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## Research Article

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# English Evidential *-ly* Adverbs in Main Clauses: A Functional Approach

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**Abstract:** The present paper examines the distribution of English evidential *-ly* adverb in the scopal hierarchical framework that was presented by Hengeveld and Dall’Aglío Hattnher (2015) in their results of work on Brazilian grammatical evidentials. The analysis will constitute the categorization of eleven English evidential *-ly* adverb. The results will determine whether the analysis supports Hengeveld and Dall’Aglío Hattnher’s (2015) conclusion that evidential items with multiple meanings occur in adjacent positions within an FDG Level, and that they can occur on two Levels in the FDG framework. The data which was retrieved from recent UK newspaper articles in the BYU NOW corpus (News on the Web), comprise main clauses modified by an evidential *-ly* adverb. Categorization of the evidential adverbs in the FDG framework was determined by paraphrasing, and by applying diagnostic scope criteria. For the eleven evidential *-ly* adverbs studied, it is shown that non-reportative evidential adverbs with multiple meanings occur at adjacent FDG layers at the Representational Level, and that two adverbs occur at both the Interpersonal and the Representational Level.

**Keywords:** evidentiality, English *-ly* adverbs, scope, Functional Discourse Grammar, reportativity, inference, deduction, event perception

## 1 Introduction

Hengeveld and Dall’Aglío Hattnher (2015) study the grammatical expression of evidentiality in their Functional Discourse Grammar (FDG) analysis of evidentials used in various native Brazilian languages. Their classification of these grammatical evidentials reveals that if an evidential expresses more than one evidential meaning, these will pertain to contiguous layers in the FDG scopal hierarchy. Hengeveld and Dall’Aglío Hattnher (2015) consider this pattern to reflect a possible developmental pathway of the meaning of grammatical evidentials. Although this paper will not study the diachronic development of adverbs, it will aim to discover whether a similar stepwise pattern holds for lexical English evidential *-ly* adverbs modifying main clauses.

The data used for this research are recent UK news articles, which have been retrieved from the BYU NOW corpus. Although this paper is limited to the analysis of present-day English evidential *-ly* adverbs modifying main clauses, it is, however, hypothesized that these English adverbs will show a stepwise type of categorization pattern in the FDG framework similar to that found by Hengeveld and Dall’Aglío Hattnher (2015). To reveal the pattern of categorization, FDG is adopted for the analysis of each of the eleven English evidential *-ly* adverbs.

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Section 2 discusses the notion of evidentiality, while in Section 3, the predictions are presented. The method, which includes diagnostic criteria based on scope relations, appears in Section 4. The analysis and summary of the analysis of the selected English evidential adverbs in *-ly* based on the classification into FDG categories is in Section 5. Section 6 presents the conclusions.

## 2 Evidentiality – definition and FDG approach

There has been and there still is much discussion about the relation between evidentiality and epistemic modality, but this distinction is not the focus of this paper. For a definition of evidentiality, I will draw on De Haan's (2005) summary of his argument as follows: "Evidentiality *asserts* the evidence, while epistemic modality *evaluates* the evidence" (De Haan 2005: 380). However, I will extend De Haan's definition of evidentiality to state: evidentiality asserts the existence of evidence, which could either be external to, or in the speech situation, or it could be the result of a thought process. After a discussion of evidentiality expressed by English *-ly* adverbs in 2.1, the focus turns in Section 2.2 to evidentiality within FDG, and scope in 2.3.

### 2.1 Evidentiality expressed by English *-ly* adverbs

English evidential *-ly* adverbs are elements that show that a speaker/writer is acting as an anchor that affords access to a retrieval point or knowledge base with the information which is found under the scope of the evidential expression. The FDG evidential hierarchy, discussed in 2.2 and 2.3, reflects the different types of knowledge base: ones external to the speech situation, existing personal knowledge, and directly available external stimuli. The anchor is the speaker/writer<sup>1</sup> of the text, who acts as the point of access to a knowledge base. The notion of anchor or intermediary seems to be present in Lazard's (2001) analysis when he states that the role of evidential forms is "to point to the speaker's becoming aware of the facts [...] the speaker is somehow split into two persons, the one speaking and the one who has heard, inferred, or perceived" Lazard (2001: 362). Haegeman (2006: 1654) refers to speaker anchoring and speaker-oriented adverbials, and to the evidential adverb *apparently*. Ernst (2009: 498) also mentions evidential *obviously* and *clearly* in sentential usage as speaker-oriented adverbs. It is expected that the evidential *-ly* adverbs in main clauses will be anchored to the speaker/writer and producer of the text, who may, in some cases, be the subject of the main clause in which the *-ly* adverb occurs. To illustrate the notion 'anchor', consider the use of *apparently* as a reportative evidential in (1). The use of *according to* cues the reader that the information about new models has been gleaned from a source elsewhere, which forms the knowledge base. The intermediary between the knowledge base and the receiver of the information is the anchor, who is the writer of the text.

- (1) *The countdown continues to the iPhone XI, or the iPhone 9, or whatever Apple is calling this year's devices, and the latest rumor to reach us involves the technical configuration of one or more of the new handsets: specifically, that a dual-SIM might be involved.*

*That's according to sources speaking to the 21st Century Business Herald in China. **Apparently** models for some countries will use a standard dual-SIM tray, while others will incorporate a standard SIM and the bespoke Apple SIM you can already find in some iPad Pro models. At this point it's not clear which of the three 2018 iPhones will get the tech.<sup>2</sup>*

The evidential expression shows that the knowledge base comprises information that is already available to the speaker at the time of production, and is made explicit under the scope of the evidential adverb in the present text. Although it is old information in the sense of being known to the speaker, the information that the evidential adverb modifies may well concern a future time such as in (2), in which the knowledge about the future situation was acquired before the moment of speaking.

<sup>1</sup> This paper will use the term 'speaker' or 'writer' to refer to the producer of the text discussed.

<sup>2</sup> Sources of newspaper texts analysed are listed below the references.

(2) *Apparently* he will arrive tomorrow.

The notion of information drawn from elsewhere is evident in the description of the general findings of Aksu and Slobin’s (1986) work on the Turkish evidential suffix *-miş* which is said to “represent intrusions into consciousness from psychologically more distant, less directly apprehended worlds of thought and experience” (Aksu & Slobin 1986: 164).

In the definition of the role of evidential *-ly* adverbs used in this paper, an *-ly* adverb scopes over a main clause. It indicates to the receiver that existing information within the scope of the evidential *-ly* adverb has been retrieved from a knowledge base. In addition, the receiver understands that there is an intermediary, the anchor that affords access to the knowledge base. Whether, when placed in different contexts, the various English evidential *-ly* adverbs have different meanings and draw on different knowledge bases will be investigated in this paper. The various types of knowledge base are reflected in the FDG description of evidentiality as discussed in 2.2.

## 2.2 Categories of Evidentiality in FDG

The FDG hierarchy is divided into different Levels and Layers. Table 1, which has been abstracted from Hengeveld and Dall’Aglio Hattner’s Fig. 1 (2015: 482), shows that the Categories of Evidentiality (in italics) fall within the two highest FDG Levels, i.e. the Interpersonal (or pragmatic) Level, and the Representational (or semantic) Level. Evidentials at the Interpersonal Level involve pragmatic aspects of the interaction between speakers and hearers, while evidential expressions at the Representational Level reflect a more introspective view of the speaker in terms of thought processes and the speaker’s own observation regarding direct perception. The hierarchy in Table 1 reflects an increase in scope between the layers within the Representational Level, and between the Representational Level and the Interpersonal Level, where the signs <sup>v</sup> and > indicate increase in scope.

**Table 1:** *Scope relations between evidential categories* (abstracted from Hengeveld & Dall’Aglio Hattner 2015: 482)

INTERPERSONAL LEVEL				
Discourse Act	> Illocution	> Communicated Content	> Referential Subact	> Ascriptive Subact
		<i>reportativity</i>		
v				
REPRESENTATIONAL LEVEL				
Propositional Content	> Episode	> State of Affairs	> Configurational Property	> Property
<i>inference</i>	<i>deduction</i>	<i>event perception</i>		

Table 2 shows that, although it is not evident from the labelling, inference is involved not only in the modifier of the FDG Layer of the Propositional Content, but also at the Layer of the Episode. In addition, perception is involved at the Layer of the Episode and the Layer of State of Affairs. *-ly* adverbs expressing evidentiality can act as modifiers at these three Layers.

**Table 2:** *Overlap of perception and inference within the Representational Level*

<i>inference</i>	<i>deduction</i>	<i>event perception</i>
involves inference		
	involves perception	

To clarify the FDG categories of deduction and of inference, these FDG evidential categories at the Representational Level will be related to analyses presented by Aikhenvald (2004), Willett (1988) and Marín-Arrese (2017). The two FDG evidential categories reflect Aikhenvald's (2004: 3) mention of "two types of inference – the one based on visible result, and the other based on reasoning, general knowledge and, ultimately, conjecture." The former relates to the FDG category of evidentiality of deduction, and the latter to 'inference' in FDG. The FDG categories of inference and deduction can also be related to Willett's (1988) observation drawn from his data of grammatical evidentiality, "inferring evidence may be specifically marked as involving either observable evidence (results) or a mental construct only (reasoning)" (Willett 1988: 57). The former is reflected in FDG's deduction, while the latter is found in the FDG evidential category of inference.

Marín-Arrese (2017) adopts a Functional-Cognitive analysis with an overarching category label 'indirect-inferential', which follows Boye (2012). The sub-headings (a-c) below have been taken from Marín-Arrese's (2017: 199) list of examples of texts with English evidential adverbs.

- (a) Indirect-Inferential, Perceptual-based: cognitive processes based on external sensory evidence.
- (b) Indirect-Inferential, Conceptual based: cognitive processes based on knowledge or information acquired externally.
- (c) Indirect-Inferential, Report-based: cognitive processes based on documentary evident, oral and written reports.

In contrast, FDG uses a functional approach in defining its evidential categories. The FDG evidential label 'inference' in the present paper refers to a narrow category of reasoning based on previously acquired knowledge comparable to (b) above, while the FDG 'deduction' is reflected in Marín-Arrese's category (a). The category (c) is part of the FDG reportativity on the Interpersonal Level.

We now turn to the FDG evidential category of reportativity at the Interpersonal Level. Hengeveld and Mackenzie (2008) state, "in general, then, at the Interpersonal Level units are analysed in terms of their communicative function" (Hengeveld & Mackenzie 2008: 15). The layer that is relevant in this paper is the Communicated Content, where the information that the speaker wishes to convey is represented. The information can be modified by a lexical item that has scope over the information reported, which does not originate with the speaker/writer her/himself. As seen in the analysis of *apparently* in (1), the reportative relays information that is accessed from a knowledge base before the time of speaking/writing. In the case of reportativity, the speaker/writer is the anchor or intermediary in providing content, but also the creator of the speech and the one who chooses to include the information from the knowledge base into the present discourse at speech time. Keizer (2015) and Hengeveld and Dall'Aglio Hattner (2015) view reportatives as being different in nature from evidential expressions found at the next lower level, the Representational Level, which concerns semantic categories. In anticipation of the diagnostic criteria of scope relations in 4.3, it should be noted that there are also non-evidential modifiers at the Communicated Content Layer of the Interpersonal Level, which can express speaker attitude to the communicated content.

The second FDG level, the Representational Level involves FDG layers, which reflect the ontological aspects of Lyons' (1977) first, second, and third order entities (Hengeveld and Mackenzie 2008: 131). Briefly, first order entities are "further ascribable animate and non-animate entities observable in space" (Lyons 1977: 443). Second order entities, involve "events, processes, states-of-affairs which are located in time and [...] are said to occur or take place rather than to exist" (Lyons 1977: 443). These are found at the Layer of State of Affairs (SoA). In contrast, there is no 'anchoring' in space or time for third order entities, which are mental constructs (Lyons 1977: 445) found at the Layer of the Propositional Content (Hengeveld & Mackenzie 2008: 131). Such mental constructs can evolve through inference.

The evidentials at the Layer of the Propositional Content on the Representational Level lead in a reflection of knowledge that the speaker already holds at the time of speech without recourse to relaying information about an (immediate) external scene. Speaker knowledge will form the knowledge base for inferential evidentials. Hengeveld and Dall'Aglio Hattner (2015) state, "an utterance characterized by an inferential operator thus elaborates on that existing and stored knowledge rather than reacts to external perceptual stimuli" (Hengeveld & Dall'Aglio Hattner 2015: 485). Again in anticipation of the diagnostic criteria for scope relations in 4.3, it should be mentioned that non-evidential subjective modality is also categorized at the layer of Propositional Content.

The FDG category of deduction is found at the Layer of the Episode, which “may be defined as a semantically coherent set of SoAs [States of Affairs]” (Keizer & Van Staden 2009: 806). The FDG evidential category of deduction involves perception, which triggers the reasoning process. That which is perceived is the knowledge base and the subject of the inferencing process. With regard to deduction, Hengeveld and Dall’Aglia Hattnher (2015: 486) write: “the speaker deduces the occurrence of one state-of-affairs, the deduced one, on the basis of another state-of-affairs, the perceived one”.

Evidential adverbs in -ly used with event perception at the Layer of State of Affairs express a spatial and temporal closeness allowing perception. The speaker is the observer and the information is first-hand as the knowledge base is accessed through sensory perception just prior to or during speech time. With respect to the categories of event perception and that of deduction, we can refer to Guimier (1986), who states, “la plupart du temps, l’adverbe n’évoque pas directement le mode de perception mais une déduction que l’énonciature opère à partir d’une réalité perçue” (Guimier 1986: 255).

### 2.3 Scope

The FDG scale of scope, as touched on in 2.2 and indicated in Table 1, represents the reaches of scope that will be used here to determine the meaning of an evidential -ly adverb and the FDG category in which the adverb would fall. The hierarchy in Table 3 reflects Hengeveld and Dall’Aglia Hattnher’s (2015: 492) Table of scope relations and shows the scope of a category in relation to other categories, which is then reflected in word-order. Every step up in the hierarchy leads to wider scope. It should be pointed out that Nuyts (2006: 19; 2017: 66) also presents a hierarchy of semantic scope of time, aspect, and modality categories in his qualificational categories. However, the highest element in Nuyts’ hierarchy is (inferential) evidentiality followed by and scoping over epistemic modality. In contrast, FDG predicts that epistemic modality at the Layer of the Propositional Content can scope over evidentials of deduction and those of event perception.

**Table 3:** *Scope relations of evidential -ly adverbs with adjacent categories*, (abstracted from Hengeveld and Dall’Aglia Hattnher 2015: 492).

Interpersonal Level		Representational Level			
Illocution (F)	Communicated Content (C)	Propositional Content (p)	Episode (ep)	State-of-Affairs (e)	Configurational Property (F) <sup>3</sup>
1.	<u>Illocutionary adverbial</u>	<i>Reportative</i>			
2.		<u>Speaker attitude adverb</u>	<i>Inference</i>		
3.			<u>Subjective modality</u>	<i>Deduction</i>	
4.				<u>Absolute Time</u>	<i>Event Perception</i>
5.	<i>Reportative</i>	<u>Subjective modality</u>			
6.		<i>Inference</i>	<u>Absolute Time</u>		
7.			<i>Deduction</i>	<u>Relative Time</u>	
8.				<i>Event perception</i>	<u>Manner/Degree</u>

<sup>3</sup> Abbreviations of FDG Layers in brackets.

Using elements from adjacent categories, Table 3 shows FDG scope relations of evidentials (in italics) with non-evidential adverbials and elements of time from adjacent categories (underlined). The combination of features in Table 3 should be read horizontally to show a representation of scope relations between an evidential adverb and a feature that typifies the FDG hierarchy layer that is one higher (1-4), or one lower (5-8) than the position of the evidential adverb. In other words, in rows 1-4, an adjacent higher non-evidential adverb or time element scopes over the evidential adverb. On the Interpersonal Level, the reportative can fall within the scope of adverbials at the Layer of Illocution, which is not considered to include evidentials. In rows 5-8, an adjacent higher evidential adverb scopes over a non-evidential adverbial or time element to its right. As to scope relations and time elements, an evidential of inference can scope over absolute time, whereas an evidential of deduction can scope over relative time. An evidential of inference can also scope over relative time but being at two layers distance, and thus not in an adjacent category, this is not relevant for the analysis.

It should be noted that the categorization of evidential adverbs is not static. As Ramat and Ricca (1998) point out, “the semantic development usually goes from the world being talked about to the views on that world uttered by the speaker in her/his act of speaking. The general trend for sentence adverbs is thus to step up along the hierarchical scale” (Ramat & Ricca 1998: 243). Additionally, this can involve changes in scope relations, which exist between the Layers and within the Levels as shown in Table 1. This supports the FDG claim (Hengeveld & Dall’Aglia Hatthner 2015: 496) that meaning change in evidentials involves development along the horizontal scopal pathway, in the sense that expressions of event perception will develop into expressions of deduction, and these, in turn, into expressions of inference. FDG also holds that any of these three categories may develop into an expression of reportativity following the vertical scopal pathway shown in Table 1. The presence of evidential *-ly* adverbs in adjacent categories on the Representational Level might well be an indication of the incrementally increasing scope of English evidential *-ly* adverbs. However, this paper will only study evidential *-ly* adverbs synchronically and therefore not discuss their development, or their possible increase in scope through time.

### 3 Predictions

The predictions in this paper will be based on FDG theory that states, “grammatical elements may acquire new meanings (i) by increasing their scope layer by layer within the same level, (ii) by moving up from the Representational to the Interpersonal Level” (Hengeveld & Dall’Aglia Hatthner 2015: 496). Accordingly, here, it is predicted that present-day English evidential *-ly* adverbs, which form lexical evidential expressions, will fall into adjacent scope categories on the Representational Level, and that some evidential *-ly* adverbs will be classified at the Interpersonal and the Representational Level without further contiguity restrictions. Paraphrasing and diagnostic criteria of scope relations (see 4.2 and 4.3) will be applied to classify the *-ly* adverbs into FDG categories in order to test the prediction regarding the FDG framework.

### 4 Method

For the analysis (section 5), adverbs were selected from Group (i) and (ii) of Quirk *et al.*’s (1985: 620) ‘Content disjuncts’, which express conviction and appeal to general perception. Of the evidential adverbs identified from these groups, the ten most frequent in current usage according to the OED Online (Oxford English Dictionary) and the Collins Online dictionary were selected. *Visibly* was added as an adverb that may be presumed to reflect the use of the anchor’s sense of direct perception, but can, like *clearly*, act as a manner adverb.

In the present study, contextual factors are kept more or less constant as the data are UK online news articles written for the general public. The examples of the occurrence of evidential *-ly* adverbs, which are listed according to date of appearance, were retrieved from the UK collection in the NOW corpus (GB NOW, Davies 2010-now). At present, the latest recorded article appeared on 30 June 2018. The corpus comprises different types of UK newspapers, but is not exhaustive.

## 4.1 Selection of examples

One thousand examples of each of the eleven adverbs were copied from the NOW corpus to Excel sheets<sup>4</sup>. Out of those, examples of evidential *-ly* adverb occurring in a main clause were selected using the paraphrasing method (see 4.2). Examples were viewed on the newspaper websites, and those with a brief accessible context were chosen for use in this paper. The diagnostic criteria of scope relations (see 4.3) were then applied to check the classification decision made by paraphrasing. These results were collated in Table 12 to indicate which adverbs have multiple meanings, and to judge how the adverbs were distributed in the FDG framework.

Finally, the results of an analysis of the frequency and the distribution of the meanings of occurrences in each FDG category were tabulated. These figures were based on the randomization in Excel of the thousand examples of each adverb extracted from the GB NOW corpus in the period preceding 30 June 2018. Out of these, the first fifty items with an evidential *-ly* adverb modifying a main clause were selected. These adverbs were classified into evidential categories, and the results placed in Table 13.

## 4.2 Paraphrasing

The diagnostic paraphrasing in Table 4 will be employed for the analysis of the examples in this paper. The use of paraphrasing is not intended to suggest that an underlying structure is being made explicit. Paraphrasing is used to identify evidential *-ly* adverbs at the Interpersonal Level, and to classify *-ly* adverbs at the various Layers of the Representational Level.

Paraphrasing can also be used to distinguish cases of evidential *-ly* adverbs expressing perception such as *visibly* and some cases of *clearly*, from cases in which they are manner adverbs. Examples of the two usages are (i) *S/he clearly drew the design, it is her/his style*, and manner adverb in (ii) *S/he drew the design clearly with a lot of detail*. Nuyts (2009: 142) suggests using the diagnostic paraphrase: “it is EVIDENTIAL ADVERB the case that.” This can be applied to evidential and manner adverbs of perception. ‘It is clearly the case that s/he drew the design’ can express (i) but not (ii). This shows that the paraphrasing works for evidential adverbs but will not work for manner adverbs.

The paraphrasing presented in Table 4 is used to classify evidential adverbs into FDG categories. The wording of the paraphrasing is based on paraphrasing given by Plungian (2001: 354), and Guimier (1986: 253-255). The first column provides the FDG category to which the paraphrasing, which is underlined refers. The third column provides a description of the category, which is not used in the paraphrasing.

**Table 4:** Paraphrasing used in this paper

	<u>Paraphrasing</u>	Description
INTERPERSONAL LEVEL		
Reportative	<u>It has been reported/said that...</u>	Information external to the existing speech situation
REPRESENTATIONAL LEVEL		
Inference	<u>From my present knowledge, I reckon that ...</u>	Speaker internal knowledge base. Computing based on existing knowledge
Deduction	<u>From what I observe (saw, heard, smelt, felt), I deduce that...</u>	External knowledge base used in reasoning: interpreting observation
Event Perception	<u>What I observed (saw/heard/ smelt/felt) was that...</u>	Assertion reflecting observations

<sup>4</sup> Only 880 examples of *purportedly* found in GB, BYU.



### 4.3 Diagnostic criteria of scope relations

Table 5 uses constructed sentences to illustrate the scope relations described in Table 3 in Section 2.3. In each row, an evidential adverb (in italics) representing an FDG evidential category combines with a suitable adverbial or time element (underlined). Rows 1-4 in Table 5 show the underlined adverbial or element of time that scopes over the evidential adverb found in an adjacent lower layer, while rows 5-8 illustrate evidential *-ly* adverbs scoping over a modifier or time expression from an adjacent lower layer.

**Table 5:** Sentences exemplifying scope relations within the FDG hierarchy

1.	<i>In all honesty</i> he was <i>reportedly</i> going to emigrate.	<u>Illocutionary adverbial</u> + <i>reportative</i>
2.	<i>Unfortunately</i> he has <i>presumably</i> decided to leave.	<u>Speaker attitude</u> + <i>inference</i>
3.	<i>Certainly</i> he was <i>perceivably</i> not feeling too well.	<u>Subjective modality</u> + <i>deduction</i>
4.	<i>Yesterday</i> he was <i>visibly</i> injured.	<u>Absolute time</u> + <i>event perception</i>
5.	<i>Reportedly</i> he is <u>probably</u> coming by boat.	<i>reportative</i> + <u>subjective modality</u>
6.	<i>Presumably</i> he <u>will</u> arrive within an hour.	<i>inference</i> + <u>absolute time</u>
7.	(Viewing a hand-written letter) <i>Clearly</i> John <u>has written</u> the letter.	<i>deduction</i> + <u>relative time</u>
8.	He is <i>visibly</i> chewing his food <u>well</u> .	<i>event perception</i> + <u>manner/degree</u>

## 5 FDG analysis of the evidential adverbs in *-ly*

As it is the context that determines the meaning of the evidential *-ly* adverb, the adverbs (in bold) are presented in their original texts (in italics). The relevant passage in the text is underlined. In order to investigate the meaning(s) of the eleven evidential *-ly* adverbs that have been selected, it is necessary to discuss the analysis of each of them. In applying the diagnostic methods, the aim is to express the meaning of the evidential *-ly* adverb as it is found in the news text. The diagnostics of paraphrasing and criteria of scope relations refer to Table 4 and Table 5.

### 5.1 *Reportedly, purportedly, allegedly and supposedly*

*Reportedly, purportedly, allegedly* and *supposedly* are reportative evidentials at the layer of the Communicated Content, at the FDG Interpersonal Level. The writer, who is the anchor, has gleaned the information from a knowledge base that is external to the speech situation, and provides the corresponding information as part of her/his argument. In the case of (3), exemplifying *reportedly*, this argument is about the continuation of the Union, the UK. By using *reportedly*, the writer does not present the information as a generally shared point of history, or as hard fact.

(3) *Put bluntly, Northern Ireland is different. It exists on the political, economic and cultural periphery of the UK, rather than being an integral component of Britain's understanding of its own self-interest or self-image.*

*Churchill and Thatcher both **reportedly** considered dumping Northern Ireland at moments of political expediency.*

*Churchill contemplated trading it for the support of the Irish Free State in World War II and made a number of overtures on this basis to the Irish taoiseach of the time, Eamon de Valera. In 1983 meanwhile, Margaret Thatcher asked the then Northern Ireland secretary James Prior if he thought her government should prepare for a "tactical withdrawal" from Northern Ireland.*

In (4), *purportedly* modifies information showing that it comes from a knowledge base with information about the intentions of the planned sinicisation. Again, the anchor, is the writer of the text.

(4) *The objective of “sinicising” religions, including the Chinese Catholic Church, was declared in 2015 after President Xi Jinping took part in a meeting of the United Front - a body answerable to the Communist Party Central Committee that has new powers to impose state control on religions.*

*The “sinicisation” process will **purportedly** increase assimilation of Chinese culture into religious expression, eliminating “foreign influences”. Independence “from foreign influence” implies acting without the mandate of the Holy See, and submission to the Communist Party.*

*No details of the Five-Year Outline were mentioned in a 22 May news letter on the CCPA-BCCCC website.*

*Allegedly* in (5) shows that the anchor and writer is relying on an external knowledge base concerning the content of the will with conclusions drawn by others.

(5) *A family are feuding over the legitimacy of a woman’s will – because it’s written on post-it notes...*

*The 59-year-old’s last will was signed but not witnessed is now the subject of a Supreme Court case, with claims that another will may have been destroyed. It is alleged that Ms Louie revoked all wills and made the notes her final will.*

*She **allegedly** wrote that everything she owns will go to her mother, Janice Louie, and sister Ms Lee. She then reaffirms her decision by writing ‘mum and sister need my total estate’.*

*‘I know I don’t have a witness, but this is my signature Kim K Louie for my Will dated 25/12/2013,’ Ms Louie wrote.*

The case of *supposedly* exemplified in (6) has similar interpersonal properties. Here, information from the knowledge base, which is within the scope of the evidential includes a supposed quote.

(6) *When Leslie Warman, a director of another Green company, spoke out of turn in a tense business meeting, he’s alleged to have found himself on the receiving end of death threats.*

*‘If you don’t shut your f\*\*\*\*g mouth, I’ll get my friends from south of the river to come for you and your family,’ Green **supposedly** declared.*

To reveal their interpersonal nature, the same diagnostics from Section 4 above can be applied to these four adverbs. The first diagnostic consists of paraphrasing the adverb by means of the matrix clause *it has been reported that* (3a)-(6a). The second one uses scope criteria which show that these four adverbs modifying the Communicated Content can all be preceded by an adverbial from the next higher FDG layer, *i.e.* the illocutionary adverbial *in all honesty*, and they can be followed by an adverbial from the next lower FDG category, *possibly* and *might* expressing subjective modality. The scope relations will be given in the variants (3b)-(6b) for the higher scope adverbial and in the variants (3c)-(6c) for the lower scope.

(3) a. *It has been reported/said that Churchill and Thatcher both considered dumping Northern Ireland at moments of political expediency.*

b. *In all honesty Churchill and Thatcher both **reportedly** considered dumping Northern Ireland at moments of politica expediency.*

c. *Churchill and Thatcher both **reportedly** considered possibly dumping Northern Ireland at moments of political expediency.*

(4) a. *It has been reported/said that the “sinicisation” process will increase assimilation of Chinese culture into religious expression, eliminating “foreign influences.”*

b. *In all honesty the “sinicisation” process will **purportedly** increase assimilation of Chinese culture into religious expression, eliminating “foreign influences”.*

c. *The “sinicisation” process will **purportedly possibly** increase assimilation of Chinese culture into religious expression, eliminating “foreign influences”.*

- (5) a. *It has been reported/said that she wrote that everything she owns will go to her mother, Janice Louie and sister Ms Lee.*  
 b. *In all honesty she **allegedly** wrote that everything she owns will go to her mother, Janice Louie and sister Ms Lee.*  
 c. *She **allegedly possibly** wrote that everything she owns will go to her mother, Janice Louie and sister Ms Lee.*

In the case of (6), the tests work more easily if we revert the order of the supposed literal quote and the sentence containing the adverb:

- (6) a. *It has been reported that Green declared: ‘[...]’*  
 b. *In all honesty Green **supposedly** declared: ‘[...]’*

It turns out to be more appropriate in this context to use, instead of the adverb *possibly*, a verbal expression of subjective modality:

- c. *Green **supposedly might** have declared: ‘[...]’*

Having thus shown the analysis of these four adverbs as reportative, interpersonal adverbs that modify the Communicated Content, I summarize the result of this analysis in Table 6.

**Table 6:** Summary of the analysis of reportedly, purportedly, allegedly and supposedly

LEVELS	INTERPERSONAL	REPRESENTATIONAL		
<i>Layers</i>	<i>Communicated Content</i>	<i>Propositional Content</i>	<i>Episode</i>	<i>State of Affairs</i>
Evidential Category	Reportative	Inference	Deduction	Event Perception
<i>apparently</i>	+			
<i>reportedly</i>	+			
<i>purportedly</i>	+			
<i>supposedly</i>	+			

## 5.2 Apparently

*Apparently* is classified into three different FDG evidential categories: reportative, inference, and deduction. These will be discussed in turn.

In (7), *apparently* is a reportative evidential at the FDG Layer of the Communicated Content at the Interpersonal Level. (7) is an extract from the longer text in (1) of Section 2.1. *That’s according to* in line 2 of (7), shows that the writer has accessed the news modified by *apparently* from elsewhere, a knowledge base to which that the writer and anchor has access.

- (7) *That’s according to sources speaking to the 21st Century Business Herald in China. **Apparently models for some countries will use a standard dual-SIM tray, while others will incorporate a standard SIM and the bespoke Apple SIM you can already find in some iPad Pro models.***

*Apparently* in text (8) is judged to be an evidential of inference as the writer is viewing information that s/he presently holds from a seemingly new perspective. The inference drawn is the writer’s, and the writer is the anchor to the knowledge base with the inference.

(8) *In January, the Government announced that it had achieved its pledge to make superfast broadband of 24 Mbps available to 95 per cent of the country. Looked at another way, Whitehall hit its target while leaving 5 per cent of the nation without usable broadband.*

*That would be unacceptable for, say, a water provider. If 5 per cent of the population – approximately 3.3 million people – died of thirst, there would be an outcry. But the Government can **apparently** leave just as many people without adequate internet and it's a triumph.*

In (9), *apparently* is a case of deduction at the Layer of the Episode on the Representational Level. The writer and anchor has drawn a conclusion about the nature of his browser on the basis of perception of its actions.

(9) *74 min: Switzerland have found a second wind! Suddenly they've got Serbia backpedaling. This is intriguingly poised. "My browser is **apparently** a Switzerland fan and spent a few minutes after the equaliser having a melt down and repeating the goal post again and again until I got bored and hit F5. God help me if they lose. Though maybe I'll just have to use it as a reason to go home early...*

The paraphrasing of the reportative *apparently* in (7) is presented in (7a) using: *it has been reported that*. In (7b) the adverbial of higher scope than *apparently* is expressed by illocutionary adverbial *in all honesty*, while in (7c) *probably* is an adverbial of lower scope than *apparently*.

- (7) a. *It has been reported that models for some countries will use a standard dual-SIM tray.*  
 b. *In all honesty **apparently** models for some countries will use a standard dual-SIM tray.*  
 c. ***Apparently** models for some countries will probably use a standard dual-SIM tray.*

The paraphrasing of inferential *apparently* presented in (8) as *from my present knowledge I reckon that* is given in (8a). The scope relation represented in (8b) is the higher scope adverbial of speaker attitude, *unfortunately* at the Layer of communicated content. (8c) represents a lower level time element: absolute time, *next year*.

- (8) a. *From my present knowledge, I reckon that the Government can leave just as many people without adequate internet and it's a triumph.*  
 b. *Unfortunately the Government can **apparently** leave just as many people without adequate internet and it's a triumph.*  
 c. *The Government can **apparently** leave just as many people without adequate internet next year and it will be a triumph.*

The paraphrase of (9) in (9a) shows that deduction involves observation and conclusion. The higher scope relation here is *certainly* which expresses subjective modality, while the lower scope relation is relative time expressed by *has become*.

- (9) a. *From what I observe, I deduce that my browser is a Switzerland fan.*  
 b. *Certainly my browser is **apparently** a Switzerland fan*  
 c. *My browser **apparently** has become a Switzerland fan.*

In Table 7, I show the results of the analysis of *apparently*, which appears in three different FDG categories.

**Table 7:** Summary of the analysis of *apparently*

LEVELS	INTERPERSONAL	REPRESENTATIONAL		
Layers	Communicated Content	Propositional Content	Episode	State of Affairs
Evidential Category	Reportative	Inference	Deduction	Event Perception
<i>apparently</i>	+	+	+	

### 5.3 Evidently

*Evidently* is analysed as a reportative evidential adverb, while in a different context it is an evidential adverb of inference. (10) illustrates the former, where the writer and anchor is relaying historical information from an external knowledge base. Therefore, *evidently* in (10) is a reportative at the Layer of Communicated Content on the Interpersonal Level.

- (10) *The most repeated “reason” for a wholesale ban on lilac in the house was too close a deep association between these springtime delights and funerals. **Evidently**, the powerful aroma was used to line coffins and so mask the smell of death. Hence an automatic link for many with grief.*

The second analysis of *evidently* is illustrated in (11), where the writer and anchor is drawing her own conclusion about the reported researcher’s information. The writer’s existing knowledge seems to be that painkillers are used to treat symptoms of a hangover, which is used in drawing the conclusion. *Evidently* is an evidential of inference with the writer as anchor giving access to her own conclusion.

- (11) *Being rejected or treated unfairly activates the dACC just as a headache would. Eisenberger, along with her collaborator Nathan DeWall, was able to show that taking a thousand milligrams of Tylenol every day for three weeks resulted in the experience of significantly less social pain compared to a control group that took a placebo. Taking a painkiller had made the participants less sensitive to everyday rejection experiences. **Evidently**, you can treat your heartache and your hangover at the same time. (Why no one is marketing ibuprofen for this purpose yet, I can’t imagine.)*

The paraphrasing of the reportative in (10) is shown in (10a) with *It has been reported that*. In (10b), the illocutionary adverbial *in all honesty* represents higher scope, while in (10c), the epistemic adverbial *probably*, expressing subject modality has lower scope than reportative *evidently*.

- (10) a. *It has been reported that the powerful aroma was used to line coffins and so mask the smell of death.*  
 b. *In all honesty the powerful aroma was **evidently** used to line coffins and so mask the smell of death.*  
 c. ***Evidently**, the powerful aroma was probably used to line coffins and so mask the smell of death.*

(11a) shows the paraphrase of inferential *evidently* as used in (11) by adding *From my present knowledge, I reckon that*. In (11b) the adverb of speaker attitude *luckily* has higher scope than *evidently*. *In the future* in (11c) expresses absolute time and is of lower scope than the evidential adverb.

- (11) a. *From my present knowledge, I reckon that you can treat your heartache and your hangover at the same time*  
 b. *Luckily **evidently** you can treat your heartache and your hangover at the same time.*  
 c. ***Evidently**, in the future you can treat your heartache and your hangover at the same time.*

The analysis of *evidently* as a reportative and an inferential evidential adverb is found in Table 8.

**Table 8:** Summary of the analysis of *evidently*

LEVELS	INTERPERSONAL	REPRESENTATIONAL		
Layers	Communicated Content	Propositional Content	Episode	State of Affairs
Evidential Category	Reportative	Inference	Deduction	Event Perception
<i>evidently</i>	+	+		

## 5.4 Presumably

In (12), *presumably* is an evidential adverb of inference at the Layer of the Propositional Content on the Representational Level. The speaker Mick Rix is the anchor of *presumably* and is drawing his own conclusion about what Boris Johnson may have thought.

- (12) *The Foreign Secretary face widespread derision after he chose to be out of the country on official business on Monday despite his long-standing opposition to a third runway...*  
 Mick Rix, national officer of the GMB union, said: "Boris Johnson **presumably** thinks he's going to get a better reception in Kabul than he would in Westminster today."  
 "As the Foreign Secretary flees the country having abused British industry and broken yet another promise, this time on Heathrow, we're standing up for quality, skilled jobs and backing expansion today."

The paraphrase in (12a) uses *From my present knowledge, I reckon that* in showing that *presumably* is an evidential of inference. The speaker attitude adverb *unfortunately* in (12b) has higher scope than *presumably*, while *tomorrow* expresses absolute time and has lower scope.

- (12) a. *From my present knowledge, I reckon that* Boris Johnson thinks he's going to get a better reception in Kabul than he would in Westminster today.  
 b. *Unfortunately* Boris Johnson **presumably** thinks he's going to get a better reception in Kabul than he would in Westminster today.  
 c. Boris Johnson **presumably** thinks he's going to get a better reception in Kabul *tomorrow* than he would in Westminster today.

The results of the analysis of *presumably* are presented in Table 9.

**Table 9:** Summary of the analysis of *presumably*

LEVELS	INTERPERSONAL	REPRESENTATIONAL		
Layers	Communicated Content	Propositional Content	Episode	State of Affairs
Evidential Category	Reportative	Inference	Deduction	Event Perception
<i>presumably</i>		+		

## 5.5 Obviously, seemingly and clearly

*Obviously*, *seemingly* and *clearly* are analysed as evidential adverbs of inference and in a different context as adverbs of deduction. *Obviously* in (13), *seemingly* in (14) and *clearly* in (15) are inferential evidential adverbs at the Layer of Propositional Content on the Representational Level, while in (16), (17) and (18), they are evidential adverbs of deduction at the Layer of the Episode of the Representational Level. In addition, here *clearly* in (15) and (18) will be paraphrased (see 4.2) to support the analysis that *clearly* is an evidential adverb and not an adverb of manner.

In (13) Arbiter, who is the anchor of the evidential adverb *obviously*, presents his conclusion about the Queen's situation. The conclusion appears to be based on existing information from his former job at the Palace.

- (13) 'Poorly' Queen pulls out of ceremony: After nine appearances in ten days, little wonder she's so tired!  
 Dickie Arbiter, a former Buckingham Palace press secretary, said: 'To have had to back off from a ceremony at St Paul's Cathedral would really upset her but **obviously** she's got a summer cold and she's erring on the side of caution.'  
 'She is the only one who can say if she's doing too much or not, but she is certainly very good at pacing herself.'

In (14), the writer and anchor is drawing a conclusion on the basis of his knowledge about Trump's communication before the expulsion of the diplomats.

- (14) *One must assume that many or most of the Russian diplomats designated for expulsion are intelligence operatives. Thus the cumulative impact on Russia's overseas intelligence activities could be considerable. Only a few days ago Mr Trump was **seemingly** setting aside the Salisbury attack and talking about a new summit with Mr Putin. Will this now go ahead? And if so when?*

In (15), the anchor is the speaker/writer of the article who is drawing the conclusion about Trump's behaviour. The classification of *clearly* as an evidential and not an adverbial of manner can be supported by paraphrasing (see 4.2): 'It is clearly the case that all that yelling and threatening has worked,' which expresses evidential meaning.

- (15) *Who would have thought it? President Donald Trump, possibly the most bellicose ever occupant of the White House, has pulled off the impossible and produced a peace deal with North Korea. He has certainly redefined the word "diplomacy" but all that yelling and threatening has **clearly** worked.*

In (13a), (14a) and (15a), *from my present knowledge, I reckon that* is used to paraphrase the examples with evidential adverbs of inference: *obviously*, *seemingly* and *clearly*. Adverbs expressing speaker attitude, *unfortunately* and *strangely*, which have higher scope than *obviously*, *seemingly* and *clearly* as evidential adverbs of inference, were inserted into (13b) (14b) and (15b). The adverbial of absolute time, *at the moment*, which has lower scope than *obviously* and *clearly* was added in (13c) and (15c). In (14c), the presence of *a few days ago* in the news text is underlined as being an adverbial of absolute time.

- (13) a. *From my present knowledge, I reckon that she's got a summer cold and she's erring on the side of caution.*  
 b. *Unfortunately she's **obviously** got a summer cold and she's erring on the side of caution*  
 c. ***Obviously** she's got a summer cold and she's erring on the side of caution at the moment.*
- (14) a. *Based on my present knowledge, only a few days ago Mr Trump was setting aside the Salisbury attack.*  
 b. *Strangely only a few days ago Mr Trump was **seemingly** setting aside the Salisbury attack.*  
 c. *A few days ago Mr Trump was **seemingly** setting aside the Salisbury attack.*
- (15) a. *From my present knowledge, I reckon that all that yelling and threatening has worked*  
 b. *Strangely all that yelling and threatening has **clearly** worked.*  
 c. *All that yelling and threatening has **clearly** worked at the moment.*

*Obviously* in (16), *seemingly* in (17) and *clearly* in (18) are evidential adverbs of deduction at the Layer of Episode on the Representational Level. In (16), the writer and anchor is presenting a conclusion on the basis of what he appears to have observed in Claire's behavior.

- (16) *The letter says this – 'In case I forget to tell you, Claire has made a will with Peter Levett making her cousins beneficiaries' said Mr Halsey. But that will mysteriously vanished and was replaced by the one making MacMaster the sole beneficiary. He got Ms Gordon to sign it as she became increasingly ill, claiming it would save her money. MacMaster said when he met the actress over 30 years ago, she **obviously** found me attractive.'*

In (17), the knowledge base for the conclusion drawn by the writer and anchor is the perceived absence of photos on Smith's page. The conclusion drawn is that Smith has deleted them.

(17) *Smith has **seemingly** deleted all photo evidence of Flynn from his page, and he no longer follows the Netflix actor. (Smith still follows Flynn’s 13 Reasons Why co-stars Justin Prentice and Miles Heizer, the latter of whom fans shipped with Flynn before Smith came into the picture. Reps confirmed Flynn and Heizer were just friends.)*

In (18), from the evidence of three baby birds being delivered to the rescue centre, it was concluded that they had lost their mother. The writer, who uses the first person pronoun in the article and works at the animal rescue appears to be the anchor who has seen the baby birds, and drawn the conclusion about them. The paraphrase ‘It is clearly the case that they had lost mum’ supports the analysis of *clearly* as an evidential adverb rather than an adverb of manner (see 4.2).

(18) *Chris had a brilliant job this week reuniting three siblings with each other. **They had clearly** lost mum. One baby came in Sunday but then we received another call on Monday as two more youngsters were found peeping and calling. They certainly would not have survived if they had been left. They are now with our orphan team leader Katie to work her magic.*

In (16a), (17a) and (18a) paraphrasing with *from what I observe, I deduce that* followed by a conclusion supports the classification of the adverbs as instances of evidential adverbs of deduction. For the scope diagnostic, *certainly* has been inserted in (16b), (17b) and (18b) as an adverb with higher scope than *obviously*, *seemingly* and *clearly*. Relative time, which is scoped over by the evidential adverb of deduction is expressed in (16c) by *after a while*, and in (17c) and (18c) by elements that were present in the newspaper text: the present perfect of *delete*, and the past perfect of *lose*.

(16) a. *From what I observe, I deduce that she found me attractive.*  
 b. *Certainly she **obviously** found me attractive.*  
 c. *She **obviously** found me attractive after a while.*

(17) a. *From what I observe, I deduce that Smith has deleted all photo evidence of Flynn from his page.*  
 b. *Certainly Smith has **seemingly** deleted all photo evidence of Flynn from his page.*  
 c. *Smith **has seemingly** deleted all photo evidence of Flynn from his page.*

(18) a. *from what I observe, I deduce that they had lost their mum.*  
 b. *Certainly they had **clearly** lost their mum.*  
 c. *They **had clearly** lost their mum.*

In Table 10, I show the results of the analysis of *obviously*, *seemingly* and *clearly* as evidential adverbs of inference and of deduction.

**Table 10:** Summary of the analysis of *obviously*, *seemingly* and *clearly*

LEVELS	INTERPERSONAL	REPRESENTATIONAL		
Layers	Communicated Content	Propositional Content	Episode	State of Affairs
Evidential Category	Reportative	Inference	Deduction	Event Perception
<i>obviously</i>		+	+	
<i>seemingly</i>		+	+	
<i>clearly</i>		+	+	



## 5.6 Visibly

*Visibly* is classified as an evidential of deduction at the Layer of Episode in some contexts and in others as an evidential of event perception at the Layer of State of Affairs. *Visibly* in (19) is classified as an evidential adverb of deduction on the Representational Level. The writer of the article appears to be the anchor who had drawn the conclusion about the level of the water in the river from observation. The paraphrase: ‘It is *visibly* the case that the level of the Tigris River has dropped’ expresses evidential meaning (see 4.2).

(19) *Ambassador Fatih Yildiz told reporters in Baghdad that it will take nearly a year to fill the reservoir behind Turkey’s Ilisu dam.*

*The level of the Tigris River has **visibly** dropped since the filling began on Friday, with Iraqis able to cross the river on foot in some places.*

*The Tigris and the Euphrates, which has also been affected by upstream Turkish dams, are Iraq’s main source of water.*

In (20), *visibly* is an evidential of event perception at the Layer of State of Affairs on the Representational Level. The writer and anchor is reporting on events he observed in court. In addition to the analyses in (19a-c), there are two points that support this classification. Firstly, *visibly* is unlikely to be a manner adverb: ‘He winced in a visible way.’ This paraphrase is odd as the definition of ‘wince’ in the Cambridge online dictionary is “to show pain suddenly for a short time in the face,” which means that a facial expression would be observable. Secondly, Nuyts’ paraphrasing (see 4.2) for evidential adverbs as in ‘It was *visibly* the case that he winced’ is acceptable, and seems to indicate that the wince was observed by the writer.

(20) *William Lincoln, 60, who suffers from bladder problems and has had a double hip replacement, gingerly left the dock on occasion to go the toilet. He **visibly** winced as he slowly got to his feet when asked to stand by the court clerk.*

The paraphrasing in (19a) shows *visibly* as an evidential adverb of deduction by inserting *from what I observe, I deduce that* before the conclusion. In (19b) *certainly* is inserted as an adverb of subject modality, which has a higher scope than *visibly*, while (19c) shows that the news text already has the present perfect in *has dropped*, which is an instance of relative tense with lower scope than *visibly*.

- (19) a. *From what I observe, I deduce that the level of the Tigris River has dropped.*  
 b. *Certainly the level of the Tigris River has **visibly** dropped.*  
 c. *The level of the Tigris River has **visibly** dropped.*

In (20a) the paraphrase with *what I observed/saw was that* supports the analysis that this instance of *visibly* is a case of event perception. *Yesterday* in (20b) expresses absolute time, which has higher scope than evidential *visibly*. *Slightly* in (20), which is a degree adverb has lower scope than *visibly*.

- (20) a. *What I observed/saw was that he winced.*  
 b. *Yesterday he **visibly** winced.*  
 c. *He **visibly** winced slightly.*

The results of the analysis of *visibly* are tabulated in Table 11.

**Table 11:** Summary of the analysis of *visibly*

LEVELS	INTERPERSONAL	REPRESENTATIONAL		
Layers	Communicated Content	Propositional Content	Episode	State of Affairs
Evidential Category	Reportative	Inference	Deduction	Event Perception
<i>visibly</i>			+	+

## 5.7 Summary with distributional data

Table 12 shows the FDG framework with the results of the classification of the eleven English evidential -ly adverbs using diagnostic criteria. The results provide support for the prediction that English evidential -ly adverbs with multiple meaning fall into adjacent categories on the Representational Level. *Apparently* and *evidently* appear to be the only adverbs studied that can be categorized on both the Representational Level and on the Interpersonal Level.

**Table 12:** Categorization of -ly adverbs into FDG Layers and Levels

LEVELS	INTERPERSONAL	REPRESENTATIONAL		
Layers	Communicated Content	Propositional Content	Episode	State of Affairs
<i>reportedly</i>	+			
<i>purportedly</i>	+			
<i>allegedly</i>	+			
<i>supposedly</i>	+			
<i>apparently</i>	+	+	+	
<i>evidently</i>	+	+		
<i>presumably</i>		+		
<i>obviously</i>		+	+	
<i>seemingly</i>		+	+	
<i>clearly</i>		+	+	
<i>visibly</i>			+	+
categories	reportativity	inference	deduction	event perception

Table 13 shows the results of calculations regarding the distribution and frequency of evidential -ly adverbs in recent UK newspaper entries in the GB section of the NOW corpus. The second column, A, gives the number of entries out of a thousand randomized items that had to be searched to retrieve the fifty occurrences (column 3, B) of -ly adverbs that modify a main clause. The classification of these evidential -ly adverbs is found in the four ensuing columns. The final column shows the frequency of *clearly* and *visibly* acting as manner adverbs modifying a main clause.

**Table 13:** First 50 entries of the evidential -ly adverbs in main clauses from randomization of a thousand examples of each occurring in NOW corpus before 30 June 2018

-ly adverb	A	B	Reportative	Inference	Deduction	Event Perception	Manner
<i>reportedly</i>	85	50	50				
<i>purportedly</i>	363	50	50				
<i>allegedly</i>	131	50	50				
<i>supposedly</i>	297	50	50				
<i>apparently</i>	123	50	42	5	3		
<i>evidently</i>	106	50	4	46			
<i>presumably</i>	177	50		50			
<i>obviously</i>	87	50		49	1		
<i>seemingly</i>	426	50		45	5		
<i>clearly</i>	74	50		43	4		3
<i>visibly</i>	536	50			30	13	7

On the basis of these results, it can be seen that the eleven English evidential *-ly* adverbs found in the data have a strong tendency to cluster in one of the FDG categories. Except for *evidently*, which may be broadening in scope, the scattering of other positions in the current data shows a tendency to a distribution lower down the scope scale. In addition, the *-ly* adverbs vary in their frequency in main clauses. It should be noted that some of these adverbs occur more frequently in other grammatical constructions. These occurrences will be investigated at a later date.

## 6 Conclusion

The classification of English evidential *-ly* adverbs in FDG categories has been supported by the acceptability of examples illustrating scope relations. On the basis of the collated results in Table 12, it can be concluded that the predictions that were stated in section 3 are consistent with the distribution of English evidential *-ly* adverbs appearing in main clauses in the present data. If an evidential *-ly* adverb has multiple meanings on the Representational Level, these do indeed fall into adjacent FDG hierarchical Layers, and secondly, some *-ly* evidential adverbs do appear at the Interpersonal and the Representational Level. The stepwise pattern of the adverbs at the Representational Level may well indicate a developmental path, which would have to be explored in a diachronic study.

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## References

- Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford: Oxford University Press.
- Aksu-Koç, Ayhan A. & Dan I. Slobin. 1986. A psychological account of the development and use of evidentials in Turkish. In Wallace Chafe, Joanna Nichols (eds.), *Evidentiality: The Linguistic coding of Epistemology*. 159-167. Norwood, NJ: Ablex Publishing Corporation.
- Boye, Kasper. 2012. *Epistemic Meaning. A Cross-linguistic Functional- Cognitive study*. Berlin: Walter de Gruyter.
- Cambridge Dictionary Online*. n.d. <https://dictionary.cambridge.org/dictionary/english>.
- Carretero, Marta. To appear 2019. Evidentiality in adverbs of manner of perceivability: *The case of English manifestly, noticeably, patently and visibly. Functions of Language*.
- Collins Online Dictionary*. 2018. <https://www.collinsdictionary.com/dictionary/english>.
- Davies, Mark. 2010-now. *NOW: News on the Web*. Available online at <https://corpus.byu.edu/now/>
- De Haan, Ferdinand. 2005. Encoding speaker perspective: Evidentials. In Zygmunt Frajzyngier, Adam Hodges, & David S. Rood (eds.). *Linguistic diversity and language theories*. 379-397. Amsterdam: John Benjamins.
- Ernst, Thomas. 2009. Speaker-oriented adverbs. *Natural Language & Linguistic Theory* 27. 497-544. doi: 10.1007/s11049-009-9069-1.
- Guimier, Claude. 1986. *Syntaxe de l'Adverbe Anglais*. Lille: Presses Universitaires de Lille.
- Haegeman, Liliane. 2006. Conditionals, factives and the left-periphery. *Lingua* 116. 1651-1669. doi:10.1016/j.lingua.2005.03.014
- Hengeveld, Kees, Marize Mattos Dall'Aglio Hattner. 2015. Four types of evidentiality in the native languages of Brazil. *Linguistics* 53. 479-524. doi:10.1515/ling-2015-0010.
- Hengeveld, Kees & J. Lachlan Mackenzie. 2008. *Functional Discourse Grammar. A typologically-based theory of language structure*. Oxford: Oxford University Press.
- Keizer, Evelien. 2015. *A Functional Discourse Grammar for English*. Oxford: Oxford University Press.
- Keizer, Evelien & Miriam Van Staden. 2009. Introduction. In Miriam Van Staden & Evelien Keizer (eds), *Interpersonal grammar: a cross-linguistic perspective. Special Issue of Linguistics* 47. 799-824. doi: 10.1515/LING.2009.027.
- Lazard, Gilbert. 2001. On the grammaticalization of evidentiality. *Journal of Pragmatics* 33. 359-367.
- Lyons, John. 1977. *Semantics*, 2 vols. Cambridge: Cambridge University Press.
- Marín-Arrese, Juana I. 2017. Multifunctionality of evidential expressions in discourse domains and genres. In Juana I. Marín-Arrese, Gerda Haßler & Marta Carretero (eds). *Evidentiality Revisited. Cognitive grammar, functional and discourse-pragmatic perspectives*. 195-221. Amsterdam: John Benjamins Publishing Company.
- Nuyts, Jan. 2006. Overview and Linguistic Issues. In William Frawley (ed). *The Expression of Modality*. 1-26. Berlin: Mouton de Gruyter.

- Nuyts, Jan. 2009. The “one-commitment-per-clause” principle and the cognitive status of qualificational categories. *Linguistics* 17. 699-737. doi: 10.1515/LING.2009.005.
- Nuyts, Jan. 2017. Evidentiality Reconsidered. In Juana I. Marín-Arrese, Gerda Haßler & Marta Carretero (eds). *Evidentiality Revisited. Cognitive grammar, functional and discourse-pragmatic perspectives*. 195-221. Amsterdam: John Benjamins Publishing Company.
- OED Online (Oxford English Dictionary)*. 2018. Oxford University Press. www.oed.com.proxy.uba.uva.nl
- Plungian, V.A. 2001. The place of evidentiality within universal grammatical space. *Journal of Pragmatics* 33. 349-357.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, & Jan Svartvik. 1985. *A Comprehensive grammar of the English Language*. London: Longman.
- Ramat, Paulo & Davide Ricca. 1998. Sentence adverbs in the languages of Europe. In Johan van der Auwera (ed.), *Adverbial Constructions in the Languages of Europe*. 187-275. Berlin: Walter de Gruyter
- Willet, Thomas. 1988. A cross-linguistic survey of the grammaticalization of evidentiality. *Studies in Language* 12. 51-97.

## References for examples in the text

1. Nield, David. 30 June, 2018. One of this year’s new iPhones might have dual-SIM capabilities. <https://www.techradar.com/news/one-of-this-years-new-iphones-might-have-dual-sim-capabilities>
2. Author’s example.
3. Cochrane, Feargal. 24 June 2018. Most Brexit voters feel a hard border with Northern Ireland would be worth it to leave the customs union – we shouldn’t be surprised. <https://www.independent.co.uk/voices/brexit-voters-hard-border-northern-ireland-customs-union-leave-eu-a8414196.html>
4. Gamble, Rose. 1 June 2018. Five-year-year plan for ‘sinicisation’ of Church of China. <https://www.thetablet.co.uk/news/9185/five-year-plan-for-sinicisation-of-church-in-china>
5. Mourad, Sahar. 30 June 2018. Family is feuding over a woman’s will giving away her \$7million fortune – because it is written on two POST-IT notes. <https://www.dailymail.co.uk/news/article-5902933/Family-feuding-Brisbane-woman.html>
6. Adams, Guy. 25 June 2018. Cocaine jokes, death threats, gold Monopoly with real money: A very colourful portrait of ex-BHS boss Philip Green – formerly known as ‘Sir Shifty’. <https://www.dailymail.co.uk/news/article-5881183/Cocaine-jokes-death-threats-new-book-Sir-Philip-green-ex-BHS-boss-Topshop-chief.html>
7. Nield, David. 30 June 2018. One of this year’s new iPhones might have dual-SIM capabilities. <https://www.techradar.com/news/one-of-this-years-new-iphones-might-have-dual-sim-capabilities>
8. Stevens, Christopher. “Don’t call it difficult”: Locals from the Welsh village who dug EIGHT MILES of trenches to install fibre optic cables reveal how an engineering genius mother-of-two dubbed ‘Splice Queen’ brought high speed internet to town. 30 June 2018. <https://www.dailymail.co.uk/news/article-5903039/Locals-Welsh-village-dug-EIGHT-MILES-trenches-install-fibre-optic-cables.html>
9. World Cup Live. 22 June 2018, 20.34. <https://www.theguardian.com/football/live/2018/jun/22/serbia-switzerland-world-cup-2018-live>
10. Skipper, Keith. 19 May 2018. How the smell of lilac gathers in so many rich memories. <https://www.edp24.co.uk/features/nostalgic-musings-prompted-by-rich-scent-1-5516956>
11. Grant, Heidi. 27 June 2018. Why we hate asking for help – and how to do it anyway. The pain of social rejection is real. <https://www.managementtoday.co.uk/why-hate-asking-help-anyway/your-career/article/1485961>
12. 25 June 2018. Johnson flies to Afghanistan to avoid Heathrow vote <https://www.iwcp.co.uk/news/national/16312667.johnson-flies-to-afghanistan-to-avoid-heathrow-vote/>
13. Greenhill, Sam. 29 June 2018. “Poorly” Queen pulls out of ceremony: After nine appearances in ten days, little wonder she’s so tired! <https://www.dailymail.co.uk/news/article-5898985/Poorly-Queen-pulls-ceremony-nine-appearances-ten-days.html>
14. McFadden, Brendan. 28 June 2018. Property consultant jailed for Tony Martin fraud who forged will of dying actress dubbed the British Bardot to con her out of £1m estate is jailed for either years. <https://www.dailymail.co.uk/news/article-5897063/Man-forged-dying-actress-1million-estate-jailed-eight-years.html>
15. March, Jonathan. 26 March 2018. Spy poisoning: What the diplomat expulsions mean for Russia. <https://www.bbc.com/news/world-europe-43547038>
16. Reilly, Kaitlin. 28 June 2018. Sam Smith deleted all photos of *13 Reasons Why* star Brandon Flynn off his Instagram. <https://www.refinery29.com/en-us/2018/06/203198/sam-smith-brandon-flynn-break-up>
17. Marshall, Sarah. 30 June 2018. South Yorkshire drivers urged to take note of penalties for using hand held mobile at the wheel. <https://www.thestar.co.uk/news/south-yorkshire-drivers-urged-to-take-note-of-penalties-for-using-hand-held-mobile-at-the-wheel-1-9229380>
18. Weeks, Trevor. 30 June 2018. The joys of microchipping. <https://www.eastbourneherald.co.uk/news/opinion/trevor-weeks-the-joys-of-microchipping-1-8547913>
19. 5 June 2018. Turkey reassures Iraq over water supply as Tigris River levels dip amid dam work. <https://www.barryanddistrictnews.co.uk/news/national/16270902.turkey-reassures-iraq-over-water-supply-as-tigris-river-levels-dip-amid-dam-work/>
20. Pettifor, Tom. 7 March 2016. Hatton Garden gang could face just four years in jail for one of Britain’s biggest ever heists. <https://www.mirror.co.uk/news/uk-news/hatton-garden-gang-could-face-7511563>