# Vilnius University Faculty of Philology Department of English Philology

Aivaras Liutkauskas

# Adverbial Markers of Epistemicity in Lithuanian and English Journalistic Discourse

Thesis submitted in partial fulfilment of requirements for the degree of BA in English Philology

Supervisor: Dr Anna Ruskan

# Abstract

The categories of evidentiality and epistemic modality have garnered considerable traction over the last few decades. The former is used to indicate the source of the speaker's or writer's knowledge, while the latter evaluates information in terms of possibility or necessity. Together they form the category of epistemicity. Although evidentiality and epistemic modality can be expressed in a number of ways, the paper is concerned only with adverbials. The goal is to investigate a number of adverbial markers of epistemicity in Lithuanian and English journalistic discourse, more specifically news reports and opinion articles. The research includes a quantitative analysis to determine the frequency of evidential and epistemic adverbials cross-linguistically and across different news genres as well as a qualitative analysis to establish the functions of the markers. For the purposes of the study a new bilingual comparative corpus was compiled, which contains articles from the Lithuanian newspaper *Lietuvos rytas* and the British newspaper *The Guardian*. The findings reveal that in both languages writers indicate information sources and provide epistemic judgements more frequently in opinion articles than news reports and that adverbial markers in the former are significantly more multifunctional.

# Contents

1. Introduction	4
2. Data and Methods	7
2.1. The corpus	7
2.2. The adverbials	8
2.3. Data selection	9
3. Results and discussion	12
3.1. Quantitative analysis	12
3.1.1. Adverbials of epistemicity in English	12
3.1.2. Adverbials of epistemicity in Lithuanian	13
3.1.3. Comparison of English and Lithuanian adverbials of epistemicity	14
3.2. Qualitative analysis	16
3.2.1. Functions of adverbials of epistemicity in English	16
3.2.2. Functions of adverbials of epistemicity in Lithuanian	21
4. Conclusions	28
References	30
Summary in Lithuanian	34
Appendices	36

#### 1. Introduction

Nowadays, epistemicity is one of the popular topics among linguists, many of whose works have been devoted to better the understanding of its two structural parts, the categories of evidentiality and epistemic modality. There are several approaches to evidentiality: following the 'narrow' definition, it indicates the source of information for the proposition (Bybee 1985: 184). However, some linguists, of whom perhaps the best known is Wallace Chafe (1986), claim that evidentiality encodes not only the source of information but also its evaluation – such belief leads to the 'broad' definition of the category. In contrast to the lack of consensus regarding the scope of evidentiality, linguists almost unequivocally agree about the sources of evidence: information can be acquired either directly, using the five senses, or indirectly, through inference or hearsay.

The origins of the second category of epistemicity, epistemic modality, can be traced to the writings of Aristotle, who approached it from the narrower perspective of logic, investigating the concepts of necessity, possibility, and impossibility (Šolienė 2013). More recent works distinguish four types of modality (Palmer 2001: 8), of which evidential modality and epistemic modality deal with 'the speaker's attitude to the truth-value or factual status of the proposition', whereas deontic and dynamic modality 'refer to events that are not actualised, events that have not taken place but are merely potential'. For the purposes of this paper, the latter two types are irrelevant; the relationship between the first two, and if evidentiality really is a type of modality, will be discussed further on. Regarding the taxonomy of epistemic modality, van der Auwera and Plungian (1998) distinguish only two types: epistemic possibility and epistemic necessity. More taxonomies exist (for example, Palmer (2001) discerns three kinds of epistemic modality: speculative, deductive, and assumptive; Mortensen (2006) puts epistemic adverbs of possibility and necessity into one group, and those that 'claim to certainty' to the other), but they will not be used in this paper.

Chafe's (1986) and Palmer's (2001) different approaches to evidentiality and epistemic modality illustrate perhaps the most poignant issue when dealing with the relationship of the two categories. There is no consensus as to how they interact, but the number of views is exhaustive. Four major differing opinions can be distinguished: 1) Epistemic modality belongs to the category of evidentiality - a well-known proponent of the position is the aforementioned Chafe (1986: 262); 2) Evidentiality belongs to the category of epistemic modality - a polar opposite view, adopted by Palmer (1986) and Willett (1988); 3)

Evidentiality and epistemic modality are two separate categories (Aikhenvald 2004, de Haan 1999); 4) Evidentiality and epistemic modality partially overlap (Auwera & Plungian 1998, Usonienė & Šinkūnienė 2013) - this approach was taken the furthest by Kasper Boye (2010, 2012), who invented a separate domain of epistemicity to map the scope of the two categories, as well as the extent of their overlap.

Evidentiality can be expressed grammatically, by means of affixes, clitics, and particles, or lexically. All languages are able to express lexical evidentiality, but only some possess the necessary grammatical tools. The main European languages generally tend to lack them (Aikhenvald 2004). Grammatically evidentiality in Lithuanian can be expressed by two constructions: 1) active participles of any tense stem that agree with a subject in case, number, and gender (for example, "Petras parašė atvažiuojas šiandien" - "Peter wrote that he is coming today"); 2) subjectless clauses with the predicate expressed by a participle with the t- or msuffix and an unstressed ending ("Čia vaiko miegota." - "The child has slept here."; "Vakar kambaryje buvo šokama." - "Yesterday in this room people danced.") (Wiemer 2006a: 35). The constructions are almost complementary, as the first one is used mainly for reported evidentiality, whereas the second one usually indicates inference (ibid.). Lexical evidentiality in Lithuanian is expressed by verbs of perception (matyti) and appearance (atrodyti), particles (esa, neva, lyg, tarsi, tarytum, atseit), prepositions (anot, pasak), adjectives (akivaizdu, aišku, ryšku), and sentence adverbs (akivaizdžiai, aiškiai, ryškiai) (Ruskan 2010, 2013). The English language lacks the tools to express evidentiality grammatically and is limited to lexical evidential markers, which are rather 'a specification added to a factual claim about something else' (Anderson 1986: 274). Among such markers are perception verbs (see, hear, feel, taste, smell), the verbs seem and appear, modal verbs (can, should, must), adverbs (obviously, apparently), parentheticals (it seems), and reported speech constructions (it is said, they say) (Gurajek 2010).

As regards epistemic modality, the documentation of its markers in Lithuanian is hardly comprehensive and, as Usonienė (2006) notices, it is one of the least explored fields in Lithuanian studies. Although during the last ten years the situation has improved, there remains plenty of room for further research. Epistemic modality in the language can be expressed by modal verbs (galėti, privalėti, reikėti), particles (ar, gal, galbūt, turbūt), adverbs (tikrai, iš tikrųjų, greičiausiai, tikriausiai), parentheticals (matyt, regis, rodos), neuter gender adverbs (aišku, gaila), and passive participles (suprantama, žinoma) (Akelaitis 2011). In English relatively similar types of markers are employed: modal verbs (can, may, could,

might), adverbials (maybe, perhaps, possibly, conceivably), modal adverbs (possible, likely) or nouns (possibility, likelihood), mental state predicates (think, believe), and verbs of probability (probably, presumably) (Šolienė 2013).

To retain the scope of the paper reasonable, only adverbial markers of evidentiality and epistemic modality are investigated. For the same purpose the research is limited to journalistic discourse. The latter choice was inspired by the works of Spanish linguists (Marín Arrese & Núñez Perucha 2006; Hidalgo 2006; Marín Arrese 2007, 2015) and motivated by the lack of anything similar involving the Lithuanian language. The research of Lithuanian linguists mostly deals with translation paradigms in parallel corpora involving fiction or academic discourse (cf. Šinkūnienė 2012; Ruskan 2013, 2015; Šolienė 2013, 2015; Usonienė 2013; Usonienė & Šinkūnienė 2013). Moreover, this thesis uses a comparable corpus compiled by the author to explore journalistic discourse in Lithuanian and English languages.

Journalistic discourse is a powerful tool of influence: a news story is able to position a reader in a certain way by means of a more or less explicit evaluative stance (Iedema et al. 1994). By use of, among others, mechanisms of attitudinal association and evidential standing, the reporter surreptitiously introduces his or her own perspective (White 2006). News reports are considered to be concise, informative, and impersonal, dealing mainly with the presentation of facts and thus presumably objective; opinion pieces, on the other hand, evaluate and comment on the facts and in turn are expected to be more subjective (López García 1996). The implication, then, is that the former type of discourse would employ fewer markers of epistemic evaluation and favour markers of reported evidentiality. Moreover, the markers in opinion articles would be used in more various ways to influence the reader. Accordingly, the aims of the thesis are firstly to carry out a quantitative analysis of the data. The second goal is to qualitatively determine what functions the markers in the corpus perform. And finally, the third goal is to compare the findings cross-linguistically.

# 2. Data and Methods

# 2.1. The corpus

For the purposes of this paper a new bilingual comparable corpus was compiled, including articles from the electronic versions of two newspapers chosen to represent journalistic discourse of the respective language: *Lietuvos rytas* for Lithuanian and *The Guardian* for English. The corpus amounts to 200,585 words in total and is divided into two main sections: the English part is 100,601 words in size, whereas the Lithuanian section contains 99,984 words. Instead of dealing with the whole of journalistic discourse, the research includes only OPINION ARTICLES (OP) and NEWS REPORTS (NEWS). Consequently, each section is further divided into two subsections with roughly 50,000 words for each of the aforementioned discourse varieties.

Table 1. The composition of the corpus.

<b>Guardian NEWS</b>	Guardian OP	Lrytas NEWS	Lrytas OP	Total
50492	50109	50362	49622	200585
25,17%	24,98%	25,11%	24,74%	100%

The texts were collected following a number of criteria. First of all, they had to be written in 2016 to provide a contemporary account of language use. Secondly, a maximum of 2 articles from a single author was allowed. The restriction was particularly relevant to Lithuanian opinion articles, as the population of the country only supports a limited pool of writers. In many cases news reports had no explicit authorship attributed and rather indicated the news source (for instance, *LRYTAS.LT* or *BNS IR LRYTAS.LT INF*). Another tool to diversify the material was to impose article length limits: news articles over 1,000 words were omitted. The decision was motivated by the fact that some of the articles in the NEWS REPORTS section had as few as 56 words, and including nearly 20 times longer texts could result in a bias towards the style of a certain author. Opinions were less imbalanced; therefore, there was no need to limit their length.

Both *Lietuvos rytas* and *The Guardian* had columns dedicated to opinions. In addition, the latter source colour-coded the articles red, making the distinction even easier. As regards news articles, they were provided according to certain topics, of which the following seven were present in both newspapers: business, culture, environment, fashion, sports, tech, and world. Thus, the subsections were further divided into seven parts of roughly 7150 words each.

# 2.2. The adverbials

The paper deals with adverbial markers of evidentiality and epistemic modality expressing possibility and necessity. The choice of English markers was inspired by Mortensen's (2006) study: only the most frequent adverbials which occurred more than 10 times per one million words in the British National Corpus were selected. The list includes: *perhaps*, *probably*, *maybe*, *possibly*, and *presumably* as markers of possibility; *certainly*, *surely*, *definitely*, *necessarily*, *undoubtedly*, and *inevitably* as markers of necessity; *apparently*, *clearly*, *obviously*, *seemingly*, *evidently*, *reportedly*, and *allegedly* as markers of evidentiality.

Table 2. Selected adverbials of epistemicity in English.

<b>Epistemic possibility</b>	<b>Epistemic necessity</b>	Evidentiality	
Perhaps	Certainly	Apparently	
Probably	Surely	Clearly	
Maybe	Definitely	Obviously	
Possibly	Necessarily	Seemingly	
Presumably	Undoubtedly	Evidently	
	Inevitably	Reportedly	
		Allegedly	

In Lithuanian, the following markers of evidentiality were initially selected: *akivaizdžiai*, *aiškiai*, *aišku*, *esą*, *neva*, *rodos/berods/regis/atrodo*, and *matyt*. The choice was based on Ruskan's (2010, 2013) research. Epistemic markers were taken from the list provided by Šolienė, which is based on 'personal intuition, the data from grammars and dictionaries, and researches on the expression of modality and the concept of probability' (Šolienė 2013: 43). The list includes: *gal*, *galgi*, *galbūt*, *bene*, and *vargu* as markers of possibility; *žinoma*, *turbūt*, *tikriausiai*, *veikiausiai*, *greičiausiai*, *būtinai*, *be abejo/abejonės/neabejotinai*, and *neišvengiamai* as markers of necessity.

Table 3. Selected adverbials of epistemicity in Lithuanian.

<b>Epistemic possibility</b>	<b>Epistemic necessity</b>	Evidentiality
Gal(gi)	Greičiausiai	Aišku
Galbūt	Žinoma	Neva
Bene	Turbūt	Esą
Vargu	Tikriausiai	Aiškiai
	Būtinai	Akivaizdžiai
	Veikiausiai	Rodos/berods/regis/atrodo
	Neišvengiamai	Matyt
	Be abejo/abejonės/neabejotinai	

# 2.3. Data selection

While the markers selected for the research mostly functioned as adverbials, some cases were irrelevant and had to be discarded. They include reported language, lexical meaning, other modalities, phrasal scope, and connectives.

# Reported language

The primary reason which inhibited automatic annotation is that journalistic discourse mainly deals with second-hand knowledge, leading to a frequent use of reported language. Adverbials in quotations do not indicate the author's stance, but rather the person's who is being quoted:

(1) "Aš irgi tai dažnai darau – net dabar norėčiau užmesti akį, nes, <u>man atrodo</u>, jis suvibravo. Bet būtų nemandagu", – taip visuomet veikiančio ekrano svarbą įvardijo J.Denisonas.

Most of the quotations were direct and easily noticeable as in the example above, but some instances featured reported speech constructions. In such cases it was not always obvious whether the epistemic evaluation was provided by the journalist or the information source. Therefore, a decision was made not to include them in the analysis.

(2) Given that Kate Winslet recently revealed what we all know – that there was <u>definitely</u> room for Jack on the raft – the whole scene seems to owe more to Artaud's Theatre of Cruelty than Love Story.

Quotations and reported language were especially prevalent in the NEWS subcorpora, both in *Lietuvos rytas* and *the Guardian*, where they were present in almost a half of all instances. Conversely, in the OPINION subcorpora the impact was relatively insignificant.

# Lexical meaning

In some cases *atrodo*, *aišku*, *aiškiai*, *akivaizdžiai*, *žinoma*, *esq*, and *clearly* retained their primary lexical meaning. Morever, the authors had a tendency to use the marker *aišku* and *žinoma* in the negative form or with a negative copula. Neither of the uses expresses the author's stance (cf. de Haan 1997 for the position on negation) and therefore they were eliminated from further investigation.

- (3) Sainsbury's states <u>clearly</u> on its website that it donates only 1p of the 5p charge in Wales (...).
- (4) Tačiau, kas užsakė žmogžudystę, iki šiol <u>neaišku</u>.

Atrodo, manoma, aišku, and žinoma can function as complement taking predicates (CTP), used either with a complementiser or without one. Exemplified by (5), the former use presents a case of semantic bleaching and the shift of meaning towards the expression of the author's stance. However, the meaning remains primarily lexical and thus the construction cannot be treated the same way as a parentheticalised adverbial (Usonienė 2013). It should be noted that the omission of the complementiser alone is not sufficient to determine whether the CTP clause is lexical or grammatical because the distinction is contextually dependent (ibid.). Only parenthetical cases of atrodo, manoma, aišku, and žinoma in the intial, medial, or final position were included into the research.

(5) Vis dėlto <u>atrodo</u>, kad "Lietuvos ryto" televizija pavadinimo nekeis.

# Other modalities

The only markers to express other modalities were  $b\bar{u}tinai$  and necessarily. All of the uses of the former were either deontic or dynamic, whereas the latter indicated epistemic modality only in combination with the negative particle not.

- (6) <u>Būtinai</u> įjunkite akumuliatoriaus taupymo režimą (...).
- (7) But at the same time, there is an understanding that the fast and emotional is <u>not necessarily</u> the right basis for good governance (...).

# Phrasal scope

Stance adverbials usually have scope over the entire clause (Biber et al. 1999). However, some of the markers displayed a different usage pattern, where only a phrase was subject to their modification. After some consideration, it was decided to include them into the research because despite the narrower scope the adverbials still conveyed the author's stance. Among such markers the most frequent were *apparently*, *seemingly*, and *bene*.

(8) Anyone (except an apparently childless US prosecutor) will understand this.

# **Connectives**

Esq and neva were sometimes used to connect a subordinate clause or a phrase. As regards esq, in his comprehensive analysis Wiemer (2006b: 253) notes that it is often used as a complementiser with verbs denoting illocutive acts or mental events (processes), less often with nouns. Neva is covered by Sinkevičienė (2013), who explored its use as a conjunction, as well as a particle. Complementisers are part of the grammatical structure of the sentence and

even in the case of omission (see Usonienė 2013) their meaning remains implied. Therefore, they could not be treated as adverbials and were excluded from further analysis.

(9) Tačiau jis paneigė pranešimus, <u>esą</u> Rusijos lėktuvai šalyje atakuoja sukilėlius.

An exception was made for those cases when the connector was found fronting a new sentence:

(10) Kai kurie aktyvūs skiepų priešininkai skelbia net sunkiai blaiviu protu suvokiamus dalykus. <u>Neva</u> su skiepais vaikams implantuojamos mikroschemos-čipai, kurie seka kiekvieną žingsnį.

# 3. Results and discussion

# 3.1. Quantitative analysis

The quantitative analysis is divided into three sections. The first investigates the markers of epistemicity in English, the second in the Lithuanian language, and the third section compares the findings of the first two.

# 3.1.1. Adverbials of epistemicity in English

Table 4. Relative and raw frequencies of English adverbials in NEWS and OP.

		OPINION		NEWS	
	Adverbial	Raw	/10000 w.	Raw	/10000 w.
Epistemic	Perhaps	24	4.78	2	0.40
possibility	Probably	13	2.60	-	
	Maybe	4	0.80	-	
	Possibly	4	0.80	1	0.20
	Presumably	1	0.20	-	
	Total	46	9.18	3	0.60
Epistemic	Certainly	13	2.60	1	0.20
necessity	Surely	10	2.00	-	
	Definitely	2	0.40	-	
	Necessarily	1	0.20	-	
	Undoubtedly	2	0.40	-	
	Inevitably	-		1	0.20
	Total	28	5.60	2	0.40
Evidentiality	Apparently	12	2.40	3	0.59
	Seemingly	4	0.80	-	
	Clearly	3	0.60	2	0.40
	Obviously	2	0.40	-	
	Evidently	-		1	0.20
	Reportedly	-		11	2.18
	Allegedly	-		1	0.20
	Total	21	4.20	18	3.57
Combined	·	95	18.98	23	4.57

The data reveal that the authors of opinion articles tend to favour epistemic possibility the most, almost as much as epistemic necessity and evidentiality combined. The latter two had a similar frequency, epistemic necessity being used slightly more often. On the other hand, the NEWS subcorpus presents a completely different situation. Both types of modality there scarcely appeared at all, whereas the source of knowledge was found in more than three quarters of all cases. Even so, evidential markers were more frequent in the opinion subcorpus and, along with both types of modality, occurred more than four times as often in total as the adverbials of epistemicity in NEWS.

As regards the markers, their distribution in OP is far from even, and each type of epistemicity has one or two adverbials which appeared significantly more often than the rest. Those are *perhaps* and *probably* for epistemic possiblity; *certainly* and *surely* for necessity; and *apparently* for evidentiality. It was difficult to identify any usage tendencies in NEWS because of the low number of the adverbials. The only exception was the evidential marker *reportedly*, the frequency of which was higher than of all the other markers in the subcorpus combined.

# 3.1.2. Adverbials of epistemicity in Lithuanian

Table 5. Relative and raw frequencies of Lithuanian adverbials in NEWS and OP.

		OPINION		NEWS	
	Adverbial	Raw	/10000 w.	Raw	/10000 w.
Epistemic	Gal(gi)	61	12.29	5	0.99
possibility	Galbūt	20	4.03	2	0.40
-	Bene	10	2.02	4	0.79
	Vargu	7	1.41	2	0.40
	Total	98	19.75	13	2.58
Epistemic	Žinoma	23	4.64	7	1.39
necessity	Greičiausiai	13	2.62	2	0.40
	Turbūt	13	2.62	-	
	Tikriausiai	5	1.01	-	
	Be abejo/neabejotinai	4	0.81	2	0.40
	Neišvengiamai	3	0.61	-	
	Veikiausiai	1	0.20	1	0.20
	Total	62	12.51	12	2.39
Evidentiality	Neva	19	3.83	1	0.20
•	Esq	16	3.22	4	0.79
	Matyt	13	2.62	1	0.20
	Rodos/berods/regis/atrodo	12	2.42	2	0.40
	Aišku	10	2.02	1	0.20
	Aiškiai	1	0.20	_	
	Akivaizdžiai	1	0.20	-	
	Total	72	14.51	9	1.79
Combined	•	232	46.77	34	6.76

The data indicate that by a rather large margin the most frequent type of epistemicity in OP is epistemic possibility, amounting to 42% of all the markers. Then comes evidentiality with 31%, closely followed by the least often used epistemic necessity with 27%. As regards NEWS, possibility adverbials were again the most frequent with 38%; however, the second most often type in this case proved to be epistemic necessity instead of evidentiality. Comparing the total numbers, OP contained more than seven times adverbial markers than NEWS, which leaves the impression that Lithuanian opinion article authors are very expressive with regards to stance-taking.

The epistemic part of the opinion subcorpus is relatively imbalanced in favour of several adverbials from each type. The most often occurring expressions were gal(gi) and  $galb\bar{u}t$  for epistemic possibility; zinoma, greiziausiai, and  $turb\bar{u}t$  for necessity. On the other hand, as many as five of the eight evidential markers appeared rather frequently, starkly contrasting with the remaining three. They are: neva, esq, matyt, rodos/berods/regis/atrodo, and aisku. As for NEWS, aside from zinoma and esq, which constituted the biggest part of epistemic necessity and evidentiality respectively, the distribution of possibility adverbials was rather diverse.

# 3.1.3. Comparison of English and Lithuanian adverbials of epistemicity

The figure below shows the relative frequencies of evidential and epistemic markers in English and Lithuanian OPINION subcorpora after the removal of irrelevant cases.

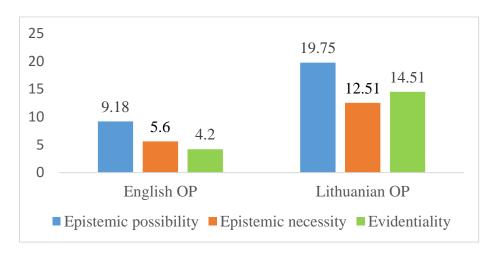


Figure 1. Adverbials in English and Lithuanian OPINION subcorpora by relative frequency, per type.

Looking at the figure, Lithuanian journalists clearly tend to express evidential and epistemic stance in opinion articles more often than English authors, the total difference reaching two and a half times. The distribution of the markers among epistemicity types also differs. Although in both subcorpora the most frequent type by a considerable margin is epistemic possibility, in Lithuanian it is followed by evidentiality, whereas English authors favour epistemic necessity instead.

Epistemic possibility and necessity are on different ends on the certainty scale: markers of possibility indicate low degree of speaker commitment, whereas necessity markers leave little room for doubt in terms of the truthfulness of the proposition (Simon-Vandenberg & Aijmer 2007). The data indicate that the authors in both languages prefer to avoid being categorical

and rather opt to protect themselves by allowing different interpretations. The findings, at least for the English part, seem to agree with Marín Arrese's (2015: 222) study on epistemic stance in Spanish and English journalistic discourse, where 'epistemic modals found in the English corpus are for the most part expressions of partial support or uncertainty.'

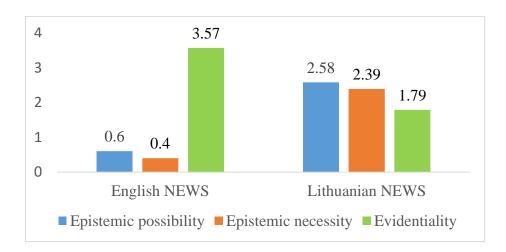


Figure 2. Adverbials in English and Lithuanian NEWS subcorpora by relative frequency, per type.

Although in the news reports subcorpora the total difference in frequency is not as noticeable as in OP, it is again in favour of Lithuanian authors, who used markers of epistemicity approximately a time and a half as often as English journalists. The distribution of epistemicity types in Lithuanian displays a descending order which begins with epistemic possibility and ends with evidentiality. Conversely, in English the markers were almost exclusively evidential, and the numbers of the two modalities were almost negligible.

The findings are rather unexpected and very interesting. Comparing the data with Marín Arrese's (2015) study, Lithuanian authors seem to be unique in their preference of epistemic modality over evidentiality in news articles. A tentative conclusion can be made that Lithuanian news reports writers choose a more evaluative writing style, whereas English journalists prefer to remain invisible and rather allow the facts speak for themselves.

Overall, twice as many markers of epistemicity were found in the Lithuanian part compared to the English data. The difference mainly amounts to their use in the opinion subcorpora, where Lithuanian authors expressed stance rather often both in relation to the English opinion articles and in general. The results suggest that Lithuanian journalistic commentary makes extensive use of epistemic and evidential tools to influence the reader in partaking a certain position. As for news reports, the low frequencies of the markers make it difficult to

distinguish between tendencies and incidental occurences. The topic invites a broader study, perhaps with a special focus on news articles.

# 3.2. Qualitative analysis

The purpose of the qualitative analysis is to explore the functional distribution of the markers. The investigation is based on the premise of multifunctionality, a belief that adverbial markers can perform several functions either simultaneously or in different contexts (Simon-Vandenbergen & Aijmer 2007 call it *heteroglossia*). Functional multiplicity can be either on the semantic level, for example in the case of overlapping evidential and epistemic functions, or an expression of epistemicity may acquire certain pragmatic extensions, which enhance or modify the initial meaning of certainty or source. English adverbials will be analysed first, followed by the analysis of Lithuanian markers. Due to space constraints, the analysis includes only the most frequent markers, which were mentioned in the quantitative part.

# 3.2.1. Functions of adverbials of epistemicity in English

To retain the structure of the paper, the markers will be investigated by type of epistemicity, beginning with epistemic possibility and ending with evidentiality. The primary reference tools will be Simon-Vardenbergen & Aijmer's (2007) framework of modal certainty and Carretero & Zamorano-Mansilla's (2013) approach, which will be reinforced by other relevant studies.

# **Epistemic possibility**

Probability adverbials can be considered as prototypical epistemic expressions, with epistemic modality being central to their meaning (Carretero & Zamorano-Mansilla 2013). The most frequent English markers of possibility in the corpus were *perhaps* and *probably*. Following Huddleston & Pullum's (2002) scale of epistemic strength, the first expresses a low degree of the speaker's or writer's commitment, whereas the latter is near the middle and indicates that something is likely to be true. The low epistemic strength of *perhaps* relieves the authors from much of the burden of responsibility and they are able to provide their own speculative contributions to the content:

<sup>(11) &</sup>lt;u>Perhaps</u> Burns and all his works had fallen foul of Scottish education apparatchiks; those who, until just a few years ago, deemed Scottish history to be unworthy of examination. I recall one teacher telling me that there simply wasn't enough of "importance" in Scottish history to merit a Higher paper all to itself.

White (2003) treats such markers as 'dialogically expansive', as they carry along a meaning of doubt, which opens up space for alternatives. Sometimes the authors themselves provided alternative possibilities, as in (12), where they include several courses of action that dog owners might assume. This use of *perhaps* was mainly found in opinion articles.

(12) What are those crowds of fair-weather owners up to with their dogs? <u>Perhaps</u> just doing a quick trek around the mud-free pavements (...). Or <u>perhaps</u> they let their dog out into the garden (...).

Another function was that of expressing an *opinion*, which is a statement that might be true, but its truthfulness cannot be verified (Carretero & Zamorano-Mansilla 2013). Such usage makes the statement less categorical by leaving room for disagreement. In (14) the adjective *only* excludes the person as being able to achieve something that others could not; however, as the claim is non-factual and based on belief, the authors cannot allow themselves to be categorical, which calls for a mitigating modifier. The function was limited to *perhaps* and *probably* in OP, where it occurred at least several times.

(13) You mix that Negro with that Creole make a Texas bama" – an insult that, <u>perhaps</u>, only Beyoncé was ever capable of reclaiming.

Two more functions exclusive to *perhaps* were that of an *approximator* (14) and *mitigator* (15) (Šolienė 2015). The former use modified a numerical value and had the meaning of 'approximately' or 'about' (ibid.), whereas the purpose of the latter was to make the utterance less imposing. The mitigating marker does not provide epistemic evaluation and is rather a politeness strategy to lower the assertiveness of the proposal (Carretero & Zamorano-Mansilla 2013). In (15) the addition of *perhaps* reduces the face-threatening force of the suggestion. Both functions appeared only in OP and were infrequent.

- (14) For in <u>perhaps</u> as little as 20 weeks' time, ill-informed voters (...) would be asked to decide nothing less than what sort of country we want to live in and bequeath to those who come after us.
- (15) (...) although I did suggest to the paper's proprietor, Viscount Biscuit, that the Scottish Daily Mail's cover should not <u>perhaps</u>, in the current climate, feature the words "Whom Wilst Spakey For England" in massive letters.

Probably mainly differs from adverbials of low epistemic strength in that the author uses it in a more forceful and more certain way. 'There is this possibility that might be true' becomes 'it is the possibility that I choose'. Hoye (1997) even considers probably to be related more to the markers of certainty because in some contexts it cannot be interchanged with a marker of low commitment. For instance, in (12), where the author uses perhaps to present an alternative, the marker could not be swapped with probably because the clauses under modification are exclusive. Therefore, it is not possible for the author to express preference towards both of them. Usonienė (2006) also notices that the ability to provide an alternative is a feature characteristic of possibility but not necessity markers.

# **Epistemic necessity**

Beside possibility, necessity is another central notion of traditional logic (Lyons 1977). Epistemic necessity indicates a high degree of the speaker's or writer's commitment towards the truthfulness of the proposition and, following Huddleston & Pullum's (2002) scale, marks either high or very high certainty. No consensus exists on whether epistemic modals are able to indicate total commitment. As a rule, total certainty is expressed by unmodalised sentences (Carretero & Zamorano-Mansilla 2013) and therefore 'we only say we are certain when we are not' (Halliday and Matthiessen 2004: 147). However, some linguists, such as Hoye (1997), Mortensen (2006), and Simon-Vandenberg & Aijmer (2007) believe that adverbials of certainty are in fact able to reinforce the speaker's or writer's commitment. This paper aligns with the latter position.

The main markers of epistemic necessity were *certainly* and *surely*. Out of the two, only *surely* expresses non-total certainty in all contexts (Simon-Vandenbergen & Aijmer 2007: 145), whereas *certainly* can express either total or non-total certainty, depending on whether it is clear from the context that the author knows the truth of the proposition (Carretero & Zamorano-Mansilla 2013). For instance, in (16) it is unclear if the authors really verified the claim or whether they are basing it on memory, or perhaps even on a generalisation. Therefore, while *certainly* is included as an assurance, due to this ambiguity the adverbial also carries a meaning of doubt:

(16) His works <u>certainly</u> didn't appear in the homework of any of my children or that of their cousins.

Total certainty is used to achieve certain pragmatic goals, such as to persuade someone by means of using the marker emphatically (ibid.; Simon-Vandenberg & Aijmer 2007). Example (17) barely retains any epistemic meaning because the primary intention of the writers was not to express their certainty or doubt but rather to strengthen the proposition by putting emphasis on the wish. This way the authors give authority to the statement, a strategy White (2003) calls *pronouncement*. Such usage was encountered quite often, but it only occurred in the OPINION subcorpus.

(17) I <u>certainly</u> wish Sanders had enough room in his capacious political imagination to consider the (UN recommended) concept of reparations for slavery.

Surely is primarily a modal adverbial, but Downing (2001) contends that it also has a meaning of expectation, expressing the speaker's perception that states of knowledge differ between speaker and hearer, hence the surprise. The speakers or writers believe that their statement is 'the only true, reasonable and acceptable one, that is, the speaker knows better than the hearer' (ibid.: 256) and invite 'affirmation or corroboration from an addressee regarding the state of mind, intentions or actions of a third party' (ibid.: 268). Therefore, it is a conscious strategy of the author to impose his/her viewpoint on the reader. The closest example in the corpus was the following sentence, where the author attempts to persuade the readers, appealing to them in the form of a rhetorical question:

(18) If we want people to work harder, play nicer and produce and consume more wisely, <u>surely</u> this is the way to do it?

Surely also occured in contexts that expressed a loaded request for confirmation, based on assumed superior knowledge, and was used as a tool to assert authority (Simon-Vandenberg & Aijmer 2007):

(19) But really, what an unappealing prospect – a government that is alternately slothful and slapdash. Surely we deserve better.

Functions of *surely* very much depend on its position in the sentence. All of the more straightforward epistemic uses were in the medial position as in (20), whereas the polemical qualities appeared either in the initial or final position, exemplified by (21). Ranger (2011) arrives at a similar conclusion, stating that 'in such [medial] examples *surely* often appears to reinforce the speaker's commitment to the projected predicative relation without any reference to other, potentially counter-oriented, perspectives':

- (20) If the answer to that question in 2016 is yes, then New Hampshire would <u>surely</u> follow the lead set by Iowa and choose the ultra-conservative senator Ted Cruz.
- (21) Can you call that reform? That's un-form, <u>surely</u>.

The adverbial *surely* was only encountered in the OPINION subcorpus.

# **Evidentiality**

The main distinction with regards to evidentiality is concerned with the type of evidence, whether the information was acquired by means of inference or hearsay. The functional analysis includes two evidential markers: *apparently*, which is able to express both types of evidentiality depending on the context, and *reportedly*, which only indicates reported knowledge.

The evidential adverb *reportedly* only appeared in the NEWS subcorpus and expressed evidence based on hearsay. The marker did not seem to carry any additional meaning extensions and was mostly used in neutral contexts to indicate that the knowledge was second-hand and that the author did not assume any responsibility for what was reported:

(22) Kesha <u>reportedly</u> sobbed as the verdict was announced, and was comforted by her mother who accompanied her to the trial.

The second adverbial *apparently* mainly functioned as a hearsay evidential to indicate that the writer acquired information from an external source. Such usage corresponds to one of the definitions in the *Cambridge Advanced Learner's Dictionary*<sup>1</sup>, according to which the adverb is 'used to say you have read or been told something although you are not certain it is true'. The certainty part is questionable, and it can be argued that instead of challenging the reliability of the information the authors simply opt to distance themselves from evaluation. Moreover, because *apparently* can be rephrased as 'it appears that', it would not be unreasonable to suppose that in some contexts the adverb has developed a meaning extension of surprise. In the example below, the author presents the statistical information acquired by hearsay as something unexpected, which would not be possible by substituting the marker with *reportedly*.

(23) <u>Apparently</u>, 11% of British women believe that Titanic contains the most romantic line ever uttered in literature or film.

<sup>&</sup>lt;sup>1</sup> Accessed 15 April 2016, available from: <a href="http://dictionary.cambridge.org/dictionary/english/apparently.">http://dictionary.cambridge.org/dictionary/english/apparently.</a>

When *apparently* took scope over a phrase, the adverbial had a slightly different sense. It corresponded with another definition provided in the *Cambridge Advanced Learner's Dictionary*, according to which the word is used to 'say that something seems to be true, although it is not certain'. The use of *apparently* in (24) accentuates that the information was acquired from an external source, distancing it from the authors and indicating that they might not necessarily agree with what is being relayed. Thus, the evidential meaning is supplemented by an epistemic evaluation:

(24) As Bernie Sanders has risen in the polls, he has been taking increasing heat for some of his <u>apparently</u> vague foreign policy positions (...).

# 3.2.2. Functions of adverbials of epistemicity in Lithuanian

As in the previous section, the analysis will begin with the functions of possibility, then necessity markers and close with evidentiality. The main reference sources for the functional analysis will be Šinkūnienė's (2012) approach on adverbials as hedging devices and Wiemer's (2007) work on Lithuanian lexical evidentials, supplemented by other relevant researches.

# **Epistemic possibility**

The analysis of Lithuanian possibility adverbials includes the markers gal(gi) and  $galb\bar{u}t$ . Their most frequent use was epistemic, concerning the speaker's or writer's uncertainty towards the truthfulness of the proposition. Both gal and  $galb\bar{u}t$  are considered markers of low probability (Šinkūnienė 2012). The lack of epistemic strength is reflected in (25), where the author uses gal to make a conjecture, which might or might not be true:

(25) <u>Gal</u> kiek pavargę nuo penktus metus skambančių kalbų, (...) savaitės viduryje jie paskelbė balsavusios komisijos narių sąrašą.

The second most frequent application of *gal* was the marker modifying an interrogative clause. A number of linguists (Greenbaum 1969, Šolienė 2013, 2015, to name a few) believe that interrogative particles do not express epistemic evaluation and rather make the question tendentious. This paper adheres to their position:

(26) <u>Gal</u> tai išties paaiškina, kodėl nemažai žmonių elgiasi kaip žemiausi gyvuliai?

Rather frequently both gal and  $galb\bar{u}t$  were used in combination with the adversative conjunction but to mark a contrastive relation between clauses. Masini and Pietrandrea (2010: 2) notice a similar usage in their analysis of the Italian magari, where they call the function concessive. In the example below the authors safeguard the integrity of their own position by anticipating and giving some ground to a contrastive opinion. This way, the importance of the conceded part is downplayed in favour of the following argument:

(27) <u>Gal</u> kompiuterinės programos išmoks atpažinti humorą ar iš balso tono atskirs liūdesį, bet kompiuteris niekada intuityviai "neperskaitys" šypsenos, gestų ar ironijos.

Moreover, just like its English counterpart *perhaps*, *gal* was used to provide one or several alternative possibilities. Sometimes one of the alternatives was presented with  $galb\bar{u}t$ , suggesting that the markers can be used interchangeably in the context.

(28) <u>Galbūt</u> kai kam pabėgti nuo televizorių neleido tie patys kitų išpeikti Justės Arlauskaitės-Jazzu ir Justino Jankevičiaus juokeliai, o <u>gal</u> tiesiog M.A.M.A. jau pribrendo iki renginio, kuris turi pakankamą svorį, kad prikaustytų dėmesį.

Furthermore, in a few cases *gal* appeared as an approximator:

(29) Jei tai ne pramanas, juose Antarktidos ledu paversta mėsa buvo laikoma dešimt, o <u>gal</u> ir dar daugiau metų.

Finally, several instances of *gal* and *galbūt* involved little to no epistemic evaluation and rather fulfilled various pragmatic goals. For instance, in (30) *gal* performs as some kind of discourse marker to help the authors organise their arguments. In (31) *galbūt* is used as a mitigator, to lower the assertiveness of the suggestion for reasons of politeness. In (32) the marker appears as a hedge, in order to provide a deliberately ambiguous answer so as to inspire the reader's doubt. All of the aforementioned functions were found exclusively in OP.

- (30) <u>Gal</u> iš pradžių nuo CV, kuriuos gauna darbdaviai: baigiau universitetą (!), vadybos studijas (oho), ieškau vadovaujamo darbo (rly).
- (31) Bet iš kur toms draugiškai vakarus leidžiančioms moterims gali atrodyti, kad <u>galbūt</u> jų gėrimas problema, jei gyvename apsupti mitų?
- (32) Klausimas ar tas atradimas, iš esmės pateiktas kaip savas, buvo savas? Galbūt.

# **Epistemic necessity**

The analysis includes *turbūt*, *greičiausiai*, and *žinoma* as markers of epistemic necessity. With the exception of *žinoma*, the adverbials did not seem to perform many functions, aside from epistemic evaluation.

Turbūt and greičiausiai were used in very similar contexts, when the authors desired to soften the strength of the proposition by making it less categorical. In most cases they could be interchanged without a noticeable shift in meaning. However, it should not be done carelessly because, as Šolienė (2013: 130) notices, the epistemic strength of turbūt can vary anywhere in the epistemic scale. The adverbials appeared in both subcorpora, except for turbūt, which was missing in NEWS. Below the authors use greičiausiai to express partial support for the truthfulness of their claim.

(33) Jei tarp jų bus pretendentų į apdovanojimus, vis tiek visi <u>greičiausiai</u> balsuos už save, todėl rezultatų tai neiškreips.

Žinoma proved to be surprisingly multifunctional. Interestingly, many of the NEWS instances retained the word's lexical meaning 'it is known' (34), whereas in OP the adverbial was used exclusively as a parenthetical (35). Parenthetical žinoma in news reports often functioned as a means to create a dialogue with the reader and expressed what White (2003) calls concurrence: an engagement strategy of indicating agreement, a shared worldview, and representing this sharedness as taken-for-granted, which, contrary to possibility markers, contracts the dialogic options (Simon-Vandenberg & Aijmer 2007: 305).

- (34) "Mano aktorius",- po nuotrauka rašė <u>žinoma</u> moteris.
- (35) Žmonės be galvų, nupjautomis kojomis, rankomis ir kitaip subjaurotais kūnais taip atrodė to paplūdimio lankytojai. <u>Žinoma</u>, jie nebuvo sužaloti jų kūnus ištampė ir kreivai suklijavo programinė įranga, apdorojanti panoraminius vaizdus.

The example above is a solidarity strategy, where the author assumes that the reader has made the correct inference. However, (36) demonstrates that the same function can also be used as a tool to exert authority, as the authors there pretend that the statement is self-evident and that the reader shares their opinion, when that might not be the case (ibid.). Another difference is that (35) deals with information which the authors know to be true and therefore lacks epistemic evaluation, whereas the instance presented below is an expectation of the state of affairs which is yet to happen and consequently might turn out to be false:

(36) Kitą sezoną tikros karalaitės atidengs savo žavingas kojas arba priešingai, žemę šluos plačiomis elegantiškomis kelnėmis. Ir, <u>žinoma</u>, puošis auksu.

On the other hand, the most frequent function of *žinoma* in OP was concessive, when the author attempted to persuade the reader. As with the English counterpart *of course*, in such contexts *žinoma* functioned to background alternative voices by conveying that the first part of the message is to be taken for granted, so that the authors could present their own opinion in the foreground (ibid., 209):

(37) Visa tai, <u>žinoma</u>, sveikintina. Tačiau yra ir kita pusė – dujų adata.

Several times in both subcorpora *žinoma* seemed to function as a tool to protect the author's prior claim by introducing another one, which imposed some kind of limitation or condition (Usonienė 2012 notices the hedging potential of the marker):

(38) Vadinasi, galima laukti, kad Vyriausybės vadovo pokalbis su prezidente bus ne tiktai rimtas, bet ir karingas, <u>žinoma</u>, jei premjeras, kaip jau ne kartą buvo, vėl nenusileis Prezidentūros spaudimui.

# **Evidentiality**

The following adverbial markers of evidentiality were investigated: *matyt*, *rodos/regis/atrodo*, *aišku*, *esq*, and *neva*. The first three express inferential source, while the latter two are concerned with reported knowledge. The markers will be dealt with according to this distinction.

Matyt and rodos/regis/atrodo are perception based adverbials, which exemplify the syncretism between evidentiality and epistemic modality. The markers inherently possess lexical sensory meanings and have evolved to indicate self-inference, which, in turn, being an unreliable source of evidence, triggered the meaning of uncertainty (Usonienė 2007). Atrodo was usually accompanied with additional expressions of doubt, reducing the author's commitment even more. In (39) the adverbial both indicates the source for the claim and that the authors deem the athlete's victory likely to happen. However, in light of the rumors about her injury, the support provided by atrodo would be too strong, and therefore another epistemic expression gali is used to reduce it:

(39) S. Williams Melburne turės ginti savo pernai iškovotą titulą. Ir <u>atrodo</u>, jai tai gali pavykti, bet netyla kalbos apie jos kelio traumą, todėl gali būti visko.

The one case of *rodos* was used to raise doubts about a seemingly commonsense inference, which was then promptly refuted, revealing the reasoning to be based on false perceptions. Wiemer (2007: 192) noticed that the pattern is characteristic to the adverbial: as a rule, the proposition under the scope of *rodos* is judged to be not entirely adequate and is therefore usually followed by an adversative clause introduced by *tačiau* or *bet*:

(40) <u>Rodos</u>, 4, 6 ar 8 euro centai nėra labai dideli pinigai. Tačiau taip taupant per metus susidaro tie siaubingai dideli 15-25 eurai.

The marker matyt is similar to gal and  $galb\bar{u}t$  in showing the author's judgement. However, unlike gal, where a conjecture can be made without evidential basis and carries no responsibility, matyt requires some kind of substantiation, be it visual, the author's own experience, general knowledge of the world, or logical reasoning (Šinkūnienė 2012: 155). Because the judgement is motivated, the author's certainty is higher than when using the possibility marker gal. In (41) the explanation of what caused the person to leave is based on the result provided in the context:

(41) Vis dėlto S.Rachinšteiną, <u>matyt</u>, pasiekė žinia, kad jo buvimo vieta jau atskleista, ir jis vėl pasipustė padus – kaip dabar paaiškėjo, atsidūrė Vietname.

Aišku is an evidential-epistemic marker, which 'denotes inferences drawn from perceptual and conceptual evidence and contribute to persuasive authorial argumentation' (Ruskan 2015: 104). The adverbial was far more frequent in OP and only occurred once in NEWS. Its distinguishing characteristic was parenthetical use, which disconnects the adverbial from the proposition and allows it to gain pragmatic overtones (ibid.). One of them was concession, which in most cases featured an admission that something was not achieved or unachievable, followed by a more feasible version of the same thing:

(42) <u>Aišku</u>, už tokią sumą gramo kokaino greičiausiai nenusipirktum. Bet tikrai išeitų daugiau nei lašas nikotino, kuris užverstų arklį.

Another variation was admitting that something was achieved, but then downplaying the relevance of the accomplishment:

(43) <u>Aišku</u>, V.Uspaskichas ir V.Gapšys vis dėlto nuteisti baudžiamojoje byloje. Bet daugybė žmonių nelabai skiria administracinių baudų (...) nuo piniginių bausmių pagal Baudžiamąjį kodeksą (...).

Aišku was also used as a marker of expectation, expressing concurrence, the basis of which was either common knowledge or preceding information. The function had several different applications. Between the provided samples below, (44) is used to present common background knowledge to establish a dialogue with the reader, whereas (45) presents an authoritative suggestion under the guise of coinciding expectations.

- (44) Nežinau, kaip ir iki šiol nežinau, kas ten sausio 25-ąją viduržiemį atsitinka barsukui. Ar ant kito šono apsiverčia, ar, išlindęs iš olos ir giedrą dieną pamatęs savo šešėlį, išsigąsta ir grįžta miegoti, ar išsibudina ir patraukia į mišką. Aišku, kartais pažaisti smagu.
- (45) Opozicija, <u>aišku</u>, pasistengs išspausti sau kiek įmanoma daugiau naudos.

The final use of *aišku* was that of an emphasis marker. In such cases the adverbial modified a structural element of the clause, strengthening but not supplementing its semantic meaning (Ruskan 2013):

(46) Šalies vadovė, <u>aišku</u>, to nenorėdama, pati jau įstūmė naująjį generalinį prokurorą į dviprasmę padėtį (...).

With the exception of *esq* in NEWS, the hearsay markers *neva* and *esq* were comparatively frequent in both subcorpora. Their function was mainly to attribute authorship of the relayed information to someone else than the author. In (47) the source of knowledge are experts of the energetics sector, whereas in (48) it is most likely the president of Lithuania.

- (47) Tiesa, Lietuvos energetikai dėl to ramūs dujų suvartojimas <u>esą</u> jau stabilizuojasi mūsų šalyje.
- (48) Suaktyvėję STT veiksmai ir tapo pretekstu prezidentei pakviesti premjerą ant kilimėlio rimto pokalbio apie <u>neva</u> ant Vyriausybės kritusį korupcijos šešėlį.

Though the two primarily indicate reported knowledge, they are also able to express epistemic stance if the context is already sufficient to suggest that the information was acquired by hearsay. Such excess of evidentiality signals that the speaker distances him/herself from the assertion and even doubts its veracity (Wiemer 2007: 203). Therefore, the duplication of meanings enables the markers to acquire additional pragmatic extensions as in the example below, where *esq* is used for the distancing effect:

(49) Dar skambiau nuaidėjo socialdemokratės B.Vėsaitės sveikinimai buvusiam jaunajam bendražygiui ir jos džiūgavimas, kad tikrasis kairysis A.Paleckis pagaliau sustiprins kairįjį sparną, kurio ekonominė ir socialinė mintis <u>esa</u> gerokai išsikvėpusi.

Compared to *esq*, which especially in NEWS was rather neutral, in the case of *neva* the element of doubt was much more conspicuous. Moreover, in some instances of *neva*, exemplified by (50), the source of information was unclear and the authors seemed to intervene, providing their own judgement on what they believed others thought. No specific statement was involved but rather an interpretation of the state of mind of a specific group of people (Sinkevičienė 2013:92):

(50) Vis giliau į Vakarų pasaulio struktūras integruojamai Lietuvai būtina suvokti, kad šalis gali būti sunaikinta ne tik ją užpuolant ir okupuojant, bet ir <u>neva</u> taikiomis ekonominės, socialinės ir kultūrinės politikos priemonėmis.

To conclude this section, many of the adverbials featured a variety of pragmatic extensions, used in addition to or instead of their evidential and epistemic meanings. Possibility adverbials in both languages proved to be highly multifunctional, allowing the authors to introduce conjectures, provide alternative options, and reduce the strength of the claim. Epistemic necessity markers primarily indicated a high level of certainty towards the truthfulness of the proposition. They were also used to establish a dialogue with the reader by addressing shared expectations, strengthen the author's statement by putting emphasis on it in English, and reject differing opinions after initially agreeing with them in Lithuanian. English evidential adverbials mainly dealt with reported knowledge and occassionally carried along a meaning of doubt. On the other hand, the Lithuanian subcorpus included a high number of inferential adverbials along with hearsay evidentials, which allowed the markers to assume functions characteristic both to expressions of epistemic necessity and evidentiality. Functional variety was only noticeable in the opinion subcorpora. Most of the adverbials in news reports had few if any additional meaning extensions.

# 4. Conclusions

The paper was based on two hypotheses: that opinion articles would feature more markers of epistemicity than news reports; and that adverbials in the former discourse type would exhibit a greater variety of functions. As far as the data allow to claim, both turned out to be correct. Regarding the first hypothesis, the frequency difference was more than four times in favour of opinion articles in English and more than seven times in Lithuanian. As for the second hypothesis, the most frequent markers appeared to be surprisingly multifunctional, but only in the opinion subcorpus. This holds true for both languages.

Comparing English and Lithuanian data, the biggest difference lies in the numbers: Lithuanian authors used adverbials of epistemicity more than twice as much as English journalists. However, it was, for the biggest part, due to opinion articles, where Lithuanians expressed their stance very often, both in general and compared to the English part. On the other hand, news reports featured comparatively few epistemicity adverbials regardless of the language.

As far as types of epistemic adverbials are concerned, adverbials of epistemic possibility were favoured in all subcorpora but English news reports. In the opinion subcorpora, the main distributional difference involved evidentiality changing positions from the second most frequent type in Lithuanian to the least frequent in English. In the English news reports subcorpus about three quarters of all markers were evidential, whereas Lithuanian authors preferred epistemic adverbials instead.

In terms of functions, the adverbials proved to serve a variety of purposes beyond indicating the information source or epistemic evaluation. Possibility adverbials in both languages were used to soften the author's claim, make conjectures, and open up a space for alternative opinions. Aside from providing strong support for the claim, adverbials of epistemic necessity also served to establish a dialogue with the reader. In addition, perhaps due to the lack of epistemic hierarchy in the Lithuanian language, the English markers seemed to carry comparatively more epistemic strength. Finally, English evidentials were mostly limited to hearsay, whereas a large part of the markers in Lithuanian expressed inference and, by association, epistemic evaluation at the same time.

On the whole, both languages feature a primarily tentative argumentative style, which revolves around mitigation and suggestions. In opinion articles authors are subjective, evaluative, and even dialogic when the purpose calls for. On the contrary, in news reports writers prefer to remain invisible and keep to referring to the information source. This reinforces the stereotype that news articles are objective and principally present facts. Of course, in reality the distinction is rarely as clear-cut and if not epistemicity, journalists have a number of other means to introduce their own position (for example, see White 2006). However, in the context of this paper the difference is significant and undeniable.

The only unexpected finding was that epistemic modals in the Lithuanian NEWS subcorpus appeared more often than markers of evidentiality. It starkly contrasts with the English data and suggests that when Lithuanian authors do express stance, they tend to take a more active role in the presentation of information. More conclusive results could be reached by carrying out a larger investigation.

#### References

- Aikhenvald, A. Y. 2004. Evidentiality. Oxford, New York: Oxford University Press.
- Akelaitis, A. 2011. "Panašu" naujas modalinis žodis? Gimtoji kalba, 11: 3-10.
- Anderson, L. B. 1986. Evidentials, paths of change, and mental maps: Typologically regular asymmetries, in Chafe, W & J. Nichols (eds) *Evidentiality: The Linguistic Coding of Epistemology*. Norwood, New Jersey: Ablex Publishing Corporation. 273-312.
- Biber, D., S. Johansson, G. Leech, S. Conrad & E. Finegan (eds). 1999. *Longman Grammar of Spoken and Written English*. London: Longman.
- Boye, K. 2010. Evidence for what? Evidentiality and scope. *Sprachtypologie und Universalienforschung*, 63/4: 290-307.
- Boye, K. 2012. *Epistemic meaning: a crosslinguistic and functional-cognitive study*. Berlin: de Gruyter Mouton.
- Bybee, J. 1985. Morphology: *A Study of the Relation between Meaning and Form*. Amsterdam, Philadelphia: John Benjamins.
- Carretero, M. & J. R. Zamorano-Mansilla. 2013. Annotating English adverbials for the categories of epistemic modality and evidentiality, in Marín Arrese, J.I., M. Carretero,
  J. Arús & J. van der Auwera (eds) *English Modality: Core, Periphery and Evidentiality*. Berlin: Mouton de Gruyter. 317-359.
- Chafe, W. 1986. Evidentiality in English Conversation and Academic Writing, in Chafe, W. & J. Nichols (eds) *Evidentiality: The Linguistic Coding of Epistemology*. Norwood, New Jersey: Ablex Publishing Corporation. 261-273.
- de Haan, F. 1997. *The Interaction of Modality and Negation: A Typological Study*. New York: Garland.
- de Haan, F. 1999. Evidentiality and Epistemic Modality: Setting Boundaries. *Southwest Journal of Linguistics*, 18: 83-101.
- Downing, A. 2001. 'Surely you knew!' Surely as a marker of evidentiality and stance. Functions of Language, 8/2: 253–285.
- Greenbaum, S. 1969. Studies in English adverbial usage. London, New York: Longman.
- Gurajek, B. 2010. *Evidentiality in English and Polish*. MA Dissertation. Edinburgh: University of Edinburgh.
- Halliday, M. A. K. & C. M. I. M. Matthiessen. 2004. *An Introduction to Functional Grammar*. London: Arnold.

- Hidalgo, L. 2006. The expression of writer stance by modal adjectives and adverbs in a comparable corpus of English and Spanish newspaper discourse, in Hornero, A. M.,
  M. J. Luzón & S. Murillo (eds) *Corpus Linguistics*. Bern: Peter Lang. 125-140.
- Hoye, L. 1997. Adverbs and Modality in English. London, New York: Longman.
- Huddleston, R. & G. K. Pullum (eds). 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.
- Iedema, R., S. Feez & P. R. White. 1994. *Media Literacy*. Sydney: Disadvantaged Schools Program, NSW Department of School Education.
- López García, Á. 1996: Escritura e información: la estructura del lenguaje periodístico. Madrid: Cátedra.
- Lyons, J. 1977. Semantics. Cambridge: Cambridge University Press.
- Marín Arrese, J. I. & B. N. Perucha. 2006. Evaluation and Engagement in Journalistic Commentary and News Reportage. *Revista Alicantina de Estudios Ingleses*, 19: 225-248.
- Marín Arrese, J. I. 2007. Commitment and subjectivity in the discourse of opinion columns and leading articles, a corpus study. *Revista Electrónica de Lingüística Aplicada*, Extra 1: 82-98.
- Marín Arrese, J. I. 2015. Epistemicity and stance: A cross-linguistic study of epistemic stance strategies in journalistic discourse in English and Spanish. *Discourse Studies*, 17/2: 210-225.
- Masini, F. & P. Pietrandrea. 2010. Magari. Cognitive Linguistics, 21/1: 75-121.
- Mortensen, J. 2006. *Epistemic and Evidential Sentence Adverbials in Danish and English: a Comparative Study*. Phd Dissertation. Roskilde: Roskilde University.
- Palmer, F. R. 1986. *Mood and modality*. Cambridge: Cambridge University Press.
- Palmer, F. R. 2001. *Mood and modality* [2nd ed.]. Cambridge: Cambridge University Press.
- Ranger, G. 2011. Surely not! Between certainty and disbelief. *Discours*, 8, accessed 28 April 2016, available from: https://discours.revues.org/8416.
- Ruskan, A. 2010. Evidencialumo raiškos priemonės lietuvių kalboje. *Lietuvių kalba*, 4, accessed 25 April 2016, available from: http://www.lietuviukalba.lt/index.php/lietuviu-kalba/article/viewFile/25/92
- Ruskan, A. 2013. Nemorfologinio evidencialumo raiška ir turinys lietuvių kalboje: bevardės giminės būdvardžiai ir prieveiksmiai. Humanitarinių mokslų daktaro disertacija. Vilnius: Vilniaus universitetas.
- Ruskan, A. 2015. Evidential adverbials in Lithuanian: a corpus-based study. *Kalbotyra*, 67: 104-130.

- Simon-Vandenbergen, A. & K. Aijmer. 2007. *The semantic field of modal certainty. A corpus-based study of English adverbs*. Berlin: Mouton de Gruyter.
- Sinkevičienė, J. 2013. Lietuvių *neva* daugiafunkcinis diskurso markeris. *Prace Bałtystyczne*, 5: 83-100.
- Šinkūnienė, J. 2012. Adverbials as Hedging Devices in Lithuanian Academic Discourse: a Cross-disciplinary Study, in Usonienė, A., N. Nau & I. Dabašinskienė (eds) *Multiple perspectives in linguistic research on Baltic languages*. Newcastle upon Tyne: Cambridge Scholars Publishing. 137-169.
- Šolienė, A. 2013. *Episteminio modalumo ekvivalentiškumo parametrai anglų ir lietuvių kalbose*. Humanitarinių mokslų daktaro disertacija. Vilnius: Vilniaus universitetas.
- Šolienė, A. 2015. Multifunctionality of modal markers: Lithuanian epistemic adverbials *gal* and *galbūt* 'perhaps/maybe' vs. their translational correspondences. *Kalbotyra*, 67: 155-176.
- Usonienė, A. 2006. Episteminio modalumo raiška: ekvivalentiškumo bruožai anglų ir lietuvių kalbose. *Darbai ir dienos*, 45: 97-108.
- Usonienė, A. 2007. Degrees of Confidence and Modal Words in Lithuanian. *Mokslo žurnalas Lietuvių kalba*, 1, accessed 29 April 2016, available from:

  <a href="http://www.lietuviukalba.lt/index.php/lietuviu-kalba/article/view/6">http://www.lietuviukalba.lt/index.php/lietuviu-kalba/article/view/6</a>
- Usonienė, A. 2012. Komplementiniai predikatai ir jų multifunkcionalumas: lietuvių kalbos tekstynais paremtas tyrimas. *Darbai ir Dienos*, 58: 223-233.
- Usonienė, A. 2013. On the morphosyntactic status of complement-taking predicate clauses in Lithuanian. *Acta Linguistica Hafniensia*, 45/1: 73-99.
- Usonienė, A. & J. Šinkūnienė. 2013. A cross-linguistic look at the multifunctionality of the English verb seem, in Marín Arrese, J. I., M. Carretero, J. Arús & J. van der Auwera (eds) *English Modality: Core, Periphery and Evidentiality*. Berlin: Mouton de Gruyter. 281-316.
- van der Auwera, J. & V. Plungian. 1998. Modality's semantic map. *Linguistic Typology*, 2: 79-124.
- White, P. 2003. Beyond modality and hedging: a dialogic view of the language of intersubjective stance. *Text*, 23/2: 259–284.
- White, P. 2006. Evaluative semantics and ideological positioning in journalistic discourse, in Lassen, I., J. Strunck & T. Vestergaard (eds) *Mediating Ideology in Text and Image:*Ten Critical Studies. Amsterdam: John Benjamins. 37-67.
- Wiemer, B. 2006a. Grammatical evidentiality in Lithuanian (a typological assessment). *Baltistica*, XLI/1: 33-49.

- Wiemer, B. 2006b. Lithuanian *esq* a heterosemic reportive marker in its comtemporary stage. *Baltic Linguistics*, 1: 245-308.
- Wiemer, B. 2007. Lexical markers of evidentiality in Lithuanian. *Rivista di Linguistica*, 19/1: 173-208.
- Willett, T. 1988. A cross-linguistic survey of the grammaticalization of evidentiality. *Studies in Language*, 12: 51–97.

# **Summary in Lithuanian**

Šiame bakalauro darbe tiriama adverbialinių epistemiškumo žymiklių vartosena lietuvių ir anglų žiniasklaidos diskurse. Epistemiškumo superkategoriją sudaro evidencialumas ir episteminis modalumas, iš kurių pirmasis skirtas nurodyti autoriaus informacijos šaltinį, o antrasis – pateikti autoriaus informacijos įvertinimą tikrumo atžvilgiu. Nagrinėjami du žiniasklaidos diskurso tipai: naujienų pranešimai ir komentarai. Vyrauja nuomonė, jog naujienų straipsniai skirti pranešti faktus, todėl yra objektyvūs, palyginti su autorių nuomonės raiška, kuri yra vertinamojo pobūdžio, taigi labiau subjektyvi. Atitinkamai, iškeltos hipotezės, jog komentaruose epistemiškumo žymikliai bus vartojami dažniau nei naujienose, be to, adverbialai komentaruose atliks daugiau įvairių funkcijų.

Tyrimui parengtas naujas, apie 200 tūkst. žodžių apimties tekstynas. Vieną jo dalį sudaro anglų laikraščio "The Guardian", kitą – lietuvių "Lietuvos rytas" straipsniai, atspindintys abiejų kalbų žiniasklaidos diskursą. Abi dalys suskaidytos į du 50 tūkst. žodžių potekstynius, skirtus naujienų pranešimams ir komentarams. Visa medžiaga parašyta 2016 metais, įvairovei išlaikyti įtraukti ne daugiau kaip du to paties autoriaus straipsniai. Iš tyrimo pašalintos citatos ir perpasakojamoji kalba, neepistemiška ir neadverbialinė vartosena.

Kiekybinė analizė parodė, jog epistemiškumo žymikliai anglų kalbos komentaruose vartojami apie keturis, lietuvių – apie septynis kartus dažniau nei naujienų pranešimuose. Dažniausia epistemiškumo rūšis visuose potekstyniuose buvo episteminis galimumas. Išimtis – anglų naujienų pranešimai, kur vyravo evidencialumas. Lietuvių kalboje episteminį modalumą dažniausiai nurodė žymikliai gal ir galbūt, būtinumą – žinoma, greičiausiai ir turbūt, evidencialumą – neva, esą, matyt, rodos/regis/atrodo ir aišku. Anglų kalboje dažniausiai pasitaikę episteminio galimumo žymikliai buvo perhaps ir probably, būtinumo – certainly ir surely, evidencialumo – apparently ir reportedly.

Kokybinės analizės dalyje ištirta aukščiau paminėtų dažniausių žymiklių vartosena. Nustatyta, jog episteminio galimumo žymikliai yra daugiafunkcionalūs bei vartojami panašiais tikslais: sušvelninti autoriaus poziciją, pateikti mažai pagrįstus spėjimus, palikti vietos alternatyviai nuomonei. Anglų kalbos būtinumo žymikliai nurodė palyginti stipresnį įsitikinimo laipsnį, kaip ir lietuvių kalboje buvo naudojami užmegzti dialogą su skaitytoju. Be to, angliškosios evidencialumo raiškos priemonės beveik išimtinai nurodė nuogirdą, o lietuvių kalboje rasta

daug numanymo atvejų su persipynusiomis evidencinėmis ir modalumo reikšmėmis. Abiejose kalbose funkcinė įvairovė buvo būdinga komentarams, bet ne naujienų pranešimams.

Patvirtintos abi hipotezės: komentaruose epistemiškumas reiškiamas gerokai dažniau bei yra funkcionaliai įvairesnis nei naujienose. Rezultatai atitinka stereotipą, jog naujienų pranešimai dėl faktinio pobūdžio yra objektyvesni už komentarus. Vienintelį netikėtumą pateikė lietuvių naujienų potekstynis, kur evidencialumo žymikliai pasitaikė rečiau nei episteminio galimumo ar būtinumo. Radiniui patvirtinti reiktų atlikti didesnės apimties tyrimą.

# Appendices

- Appendix A. Lithuanian OPINION subcorpus on CD.
- Appendix B. Lithuanian NEWS subcorpus on CD.
- Appendix C. English OPINION subcorpus on CD.
- Appendix D. English NEWS subcorpus on CD.
- Appendix E. English and Lithuanian markers on CD.
- Appendix F. List of English OPINION authors on CD.
- Appendix G. List of Lithuanian OPINION authors on CD.