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Second Language Acquisition of Evidentiality in French and English in a narrative task

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Abstract

Evidentiality, i.e., the linguistic encoding of the mode of access to information (direct perception, inference, hearsay), despite not being fully grammaticalized in English and French, is expressed through a variety of means. This paper seeks to determine how a relatively non-salient concept in the source and target languages can be acquired by L2 learners. We determine what markers of direct perception and inference are commonly used by native speakers of French (n=10) and English (n=10) and L2 learners of those two languages (at 3 proficiency levels, n=10 per group), in an oral elicited narrative task, and at which level they emerge. Our results point to a much more frequent use of inferential than direct perception markers, to slightly different patterns of evidential marking in French and in English, and to a late emergence of evidential markers in the speech of learners, who display sensitivity to their discursive functions, with types and tokens increasing as a function of proficiency level.

Keywords: evidentiality – SLA – French – English – direct perception – inference – discursive functions

1. Introduction

Evidentiality can be defined as the linguistic encoding of the mode of access to information (*see* Aikhenvald, 2004; Schenner, 2010; Tournadre, 2008, *inter alia*). This concept so far retains an exotic flavour, as evidentiality in Indo-European languages is still widely under-investigated (Diewald & Smirnova, 2010; Squartini, 2007), and the acquisition of this complex function is not yet well described or understood.

As pointed out by Mushin (2013), most work on evidentiality is split between typologists' research on languages which feature highly grammaticalized evidential morphemes (Aikhenvald, 2004, 2018), with a particular interest in their morphological, semantic, and typological characteristics, while another, functional line of investigation has explored the semantics and pragmatics of non-grammaticalized or semi-grammaticalized evidential forms and constructions. Three broad functional categories are usually distinguished: direct perception, inference and hearsay. These three semantic subdomains can be expressed by a variety of linguistic markers, ranging from lexical items, such as adverbs like

‘presumably’, collocations like ‘I guess’, or inflectional morphemes, such as *-miş* in Turkish. Against such a background, Aikhenvald (2004) distinguishes between ‘real’ evidential markers, which can only be found in languages that have fully grammaticalized the notion, and evidential strategies, the latter being an umbrella term for the diverse lexical or semi-grammatical means that may be involved in the expression of direct perception, inference, or hearsay. In English and French, evidentiality is expressed with a variety of lexical and (semi-)grammatical tools, instantiating Aikhenvald’s “evidential strategies”. Indeed, French and English do not count evidentiality as a fully grammaticalized category, unlike languages such as Turkish, Tibetan, or Quechua, for which there are specific grammatical markers affixed to the verb encoding the modes of access to information. We consider evidentiality to be a relatively non-salient concept for learners in French and English for several reasons: (i) it lacks a closed paradigm of obligatory markers in those two languages, (ii) it is expressed by a large array of relatively infrequent, polyfunctional linguistic means (adverbs, modal verbs, perception verbs, etc.), and (iii) the evidential category is rarely explicitly taught in the classroom. While individual markers such as modals or perception verbs are well known to teachers and learners, and are often presented in French or English textbooks, there is a general lack of awareness of their belonging to the broader category of evidentiality, resulting in at best partial knowledge of their evidential function¹. The odds of learners paying attention to the evidential functions of these markers are therefore quite low, and acquisition is likely to occur without any conscious effort.

It is consequently not particularly surprising to find that studies on the acquisition of evidentiality mostly focus on child learners of languages in which it is a fully grammaticalized concept (e.g., Aksu-Koç, Ögel-Balaban & Alp, 2009 on Turkish; de Villiers, Garfield, Gernet-Girard, Roeper & Speas, 2009 on Tibetan). There are few studies focusing on the L1 acquisition of evidentiality in English (Papafragou, Li, Choi & Han, 2007; Rett & Hyams, 2014 on Korean and English) or other European languages (Ifantidou, 2005 on Modern Greek, Koring & De Mulder, 2015 on Dutch), and to the best of our knowledge, none on French. Second language acquisition of evidentiality is a largely unexplored territory, with the exception of a few pioneering studies focusing on the use of hearsay evidentials (Ishida, 2006; Kamada, 1990, cited by Ishida, 2006; Narita, 2011 on learners of Japanese), on the processing of grammatical evidentiality for direct and indirect reports (Arslan, Bastiaanse & Felser, 2015, on bilingual heritage learners of Turkish), and on the discursive function of inferential forms (see Leclercq & Edmonds, 2017, on the acquisition of verbal modality in French and English L2). In the current paper, we seek to contribute to this relatively new area of research by focusing on the following acquisition issue: how do learners acquire adequate form-function mappings for markers with an evidential meaning?

¹ Note that the concept of evidentiality emerged fairly recently in the literature, with the English terms popularized in the 1980s and the French terms in the 1990s, see Dendale & van Bogaert, 2012; Dendale & Izquierdo, 2014, for a historical perspective.

We intend to contribute to the field with a data-informed description of how native speakers and adult learners of French and English mark evidentiality, and more specifically the subdomains of direct perception and inference in a semi-constrained oral narrative task at three proficiency levels, before examining how learners solve the above-mentioned learning problem.

The task consisted in the viewing of a cartoon and a subsequent retelling of the cartoon's events. The cartoon allowed the participants to have a direct visual perception of most actions performed by the two protagonists. However, they had to infer a few events, either because the latter were not shown in the cartoon, or because they had forgotten about them when retelling the story, which led them to resort to compensatory strategies. Consequently, the narrative task provided ample opportunities to use evidential markers of direct perception and inference.

In this exploratory study, we adopted a functional and developmental perspective to assess the use of such forms by native speakers and learners at three different proficiency levels (lower intermediate, upper intermediate, advanced), so as to document the emergence of evidentiality marking and its discursive functions and find out whether there are common developmental patterns.

We will first offer a presentation of evidential markers in English and French, which will allow us to present our research questions and methodology, before conducting a detailed analysis of the way evidential markers are used in narrative discourse in English and French, both in L1 and L2 data.

2. Theoretical background

2.1 What is evidentiality?

Evidentiality is highly grammaticalized in many non-Indo-European languages, such as Tibetan. The semantic category can be subdivided into three sub-categories of evidential marking: direct perception (see (1)), inference (see (2)) and hearsay (see (3)²). If we want to translate a simple sentence such as 'he drank some tea' into Tibetan, we will need to choose between at least three verbal inflections:

(1) *ja* 'thung-song
tea drink- DIRECT AORIST
'He drank some tea.' (I saw it)

(2) *ja* 'thung-bzhag
tea drink- INFERENCE PERFECT
'He drank some tea.' (I can figure it out)

² [All three examples were generated by the authors to illustrate the three sub-categories of evidentiality.](#)

- (3) *ja* 'thung-pa.red -ze
 tea drink- FACTUAL AORIST -HEARSAY
 'He drank some tea.' (I've heard so)

The verb in (1) is used with the direct perception aorist inflection *-song*, indicating that the speaker was a direct witness of the situation. The verb in (2) has the inferential perfect inflection *-bzhang*, which would be used in a context where the speaker did not see the person drink tea, but can infer it, for example by noticing an empty cup on the table. The verb in (3) is associated with the factual aorist suffix *-pa.red* which presents the proposition as a fact, as well as the hearsay enclitic *-ze*, specifying that the speaker has heard about the situation. These obligatory distinctions in Tibetan would usually be rendered by the same form in English, namely the simple past inflection.

In languages such as French and English, encoding evidentiality is usually “an optional context-driven choice” (Mushin, 2013, p. 628), and can be expressed with markers of various syntactic categories (see Mélaç 2014 *inter alia*). However, evidentiality is a coherent semantic domain, and usage has dedicated specific expressions to evidentiality in these two languages.

Literature on evidentiality in French and English is scarce and very fragmented. In French, research has predominantly focused on the overlap between evidential, temporal, and modal categories³ (see Caudal, 2012; de Mulder, 2012; de Saussure, 2012; Dendale, 1994; Kronning, 2012; Rossari, 2012; Vettters, 2012). A few studies tackle the evidential use of some discourse markers (Hassler, 2015; King & Nadasdi, 1999, Rossari, 2012) or perception verbs (Franckel & Lebaud, 1990; Grossmann & Tutin 2010). Moreover, Diewald & Smirnova (2010), Marín-Arrese, Hassler & Carretero (2017), and Squartini (2007, 2018) compiled numerous studies on lexical and (semi-) grammaticalized evidentials in Indo-European languages, thus including the description of a few French and English evidentials. Cappelli (2007) provides a thorough analysis of cognition verbs in English and their evidential meaning, while Whitt (2010) conducted a comparable study on English perception verbs. Finally, Gurajek (2010) compared the English and Polish linguistic means available to express evidentiality.

Examples of evidential markers in French and English are provided in Table 1.

Type of marker	English	French	Semantic values
Perception verbs	<i>see, hear, feel...</i>	<i>voir, entendre, sentir...</i>	<i>Direct perception</i> <i>Inference</i> <i>Hearsay</i>
Copular verbs	<i>look, sound, feel, seem...</i>	<i>sembler, sentir...</i>	
Cognition verbs	<i>I guess, I suppose...</i>	<i>j'imagine, je suppose...</i>	

³ See Dendale & Izquierdo, 2014 for a list of references and short summary of research on this conceptual domain in French.

Epistemic-inferential modal auxiliaries	<i>must, should, may...</i>	<i>devoir, pouvoir...</i>	<i>Inference</i> <i>Hearsay</i>
Adverbs	<i>presumably, reportedly...</i>	<i>apparemment, notoirement...</i>	
Idioms	<i>be said to, they say...</i>	<i>avoir l'air, il paraît...</i>	
Tense/mood		<i>conditional mood</i>	

Table 1. Non-exhaustive list of frequent evidentials in French and English

As far as we know, there is no corpus-based comprehensive study comparing the use of evidential markers in French and English, but Mélac (2014), who conducted a corpus-based analysis of Tibetan and English evidentiality, showed the following tendencies: in English, direct perception markers are fairly infrequent (around 695 per million words (pmw), compared to 22,590 pmw in Tibetan in his contrastive corpus). Hearsay markers seem to be slightly more frequent than direct perception markers in English (902 pmw, compared to 5,497 pmw in Tibetan). Inferential markers are by far the most frequent (5,978 pmw in English, compared to 17,997 in Tibetan) (Mélac, 2014, pp. 384-387), with the cognition verb construction ‘I guess’ (around 190 pmw in spoken English) quite some way ahead of other cognition verb constructions, such as ‘I suppose’ (around 23 pmw), the epistemic-inferential ‘must’ (around 43 pmw) or adverbs, such as ‘presumably’ (around 13 pmw) (see Mélac 2014, pp. 203-30). Many of the above-mentioned studies on evidentiality in French and English focus on the description of a few individual markers. The next section presents the broader discursive approaches to evidentiality.

2.2 Discursive approaches

In what can be described as a discursive approach, Mushin (2013) and Bergqvist (2017) concur in the relevance of analysing evidentials as deictic markers of speaker stance or perspective. Bergqvist (2017, p. 10) believes that “evidentials cannot be satisfactorily described without taking into account the context of their use in a communicative and social sense”. This is particularly the case in the context of second language acquisition, as learners have to learn how to use linguistic forms in the appropriate social contexts and with communicative purposes, as highlighted by Gablasova, Brezina, McEnery & Boyd (2017). For example, ‘reportedly’ in English is used in specific contexts (press, academic writings) while *apparemment* appears in oral and written French across a larger variety of contexts and registers.

As regards the discursive function of evidentials in narratives, work by Narita (2011) and Mushin (2013) suggests that evidentials can be used to mark discourse coherence. For example, in Japanese, if the evidential frame is maintained over a few clauses, markers can be omitted, as exemplified in Table 2.

She states that “while further study of this phenomenon is required, we can say that the use of evidentials to frame a particular stance is consistent with its deictic properties, as well as with the behaviour of other deictic categories (e.g., the omission of tense marking in clause chains)”.

In a study on the use of hearsay evidential markers by English-speaking learners of Japanese, Narita (2011, p. 2) provides an example of a typical English hearsay report in which speakers may mention the information source (CNN news), and the mode of access to information through the use of a hearsay evidential marker (I heard). Evidential information is then maintained throughout the next two utterances. While our database only includes direct perception and inferential markers, we believe the example in Table 2 illustrates what we will refer to as explicit evidential framing (i.e., an overt perception evidential is used at the beginning of a narrative episode, and then maintained through ellipsis, to signal the mode of access to the narrated events):

(Information source) According to the CNN news
Information 1 (overt hearsay marker) I heard a bomb exploded in Turkey.
Information 2 (no hearsay marker) About 150 people were injured.
Information 3 (no hearsay marker) The Istanbul governor suggests the convincing culprit is indeed the PKK.

Table 2. English hearsay report, adapted from Narita (2011, p. 2).

The lack of overt evidential markers (i.e., the absence of specific mention of the mode of access to the narrated information) will be called implicit evidential framing (speakers do not deem necessary to specify through which channel they acquired a given piece of information). Given that our experimental task comprises a visual stimulus, we hoped to find instances of explicit evidential framing through visual perception markers.

The next sections provide a brief overview of the main discursive functions of direct perception and inferential evidentiality markers in French and English.

2.2.1 Discursive functions of direct perception evidentials in English and French

Among the languages which do not have a specific morpheme to indicate direct evidentiality, perception verbs are usually a prime choice to express that domain (Whitt, 2009, 2010, 2011).

In French, only a few studies focus on the evidential use of perception verbs, with a special interest in *voir*. In their study on the evidential use of *voir* in a corpus of written scientific articles, Grossman & Tutin (2010) showed that this verb’s perceptual and inferential meanings are intertwined in scientific

writing, and that *voir* is involved in a variety of discursive functions (statement marker, intra- or intertextual reference marker).

In oral narrative discourse, perception verbs (mostly *voir* in French and ‘see’ in English, although *entendre* and ‘hear’ can also be found) are analysed as fulfilling evidential, as well as macrostructuring functions (Lambrecht, 2000; Leclercq, 2007, 2009). Leclercq (2009) observes that such constructions are often used in French oral retellings so as to introduce the story’s protagonists, with a generic perspective (*on voit* ‘we see’ rather than *je vois* ‘I see’). Although she does not employ the term ‘evidential’, she argues that *on voit* in French and to a lesser extent ‘we see’ in English L1 and L2 provide the speaker with the possibility to indicate that the narrative is “a reconstruction of the perceived events by the speaker who stages [their] discourse” (Leclercq, 2009, p. 278). She also highlights the macrostructuring role of perception verbs in oral retelling, through the introduction of the protagonists, and the opening of a temporal frame in which the protagonists’ actions are inscribed, as in (3):

- (3) “We see a man
preparing a meal
slicing salmon
washing vegetables...” (example taken from Leclercq 2009, p. 277).

Given the evidential properties of ‘we see’ / *on voit*, we can assume that they also open an explicit evidential frame. In (3), the speaker indicates the source of perception of events with ‘we see’, and evidential reference is maintained throughout the sequence with zero anaphora.

Leclercq (2009) nevertheless observes differences in the way native speakers and learners of French and English use *voir* / ‘see’. French speakers and advanced learners of English use *on voit* much more systematically than English natives, who tend to restrict the use of ‘we see’ to a single occurrence at the beginning of the retellings, thereby performing a discourse grounding role (i.e., a way to indicate that they are starting the narrative) rather than a macrostructuring role as is the case in the French data.

In line with the findings of Grossman & Tutin (2010), and Leclercq (2009), we hypothesize that *on voit* has specialized into a macrostructuring marker of temporal and evidential framing, and that it will therefore be found in our L1 French data to introduce protagonists, as well as to account for the fact that the source of information available for the task is mostly visual. Since such systematic macrostructuring use has not been documented with ‘we see’, we assume that it will not be a feature of the L1 English data. We also predict that English learners of French will not necessarily use *on voit* to indicate the source of information, while French learners of English could use ‘we see’ with a macrostructuring role, due to a transfer from French L1 patterns.

2.2.2 Inferential evidentials in English and French

Inferential evidentiality encodes that the speaker did not witness the situation they are describing directly but can suppose its existence through indirect perception and reasoning. Squartini (2008, p. 925) reports on three subcategories of inference: circumstantial inferences (4), generic inferences (5) and conjectures (6). All three are “products of the speaker’s reasoning process and therefore inferential processes”. However, in the case of circumstantial inferences, the speakers’ reasoning is fed by “external sensory evidence”, while in the case of conjectures, “all external evidence is missing”. Generic inferences are described as being the product of the speaker’s reasoning, based on observation and his general world knowledge.

(4) she’s obviously quite a good skater (E07, line 70)

(5) and then he also puts on the scarf (...) it’s probably a very like soft wool cashmere scarf. (E04, line 47)

(6) [The doorbell rings] I was not expecting anybody. It might be Gianni. (Squartini 2008: 924)

Generally speaking, inferential evidentials are considered to be a means to express the speaker’s epistemic stance, which, according to Gablasova et al. (2017: 614-615), is mostly expressed in English spoken discourse by lexical verbs such as ‘I think’ or ‘I guess’, adverbs such as ‘maybe’, and modals (‘may’, ‘could’, etc.). These authors indicate that epistemic stance markers “fulfil[s] three major interconnected functions in the interaction: (i) expressing opinion, (ii) maintaining relations between the interlocutors, and (iii) discourse organization (...). In this way, it acts as both a subjective (self-expressive) and intersubjective device, allowing speakers to position themselves towards their propositions (express their doubt or certainty about a statement) as well as towards the other interlocutor(s).” We believe that in certain contexts, verbal epistemic stance markers such as ‘I think’ or ‘must’ can also take on an evidential discursive function (i.e., indicating to the interlocutor that a given piece of information has been inferred) (see Hassler, 2015, for a discussion of the overlap between epistemic modality and evidentiality).

3. Second language acquisition of evidentiality

While there is a fairly abundant literature on the L1 acquisition of evidential markers, few studies focus on the second language acquisition of this notion. Of the five studies that we have found, four deal with the acquisition of evidential structures in languages with a grammatical rendering of evidentiality: Kamada (1990, cited by Ishida 2006), Ishida (2006) and Narita (2011) study the expression of hearsay by English learners of Japanese in an instructed setting, and Arslan et al. (2015) focus on the processing of direct and indirect grammatical evidentiality by early and late bilingual speakers of German and Turkish.

Kamada (1990) and Ishida (2006), in studies on how advanced English-speaking learners of Japanese use hearsay evidentials, both point to the fact that learners use them more sparingly than native speakers, and often with contextual inadequacies. Conversely, Ishida identifies possible patterns of transfer from English to Japanese, but also an incipient appropriation of the Japanese system. Narita (2011) explores the phenomenon through a pedagogical perspective, namely the effects of “pragmatic consciousness raising (PCR) activities” in the acquisition of hearsay evidential markers in Japanese, and “the question of whether awareness is necessary for L2 pragmatic learning”, based on Schmidt’s (1995) noticing hypothesis (L2 learners must become aware of a specific form in the input before intake can take place). The participants were administered metapragmatic knowledge tests and oral discourse production tests. The results show an effect of PCR instruction, as the PCR group outperformed the control group as regards the production of hearsay evidentials, thus providing evidence for Schmidt’s noticing hypothesis.

As for Arslan et al. (2015), they investigated how adult early bilinguals (heritage speakers) and late bilingual speakers of Turkish and German process grammatical evidentiality in comparison with monolingual speakers of Turkish, a language that marks evidentiality through inflectional affixes indicating direct (-*DI*) or indirect (-*mlş*) evidentiality. The authors intended to assess how the age of onset impacted the processing of evidentiality, as well as the differences between monolingual, early and late bilingual processing of direct and indirect evidentials. They conducted an eye-tracking analysis during a listening experiment in which participants had access to some visual information so as to elicit direct or indirect evidentials. The study featured three groups of participants: 19 early German-Turkish bilinguals, all born in Germany; 20 late bilinguals, L2 learners of German who came to Berlin after puberty; and 22 monolingual Turkish speakers. The results show that “monolingual Turkish speakers comprehended direct and indirect evidential scenarios equally well”, but “both late and early bilinguals were less accurate and slower to respond to direct than to indirect evidentials” i.e., they fixated “less frequently on the target picture in the direct than in the indirect evidential condition”. The results point to a diminished “sensitivity to the semantic and pragmatic function of direct evidential forms in both late and early bilingual speakers” (p. 1), therefore suggesting that Turkish heritage grammar features a simplified evidential system.

Although analyses of the evidential function of perception verbs are rare, their discursive function has been highlighted in Leclercq (2009, p. 275). In a study on the expression of simultaneity in a narrative task, the author observes the use of *on voit* presentative construction as performing three main functions: a grounding function to make it clear that reference is made to a unique situation, in spite of the use of present simple tense in the embedded clause; an introductory function, as the main protagonists are usually introduced in discourse through a presentative; and a macro-structuring role, as regards the opening of an evidential and temporal framework within the narrative (i.e. with *on voit*, the speaker indicates that the time of the situation and the time of perception coincide, thereby defining a temporal

and evidential framework in which a variety of events may be inscribed). In Leclercq's task, 65% of the French participants introduce the first protagonist with *on voit*, whereas only 10% of English native speakers use 'we see', suggesting a more prevalent explicit evidential framing in the French data. As for advanced French learners of English, 28% use either 'we see' or 'we can see', 36% use 'there is', and 36% use an independent clause. This can be reinterpreted as a tendency to depart from the explicit framing found in French L1 and to move closer to the implicit framing pattern favoured by English participants.

Finally, the expression of inference through modal verbal markers has been studied by (Leclercq & Edmonds, 2017; Mifka-Profovic, 2017). Leclercq & Edmonds (2017), based on an oral production task, find that modality emerges at upper intermediate level, and that the only group that makes use of modals to express inference (*seem* or *must*) are the English native speakers. Native French speakers did not express inference at all using modals, nor did English learners of French and French learners of English, whatever their proficiency level (ranging from lower intermediate to advanced). More generally, their findings highlight that epistemic modality is difficult to master, even at advanced level, a result that is confirmed in a study on the online processing of modals by advanced Croatian learners of English by Mifka-Profovic (2017), in which she found that although the acquisition of deontic modals is native-like, epistemic modality proves harder to acquire.

To sum up, research on the second language acquisition of evidentiality suggests L1-L2 transfer phenomena (Ishida, 2006; Kamada, 1990; Leclercq, 2009; Mifka-Profovic, 2017), but also sensitivity to L2 input (Arslan, 2015, Leclercq & Edmonds, 2017), with appropriate pedagogical methods helping learners develop more target-like evidential marking, at least when the target language includes grammaticalized evidential markers (Narita, 2011). Against such a background, we seek to provide preliminary answers to the following research questions:

RQ1. What evidential markers do the French and English native speakers use to express direct perception and inference in an oral narrative, and with which discursive function?

RQ2. How do learners of French and English express direct perception and inference at three proficiency levels? More specifically, at what stage do evidential markers emerge in learner productions?

RQ3. Do advanced learners use direct perception and inference markers with the same discursive functions as native speakers?

In line with previous findings on the acquisition of modality, we expect evidentiality to be acquired late (see Leclercq & Edmonds, 2017), regardless of the source and target languages. More specifically, we expect to find direct perception markers at lower proficiency levels and inferential markers at higher proficiency levels, in line with what Rett & Hyams (2014, p. 220) claim for L1 acquisition ("cognitive

primacy of direct evidentiality”: direct evidentials are acquired earlier because “reporting on direct perception is ‘simpler’ in some intuitive sense than reports based on either inference or hearsay”.)

4. Methodology

4.1 Film retelling task eliciting narrative discourse

In order to answer these questions, we used a cross-sectional experimental design featuring a semi-constrained oral narrative task from the APN project (Watorek 2004). The latter includes the watching (and therefore direct perception) of a five-minute-long cartoon, which contains background sounds and music, but no verbal information. The cartoon presents the adventures of a dog named Reksio and his owner, who go ice-skating on a frozen pond. The task instruction was “Watch the cartoon and then tell the interviewer what happened”. The interviewer stayed in the same room as the participants, but did not watch the cartoon with them, so that the proposed communicative task could be felt to be realistic. It triggered semi-constrained oral production data which were audio-recorded and transcribed using CLAN procedures (MacWhinney, 2000). Each transcription was proofread by one of the investigators to ensure accuracy and reliability.

The task was designed to elicit direct perception and inferential evidential markers. Indeed, participants had a direct (visual) perception of a series of events featuring the two protagonists. They also had to memorize a significant amount of information, as the cartoon lasted five minutes, and while all participants were able to recount the plot and the main actions that had taken place in the cartoon, they did not display the same level of detail in their retellings. They did not necessarily pay attention to the same pieces of information, or did not memorize the events to the same extent, which sometimes led to the use of inferential forms to reconstruct forgotten (or lacking) information. The proficiency of the learners is obviously an essential explanatory factor for the more or less fine-grained retellings that we find in the database: lower proficiency levels are constrained by more limited linguistic means, resulting in coarser-grained, shorter narratives (see Table 3 below).

4.2 Participants

The task was performed by native speakers of French and of English (control groups, n=10 each), and six groups of learners (n=10 for each group): French lower intermediate (LI), upper intermediate (UI) and advanced (A) learners of English, on the one hand, and English LI, UI and A learners of French, on

the other hand, as presented in Table 3. Such a database enables us to assess the impact of the proficiency factor in the acquisition of a non-salient feature of the input.

French and English native speakers were all students, and were respectively recorded on a French and a British campus. All French natives shared the same Metropolitan French variety, while the English natives included British, American, Australian and Singaporean varieties. Most learner participants were students recorded during a face-to-face interview in a French university setting. This means that while English learners of French were in a study abroad context, French learners of English were in an instructed context. However, due to the covid-19 pandemic situation, the last phase of data collection had to take place online through a video-conferencing application. Although some of the English learners were back in their home country during the online interview, they had all spent at least several months in France before lockdown. No learner had received formal instruction on evidentiality. The face-to-face and online interviews all started with a biographical questionnaire, followed by the narrative task, and a language test aiming at assessing the learners' general proficiency. Learners of English were administered a version of the Oxford Proficiency Test for learners of English, a standardized test tapping into grammatical and lexical knowledge, while learners of French were administered an in-house test of the American University in Paris assessing the same competences. The latter was not a standardized test and the researchers had to determine themselves the thresholds separating lower intermediate, upper intermediate and advanced learners. These measures were completed by a description of the length of productions, measured through the number of utterances (see Table 3). The database contains a total of 4,677 utterances, segmented according to the principle that each utterance can only contain a single verb, as in (7a), except when a modal or temporal-aspectual verb is involved, as in (7b):

(7) a. then the boy **falls into** the lake (UIFE08): 1 utterance

b. then he **might be able to pull** her **back** to safety (E07): 1 utterance

Participants were attributed a code composed of a letter indicating their proficiency level (LI, UI, A), one or two letters indicating their language combination (E= English native, F= French native, EF= English learner of French, FE=French learner of English), and a participant number (01 to 10). For example, speaker AEF01 is an advanced English learner of French.

Table 3 shows that native speakers' productions are much longer than learners', with English natives producing even longer narratives than French natives. As for learners' productions, they globally increase in length across proficiency levels, except for advanced learners of French who produce shorter narratives than upper intermediate learners. Standard deviation and range figures illustrate the wide variation in length of narratives within all groups of participants.

	Group	N=	Mean Age	Gender	Proficiency test scores**(out of 60)	Length of productions (number of utterances)
ENGLISH	LI NNSs	10	23.2	3M, 7F	M 34.3 SD 3.22 Range 30-39	M 38.5 SD 15.5 Range 20-68
	UI NNSs	10	21	2M, 8F	M 43.9 SD 2.3 Range 40-47	M 41.6 SD 14.1 Range 30-64
	Adv NNSs	10	27	7M, 3F	M 54.9 SD 3.17 Range Range 53-59	M 57.9 SD 26.2 Range 21-113
	NSs	10	25.4*	5M, 5F	/	M 115.6 SD 29.7 Range 82- 169
FRENCH	LI NNSs	10	22.8	2M, 8F	M 29.6 SD 3.8 Range 27-36	M 30.2 SD 14.5 Range 14-55
	UI NNSs	10	23.7	1M, 9F	M 46.9 SD 2.2 Range 41-50	M 54.4 SD 26 Range 30-69
	Adv NNSs	10	28.5	4M, 6F	M 55.7 SD 2.3 Range 52-58	M 43.6 SD 14.7 Range 82-169
	NSs	10	30.3*	6M, 4F	/	M 85.7 SD 47.1 Range 20-180

Table 3. Description of participant groups and characteristics of productions

* Mean age was calculated on the basis of 9 participants for French and English native speakers as two participants did not provide their age.

**Please note that OQPT and AUP test scores are not strictly comparable as the latter is a standardized test while the former is not, and while they tap into the same kind of knowledge, they operate on two distinct languages. The aim of Table 3 is therefore to provide information on the relative comparability of the different groups of participants.

4.3 Coding scheme

The coding system for evidentials, illustrated in Table 4, was elaborated based on the categorizations of Mélaç (2014) and Squartini (2008). Three subcategories were selected: direct perception, circumstantial

inference (inference based on sensory perception) and generic inference (inference based on observation and general knowledge). No occurrence of conjecture was found in the corpus. As shown in table 4, the data were also fully coded for the nature of markers: adverb, cognition verb construction, copular predicate, modal verb, perception verb, or other construction.

Speaker	Utterance	Nature of marker	Type of evidentiality
AFE04	So apparently it's cold	Adverb	Circumstantial inference
AFE01	And the boy is very grateful I guess <for> [//] to the dog	Cognition verb construction	Generic inference
E07	Oh at the beginning we see a dog's kennel	Perception verb	Direct perception

Table 4. Example of coding scheme

'Apparently' indicates that AFE04 has made an inference based on visual stimuli (in the cartoon, the dog shivered and skidded on a patch of ice). 'I guess' encodes that AFE01 has inferred that the child showed gratefulness as the participant knew that the boy had been rescued from drowning in a frozen lake by the dog. By using 'we see', E07 indicates a direct visual perception of the situation.

We will first present an overview of the use of evidential markers in the database before analysing direct perception and inferential markers.

5. Results

5.1 Quantitative analysis

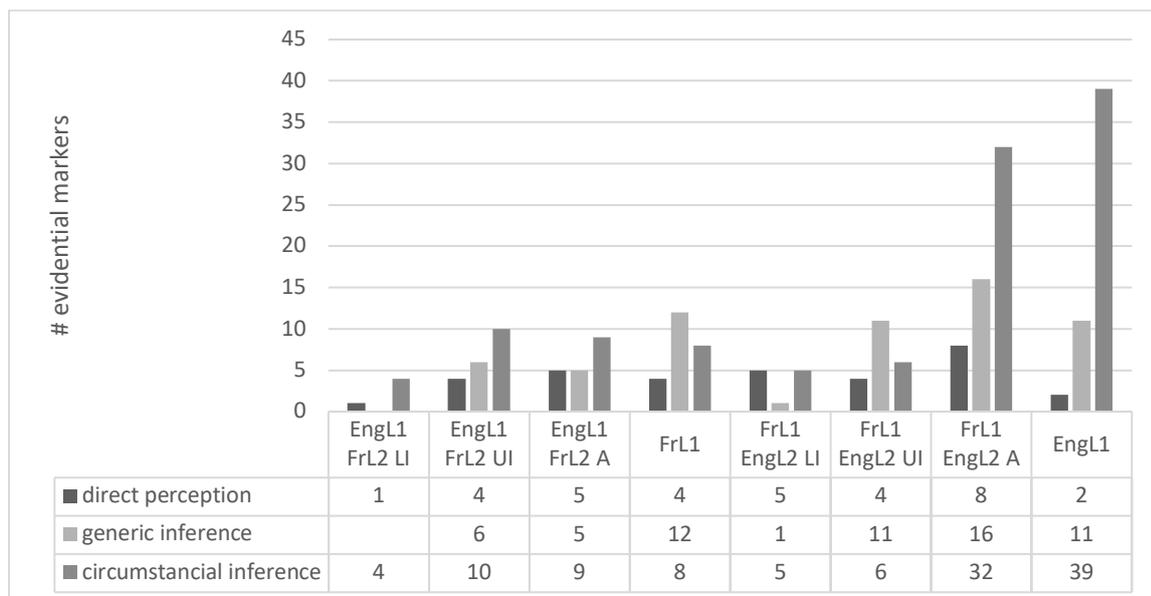
In this section, we will propose a quantitative description of the use of evidentials in our database. We will then propose a qualitative analysis of Table 5 and Graph 1, which summarize the use of evidential markers (expressing direct perception, circumstantial inference, and generic inference) in our database.

The first obvious comment that can be made concerns the relatively small number of evidential markers in the database, as only 208 occurrences, produced by 55/80 speakers, were found out of 4,697 utterances in total. Given the limited number of occurrences in our database, we adopted a mixed method approach, including a qualitative analysis supported by descriptive statistics.

Total # participants producing evidentials	Total # evidential types/ tokens	% utterances with evidentials	Range of use among participants
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EngL1 N=10	10	14/52	4.5	1-17
FrL1 N=10	6	17/24	2.8	0-11
EngL1 FrL2 LI N=10	4	2/5	1.6	0-2
EngL1 FrL2 UI N=10	7	6/20	3.6	0-6
EngL1 FrL2 A N=10	7	8/19	4.1	0-8
FrL1 EngL2 LI N=10	6	6/11	2.8	0-4
FrL1 EngL2 UI N=10	6	10/21	5	0-5
FrL1 EngL2 A N=10	10	16/56	9.6	1-14

Table 5. Description of database – evidential markers



Graph 1. Category of evidentiality in the database (number of occurrences)

Another key finding is that there is notable individual variation in the use of evidential markers, even among native speakers. Judging from the data in Table 5, English natives use evidentials slightly more frequently than French speakers (4.5% against 2.8%). However, all English native participants used evidential markers, while only six out of ten French participants did, suggesting that the use of evidential markers in a narrative context is even more optional in French than in English. Range of use, with English speakers displaying between one and seventeen evidential markers in their retellings and French speakers using between none and eleven, also shows substantial inter-individual variation. If we turn to type and token figures, it is interesting to notice that despite using only 24 tokens, French natives employ a large array of types (17), while English natives use only 14 types for 52 tokens. As Tables 6 and 7 clearly show, the more advanced learners are, the larger variety of types they use.

EngL1FrL2 LI	EngL1FrL2 UI	EngL1FrL2 A	FrL1
je pense (4)	je crois (5)	on voit (5)	on voit (4)
on a vu (1)	je pense (4)	j'imagine (4)	a l'air (3)
	j'imagine (4)	peut-être (3)	je pense (2)
	on voit (4)	je crois (3)	a dû (1)
	peut-être (2)	a dû (1)	apparemment (1)
	a l'air (1)	je pense (1)	certainement (1)
		on a l'impression (1)	devait (1)
		on dirait (1)	doit (1)
			il faut imaginer (1)
			je crois (1)
			normalement (1)
			on peut penser (1)
			on sent (1)
			on suppose (1)
			pourrait (1)
			semble (1)
			sûrement (1)
			très certainement (1)

Table 6. Types (and tokens) of evidential markers in the French L1/L2 data

FrL1EngL2 LI	FrL1EngL2 UI	FrL1EngL2 A	EngL1
we can see (4)	maybe (8)	I guess (12)	I think (15)
look (2)	seem (2)	I think (12)	obviously (8)
I think (1)	I guess (2)	look (5)	seem (8)
maybe (1)	I think (2)	we see (4)	might (4)
seem (1)	apparently (1)	apparently (3)	look (3)
we see (1)	can see (1)	appear (3)	as far as I can tell (2)
we suppose (1)	I've just seen (1)	I would say (3)	must (2)
	may (1)	seem (3)	presumably (2)
	we can see (1)	we can see (3)	probably (2)
	we see (1)	obviously (2)	I believe (1)
	we suppose (1)	I would assume (1)	I guess (1)
		maybe (1)	maybe (1)
		presumably (1)	sound (1)
		probably (1)	we see (1)
		we can guess (1)	you see (1)
		we hear (1)	

Table 7. Types (and tokens) of evidential markers in the English L1/L2 data

As shown in Graph 1, which describes the categories of evidentials (direct perception vs circumstantial and generic inference) found in the database, English natives overwhelmingly prefer to use circumstantial evidentials (39/52 occurrences), while French speakers' favourite option seems to be generic inference markers (12/24). All in all, inference occurrences largely outnumber direct perception, despite inference being considered a more costly cognitive phenomenon than direct perception (being a witness of a situation is a spontaneous phenomenon that involves automatic sensory processes while inference usually requires both the perception of a situation and the use of reasoning with premises and logical consequences). These results seem to contradict Rett & Hyams' (2014) claim that there is cognitive primacy of direct evidentiality, but they might also be due to the retelling task itself, in which direct perception markers are used to open a narrative frame valid for most of the episode, while inferential markers are used for a variety of narrated events. Indeed, the narrative task implies a reconstruction of events based on memory and world knowledge, and probably triggered a more frequent use of circumstantial and generic inferential markers. For example, at the beginning of the cartoon, the dog is seen slipping on a frozen puddle, then taking a handful of a certain substance and throwing it on the ground. While most English native speakers stated the dog put dirt on the frozen puddle as in (8), some learners of English inferred, based on what they saw in the cartoon and what they know about how to melt ice, that he had spread salt on the ground (9). Other speakers simply did not mention this episode.

(8) and and he comes back with a bucket full of dirt yeah throws dirt onto the onto the ice (E04, English native speaker) NO EVIDENTIAL

(9) he puts something **maybe salt** on the ground (UIFE07, French learner of English, upper intermediate) GENERIC INFERENCE

The learner data from Table 5 clearly show two distinct developmental paths. Among French learners of English, percentage of use and number of tokens increase steadily with proficiency level (LI 2.8%, UI 5%, A 9.6%). At LI and UI levels, 6 participants out of ten use evidentials, while all advanced learners use at least one evidential marker in their productions (with one participant peaking at 14 markers). If we compare the way advanced learners of English and English natives use evidentials, we notice that in both groups, (i) all participants use at least one evidential; (ii) the total number of occurrences is fairly similar (EngL2 A $n=56$; EngL1 $n=51$), but (iii) the percentage of occurrences is much higher in advanced learners as their narratives are usually shorter than those of native speakers. Two one-way ANOVAs were carried out in order to investigate the impact of group membership on the percentage of use of evidential markers. The first ANOVA on the English data (EngL1, EngL2 LI, UI, A) showed a significant difference by group, $F(3, 36) = 5.28314, p = 0.004015$. Post-hoc comparisons using Tukey's HSD revealed a significant difference between the advanced learners ($M = 9.11, SD = 6.15$) and the lower intermediate learners ($M = 2.72, SD = 3.23$). The behaviour of the NSs ($M = 4.27, SD = 2.72$) and the upper intermediate learners ($M = 4.47, SD = 4.82$) was not found to differ from that of the other groups. The second ANOVA on the French data (FrL1, FrL2 LI, UI, A) showed no significant difference by group, $F(3, 36) = 1.62784, p = 0.199992$.

As for English learners of French, they gradually progress in their use of evidentials from LI (1.6%) to UI (3.6%) and A (4.1%) levels, with seven participants producing at least one evidential marker at UI and A against four participants at LI; while the total number of tokens is relatively stable between UI (20) and A (19), the number of types expands slightly (from 6 at UI to 8 at A). Interestingly, UI and A learners' pattern slightly overuse evidentials compared to FrL1 (2.8%), even if the number of types and tokens is narrower among learners. Two one-way ANOVAs were carried out in order to investigate the impact of group membership on the diversity of types of evidentiality markers. The first ANOVA on the English data (EngL1, EngL2 A, UI, LI) showed a significant difference by group, $F(3, 36) = 4.043068, p = 0.0141408$. Post-hoc comparisons using Tukey's HSD revealed a significant difference between the advanced learners ($M = 5.6, SD = 4.74$) and the lower intermediate learners ($M = 1.1, SD = 1.37$). The behaviour of the NSs ($M = 5.2, SD = 4.56$) and the upper intermediate learners ($M = 2.1, SD = 2.07$) was not found to differ from that of the other groups. The second ANOVA on the French data (FrL1, EngL2 LI, UI, A) showed no significant difference by group, $F(3, 36) = 1.201166, p = 0.323218$.

In both sets of learner data, it is clear that the use of evidential markers at LI level is still very limited; it picks up at upper intermediate level, which sees longer, more detailed and more complex productions. Patterns then diverge according to language combination: while advanced learners of French only slightly overuse evidentials in comparison with French natives, advanced learners of English massively overuse them compared to English natives (if we look at percentages). Finally, a look at the number of

types and tokens shows progression from LI to A, regardless of the language combination. However, learners of French, even at advanced level, use only a restricted set of evidential markers (types at LI: 2, UI: 6, A: 8), while learners of English use a much wider range of expressions, with advanced learners using almost the same number of types as English natives (types at LI: 6, UI: 10, A: 16).

Let us now turn to the analysis of the category of evidentials chosen by learners. Graph 1 suggests that direct perception and circumstantial inference emerge earlier than generic inference insofar as there is just one generic evidential at the LI proficiency level. While use of direct perception markers is fairly similar at all proficiency levels and across all language groups (with the exception of advanced learners of English who use eight such markers), different patterns emerge for the marking of inference. Among learners of English, inference appears at LI, builds up at UI (particularly generic inference), and expands at advanced level. Just like English natives, advanced learners of English have a preference for circumstantial inference, contrary to advanced learners of French who use generic and circumstantial inference markers sparingly and in a comparable fashion. As for French natives, they favour generic inference. It is finally worth noting that advanced learners of English resort to direct perception markers (mostly ‘we see’/‘we can see’) much more than the other groups of participants.

To sum up, our results point to the fact that (i) French natives use evidential markers less consistently than English speakers, which could reveal a slightly less grammaticalized evidential system; (ii) direct perception markers are used much less frequently than inferential markers (even if advanced learners of English slightly overuse them compared to the other groups); (iii) there is strong inter-individual variation in the use of evidential markers; but (iv) advanced learners seem to be rather sensitive to the distribution of markers in the input: advanced learners of English display a significant progression in the use of evidential markers compared to lower intermediate learners. Like English natives, all advanced learners of English resort to a large variety of evidentials in their retellings, although they do so in a much higher proportion; and like French natives, advanced learners of French use evidentials more sparingly, or not at all.

We will now provide a qualitative analysis of the 33 direct perception and 175 inferential markers used by the different groups of speakers.

5.2 Qualitative analysis

5.2.1 Direct perception

Direct perception is almost exclusively instantiated in our database by perception verbs *voir/see*, which is not surprising considering the visual nature of the stimulus (see table 5).

Group of participants	Explicit evidential framing
FrL1 n=10	<i>On voit</i> (4 tokens produced by 4 speakers)
EngL1 n=10	We see (1 token produced by 1 speaker) You see (1 token produced by 1 speaker)
FrL1 EngL2 n=30	We see (6 tokens produced by 2 A, 1 UI and 1 LI learners) We can see (8 tokens produced by 3 A, 1 UI and 3 LI learners) I've just seen (1 token produced by 1 UI learner) We hear (1 token produced by 1 A learner) Total: 17, found in 11 narratives
EngL1 FrL2 n=30	<i>On voit</i> (9 tokens produced by 4 A and 2 UI learners) On a vu (1 token, 1 LI learner) Total: 10, found in 6 narratives

Table 5. Direct perception markers

Native speakers use very few direct (visual) perception evidentials (EngL1=2, FrL1=4), illustrated in examples (10) and (11).

(10) *et on voit le petit chien qui est dehors devant sa niche* ‘and we see the dog who is outside in front of his kennel’ (F07, line 115)

(11) *erm# oh at the beginning we see a dog's kennel* (E07, line 1)

Learners of English use six occurrences of ‘we see’ (attested but infrequent in the English data) and eight of ‘we can see’ (not attested), as in (12), at LI, UI and A levels.

(12) *we can see the boy drinking some tea* (LIFE03, line 55)

We assume that the use of ‘we can see’ in EngL2 is a direct consequence of grammar instruction in the English classroom in France, as the modal auxiliary ‘can’ is often introduced during the first year of English as a Foreign Language Instruction in association with ‘see’ in description tasks in English textbooks for beginners.

What is interesting is that the use of those direct perception markers in the narratives, in addition to indicating the mode of access to information, fulfils a macrostructuring function (presentative as well as evidential), which we call explicit evidential framing.

Explicit evidential framing through visual perception verbs is used in a total of 22/80 narratives, including four narratives in French L1, two in English L1, five in French L2 (three by A, one by UI and one by LI learners) and eleven in English L2 (four by A, four by UI and three by LI learners). While

most speakers use the direct evidential *on voit* / ‘we see’ only once, one advanced learner (AFE01) used ‘we see’/‘we can see’ four times in his retelling, thereby adopting a very explicit evidential stance.

(13) Explicit evidential framing

Speaker	Language	Utterance	Line	Utterance status
E07	EngL1	erm# oh at the beginning we see a dog’s kennel #	1	background
E07	EngL1	and a little dog pops his head out of it #	2	foreground
E07	EngL1	the dog’s got white and brown spots on his back	3	background
E07	EngL1
E07	EngL1	that’s all	168	background
E07	EngL1	I can remember	169	background

In (13), evidential framing is provided in the first utterance through ‘we see’, which indicates that the coming narrative is based on direct perception. It is maintained throughout the narrative (though not repeated) and holds until the last utterances in which the speaker ends the narrative with a reference to his recollection of the witnessed events, ‘that’s all I can remember’.

(14) Absence of framing (default evidential perspective)

Speaker	Language	Utterance	Line	Utterance status
E09	EngL1	And he goes out to the middle	53	foreground
E09	EngL1	and for some reason he comes into some difficulty	54	background
E09	EngL1	but I’m not really sure why	55	background
E09	EngL1	cause he sort of must have fallen over or something	56	background
E09	EngL1	anyway he heads back	57	foreground

In (14), the narrative passage by an English-speaking native speaker accounts for a video extract in which Reksio, the dog, goes ice-skating on a frozen pond, loses his balance, and comes back. There is no evidential framing through direct perception markers, as protagonists and events are introduced without any evidential marker (default perspective, maintained throughout). An epistemic-inferential modal auxiliary (‘**must** have fallen over’) marks an inference based on the speaker’s reasoning rather than on his perception of events.

Our database may be too small to allow for generalizations, but it suggests that although the default perspective is the most common in both languages, French learners of English tend to make evidential framing explicit more often than native speakers of both languages and English learners of French.

5.2 Inferential markers

As observed earlier (see Graph 1), the use of inference evidentials is far more frequent than direct perception markers among all groups of participants, confirming Mélac's (2014, p. 384-387) results in a corpus-based study on English natives. Using Squartini's (2008) classification, we will first analyse native speakers' choice of inferentials, before focusing on their use by L2 learners.

	FrL1 EngL2 LI	FrL1 EngL2 UI	FrL1 EngL2 A	Eng L1	EngL1 FrL2 LI	EngL1 FrL2 UI	EngL1 FrL2 A	Fr L1
Circumstantial	5	6	32	39	4	10	9	8
<i>adverb</i>	1	2	6	8			1	1
<i>cognition verb construction</i>	1	2	15	17	4	9	5	2
<i>copular predicate</i>	3	2	11	12		1		4
<i>modal verb</i>							1	
<i>other construction</i>				2			2	
<i>perception verb</i>								1
Generic	1	11	16	11		6	5	12
<i>adverb</i>		7	2	5		2	2	5
<i>cognition verb construction</i>	1	3	11			4	3	4
<i>modal verb</i>		1	3	6				3
Total	6	17	48	50	4	16	14	20

Table 8. Inferential markers (circumstantial and generic)

While direct perception is almost always expressed through a single marker (perception verbs 'we see' / *on voit*), Tables 6 and 7 clearly show the vast array of evidential markers available to speakers of French and English, while Table 8 illustrates their distribution and the type of inference they mark across proficiency levels. Circumstantial markers include copular verbs of perception, perception verbs, adverbs, cognition verb constructions, conditional mood and modal auxiliaries, while generic inference is marked by modal auxiliaries, cognition verb constructions, and adverbs. The relatively frequent use of inferential markers could be due to their discursive function: contrary to direct perception markers which are optionally used to open a narrative frame, with reference maintained elliptically throughout the narrative episode, inferential markers are used each time the speaker narrates an episode which they need to reconstruct, either based on visual cues (circumstantial markers) or on world knowledge (generic markers). The nature of the task (cartoon viewing then retelling) probably explains the dominance of circumstantial markers in the productions. Let us now analyse the different markers found in our database.

Native speakers of French and English mainly rely on copular verbs of perception to express circumstantial evidentiality, as in (15), (16) and (17):

(15) and she then **looks** awfully sad (E02, line 90)

(16) and the dog **seemed** very happy (E01, line 2)

(17) *Ils ont l'air d'être copains* (F05, line 16) 'They look like they are friends'

With 'look + adjective', the speaker infers the subject's state of mind based on visual perception, as in (15). Such examples produced by English natives include adjectives expressing emotions, which are notably observable in the stimulus through facial expressions. As for *avoir l'air*, it is used here to infer the relationship between the two protagonists, based on visual cues, as in (17). 'Seem' is the most frequent circumstantial marker used by English natives, as in (16), which is not surprising considering that its core semantic value includes inference, making it a likely candidate for the job. However, contrary to 'look' or 'sound', it does not specify what sensory channel is involved.

As for learners, they generally underuse copular verbs of perceptions, with some non-target-like constructions as is the case for the English learner of French in (18).

(18) **Il a l'air qu'il est triste* (UIEF08, EngL1FrL2, line 34) 'He looks like he is sad'

Learners of English favour 'seem' over the copular verbs of perception, reflecting a lack of sensitivity to the specific sense involved, which could be due to the lower grammaticalization of the copular perception verb paradigm in French than in English (see Miller, 2008; Gisborne, 2010).

In our database, epistemic modals are specialized in the marking of generic inference in the productions of native speakers. However, learners altogether use them very rarely, or sometimes use modal auxiliaries to mark circumstantial inference, as *a dû* in (19), which recounts the episode in which the dog wakes up, stretches and leaves its kennel to find out that the ground is frozen and slippery.

(19) *on dirait le matin et il arrive pas à marcher parce qu'il a dû geler dans la nuit* (AEF02, lines 3-5) 'it **looks like** morning and he doesn't manage to walk because it **must have frozen** during the night'.

Adverbs are also a productive means of marking both circumstantial and generic inference, with some adverbs being used for both, depending on context:

(20) and then she falls through the ice so ehm **obviously** not very thick (E10, line 55)
GENERIC

(21) because he was **obviously** very cold (AFE05, line 37) CIRCUMSTANTIAL

Even though the cartoon does not show the character falling through the ice, in (20), E10 infers, based on his world knowledge, that the ice was not very thick. On the other hand, the description of the character being very cold in (21) is based on the observation of the character shivering.

It is interesting to note that English speakers here favour ‘obviously’ for circumstantial inference, and ‘probably’ for generic inference, with ‘presumably’ being used for both. As for French natives, they mostly use adverbs for generic inference (*certainement, sûrement, normalement*), with one occurrence of circumstantial *apparemment*. Regarding learners of French, the only adverb they use is *peut-être*, with one instance for circumstantial inference, and the rest marking generic inference. Contrary to learners of French, learners of English use a variety of adverbs, with 9 circumstantial and 9 generic uses. They display sensitivity to EngL1 preferences with the use of ‘obviously’ and ‘presumably’, but also might transfer the French *apparemment* when they use ‘apparently’, which is not attested in the English data.

Finally, instances of cognition verb constructions are mostly found in English speakers’ narratives (n=16), almost exclusively to express circumstantial inference with ‘I think’ (n=15), as in (22). French speakers display a less clear pattern as they use several expressions (*je crois, je pense, j’imagine, on suppose*) to express both circumstantial and generic inference. English learners of French seem to be sensitive to such variety in the French input: at LI level, they exclusively use *je pense*, probably influenced by English L1 preferences; at UI and A levels, they start using also *je crois* (‘I believe’) and *j’imagine*, thereby integrating the use of a more diverse set of expressions, in line with French L1 patterns.

(22) **I think** the dog managed to pull the girl out of the extremely cold water with a scarf (AFE07, line 49) CIRCUMSTANTIAL

As for French learners of English, they have to learn to use a single marker (‘I think’) to perform like native English speakers. However, our data shows that at LI and UI levels, they use a few instances of ‘I suppose’, ‘I think’, and ‘I guess’, then at A level they massively use the latter two markers in equal proportions (‘I think’: 12 tokens, ‘I guess’: 12 tokens), thereby departing from the native speakers’ preferred choice of expression. The strong use of ‘I guess’ could be due to its polysemy: it is frequently found in spoken English as a gap filler, which also marks the speaker’s stance, as in (23): in the absence of visual cues, the speaker uses ‘I guess’ to indicate that he taps into his world knowledge to infer that what the boy is drinking is hot chocolate, as it is what children usually drink to warm up.

(23) He’s drinking some hot chocolate **I guess** (AFE01, FrL1 EngL2 Adv, line 107)
GENERIC

To conclude, we observe in the FrL1 EngL2 data that variety increases with proficiency level. Choices differ from EngL1: learners overuse ‘I guess’ and underuse ‘seem’ and epistemic modals. As regards

adverbs, they use ‘apparently’ where native speakers use ‘presumably’ and ‘obviously’, which might be a case of transferring French L1 preferences. As for EngL1 FrL2, they use mostly cognition verbs to express inference, starting with *je pense* ‘I think’ at LI level, as well as adverb *peut-être* ‘maybe’, which happens not to be the collocation selected by French native speakers.

6. Discussion and conclusion

In this paper, we sought to complement existing research by providing a non-exhaustive overview of the evidential markers used in French and English (two languages that do not possess a highly grammaticalized evidential system), in a narrative task, while investigating how L2 learners acquire such markers and their subtle discursive functions. We hypothesized that such a task would elicit the use of direct perception and inference evidentials, that direct perception markers would be frequent in the data due to the nature of the experimental task, and that evidential markers would appear at advanced stages in the productions of L2 speakers. We wanted to examine at what stage learners acquire a functional domain that is neither obligatory nor particularly homogeneous or salient in the speech of natives, and were looking for language-specific effects as well as general patterns of development.

RQ1. What evidential markers do the French and English native speakers use to express direct perception and inference in an oral narrative, and with which discursive function?

Our results contribute new typological information, as we highlighted a slightly more developed use of evidential markers in English than in French. Not only do English speakers consistently use those markers (all speakers use at least one expression), they can also rely on a fairly grammaticalized paradigm of copular perception verbs specialized in the expression of circumstantial inference, on specialized inferential adverbs such as ‘obviously’ and ‘presumably’, as well as frequent cognition verb constructions markers such as ‘I guess’. Modal auxiliaries are also markers of choice to express generic inference. As for direct perception, it is expressed through ‘we see’, but on a much more limited basis than *on voit* in French. Even though those two markers indicate the speaker’s stance and make evidential framing explicit in discourse, the implicit option (no direct evidential framing) is by far the most frequent in English, while French *on voit* appears on a more systematic basis. However, in line with the findings of Mélaç 2014 on English, inference markers largely dominate the database, with French natives favouring generic inference and English natives producing more instances of circumstantial inference. We believe that such quantitative predominance is due to the fact that direct perception markers, when used for evidential framing and narrative discourse construction, can be implicitly maintained throughout the narrative, while inference markers tend to frame every proposition emerging from the speaker’s inferential reasoning.

RQ2. How do learners of French and English express direct perception and inference at three proficiency levels? More specifically, at what stage do evidential markers emerge in learner productions?

We had hypothesized that due to the nature of our retelling task, direct perception markers would be used earlier and more frequently than inference markers. This expectation was fostered by a general finding in the literature on the L1 acquisition of evidentiality, which states that direct evidentials are usually acquired earlier than indirect ones, probably due to the increased cognitive complexity of using evidence based on reasoning compared to using perceptual evidence (see Koring & De Mulder 2015, p. 949 for a detailed presentation). While our small dataset is consistent with earlier emergence of direct perception, we find that inferential marking is much more widespread than direct perception in our L2 data from the UI level onwards.

RQ3. Do advanced learners use direct perception and inference markers with the same discursive functions as native speakers?

On the whole, data from advanced learners reveal successful acquisition of the formal and semantic features, as well as the main discursive functions, of frequent evidentials, but seem to indicate replication of some ingrained L1 preferences. Just as is the case for native speakers, direct perception is used much less frequently than inference, as direct perception framing is produced through a single marker, with maintained reference throughout the narrated episode. Such a result indicates that the discursive function of direct evidential framing is mastered by advanced L2 learners. As for the use of inference, it seems to illustrate crosslinguistic preferences: learners of French use slightly more circumstantial inference, like English natives, while learners of English prefer generic inference, like French natives, as shown in Graph 1, to express epistemic stance. Such influence of L1 patterns is also illustrated by the higher use of direct perception by French natives and learners of English (upper intermediate and advanced).

The latter phenomenon might reflect the tendency to overexplicitness highlighted in some studies on nominal reference (see Ryan, 2015 for an overview). Indeed, we observe that both groups of advanced learners use a higher proportion of evidentials in their narratives than the target language control groups. However, they display a different progression pattern in the L2 French and L2 English data: while the percentage of use of evidentials by learners of English soars at advanced level, it progresses much less dramatically among advanced learners of French. This more sedate curb might reflect French learners' sensitivity to the fact that these forms are seldom used in the native input.

Our study also sheds light on the patterns of L2 acquisition of a low-salience concept. Interest in evidentiality is relatively recent, and the concept is consequently not part of class curricula for languages such as French and English. Learners therefore cannot rely on guided instruction to what evidential expressions to use, and when. They can only rely on target-language input, but also on the patterns they implement in their own mother tongue. For learners of French and English, the problem is to figure out

when to express evidentiality in a narrative context, and with which expressions. Our results show that the use of evidentials emerges at LI, and globally increases at UI and A levels. Evidentiality is indeed a metacognitive and metalinguistic concept. It is metacognitive in the sense that it relies on the speaker's awareness of what led them to their knowledge of a situation. It is metalinguistic because it encodes linguistically the source of a piece of knowledge that a speaker has chosen to express. Such encoding usually requires the use of rather complex syntactic structures, such as embedding, which appear at more advanced stages of development.

Finally, we are well aware of the limitations of this study, due to a relatively small number of participants per groups, and to a limited database of evidential expressions. However, pending further studies with larger databases, we hope to have shed some light on the discursive functions of evidential markers, the acquisition process of non-grammaticalized concepts, and on the emergence of evidential markers for direct perception, circumstantial and generic inference, in L1 and L2 French and English.

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Résumé

Bien que l'évidentialité, c'est-à-dire l'encodage du mode d'accès à l'information (par perception directe, inférence ou oui dire), ne soit une notion grammaticalisée ni en français ni en anglais, ce concept est exprimé à travers une grande diversité de moyens linguistiques. Dans ce travail, nous tentons de déterminer si un concept non saillant dans les langues source et cible peut être acquis par

des apprenants L2. Nous déterminons quels marqueurs de perception directe et d'inférence sont communément utilisés par des locuteurs francophones (n=10) et anglophones (n=10) natifs ainsi que par des apprenants adultes de ces deux langues (à trois niveaux, n=10 pour chaque groupe), dans une tâche de narration orale semi-guidée, et à quel niveau ces marqueurs émergent. Nos résultats indiquent un marquage plus fréquent de l'inférence que de la perception directe, que le marquage de l'évidentialité s'effectue de manière légèrement différente en français et en anglais, et que ces marqueurs émergent tardivement dans les productions des apprenants (la diversité de types et tokens augmentant avec le niveau de langue). Finalement les apprenants semblent sensibles aux fonctions discursives des marqueurs étudiés.