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Crosslinguistic paths of pragmatic development: the acquisition of *actually* and *en fait* by British and French children

Key-words:

discourse markers; first language acquisition; pragmatics; corpus linguistics; contrastive linguistics

Abstract

Diachronic studies of discourse markers suggest they follow a unidirectional developmental path, from propositional to textual and expressive uses. The present study tests whether children acquire the propositional (literal) before the expressive (pragmatic) functions of two adversative discourse markers in French and English, which have similar core meanings and pragmatic functions. Our results partially confirm the propositional-first hypothesis but semantics and pragmatics appear to work together, rather than first one then the other, at least in this case, and this runs counter to both diachronic theories and usage-based accounts of L1 acquisition.

88 occurrences of en fait *and 174 of actually were extracted from the CHILDES database, and coded for two functions (adversative and elaborative) and three domains (propositional, textual, expressive). The results suggest that the pragmatic functions of* actually *are used by children as young as two years old, but the same is not true of* en fait, *which is almost exclusively propositional in the early years. By contrast, before age 5, French children start to use* en fait *for textual and elaborative functions to a greater extent than* actually. *The role of syntactic position and parental input are discussed.*

1. Introduction

Among the many dimensions and perspectives through which discourse-pragmatic variation has been investigated, that of child language (henceforth L1) acquisition has received surprisingly little attention.[1] Compared to L1 acquisition of phonology or morpho-syntax, the study of the development of discourse-pragmatic features indeed faces many challenges, in particular from a crosslinguistic viewpoint: differences can arise on many methodological levels such as analytical framework and data availability, but also on the very definition of what is a discourse-pragmatic feature and on how to disambiguate their functions. The present study attempts to contribute to this challenging area of study by exploring the functional paths of L1 development of two discourse markers in French and British children.

Diachronic studies of the development of discourse markers (henceforth DMs) generally suggest that the semantic load of a lexeme can later be used metaphorically, which leads from propositional to textual and expressive uses in a unidirectional way (Traugott 1982; Sweetser 1990). In the case of *actually*, for instance, the adverbial evolved from a propositional meaning of factuality ('in reality', 'effectively') to contradiction, topic change and hedging uses (Defour et al. 2010a). This evolutionary tendency has, however, not been observed in first language acquisition: Sprott (1992) points out that *because*, *so*, *and*, *but* and *well* are first used interactionally as part of the exchange and action structures, and only subsequently ideationally to express propositional relations (cf. Kyratzis & Ervin-Tripp 1999). While the relationship between language evolution and L1 acquisition is a complex and controversial one (Slobin 2004), the large number of diachronic studies on DMs do provide us with hypotheses that can be tested drawing on both the scarcer literature on L1 pragmatic development and corpora of child language data. Cognitively, it makes sense for propositional uses to be exploited or recruited for interactional purposes rather than the opposite being the case. It may, however, be that children learn the interactional and propositional functions of DMs separately without necessarily making a cognitive link between the two.

Crosslinguistic studies of DMs have repeatedly illustrated that discourse functions are not distributed equally across languages and registers (see the papers in Aijmer & Simon-Vandenbergen 2006). In particular, cognates such as *in fact* and *en fait* only partially mirror each other's functional spectrum, leading to transfer effects in second language learners (Buysse 2020). The present study takes a crosslinguistic approach to the use of two adversative DMs, viz. *actually* and *en fait*, by British and French children. These expressions share the same core meaning and a number of propositional and pragmatic functions (Mortier & Degand 2009).

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[1] We thank our anonymous reviewers for their constructive suggestions on earlier drafts of this paper. Any remaining error is ours.

We apply corpus linguistic methods to provide a crosslinguistic functional description of the acquisition of *actually* and *en fait* up until age 5, combining quantitative and qualitative analyses. This study therefore lies at the crossroads between child language acquisition, pragmaticalisation, discourse analysis and contrastive linguistics.

2. Background to the study

In order to situate our study in relevant literature, we need, firstly, to summarise previous findings with regard to the functions of *actually* and *en fait* in the spoken language, their position in the tone unit, their degree of pragmaticalisation and the extent to which they are translation equivalents. These aspects are addressed in the next section. Secondly, we need to expand on the unidirectional hypothesis of semantic change which leads from propositional to textual to expressive. A number of studies in diachronic linguistics demonstrate crosslinguistic similarities in the types of core semantic elements which can be recruited for particular pragmatic purposes (Sweetser 1990) and this is particularly the case for DMs (see Beeching 2007 on hedging expressions). There are also interesting insights to be gained from cognate forms which end up being "false friends", such as *actuellement* ('currently'). Salient points from this literature are summarised in Section 2.2. Finally, we need a state of the art review of studies dealing with the child language acquisition of DMs. Research on child language acquisition has traditionally been more concerned with aspects of syntax and morphology than with vocabulary or DM acquisition, and, though there has been some work on connectives, there is little on the more pragmatic aspects of markers. Increasing interest is being shown in children's pragmatic development (see Papafragou's 2018 special issue on this topic)– and their usage-based acquisition of DMs arguably forms part of this, along with an agreement that DMs must be considered to be part of the grammar, albeit not readily allocated to a particular word-class. This aspect is covered in Section 2.3.

2.1 Functions of *actually* and *en fait* in contemporary spoken British English and European French

Aijmer (2013, Chapter 3) gives a comprehensive account of the distributional frequency and functions of *in fact* and *actually* in writing and in speech in the ICE-GB Corpus. We will be summarising here her findings with regard to *actually* in the spoken language. Aijmer (2013: 103) finds that *actually* is frequent in "telephone conversations and business transactions, that is in text types implying a high degree of interaction and involvement". She suggests it has a meaning potential rather than a single meaning and occurs in ICE-GB more often medially (56%) than initially (21.5%) or finally (22%). This is in sharp contrast with *in fact* which is found more often initially (63%) and less often medially (16.2%) and finally (20.6%). *Actually* occurs 1.66 times per 1,000 words in the British English represented in ICE-GB (by contrast with its far lower frequency in the American Santa Barbara Corpus – 0.49). Aijmer (2013: 107-116) demonstrates that *actually* is by far most often used in adversative contexts to express strong or weak opposition (10%), to emphasize reality (12%), to express novelty and surprise (23%), to hedge and be polite (mild contradiction) (10.5%), and to emphasize the speaker's position ("I think actually") (8%). Aijmer finds some, but very few, elaborative

examples: Clarification ("I mean actually") 1 example – 0.5%), upgrading[2] (1.5%), elaboration ("and actually") (1%), causal ("so actually") (3.5%). Finally, she enumerates some conversation-specific functions: shifting the topic (4.5%), change of mind (2.5%), self-interruption and restart (1%) and softener (22%).

In the conversations in ICE-GB, then, it seems that adult speakers most often use *actually* to express surprise and to hedge. It is interesting that Aijmer finds so few elaborative uses and also somewhat unconvincing to suggest that, just because *actually* occurs in collocation with *I mean* or *so*, that *actually* itself is clarificatory or causal, respectively. Aijmer does not mention the "sudden thought" or "mental leap" function which is characteristic of *actually* and commented upon by Clift (2001: 286). *Actually* in these cases might be glossed as follows: 'Here is an additional piece of information which I've just thought of which is relevant'. Finally, where *actually* tends to soften, *in fact* tends to upgrade. The importance of this is relevant to Buysse's (2020) study summarised below.

Waters (2016: 52-53) underlines the importance of the position of *actually* in the clause (whether within or adjacent to the clause). Position can be used as a "proxy for narrower discourse-pragmatic functions" and as a means of acknowledging that "multiple functions may be at work simultaneously, while maintaining the generally agreed upon distinction between peripheral and clause-internal functions for the co-variants". In our investigations of *actually* and *en fait*, we have noted position but have not assumed that the position necessarily dictates the function or domain, though it may well provide probabilistic tendencies (in other words *actually* and *en fait* would tend to be in initial position for elaborative functions).

Mortier and Degand (2009) investigate *en fait* in French in relation to *eigenlijk* ('actually') in Dutch. They also identify opposition (57%) and reformulation values (30%) for *en fait*. Their data is primarily written and they recognise that both items may well have more pragmaticalised functions in spontaneous conversation. Defour et al. (2010b) contrast the French expressions *au fait, de fait* and *en fait* but do not give comprehensive coverage of *en fait* (and, once again, the *en fait* data is mainly written). As a preliminary to the investigation of the child language uses, the functions of 50 occurrences of *en fait* in the spontaneous speech of 16 adults in the *Corpus du Français Parlé Parisien* (2000) were analysed in order to provide greater comparability with Aijmer's (2013) analysis of *actually*. In the CFPP, *en fait* occurs more often initially (42%) than medially (28%) or finally (24%). It is more often elaborative (66%) than adversative (33%) and more propositional (72%) than expressive (26%). If we can assume that ICE-GB and the CFPP are reasonably representative of ordinary everyday spoken English and French respectively (and we believe so), then we can see that *actually* and *en fait*, despite appearing to be similar and potential translation equivalents, are different both in position and in fundamental function. These proportions are presented in Tables 1 and 2 for ease of comparison.

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[2] The upgrading function of discourse markers serves to strengthen or boost the accompanying proposition - the DM links a justification to a claim that has been made.

Table 1: Positions of *actually* and *en fait* in the argument structure in ICE-GB and CFPP, respectively

Marker/Position	Initial	Medial	Final
actually	21.5%	56%	22%
en fait	42%	28%	24%

Table 2: Overall functions of *actually* and *en fait* in ICE-GB (Aijmer 2013) and in CFPP, respectively

Marker/Function	Adversative	Elaborative
actually	63.5%	36.5%
en fait	33%	66%

En fait often appears with conjunctions and adverbs: *et en fait, mais en fait, parce qu'en fait, puisqu'en fait, alors qu'en fait, puis en fait, donc en fait*, and with other PMs particularly in final position : *en fait finalement, en fait hein*. In the CFPP corpus, *en fait* is, then, more often used to add a clarification, or more precision, or justification for something which has just been said than *actually* is. When it has a softening function, *en fait* is often accompanied by another PM such as *finalement* or *hein.*

Buysse (2020: 30) highlights d'Hondt's (2014) remark that *en fait* is used as a stop-gap to fill in time while searching for words. His data show that French-speaking learners of English tend to overuse *in fact*, presumably because it is a cognate of *en fait*. These speakers run the risk of appearing over-emphatic, as, by comparison with *en fait* (or *actually*), 'in fact' very often signals a speaker's strong commitment to a proposition, or reinforcement of it, rather than having the opposite, hedging role. Despite their formal similarity, *in fact* and *en fait* are thus quite different in meaning and function, and the French marker overlaps more with *actually*, even though their distribution of position and functions is reversed.

In summary, *actually* and *en fait* cover a number of similar functions – but not in the same proportions or in exactly the same positions. We might expect these similarities and differences to be reflected in the way that children begin to acquire the functions of the markers.

2.2 *Actually* and *en fait* in diachrony

Since Sweetser's (1990) ground-breaking work on the links between metaphor, pragmatic ambiguity, semantic change and polysemy, a number of studies have demonstrated the ways in which terms evolve pragmatic functions with scope-over-discourse from words with particular propositional meanings. Beeching (2007) for example provides cross-linguistic evidence for hedging particles which derive from terms in the semantic fields of smallness, approximativeness and similitude. Beeching (2010) illustrates how both *finalement* and *effectively* assume a summarising function

on their path to a hedging role. Meanwhile, Brems et al.'s (2022) edited volume on taxonomic nouns shows how type-nouns such as *sort of*, Spanish *tipo,* and French *genre* across different languages also develop hedging or approximative functions (and quotative functions) by suggesting peripherality in relation to prototypical categories.

The pragmatic functions of *actually* and *en fait* are widely recognised to have emerged from their factuality and adversative qualities, and their association with the semantic field of expectation. Schwenter and Traugott's (2000) article demonstrates how the pragmaticalised adverbial *in fact* is "recruited to invoke scalarity in two domains: that of epistemic adverb and that of additive discourse marker" (Schwenter and Traugott 2000: 7). Similar to *in fact*, from their original contrastive or adversative meanings, *actually* and *en fait* develop more pragmaticalised and bleached, less strong functions via counter-expectation. By hinting at the possibility of an opposing view, speakers can downtone the strength of their assertions. They can also use the contrastive undertone of *actually* and *en fait* on the textual level to signal surprise, a shift of perspective, a "mental leap" or the addition of some further piece of information. *Actually* and *en fait* both have adversative and elaborative functions but differ from *in fact* in that they have not developed the propensity to strengthen the speaker's rhetorical stance.

2.3 Child Language Acquisition of DMs

A number of studies have focused on second language acquisition of DMs (Müller 2005 is the best known and most comprehensive) but, to our knowledge, there are few studies on child language acquisition of their pragmatic functions, a notable exception being Uno (2016) on Japanese *wa* and *ga.* Since Tomasello's seminal works on usage-based approaches to first language acquisition placed the emphasis squarely on the social aspects of child language learning, much evidence has been adduced to demonstrate that children learn from care-giver input coupled with general cognitive competencies. These studies have, however, mainly focused on syntax and morphology, rather than on the pragmatic functions themselves. Papafragou's (2018) special issue on pragmatic development demonstrates increasing interest in how children acquire lexical, and other, forms in context. According to Papafragou (2018: 167), there is a symbiotic interplay between the pragmatics and the semantics of items, the pragmatics informing the semantics and vice versa.

Most recent studies underline the essentially pragmatic nature of communication in early childhood: speech-acts and intentions emerge before actual content (Stephens & Matthews 2014; Grassmann 2014). Clark (2018) suggests that there is an initial form-meaning mapping which is progressively refined as children hear further uses in other contexts. These form-meaning mappings could reflect pragmatic uses in the input (Van Veen et al. 2009). But, as Behrens (2006) argues, if the parental input is too variable, the mapping will be more difficult.

On the one hand, then, we would expect pragmatic functions to be learnt before semantics. On the other, it is a general finding that children do not understand or use metaphors fully until late childhood (Pouscoulous 2014). The expressive functions of DMs tend to be metaphorical extensions of their propositional functions so it is interesting to discover which comes first, the pragmatics or the propositional. Other

studies suggest that children have a limited set of pragmatic skills (e.g. Theory of Mind), so the pragmatics-or-literal-first debate is a very live one.

Previous studies on the acquisition of DMs suggest that their interactional functions are acquired first (Sprott 1992; Kyratzis & Ervin-Tripp 1999). Others have shown that the cognitively simpler uses of DMs are acquired first (propositional before epistemic; positive before negative) (Zufferey 2010; Evers-Vermeul & Sanders 2008). Levey's (2016) study of the acquisition of the *be like* quotative is one of the few studies to highlight the child language acquisition of discourse-pragmatic features – and is particularly interesting as the children (actually, pre-adolescents) do not acquire *be like* from parental input - his study thus addresses "the acquisition of changes in progress, as opposed to stable variation" (Levey 2016: 161).

The findings from the different studies outlined above are difficult to compare as they were very different methodologically on a number of counts:

- different DM selections, from conjunctions (*because*) to particles (*well*),

- different definitions of functions (interactional exchange functions when the marker appears at the beginning of a speaker's new turn, Sprott 1992),

- different analytical approaches e.g. more qualitative on the one hand versus sociolinguistic methods with a strong commitment to respecting the envelope of variation and Labov's (1972: 72) principle of accountability (Pichler 2016).

There is thus substantial scope for DM research to contribute to broader debates in the child language acquisition field as well as shedding light on the functions of DMs across languages, and methods of doing so.

We therefore propose the following research questions in relation to *actually* and *en fait* by way of a case study in the exploration of the child language acquisition of markers:

- What are the functions of *actually* and *en fait* in child data up to age five?

- Do expressive (interactional, interpersonal) uses of *actually* and *en fait* occur in the early stages of language development, simultaneously or even before propositional (literal, semantic) ones?

3. Methodology

Occurrences of *actually* and *en fait* were extracted from the CHILDES database, particularly the Paris (Morgenstern & Parisse 2007) and Lyon (Demuth & Tremblay 2008) corpora for French and the Wells (Wells 1981), Manchester (Theakston et al. 2001) and Thomas (Lieven et al. 2009) corpora for English. These corpora were selected because they were the only ones (at the time of the study) that included transcripts from several children from the requested age span, and where we found occurrences of the two DMs. We first extracted all occurrences of the markers in the first year of their acquisition (age 2). This amounted to a sample of four French children and six British children (see Table 3), for an overall corpus size of 350,860 words till the end of age 2. The size difference between these two datasets, which is due to the lower availability of French child data, has little bearing on our results given the relatively high frequency of *en fait* (see Section 4 below) and since we used the same

data collection and extraction methods in both languages. However, this caveat should be borne in mind.

Table 3: Sample size in words for the French and English studies

FRENCH	0-2	2-3
Anae	1813	16081
Leonard	1304	11324
Madeleine	3881	23404
Theotime	7742	26869
Total French	14,740	77,678
ENGLISH		
Becky	NA	54517
Dominic	2591	42468
Gail	920	39239
Joel	2074	41224
John	1832	26443
Warren	4648	42486
Total English	12,065	246,377

We then conducted two longitudinal case studies, focusing on an individual English and French child (Thomas and Madeleine), to trace the development of the functional uses of *actually* and *en fait* from ages 2 to 4. Table 4 shows the sample size for these case studies. The same caveat regarding corpus size applies here.

Table 4: Sample size in words for the case studies of Madeleine and Thomas

Age	Madeleine	Thomas
Year 2-3	23,404	251,809
Year 3-4	11,260	146,286
Year 4-5	9,444	109,678
Total	34,108	507,773

Finally, a random sample of *actually* and *en fait* were extracted and analysed from the children's mothers (2-year-olds + Madeleine and Thomas), child-directed uses only. These comprised the 48 tokens in French 2yo and a sample of 50 in English 2yo

children; the 28 tokens in Madeleine's mother and a sample of 150 in Thomas's mother. Table 5 shows the sample size for Madeleine's and Thomas's mothers' data.

Table 5: Sample size of the mothers' data in words for the case studies of Madeleine and Thomas

	0-2 years	2-3 years	3-4 years	4-5 years
Madeleine's mother	27,718	25,151	13,059	7,177
Thomas's mother	NA	1,070,144	446,286	283,839

We used a coding scheme which distinguishes between two functions (adversative and elaborative) and three domains (propositional, textual, expressive) to explore patterns of usage of these markers and to look for any regularities in the way that they are acquired. This coding scheme is inspired by Crible & Degand's (2019) two-dimensional approach to DMs. The adversative/elaborative distinction is one that is made in Buysse (2020) as also by Aijmer (2013) in her study of *in fact* and *actually* . Propositional, textual and expressive are the terms used by Traugott (1982) in her seminal study of semantic change. Table 6 shows the intersection of the Functions and Domains and Table 7 gives some examples for English.

Table 6: Coding scheme with Functions and Domains

	Propositional	Textual	Expressive
Adversative	self-contradiction, self-correction, correction of something that appeared to be true, but not attributed to someone in particular	re-wording (metalinguistic reformulation) OR combination of adversative and discourse-structuring functions	contradiction of someone else OR adversative meaning in a speech act (question, order), addressed to someone
Elaborative	addition of precision, new information, answer to a question	start of a long explanation or long narrative, boundary marker	reinforcing value OR elaborative meaning in a speech act addressed to someone

Table 7: Examples of Coding system for English

	Propositional	Textual	Expressive
Adversative	INV: what are you called? CHI: Fireman_Fergus . *actually*	CHI: and this one's the same MOT: that that was a good one to have, wasn't it? On his	MOT: oh that's a picture of a horse, Thomas CHI: a dog *actually* MOT: a dog *actually*?

	Policeman_Fergus	birthday . Kipper . Because we gave him Kipper, didn't we ? CHI: I need a wee ***actually***	Oh I'm sorry
Elaborative	CHI: I'm going on holiday today MOT: are you ? Where are you going? CHI: to Spain ***actually*** MOT: are you?	[songs playing in background] CHI: Kim . Where's Kim gone? Mummie MOT: yes love CHI: ***actually*** I don't really think those songs are very nice	CHI: Mummy, it's the band clapper MOT: a what clap? CHI: it's a band clapper MOT: a band clapper CHI: yes . it is ***actually*** MOT: like a clapper board CHI: yes

As we can see from these tables, both functions can combine with all three domains. Decisions for functions and domains were made independently of each other in no particular order (function then domain or vice versa). The functions target the type of discourse relation that is made explicit by the marker between its previous and subsequent context: whether the segments are in some sort of opposition (adversative) or whether the following segment brings new information or clarifications. This binary categorization avoids the issue of simultaneous functions, as *actually* and *en fait* never appeared to express both elaborative and adversative functions at once in our data. Domains, in turn, correspond to the nature of the connected elements or to the level of discourse structure that is targeted by the marker: either facts (propositional), topics (textual) or interpersonal relationships (expressive). As the examples in Table 7 illustrate, *actually* (and *en fait*) can be used:

- to correct an erroneous previous statement (propositional adversative),
- to dismiss a previous topic (textual adversative),
- to correct someone else (expressive adversative),
- to add some information often in response to a question (propositional elaborative),
- to make a parenthetical comment (textual elaborative)
- or to strengthen a point in reaction to someone else (expressive elaborative).

In addition to coding the markers for function and domain, we noted the position of the marker in the argument structure whether initial, medial or final.

The examples of *en fait* and *actually* in the input data (mothers' child-directed uses) were analyzed using the same coding scheme and position in the argument structure (initial, medial, final) as for the child data. In doing so, we looked for parallels with the

output and whether both the mothers and the children used the full functional spectrum of these markers or not.

All data from two-year-olds (cf. Table 3) were independently coded by the two authors in order to refine our criteria and enhance the replicability of the analysis. We had no access to sound files during the coding process.[3] Some occurrences were discarded due to transcription errors (wrong speaker tag), others were left as uninterpretable for lack of context. We came to an agreement for all cases after discussing and further defining all values. The rest of the data (Madeleine and Thomas age 2-5) was single-coded by each author (one for French and one for English), with discussion of difficult cases if necessary.

4. Results

A total of 28 *en fait* (0.36 per thousand words) and 47 *actually* (0.19 ptw) were extracted from two-year-olds, in addition to the 60 cases (1.76 ptw) in Madeleine and 127 (0.25 ptw) in Thomas across a three-year span.

4.1 First year of acquisition

En fait and *actually* do not appear in the child data until age 2 – and that is for all children in the sample, despite uses in earlier recordings in the parental input, including child-directed uses. As we can see in Table 8, token rates in the 2-3 year-olds are very low and there is considerable variation across individuals, with Leo and Warren taking the lead for French and English at 0.79 and 0.59 occurrences per 1,000 words, respectively.

Table 8: Tokens and rates per thousand words of *en fait* and *actually* in 2 – 3 year-olds

| Freq. | French | | | | English | | | | | |
	ANA	LEO	MAD	THE	BEC	DOM	GAI	JOE	JOH	WAR
24-35 months	6	9	4	9	1	7	10	3	1	25
Per 1,000 words	0.37	0.79	0.17	0.33	0.02	0.16	0.25	0.04	0.15	0.59

Figure 1 displays the relative proportions of Functions and Domains in the English and French children's data at age 2. In both English and French we see more adversative than elaborative uses but both functions exist as early as age 2 in the two languages. They are mainly propositional uses, and almost exclusively so in French for this age-

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[3] Prosody is often mentioned but rarely systematically associated with functional disambiguation. For instance, Kleinhans et al. (2017) and Didirková et al. (2019) found that prosodic features do not always help discriminate between different discourse relations. However, access to audio is always recommended for pragmatic analysis of DMs and its absence in the present study should therefore be borne in mind as a caveat.

group. There are, however, a substantial number of textual and expressive uses already appearing in English as early as age 2, something which already differentiates *actually* from *en fait.*
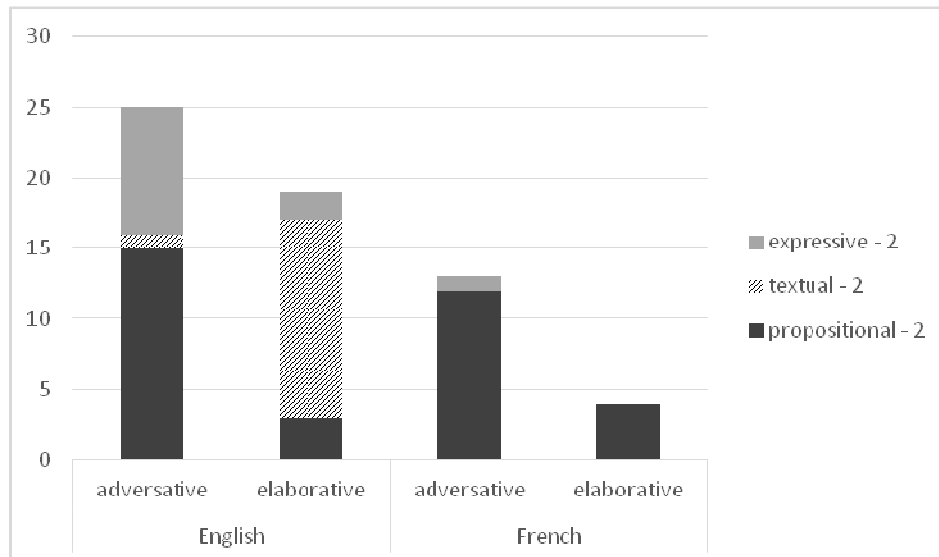

Figure 1: Token rates for Functions and Domains in English and French at age 2

At age 2, both French and English children tend to use the markers in an adversative and propositional way, to distinguish one entity from another, often self-correcting. In example (1), Leonard substitutes one name for another, enumerating the ways in which he had mispronounced words in the past and how they should in fact be pronounced.

(1)   *CHI: et puis avant c'était goi [: gorille] .
          *CHI: et puis **en fait** c'était gorille .
          *CHI: et puis avant c'était tik .
          *CHI: et puis **en fait** c'était tigre .
          *CHI: et puis avant je disais Sambo .
          *CHI: et puis **en fait** c'est chameau .
          *CHI: et puis là y a +...
          *CHI: et puis avant je disais zeb@c .
          *CHI: et puis **en fait** c'était arbre .

          *'*CHI: and then before it was goi [: gorille] .*
          *CHI: And then in fact it was gorilla .
          *CHI: and then before it was tike .
          *CHI: and then in fact it was tiger .
          *CHI: and then before I used to say Campbell [4].
          *CHI: and then in fact it's camel .
          *CHI: and then there is +...
          *CHI: and then before I used to say zeb@c .

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[4] . We have translated 'not Sambo but chameau' as 'not Campbell but camel' to capture the fact that 'Sambo' and 'chameau' sound similar.

CHI: and then in fact it was tree .'

In example (2), again at age 2, Madeleine uses *en fait* in an adversative and propositional way, to correct a mistaken impression, an expectation which has been disappointed.

(2)   *CHI: <moi je> [>] croyais qu'elle se collait là .
       *OBS: <je n(e) sais> [<] +//.
       *CHI: mais **en fait** elle se colle pas .
       *OBS: non elle se colle simplement au [/] au [/] au milieu .
       *OBS: oh elle a un joli pantalon à fleurs !
       *OBS: tu pourrais lui mettre son joli pantalon ça irait bien avec son chandail je trouve .

       CHI: <me I> [>] thought she was sticking on there .
       OBS: <I don't know> [<] +//.
       *CHI: but **actually** she doesn't stick*
       OBS: no she only sticks on in the [/] in the [/] in the middle .
       OBS: oh she has a nice flowery pair of trousers !
       OBS: you could put on her nice trousers that would go well with her sweater I think .'

Madeleine expected one thing (that the dress-the-dolly would stick on) but found out *actually* that she didn't – she corrects herself, using *en fait* in what we have classified as initial position (after *mais*).

Besides these "basic" (i.e. adversative propositional) uses of *en fait* and *actually*, we also find a rather large number of more metaphorical uses of *actually* in the expressive domain, as in example (3) produced by Warren at age 2:

(3)   *MOT: what do you think they are those little white spots?
       *CHI: that one not go there
       *MOT: they might be daisies
       *CHI: no .
       *CHI: **actually** little red spots .
       *MOT: actually they're white spots

Here, Warren directly contradicts his mother on the colour of the daisies (white vs. red); this adversative expressive use of *actually* is preceded by the answer particle "no", which strengthens the opposition.

Besides variation in domains, we also find variation in functions at age 2, with a number of elaborative uses of *actually*. At age 2, Thomas is already using *actually* in an elaborative and propositional way to add detail to his accounts, as we can see in example (4).

(4)   *MOT: no .
       *MOT: I'm not pressing it .
       *CHI: oh .
       *MOT: are you playing with your fire engine ?
       *CHI: not fireman .
       *CHI: he been naughty boy **actually** .

*MOT: who's a naughty boy actually ?
　　　　　*CHI: somebody .
　　　　　*MOT: somebody ?

Actually marks the addition of some new information about the 'not fireman' that Thomas is playing with.

In the first year of acquisition, elaborative *actually* is even more frequent in the textual than in the propositional domain, as in example (5) where Warren directs his mother's attention to new object or toy:

(5)　　　*CHI: want him out .
　　　　　*CHI: oh look .
　　　　　*CHI: xxx .
　　　　　*CHI: Henry can't go under .
　　　　　*CHI: brumm@o .
　　　　　*CHI: oh **actually** see .
　　　　　*CHI: put it on there and it fall off .
　　　　　*CHI: oh .
　　　　　*CHI: it falls .

This focusing use of *actually* segments the different moments of the child's activity and opens a new part in the play session. It is already quite distant from the bulk of the counter-expectation or self-correcting uses of *actually* and *en fait* observed early on.

In sum, at age 2, the adversative propositional uses of both *actually* and *en fait* are prevalent, but the functional spectrum of *actually* is much more developed than that of *en fait* even at this early stage, with a number of elaborative uses as well as more pragmatic uses in the textual and expressive domains.

4.2 Case study: development till age 5

In order to investigate whether these differences between *actually* and *en fait* are stable through language development, we compared the uses made by Madeleine and Thomas by way of a case study. Tables 9 and 10 chart the tokens and percentage of adversative and elaborative uses in Madeleine's and Thomas's speech from two to five years old.

Table 9: Adversative and elaborative functions of *en fait* in Madeleine's speech, aged 2 – 5 years

	2yo	3yo	4yo	Total %
Frequency	4	18	38	60
***%* adversative**	25	11.1	34.2	26.7
***%* elaborative**	50	88.9	63.2	70
***%* not interpretable**	25	0	2.6	3.3

Table 10: Adversative and elaborative functions of *actually* in Thomas's speech, aged 2 – 5 years

	2yo	3yo	4yo	Total %
Frequency	24	44	59	127
%adversative	54.2	59.1	59.3	58.3
%elaborative	45.8	38.6	33.9	37.8
%not interpretable	0	2.3	6.8	3.9

The raw number of occurrences of *en fait* and *actually* rises dramatically as the two children get older. The opposite distribution of functions that were noted in the adult corpus data is evident here: the elaborative uses are more frequent in Madeleine's interactions, the adversative uses more frequent in Thomas's, and this is a situation which remains stable across the three years. The divide between the two functions grows larger at age 3. It then remains stable for Thomas, while adversative uses increase at age 4 in Madeleine yet remain in second place at around one third of the total. This increase of adversative uses late in Madeleine's development may correspond to the increase in expressive uses at the same age observed for domains (cf. establishment of self-confidence in her own opinions), as we can see below.

Tables 11 and 12 display the frequencies and rates of occurrence of *en fait* and *actually* in Madeleine's and Thomas's speech respectively over the three year period from age 2 to 5 in relation to the domains of use, propositional, textual and expressive.

Table 11: Domains of *en fait* in Madeleine's speech age 2, 3 and 4 years

Domains	2 yo	3 yo	4 yo	Total
propositional	3 (75%)	11 (61.1%)	16 (42.1)	30 (50%)
textual	0	6 (33.3%)	13 (34.2%)	19 (31.7%)
expressive	0	1 (5.6%)	8 (21.1%)	9 (15%)
not interpretable	1 (25%)	0	1 (2.6%)	2 (3.3%)
Total (ptw)	4 (0.17)	18 (1.6)	38 (4.02)	60 (1.76)

Overall, there is a progressive increase in the frequency of *en fait* up to age 5, and the functional spectrum expands. Textual and expressive uses of *en fait* appear in Madeleine's speech at age 3 and there is a substantial increase in the expressive domain at age 4. By age 4, Madeleine's language is more sustained, and she can pursue a narrative over several turns, as we can see in the adversative and textual use she makes of *en fait* in example (6):

(6)   MOT: et il jouait de la belle musique ?
        *CHI: +< 0 [=! bruit] .

*CHI: ‹oui [=! hausse les sourcils]› !
*CHI: <le viol(on)> [///] tous les violons quand la dame euh qui était la maman là ‹de [//]› <du p(e)tit violon> [=! sourit] +...
*MOT: hum [/] hum !
*CHI: +, et bah **en fait** i(ls) jouaient pas ‹ceux [///]› les autres +...
*CHI: +, et ‹puis (.)› ‹elle [/]› elle essayait de jouer +...
*CHI: +, elle croyait que c'était la maladie <de la mau(vaise)> [/] de la mauvaise note +...
*CHI: +, <et puis> [=! sourit] +...

*MOT: and did he play nice music ?
*CHI: +< 0 [=! Noise] .
*CHI: ‹yes [=! Raises eye-brows]› !
*CHI: <the voil(in)> [///] all the violins when the lady er who was the mummy there ‹of [//]› <of the li'le violon> [=! smiles] +...
*MOT: hm [/] hm !
*CHI: +, and well **actually** they didn't play ‹these [////]› the others +...
*CHI: +, and ‹then (.)› ‹she [/]› she tried to play +...
*CHI: +, she thought it was the illness <of the wr)> [/] of the wrong note +...
*CHI: +, <and then> [=! smiles] +...'

En fait arguably serves a simultaneously discourse-structuring and contrastive function in this extended account about the violins: it resumes the narrative after the short digression about "la dame euh qui était la maman", while opposing "the little violin" to "the others".

The analysis of Thomas's use of *actually* reveals almost no textual uses at any age. Propositional and expressive uses share about one half of the data each from age 3. This contrasts dramatically with Madeleine's use of *en fait* which gradually moves from being exclusively propositional to more textual to more expressive over the three years, though propositional remains the most frequent use.

Table 12: Domains of *actually* in Thomas's speech age 2, 3 and 4 years

Domains	2 yo	3 yo	4 yo	Total
propositional	20 (83.3%)	20 (45.4%)	25 (42.4%)	65 (51.2%)
textual	0	1 (2.3%)	2 (3.4%)	3 (2.4%)
expressive	4 (16.7%)	22 (50%)	28 (47.4%)	54 (42.5%)
not interpretable	0	1 (2.3%)	4 (6.8%)	5 (3.9%)
Total (ptw)	24 (0.1)	44 (0.3)	59 (0.54)	127 (0.25)

In summary, in the child data the propositional domain clearly dominates at age 2, which confirms the propositional-first hypothesis from diachronic studies. The proportion of propositional uses progressively decreases at ages 3 and 4 compared with textual (exclusive to French) and expressive uses (age 3 for Thomas, age 4 for

Madeleine). This evolution may correspond to a diversification of the types of activities verbally performed by the children: they start by describing objects, then move on to longer stretches of talk such as narratives (especially for *en fait*) and to interpersonal uses which reflect the child's increasing self-confidence and pragmatic competence (reinforcing and hedging values).

4.3 Analysis of input data

Tables 13 – 16 display the functions and domains for *en fait* used by the children's mothers. These appear to be evenly spread over adversative and elaborative in the first 2 years, with greater weight given to propositional for *en fait* and for expressive for *actually* .

Table 13: Functions of *en fait* for all French mothers up to age 2

Year	adversative	elaborative	not interpretable	Total
1	6	6	0	12
2	19	16	1	36
Total	25	22	1	48

Table 14: Domains of *en fait* for all French mothers up to age 2

Year	expressive	propositional	textual	Total
1	1	10	1	12
2	8	22	5	35
Total	9	32	6	47

Table 15: Functions of *actually* for all English mothers up to age 2

Year	adversative	elaborative	Total
1	1	2	3
2	26	20	46
Total	27	22	49

Table 16: Domains of *actually* for all English mothers up to age 2

Year	expressive	propositional	textual	Total
1	0	3	0	3
2	27	14	5	46
Total	27	17	5	49

The data from Madeleine's mother are rather sparse (Table 17) – but it looks as though functions are evenly balanced in the parental input between adversative and elaborative for *en fait*, whereas elaborative becomes more prevalent over adversative at ages 3 and 4 for *actually* (Table 18).

Table 17: Madeleine's mother's data

Year	adversative	elaborative	Total

1	2	4	**6**
2	8	6	**14**
3	3	2	**5**
4	0	2	**2**
Total	**13**	**14**	**27**

Table 18: Thomas's mother's data

Year	Adversative	Elaborative	Total
2	25 (53%)	22 (47%)	**47**
3	14 (29%)	34 (70%)	**48**
4	16 (32%)	34 (68%)	**50**
Total	**55 (38%)**	**90 (62%)**	**145**

In relation to *actually* , we found several examples where Thomas and his Mother talk about the use of the word, in a playful metalinguistic discussion, as in example (7), when Thomas is 3 years and 2 months old.

(7)   *MOT: look .
       *MOT: I've just turned it to the other side so I could read the label and it says "low salt Flora" .
       *MOT: it's margarine „ isn't it ?
       *CHI: **actually** [/] **actually** .
       *MOT: why did you say actually ?
       *CHI: **actually** I love you .
       *MOT: actually you love me .
       *MOT: oh .
       *MOT: actually I love you .

Thomas's Mother is talking about Flora margarine. Thomas's first two uses of *actually* appear to be textual topic-shifters. Thomas's mother picks up a sense of ambivalence and asks him why he said *actually*. Thomas does not answer the question directly, saying "actually I love you." The change in topic from margarine to "I love you" is a dramatic one and there is a playful syntactic parallelism in the Child-Mother exchange "actually I love you . / actually you love me". The Mother's "oh" underlines the sense of surprise conveyed by *actually* – and the conversation culminates with the Mother's emphatic (or adversative) assertion "actually I love you". The occurrences of *actually* in this small extract have a number of potential meanings which do not need to be made explicit for the conversation to succeed.

Overall, it seems that the child data does not reflect the parental input in terms of either the functions or the domains of use.

4.4 Position and function across children and adult data

Let us turn now to the position of the two markers in the argument structure, whether initial, medial or final. From our review of the literature concerning more general adult use of *en fait* and *actually* in spoken French and English (Tables 1 and 2 above), we would expect *en fait* to be mainly initial and mainly elaborative, while *actually* is more

evenly spread over the positions and mainly adversative, with over half in a medial position and a quarter each in initial and final positions. Figure 2 displays the relative positions of *en fait* and *actually* in the child data with an indication of the extent to which occurrences are adversative or elaborative.
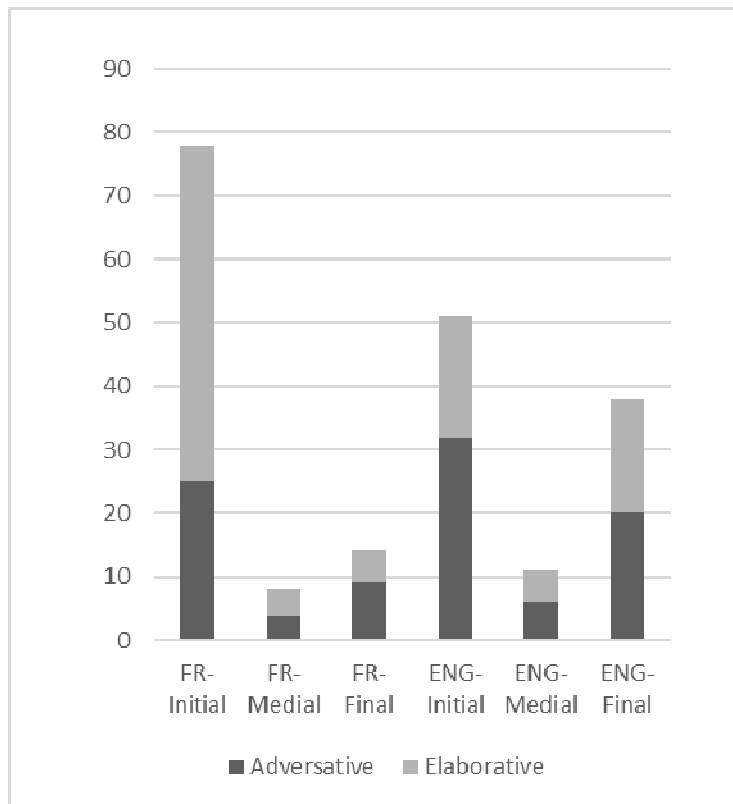

Figure 2: Position and function of *en fait* in French and *actually* in English in the children's data, ages 2 – 5, expressed as % rates.

The tendency for position and function which was found in the adult corpus data is broadly upheld in the children's data, with *en fait* favouring initial position and elaborative functions. In the children's data, however, *en fait* is even more likely to be found in initial position and there are fewer examples of *actually* in medial position, with a preference for initial position, followed by final position – perhaps because children's utterances tend to be rather short, as can be seen in all the examples above.

Table 19 shows the relative preference for adversative or elaborative functions in the child data (two-year-olds and Madeleine and Thomas). The proportions are remarkably similar for uses of *actually* and *en fait* in the ICE-GB and the CFPP (cf. Table 2) with *en fait* favouring elaborative and *actually* favouring adversative uses (albeit at a somewhat less marked degree than in the adult data in ICE-GB and CFPP).

Table 19: Overall functions of *actually* and *en fait* in the children's data

Marker/Function	Adversative	Elaborative
actually	58%	42%
en fait	38%	62%

It seems that, even at this early age, children are acquiring the typical positions and functions of these markers. *Actually* is more often adversative and *en fait* elaborative.

5. Conclusions

This research study set out to explore the child language acquisition of *en fait* and *actually*, DMs with similar counter-expectational semantic cores and pragmatic functions. We were interested to see at what age children begin to use the markers and whether children acquire the literal, adversative and propositional, meanings first, a hypothesis derived from cognitive, metaphorical and invited inferencing theories of semantic change, or whether they use the markers from the start in a pragmatic way, as we might expect from usage-based theories of child language acquisition.

Both *en fait* and *actually* start to be used by children at age 2 and the propositional-first hypothesis is partially confirmed. The propositional domain is more frequent at age 2 but the textual domain also appears at age 2 for *actually* and more pragmatic uses develop at age 3 (especially expressive uses). What is more, the subtle differences in the functions of *en fait* and *actually* already appear in child language. *En fait* is more often found in initial position than *actually* which is more prevalent position-medially in adult data and position-finally in the child data than *en fait* is. The functional spectrum of *actually* is more developed at age 2 than that of *en fait*. Elaborative uses appear later but become prevalent for *en fait* whereas there is a stable preference for the adversative core of *actually*.

Our conclusions need to be accompanied by the caveats that the number of child participants is low and, although our coding scheme is operational, the interpretations of the data and allocation to functions and domains remain subjective. The intentionality of a speaker's utterance is usually debatable – and, in the case of child-language data, particularly the younger age-groups, it is not always clear whether the child is using a particular word in a semantically or pragmatically accurate way – or simply repeating a word or phrase that they have heard and trying it for size without being entirely sure of its meaning and/or function. The multiplicity of semantic and pragmatic potential and the fuzziness of intention and interpretation is perhaps surprising but a normal part of everyday interaction and the means whereby "word meaning further develops depending on an individual's experience" (Grassmann 2014: 153). The pragmatic functions of DMs like *en fait* and *actually* are notoriously difficult to pin down and describe. Their multifunctional nature and the fact that they combine functions such as counter-expectation, textual topic-shifter and emphatic reinforcer make them tricky to analyse and, presumably, tricky to acquire. As suggested by the subtle differences between children's and parents' patterns of use in our data, discourse-pragmatic features might take longer to be fully acquired than, for instance, phonology, which is considered completed by the age of 6 (Kerswill 1996). The evidence presented in this article demonstrates, however, that children do acquire DMs – and begin to acquire their different functions – from a very early age.

The evidence we have gathered so far about the acquisition of the different functions of *en fait* and *actually* suggests that children use both adversative and elaborative

functions (literal/propositional and more inferential) from the start, that adversative is more frequent than elaborative up to age 3, that overall frequency rises with age, and more elaborative uses are detected as age rises, both in the parental (at least for Thomas's Mother) and in the child data. Semantics and pragmatics appear to work together, rather than first one then the other, which runs counter to both diachronic and usage-based accounts of L1 acquisition (at least in this case). *En fait* and *actually* indicate contrast whether it is facts which are being contrasted – or, more metaphorically, - in a topic change, or in reinforcing or hedging usages (which draw on counter-expectation). As Evans and Green (2006: 287) point out, despite an assumption that most language is literal, and metaphorical uses are literary or derived from the literal, much of our ordinary everyday language turns out to be figurative in nature. Gibbs (1994) noted that metaphorical uses are often more immediately salient than literal ones – and it may be the case that the pragmatic or metaphorical functions of *en fait* and *actually*, their textual and expressive uses, occurred much earlier than diachronic studies suggest (see Beeching 2017 for early examples of right peripheral pragmatic uses of *donc* discovered in the *Manières de Langage*). Diachronic studies generally draw on written text in which pragmatic intentions do not figure so prominently. The unidirectionality from propositional to textual to expressive may thus prove in some cases to be an artefact of the methodology and data employed to investigate DMs in older texts rather than a hard-and-fast rule applicable to spoken interaction, or indeed to child language acquisition.

Van Veen et al. (2009) discovered that parents did not adjust the rates at which they introduced different German connectives in accordance with a child's supposed cognitive abilities. In our study of *en fait* and *actually*, though rates of occurrence increase in both the parental input and in the children's output after the age of two years, the children's functional or pragmatic exploitation of the markers appears to correspond to the different activities they engage in at different stages of their development rather than precisely mirroring the parents' use of the markers. From a crosslinguistic perspective, however, by age 5, the children already display preferences for position and function which we find in corpora of adult French and English data: *en fait* is more often in initial position and elaborative while *actually* is more evenly spread positionally and more often adversative.

References

Aijmer, Karin. 2013. *Understanding pragmatic markers. A variational pragmatic approach.* Edinburgh: Edinburgh University Press.

Aijmer, Karin and Anne-Marie Simon-Vandenbergen. 2006. *Pragmatic markers in contrast*. Leiden: Brill.

Beeching, Kate. 2007. A politeness-theoretic approach to pragmatico-semantic change. *Journal of Historical Pragmatics*, 8/1: 69-108.

Beeching, Kate. 2010. Semantic change: evidence from false friends. *Languages in Contrast*. 10/2: 139-165. Reprinted 2012 In Peter Lauwers, Gudrun Vanderbauwhede and Stijn Verleyen (eds.) *Pragmatic markers and pragmaticalization*. Benjamins Current Topics 44. Amsterdam/Philadelphia : John Benjamins, 11-36.

Beeching, Kate. 2017. Alors/donc/then at the right periphery: seeking confirmation of an inference. *Journal of Historical Pragmatics*, 17/2: 208-230.

Behrens, Heike. 2006. The input-output relationship in first language acquisition. *Language and Cognitive Processes* 21(1-3): 2-24.

Brems, Lieselotte, Kristin Davidse, Inga Hennecke, Alena Kolyaseva, Anna Kisiel and Wiltrud Mihatsch. 2022. Type noun constructions in Slavic, Germanic and Romance languages. Berlin: Mouton de Gruyter.

Buysse, Lieven. 2020. 'It was a bit stressy as well *actually*'. The pragmatic markers *actually* and in fact in spoken learner English. *Journal of Pragmatics* 156: 28-40.

Clark, Eve V. 2018. Conversation and language acquisition: A pragmatic approach. *Language Learning and Development* 14 (3): 170-185.

Clift, Rebecca. 2001. Meaning in interaction: The case of *actually. Language* 77(2): 245-91.

Crible, Ludivine and Liesbeth Degand. 2019. Domains and functions: a two-dimensional account of discourse markers. *Discours* 24 (online publication - https://journals.openedition.org/discours/).

Defour, Tine, Ulrique D'Hondt, Anne-Marie Simon-Vandenbergen and Dominique Willems. 2010a. Degrees of pragmaticalization. The divergent histories of "*actually*" and "actuellement". *Languages in Contrast* 10 (2): 166-193.

Defour, Tine, Ulrique D'Hondt, Anne-Marie Simon-Vandenbergen and Dominique Willems. 2010b. *In fact, en fait , de fait, au fait* : a contrastive study of the synchronic correspondances and diachronic development of English and French cognates. *Neuphilologische Mitteilungen* 111(4): 433-463.

Demuth, Katherine and Annie Tremblay. 2008. Prosodically-conditioned variability in children's production of French determiners. *Journal of Child Language* 35: 99-127.

D'Hondt, Ulrique. 2014. *Au fait, de fait et en fait.* Analyse de trois parcours de grammaticalisation. *Revue Romane* 49(2): 235-263.

Didirková, Ivana, Ludivine Crible and Anne Catherine Simon. 2019. Impact of prosody on the perception and interpretation of discourse relations: Studies on "et" and "alors" in spoken French. *Discourse Processes* 56(8): 619-642.

Evans, Vivyan and Melanie Green, M. 2006. *Cognitive linguistics. An introduction.* Edinburgh: Edinburgh University Press.

Evers-Vermeul, Jacqueline and Ted Sanders. 2008. The emergence of Dutch and English connectives: How cumulative complexity explains the order of acquisition. *Journal of Child Language* 36: 829-854.

Gibbs, Raymond W. 1994. *The Poetics of Mind*. Cambridge: Cambridge University Press.

Grassman, Susanne. 2014. The pragmatics of word learning. In Danielle Matthews (Ed.), *Pragmatic development in first language acquisition*: 139-160. Philadelphia: John Benjamins.

Kerswill, Paul. 1996. Children, adolescents and language change. *Language Variation and Change* 8(2): 117-202.

Kleinhans, Janine, Mireia Farrús, Agustín Gravano, Juan Manuel Pérez, Catherine Lai and Leo Wanner. 2017. Using prosody to classify discourse relations. In *Proceedings of Interspeech 2017*, ISCA: 3201-3205.

Kyratzis, Amy and Susan Ervin-Tripp. 1999. The development of discourse markers in peer interaction. *Journal of Pragmatics* 31: 1321-1338.

Labov, William. 1972. *Sociolinguistic Patterns.* Philadelphia: University of Pennsylvania Press.

Levey, Stephen. 2016. "The role of children in the propagation of discourse-pragmatic change: insights from the acquisition of quotative variation". In Pichler, Heike, *Discourse-Pragmatic Variation and Change in English. New Methods and Insights*: 160-180. Cambridge: Cambridge University Press

Lieven, Elena, Dorothé Salomo and Michael Tomasello. 2009. Two-year-old children's production of multiword utterances: A usage-based analysis. *Cognitive Linguistics*, 20, 3, 481-508.

Morgenstern, Aliyah and Christophe Parisse. 2007. Codage et interprétation du langage spontané d'enfants de 1 à 3 ans. *Corpus* 6: 55-78.

Mortier, Liesbeth and Liesbeth Degand. 2009. Adversative discourse markers in contrast: the need for a combined corpus approach. *International Journal of Corpus Linguistics* 14: 338-366.

Müller, Simone. 2005. *Discourse markers in native and non-native English discourse*. Amsterdam: John Benjamins.

Papafragou, Anna. 2018. Pragmatic development. *Language Learning and Development* 14 (3): 167-169.

Pichler, Heike. (ed.) 2016. *Discourse-pragmatic variation and change. New methods and insights*. Cambridge: Cambridge University Press.

Pouscoulous, Nausicaa. 2014. The 'elevator's buttocks'. Metaphorical abilities in children. In Danielle Matthews (ed.), *Pragmatic development in first language acquisition*: 239-259. Philadelphia: John Benjamins.

Schwenter, Scott A. and Elizabeth Claus Traugott. 2000. Invoking scalarity. The development of *in fact. Journal of Historical Pragmatics* 1(1): 7-25.

Slobin, Dan I. 2004. From ontogenesis to phylogenesis: What can child language tell us about language evolution? In Sue Taylor Parker, Jonas Langer and Constance Milbrath, *Biology and Knowledge Revisited. From Neurogenesis to Psychogenesis*: 255-286. Mahwah, NJ: Lawrence Erlbaum Associates.

Sprott, Richard A. 1992. Children's use of discourse markers in disputes: Form-function relations and discourse in child language. *Discourse Processes* 15: 423-439.

Stephens, Gemma and Danielle Matthews. 2014. The communicative infant from 0-18 months. The social-cognitive foundations of pragmatic development. In Danielle Matthews (ed.), *Pragmatic development in first language acquisition*: 13-36. Philadelphia: John Benjamins.

Sweetser, Eve. 1990. *From Etymology to Pragmatics: Metaphorical and cultural aspects of semantic structure*. Cambridge: CUP.

Theakston, Anna, Elena Lieven, Julian Pine and Caroline Rowland. 2001. The role of performance limitations in the acquisition of verb-argument structure: an alternative account. *Journal of Child Language* 28: 127-152.

Traugott, Elizabeth Claus. 1982. From propositional to textual and expressive meanings: Some semantic-pragmatic aspects of grammaticalization. In Winifred P. Lehmann and Yael Malkiel (eds.), *Perspectives on historical linguistics*. Philadelphia, Benjamins: 245-271.

Uno, Mariko. 2016. A usage-based approach to early-discourse pragmatic functions of the Japanese subject markers *wa* and *ga. J. Child Language* 43: 81-106.

Van Veen, Rosie, Jacqueline Evers-Vermeul, Ted Sanders and Huub van den Bergh. 2009. Parental input and connective acquisition. *First Language*. 29 (3): 266-288.

Waters, Cathleen. 2016. Practical strategies for elucidating discourse-pragmatic variation. In Pichler, H. (ed.), 41-55.

Wells, C. Gordon. 1981. *Learning through Interaction: The study of language development*. Cambridge: CUP.

Zufferey, Sandrine. 2010. *Lexical pragmatics and theory of mind*. Amsterdam: John
  Benjamins.