floor	

'Hey! You've thrown everything on the floor!'

(4) **Quotative *que***. Context: the speaker is asked who had just phoned

*Era Carmen. **Que** me llamaba para felicitarme* (Spanish)
was Carmen that.QUOT CL.DO= phone.IMPF.3SG to congratulate=CL.DO

'It was Carmen. She phoned me to wish me a happy birthday.'

(5) **Conjunctive *que***

*No li diguis això a la Paula **que** és un secret* (Catalan)
not CL.IO= tell.SUBJ.2SG this to the Paula that.CONJ is a secret

'Don't tell this to Paula because it's a secret.'

(6) **Interrogative *que*** (available in Catalan, marginal in Spanish)
    Que *vindràs*   *al*   *final*   *a veure*   *la*   *pel·lícula?*   (Catalan)
    that.INT come.FUT.2SG in.the end   to watch.INF the film

    'Are you coming to watch the film in the end?'

- Also instances of Adjective/Adverb + *que* (Cruschina and Remberger, 2018), and cases of emphatic polarity particles + *que* (Batllori and Hernanz, 2013):

(7) a.   *¡Claro* **que** *entendió!*   (Spanish)
       clear   that understand.PST.3SG

       'Of course he/she understood!'

   b.   *Sí* **que** *val*   *la* *pena,*   *tenies*   *raó*   (Catalan)
       yes   that cost.3SG the struggle have.IMPF.2SG right

       'It certainly is worth it, you were right.'

- ✏️ Corr (2016, 2018):
  - ▶ *Exclamative* and *conjunctive que* in a higher **Speech-Act domain** (dominating CP).
  - ▶ *Quotative que* in the **CP domain** (see also Corr, 2022, for a revised treatment).
- ✏️ Prieto and Rigau (2007) and Kocher (2022):
  - ▶ *Interrogative que* is C-based: in Fin or Force, respectively.

SAP   ← **speaker-hearer** domain (perspectival, interactional)
CP   ← **discourse** domain (clause-typing, topic, focus, etc.)
TP   ← **anchoring** domain (tense, mood, etc.)
SAP   ← **speaker-hearer** domain (perspectival)
vP   ← **thematic** domain (agent, patient, aspect, etc.)

Figure 1: Clausal structure with speech-act layers (Biberauer, 2018, p. 4).

See Villalba (2016, 2023) and Trotzke and Villalba (2021) for other analyses of exclamative *que* constructions.

- ■ *Embedding* complementisers standardly **C-heads** and, in cartographic approaches, typically in Rizzi's (1997) highest Force head.

👍 Like embedding complementisers, illocutionary complementisers are also **structurally very high** elements.

3. Theoretical background and hypothesis

- Contrasting the acquisition of these two complementisers is **potentially instructive** in (at least) **three ways**:
  - ▶ Possible developmental differences between complementisers (speaker-hearer-oriented and main-clause *vs* embedded-clause).
  - ▶ Informs us about the development of (some) speech-act-related material (understudied domain).
  - ▶ Brings in a new piece of adjucating evidence for contemporary acquisition hypotheses.
- → Focus here – brief and selective overview of (generative) approaches to syntactic development.
  - ▶ Bottom-up development[1] approaches
  - ▶ 'Inward' development approaches

 (I set aside Continuity approaches due to time considerations)

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[1]Note that while many of these approaches propose maturation of innate functional spines, not all of them posit hard-wired maturational trajectories, hence the use of 'development' as a more general term that encompasses both.

- **Bottom-up development**: the development of **structurally-lower elements precedes** that of **structurally-higher** ones. Therefore, general acquisition timeline is vP → TP → CP (i.a., Radford, 1988; Rizzi, 1994; Friedmann et al., 2021; Diercks et al., 2023).

→ Arguably the **dominant** perspective in maturational or non-continuity approaches.
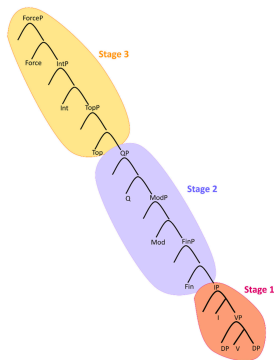
Figure 2: Stages of acquisition of the clausal domain in the Growing Trees Hypothesis (Friedmann et al., 2021, p. 12)

- **Inward development**: development **begins** in 'structural **edges**', meaning the *v*P domain and (part of) the CP (and, in some approaches, Speech-Act) domain emerge early, before the TP domain (variously entertained; Galasso, 2003; Tsimpli, 2005; van Kampen, 2010; Biberauer and Roberts, 2015; Biberauer, 2019; Heim and Wiltschko, 2021).
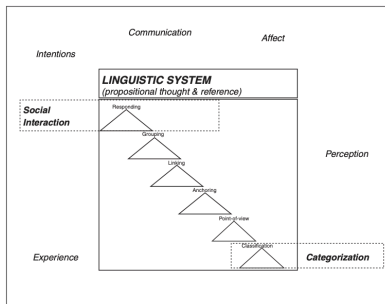

Figure 3: Bridge Model (Hinzen and Wiltschko, 2022)

- **Bottom-up**: emphasis on bottom-up derivational timing or structure building in language (derivation ↔ acquisition), *across all proposals*.
- **Inward**: speaker-hearer-related items are acquisitionally-priviledged, *articulated in various ways*. E.g:
  - ▶ Tsimpli (2005): LF-interpretable [F]s (e.g., discourse-related, peripheral features) acquired earlier than uninterpretable ones (e.g., inflection).
  - ▶ van Kampen (2010): 'typological guidance' approach, V2 is early acquired as it's a major typological characteristic of Dutch/German.
  - ▶ Biberauer (2018): structural (esp. phasal) *edges* facilitate crucial syntactic domain-size learning in acquisition, as the locus of speaker-hearer and [F]-less material. Expects children to acquire (some) peripheral elements early.
  - ▶ Heim and Wiltschko (2021): SAP domain phylogenetically prior, initial maturational stage.
  - 👉 Commonality: there's something 'special' about the CP/SAP domains, translating into early acquisition.
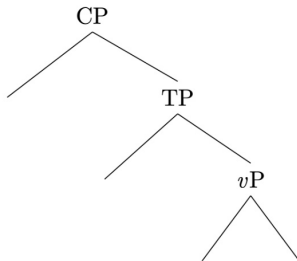
Predictions for the development of complementisers

- **Bottom-up development**: expects **all** elements in the (higher) left periphery to emerge at the very end of the learning path → **both** kinds of complementisers should emerge substantially **late**.

- **Inward development:** expects a possible developmental mismatch → if the CP emerges early, **early production** of (**some**) **illocutionary complementisers** is anticipated. Subordinating complementisers might develop later as they require knowledge of embedding.

4. Corpus study

- Summarising the foregoing discussion, the following structures were analysed in every corpus:
    1. **Illocutionary complementisers**
        a) Exclamative
        b) Conjunctive
        c) Quotative
        d) Interrogative (in Catalan only)
        e) Adverb/adjective + *que*
        f) (Topic) *sí/no que* ('yes/no that')
    2. **Subordinating complementisers**
        a) Complement clauses
        b) Relative clauses introduced by *que*

- Using CLAN, we automatically extracted all occurrences of *que* and their conversational contexts for 10 Catalan and Spanish children in CHILDES (MacWhinney, 2000).

Table 1: Children studied in the CHILDES database and summary information.

Language	Corpus	Children	Age range	Files analysed	MLUw range
Catalan	Serra/Solé	Laura	1;07-4;00	19	1.03-3.47
		Gisela	1;07-4;02	20	1.02-3.51
		Àlvar	1;02-3;01	21	1.07-3.37
		Guillem	1;01-4;00	34	1.01-3.88
	Júlia	Júlia	1;07-2;06	17	1.15-2.74
Spanish	Llinàs/Ojea	Irene	0;11-3;02	40	1.0-4.94
		Yasmin	1;10-2;09	47	1.29-3.21
	Aguado-Orea/Pine	Juan	1;10-2;05	65	1.34-3.39
	Aguirre	Magín	1;07-2;10	29	1.24-3.07
	Vila	Emilio	0;11-4;08	35	1.0-3.23

- This yielded **N = 1318** utterances from children aged 0;11 to 4;08 that contained a complementiser. 1009 of them (76.6%) corresponded to examples with illocutionary and 309 corresponded to subordinating complementisers (23.4%).

Table 2: Proportion of use by type of complementiser.

Language	Children	Illocutionary	Embedding
Catalan	Laura	154 (76.2%)	48 (23.8%)
	Gisela	148 (73.6%)	53 (26.4%)
	Àlvar	9 (60%)	6 (40%)
	Guillem	85 (81%)	20 (19%)
	Júlia	3 (75%)	1 (25%)
Spanish	Irene	58 (64.4%)	32 (35.6%)
	Yasmin	36 (85.7%)	6 (14.3%)
	Juan	164 (67.2%)	80 (32.8%)
	Magín	248 (84.1%)	47 (15.9%)
	Emilio	104 (86.7%)	16 (13.3%)
Total		1009 (76.6%)	309 (23.4%)

- Results reveal two key trends. These regard (i) order of emergence and (ii) syntactic productivity and lexical (non)specificity.

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☞ First generalisation → **illocutionary** complementisers typically appear well *before* **embedding** complementisers and never later (in two children only, they emerge simultaneously).

(Full developmental trajectories for every child, file by file, are available in Appendix)

Table 3: Emergence of illocutionary and embedding complementisers.

Language	Children	Illocutionary	Embedding
Catalan	Laura	1;10.22 1.15 MLUw	3;00.02 2.42 MLUw
	Gisela	1;08.24 1.13 MLUw	2;08.00 2.61 MLUw
	Àlvar	2;02.06 1.84 MLUw	2;06.25 1.91 MLUw
	Guillem	2;02.28 1.54 MLUw	2;11.25 2.44 MLUw
	Júlia	2;06.25 2.74 MLUw	2;06.25 2.74 MLUw
Spanish	Irene	1;08.09 1.88 MLUw	1;09.10 3.28 MLUw
	Yasmin	1;10.08 1.93 MLUw	2;05.18 2.47 MLUw
	Juan	1;11.11 1.58 MLUw	2;01.21 1.77 MLUw
	Magín	1;09.01 1.78 MLUw	1;10.00 2.73 MLUw
	Emilio	2;04.17 2.18 MLUw	2;04.17 2.42 MLUw
Average		1.67 MLUw	2.42 MLUw

■ On average, the two kinds of complementisers emerged at the following word-based MLU (MLUw) values:

Table 4: Average and range of MLUw values across language groups for the emergence of illocutionary and embedding complementisers.

	Illocutionary	Embedding
Catalan	MLUw 1.41 (range 1.13-1.84)	MLUw 2.35 (range 1.91-2.61)
Spanish	MLUw 1.87 (range 1.58-2.18)	MLUw 2.49 (range 1.77-3.28)
Combined	MLUw 1.67 (range 1.13-2.18)	MLUw 2.42 (range 1.77-3.28)

■ A paired-samples t-test confirms that there was a highly statistically significant difference of **0.5456** between the MLUw value of emergence of illocutionary (*M* = 1.67, *SD* = 0.35) *vs* embedding complementisers (*M* = 2.42, *SD* = 0.45), with the former being much more likely to emerge significantly earlier (*t(17)* = 5.6201, *p* < 0.001).

(8) Illocutionary complementisers

    a. **_Que_** _ja_ _no fa_ _mal?_ (Guillem; MLUw 1.99)
       that.INT already not make.3SG pain

       'Does it not hurt anymore?'

    b. _Ai,_ **_que_** _crema!_ (Laura; MLUw 1.35)
       ouch that.EXCL burn.3SG

       'Ouch, it's burning!'

    c. **_Que_** _no quiero_ (Juan; MLUw 1.58)
       that.QUOT not want.1SG

       '(I said) I don't want to.'

    d. _Ay, no,_ **_que_** _me harán daño a_ (Emilio; MLUw 2.2)
       ouch no that.CONJ CL.IO= do.FUT.3PL harm to

       la barriga
       the tummy

       'Ouch, no, they'll hurt my tummy'

(9) Embedding complementisers

    a. *Una vegada hi   havia   un nen **que** es*   (Júlia; MLUw 2.74)
        one time   CL.LOC= AUX.IMPF.3SG a   boy that CL.REFL=

        diu   Andreu
        say.3SG Andreu

        'Once upon a time, there was a boy named Andreu.'

    b. *En una capsa **que** hi   ha   aquí*   (Àlvar; MLUw 2.82)
        in a   box   that CL.LOC= AUX.3SG here

        'In a box that's here.'

    c. *Quiero   **que** sea   un zapato*   (Yasmin; MLUw 2.47)
        want.1SG that be.SUBJ.3SG a   shoe

        'I want it to be a shoe.'

    d. *¿No ves   **que** estaba con la   pelota?*   (Irene; MLUw 3.23)
        not see.2SG that was   with the ball

        'Don't you see it was next to the ball?'

- ② What's the **nature** of these early illocutionary complementisers (productive, lexically-specific, rote-learned, etc.)?
- ■ A look at the **frequency** and **lexical (non)specificity** of the earliest uses of illocutionary complementisers reveal likely *syntactically productive* knowledge.

- ❓ What's the **nature** of these early illocutionary complementisers (productive, lexically-specific, rote-learned, etc.)?

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- ☞ Second generalisation: Before embedding complementisers first emerge, early illocutionary complementisers are *neither infrequent nor lexically-specific*.

Table 5: Types of verbs with illocutionary complementisers before the emergence of embedding complementisers and overall frequency of illocutionary complementisers at this point

	Unacc	Unerg	Trans	Modal	Copula	Impers	Freq
Laura	✓		✓	✓	✓	✓	20
Gisela	✓	✓	✓	✓	✓		7
Àlvar					✓		1
Guillem	✓	✓	✓	✓		✓	11
Irene			✓				1
Yasmin	✓	✓	✓		✓	✓	18
Juan	✓	✓	✓		✓		10
Magín	✓		✓				10

Frequency
- ▶ Illocutionary complementisers emerge early, *and* they are also frequent in most children before embedding complementisers emerge.

Lexical variety
- ▶ For most children, illocutionary complementisers can be found with a **wide range of verb classes**, indicating these complementisers likely do **not form part of rote-learned formulae**.

- Combined together, these points strengthen the hypothesis that illocutionary complementisers are **acquired early**, before embedding complementisers, and in a *productive* manner.
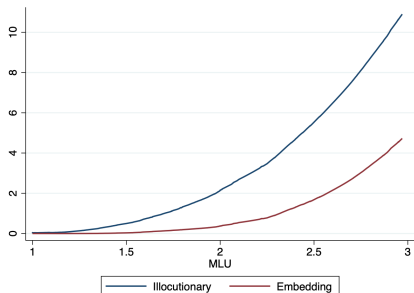
Figure 4: The development of complementisers in the Catalan and Spanish children.

- Illocutionary complementisers both **emerge earlier** and **develop faster in frequency** than their subordinating counterparts (Kolmogorov-Smirnov test indicates that the two curves are *not* equal, *D = 2.0000*, *p < .001*)

5. Theoretical implications and future directions

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5.1. Theoretical implications

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- Early emergence, frequency and lexical variety lend credence to these conclusions.
- Significant consequences for bottom-up approaches ('late CP') → *not all complementisers are equally stagnant.*
  - ▶ Open question whether the patterns can be reconciled with bottom-up maturation. I preliminarily suggest that bottom-up approaches are not well-suited to account for this data (see also Bosch, 2023, for other empirical evidence).
  - ▶ Instead, results point, in a novel way, to an acquisitionally advantaged role of peripheries and edges, interactional language and the CP domain more broadly.

- Adds to the growing body of work with evidence for an early CP and early sensitivity to some speaker-hearer- and discourse-oriented material. Either at very early stages:
  - Shirai et al. (2000) on Japanese: sentence-final particles.
  - Galasso (2003) on English: wh-questions.
  - Tsimpli (2005) on Greek: focus, dislocation, clitic doubling.
  - Westergaard (2009) on Norwegian: V2, yes/no questions, wh-questions.
  - van Kampen (2010) on Dutch: V2.
  - Perkins and Lidz (2021), Perkins et al. (2021), Goodhue et al. (2023) on English: wh-questions, yes/no questions.
  - Heim (2023) on British/American English: question tags.
  - Bosch (2023) on Catalan, Spanish, Italian, German and Dutch: V2, wh-questions, yes/no questions, topics/foci, illocutionary complementisers.
  - Etc.
- Or later ones:
  - Roeper and Rohrbacher (1994) on English: wh-questions.
  - Heim and Wiltschko (2021) on English: question tags, sentence-final particles.
- See also Biberauer (2018) on diachrony, grammaticalisation, formal integration of expressive material via structural edges.

- But, what exactly do children's early representations contain? → illocutionary complementisers data is only one piece of the puzzle.
  - A single CP (cartographic or more minimalist)? (Galasso, 2003; Tsimpli, 2005)
  - A (more or less) articulated interactional spine and a CP/Linking domain? (Heim and Wiltschko, 2021; Heim, 2023)
  - Or a more pared-down, 'underspecified' CP/SAP domain? (Biberauer and Roberts, 2015)
  - Are these projections innate or emergent? Are linguistic/conceptual templates required (i.a., Ramchand and Svenonius, 2014; Wiltschko, 2014, 2021)?
  - Can inward *maturation* (hard-wired acquisition trajectories) capture the patterns?
  - Etc.

- Acquisition timeline of interactional/CP elements vis-à-vis their hierarchical position and emergence of co-occurrences of SAP and CP elements might inform us about this (see Extra slides).

■ Consequences for acquisition: the insights from illocutionary complementisers:

▶ (Part of the) CP/SAP domain(s) appears available early on → illocutionary complementisers emerge very early.

▶ Bottom-up maturation cannot capture the patterns, absent a clear way of reconciling them, supporting some version of an inward development approach.

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  - ▶ **Next up**: Children exploit and piggyback on earlier-acquired knowledge (Biberauer, 2018, 2019), reinforcing our hypothesised salience of interactional/discourse knowledge.
    - → Illocutionary complementisers are not just early, but also readily *(over)generalised* in some languages.

5. THEORETICAL IMPLICATIONS AND FUTURE DIRECTIONS

5.2. Future directions: first impressions on Italian child data

- Illocutionary complementisers also occur in **Italo-Romance** (in a more restricted form than Ibero-Romance), e.g., CIDs and NIDs generally allow some conjunctive uses of *che*, exclamative *che* (typically with subjunctive mood) and, in some varieties, interrogative *che* (Cruschina and Remberger, 2016).

- 💡 Preliminary look at CHILDES Italian data → **attested relatively early** on *and* in **creative configurations** that are ungrammatical in many Italian varieties and unattested in their parental input (according to 3 Italian informants).

(10) a.   ***Che*** *gira*   (Martina; 1;11.02, MLUw 1.99)
           that stir.3SG

           'He/she/it stirs (it)'

      b.   ***Che*** *legge*   (Martina; 1;08.02, MLUw 1.9)
             that read.3SG

             'She is reading' (in response to *Diglielo alla mamma cosa fa la bimba*, 'tell mum what the child is doing')

(11)   a.   ***Che***   *ride!*   (Martina; 1;11.02, MLUw 1.99)
           that.EXCL   laugh.3SG

           'He/she is laughing!'

       b.   ***Che***   *piove*   (Martina; 2;01.12, MLUw 1.99)
           that.CONJ   rain.3SG

           'It's raining' (in response to *l'ombrello?*, 'the umbrella?', asking what
           someone was doing with an umbrella)

   ■ All examples pre-date the emergence of embedding *che* in Martina (at
     2;03.01 and MLUw 2.55).

- This apparent (over)generalisation of interactionally-oriented functions of *che* extends to later developmental stages:

(12) a. *Oh,* **che**   *c'ha*   *un lunghi*   (Diana; 2;06.00, MLUw 5.53)
         oh **that.EXCL** CL.LOC=have.3SG a   long.PL

         pelosi!
         hairy.PL

         (lit.) 'Oh, there's a long hairy!' (possibly meaning 'There's (a) long hair(s)!)

    b. **Che**   *io ti   chiudo   la   bocca,*   (Diana; 2;06.00, MLUw 5.53)
        that.QUOT I   CL.IO= close.1SG the mouth

         sai?
         know.2SG

         '(I've said) I'll shut your mouth, you know?'

(13)   a.   ***Che***   *lo*   *metto   qui!*   (Elisa; 2;01.06, MLUw 4.47)
            that.QUOT CL.DO= put.1SG here

      '(I've said) I'm putting this here' (uttered after *lo metto qui*)

      b.   *E*   ***che***   *vuoi*   *un posto tu?*   (Marco; 2;01.27, MLUw 2.16)
            and **that.INT** want.2SG a   place you

      'And do you want a place?'

All data taken from the following CHILDES corpora: Calambrone (Martina and Diana) and Tonelli (Elisa and Marco), from children growing up in Central/Northern Italy

■ Creative, illocutionary 'inventions' (overgeneralisations) in child Italian.

Table 6: Distribution of illocutionary complementisers across grammars

	EXCL	CONJ	QUOT	INT
Catalan	✓	✓	✓	✓
Spanish	✓	✓	✓	
CIDs/NIDs	(✓)[2]	✓		(✓)[3]
SIDs	✓	✓	✓	✓
It. children	✓	✓	✓	✓

■ Possible stage in which children 'maximise' the use of illocutionary *che*. They exploit a grammatical option only occasionally present in the input and capitalise on the structural/representational options available in their growing system (reminiscent of the case study on DOM in Belletti, 2022).

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[2] Depending on context.
[3] Depending on variety.

OVERALL: Take-aways from Romance illocutionary complementisers

- Points to the **feasibility** of several 'inward development' and neo-performative approaches to acquisition, where:
  - Early **availability of CP and/or SAP** domains and early awareness of some speech-act relations → role of *peripheries* and structural *edges*.
    - Either due to maturational factors (Heim and Wiltschko, 2021; Hinzen and Wiltschko, 2022) or due to the formal shape of syntactic systems and children's sensitivities (Biberauer, 2018).
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OVERALL: Take-aways from Romance illocutionary complementisers

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  - ▶ By-products of children's **learning biases** (see Biberauer, 2019, on Maximise Minimal Means, and Hudson Kam and Newport, 2005, on 'maximisation')
- ⟡ Similar 'errors' and case-studies may be theoretically elucidating regarding children's use of speaker-hearer-related items and the formal status of their representations.
- ⟡ 'Errors' (Italian) as informative as input-consistent productions (Catalan, Spanish).

6. CONCLUSION

→ **Two complementisers, two acquisition timings**: **Illocutionary complementisers** *before* **subordinating complementisers**, problematising bottom-up approaches to development.

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👍 I interpreted them as **favouring 'inward development' approaches** → argument for early emergence of a CP/Speech-Act domain.

■ **Further work** needed:
  ▶ Other (Ibero-)Romance varieties (e.g., Portuguese).
  ▶ **Italo-Romance** data shows *initial promise* → early emergence of illocutionary complementisers + (over)generalisation to target-deviant speaker-hearer functions.
  ▶ Comprehension/behavioural studies.
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⚲ More broadly, further study on the acquisition of **speaker-hearer** and **discourse-oriented** material will help elucidate the formal make-up of early grammars.

Thank you!

Gràcies, gracias, grazie, merci, dank u wel!

Slides 💻→ Email me!
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7. Extra slides and Appendix

Child	Order
Laura	EXCL > QUOT > *Sí que* > CONJ > *Eh que* > INT > Topic + *sí que* > *Oi que*
Gisela	EXCL > QUOT > CONJ > INT > *Sí que* / *A que* > *Oi que* > *Eh que* > Topic + *sí que*
Àlvar	QUOT > *Sí que* > EXCL > INT > *Eh que* > CONJ > Topic + *sí que*
Guillem	EXCL > INT > *Sí que* > QUOT > CONJ > *Eh que* > *Oi que* > Topic + *sí que*
Júlia	QUOT
Irene	QUOT > EXCL > CONJ > *Sí que* > *A que* > Topic + *sí que* > INT
Yasmin	QUOT > EXCL > CONJ > INT
Juan	QUOT > CONJ > EXCL > INT
Magín	EXCL > QUOT > CONJ > *A que* > INT > *Sí que*
Emilio	Adj + *que* > *Sí que* > QUOT > CONJ > INT > Topic + *sí que* > QUOT

Table 7: Order of emergence of types of illocutionary complementisers

- Some generalisations:
  - EXCL/QUOT are the first to be acquired.
  - Then CONJ, INT[4] and *sí que* follow.
  - Interestingly, several constructions that require co-occurrence of *two* or more left-peripheral heads emerge last (Bosch, 2023).
    - Discourse marker (*eh*, *oi*, *a*, etc.) + *que*[5]
    - Topic + *sí que*
- Possible implications of this tentative timeline:
  - Results do not straightforwardly 'recapitulate' any proposed hierarchy in analyses of illocutionary complementisers, either bottom-up or inwardly (i.a., Batllori and Hernanz, 2013; Corr, 2016; Kocher, 2022).
    - This aligns with the conclusions in De Lisser et al. (2017) and Bosch (2023), regarding the cartographic TP and CP domains, respectively.
  - Suggests that 'directionality' of maturation/development is only partly relevant: models might need to consider, too, the 'granularity' of children's categories → e.g., dividing a coarse-grained CP to a 'split' or cartographic-type CP at later stages (Biberauer and Roberts, 2015).

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[4]In Catalan at least. In Spanish it emerges later, possibly because it's a more marginal option.
[5]Assuming *oi/eh/a que* structures likely require the involvement of at least two SAP/CP heads (see e.g., Prieto and Rigau, 2007).

Table 8: Proportion of 'errors' in the use of illocutionary complementisers in all CHILDES Italian children (conservative estimate)

Child	Illocutionary	'Errors'	MLUw range
Camilla	16	2	2.64-4.61
Diana	19	4	2.28-5.53
Guglielmo	8	3	1.97-4.78
Martina	8	6	1.26-2.69
Rosa	5	4	1.27-3.24
Viola	1	0	1.67-2.72
Claudia	1	1	1.13-1.89
Elisa	17	2	3.05-4.93
Gregorio	1	0	1.34-2.35
Marco	4	3	1.14-2.88
Total	80	25	

- Some (speculative!) generalisations:
  - ▶ Proportion of overgeneralisations appears slightly higher in children at early developmental stages (though trend could be spurious).
  - ▶ It decreases in more advanced children, where errors are comparatively scarcer.
  - → 'Creative' illocutionary complementisers may be a characteristic of earlier stages, but fade away (= they recover from the overgeneralisation) at later stages.
- NB: CHILDES data is insufficient, any inferences remain speculative and require further research.
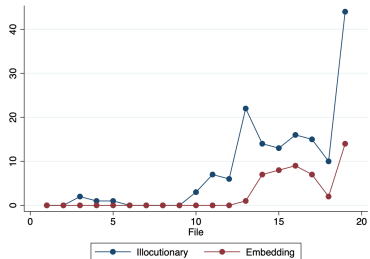
Figure 5: Laura's development
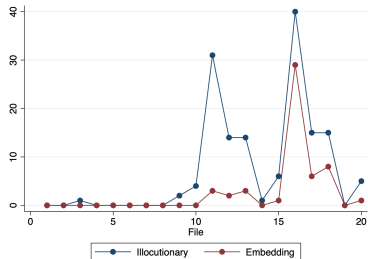
Figure 6: Gisela's development
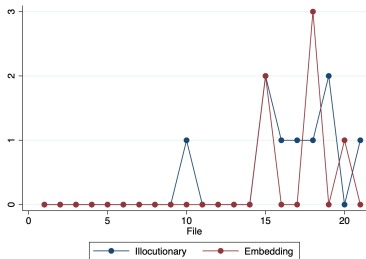
Figure 7: Àlvar's development
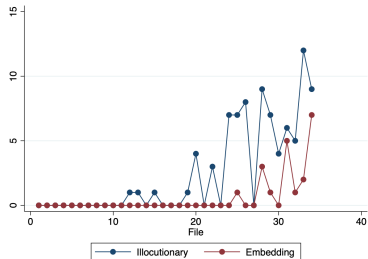
Figure 8: Guillem's development
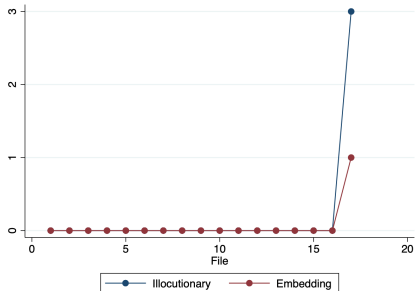
Figure 9: Júlia's development
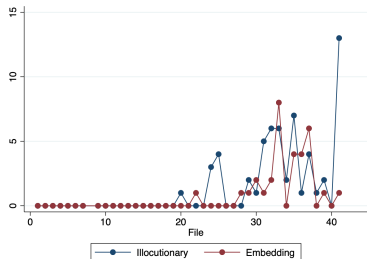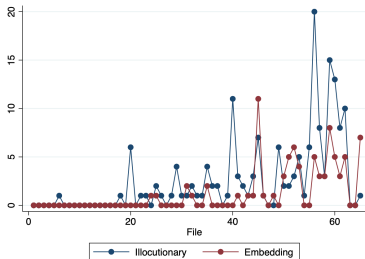
Figure 10: Irene's development
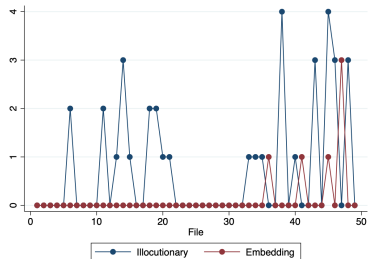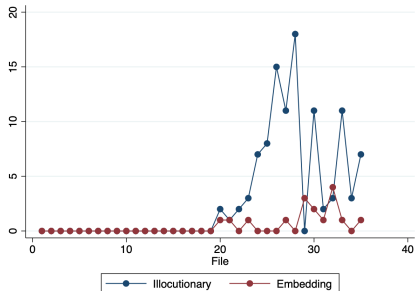

Figure 11: Yasmin's development

Figure 12: Juan's development
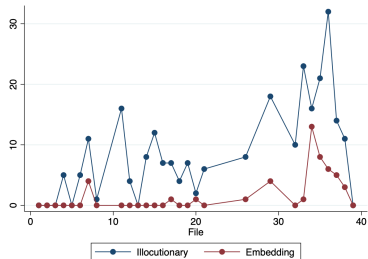
Figure 13: Magín's development

Figure 14: Emilio's development

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