

A CORPUS-BASED CONTRASTIVE ANALYSIS OF CERTAINTY AND DOUBT ADVERBIALS IN ACADEMIC DISCOURSE BY NATIVE ENGLISH AUTHORS AND NON-NATIVE KURDISH AUTHORS

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ABSTRACT

The use of stance adverbials in academic writing is of great significance as they have the ability to influence the rhetorical stance of the author. Within this domain, Adverbials that express certainty or doubt play a critical role in indicating the amount of commitment the authors have towards the information they communicate. This study presents findings from corpus-based research conducted to examine the use of adverbials expressing certainty and doubt by both native English authors and non-native Kurdish writers. The data for quantitative analysis is taken from two corpora: the Non-Native speaker corpus (KNNSC) and a subcorpus of academic discourse by English native speakers compiled from CAEC (Cambridge Academic English Corpus) as a reference corpus. The analysis in both corpora was carried out using the Sketch Engine (SkE) software. This study addresses the significance of stance adverbials in academic writing, especially for Kurdish scholars, filling a gap in the literature and illuminating their role in reflecting cultural, linguistic, and identity. Author study focuses on the restricted comprehension of adverbial markers of stance in academic writing, especially in our EFL context . The study underlines the need of studying stance markers in non-native English authors, who struggle to communicate certainty and doubt in their research. The results obtained from data analysis in this research revealed a notable disparity in the frequency of the use of the aforementioned adverbials between the two groups of authors. In addition, the underuse of these adverbials by non-native Kurdish authors can be explained in terms of culture and the degree of the proficiency in the use of adverbials by the writers.

KEYWORDS: Adverbials, Doubt, Certainty, Corpus-Based, Academic Discourse

1. INTRODUCTION

Academic writing is often viewed as a kind of discourse that strives to maintain a neutral and unbiased stance in the presenting of factual information. However, scholars such as Crismore and Farnsworth (1990), Hyland (1998; 2004), Hunston (1994), and Hyland and Tse (2004; 2005) acknowledge that academic writing does not merely involve presenting investigations in an impartial manner. Authorial stance is considered to be of a great importance in the development of academic discourse.

There is a misunderstanding among writers that academic writing needs to be impartial and detached. They are often instructed that this style of writing necessitates them to objectively explore concepts. They are expected to suppress their identity and adhere to society's standards of obscurity, in their ideas, actions and persona. This advice can be found in textbooks and writing manuals designed for both native and non-native English speakers (Hyland, 2002) . The idea that

professional scientific writing merely consists of objective presentations of factual information leading to the establishment of truth is generally believed overly negative and "a very generous myth" (Crismore and Farnsworth, 1990: 118). Studies have revealed that academic writing uses language devices like stance taking to indicate the author's viewpoint on the information being delivered, enhancing the engagement and evaluative nature of their work. Stance adverbials are often used in academic writing to explain the author's viewpoint on a topic. Biber et al. (1999: 766-767) claim that speakers use stance adverbials as a means to effectively communicate their evaluations and perspectives, hence indicating their specific intentions about the interpretation of their propositions.

Corpora have become a prominent topic in academic discussions, serving as valuable tools for investigating linguistic characteristics in various academic genres, including student essays, academic lectures, textbooks, theses, and research articles. Scholars like Show (2007)

emphasize the use of statistical assessment within academic discourse analysis, offering intriguing insights and laying the groundwork for future research. Additionally, Conor (2004) highlights that corpus-based approaches have become integral to empirical investigations of both academic and professional genres. Corpora excel in identifying repetitive linguistic patterns in these genres, enabling analysts to explore how consistent language choices contribute to the formation of scholarly communities, underscoring their significant advantages in academic research. Charles et al. (2009: 1) discuss the similarities found between corpus linguistics and discourse analysis in being:

- Both traditions begin with a few carefully chosen instances of naturally occurring discourse.
- Both make an effort to find recurring themes in the naturally occurring illustrations.
- The social, intellectual, or ideological settings in which the speech is present are discussed by both authors in relation to their findings.
- Both tie their identifications to the social, intellectual, or ideological settings within which the discourse functions.

Although the above-mentioned points have shed light on the similarities that could be found between discourse analysis and corpus linguistics, the two fields of research have also some vital distinctions that lead to deal with each differently. The priorities of the two approaches tend to vary in that discourse analysis focuses on full texts and their cultural context, discovering patterns that encompass sentences and paragraphs. Therefore, Swales (2002) views the approach of discourse as a 'top-down' method in the sense that they are concerned with entire, individual texts as well as the social contexts in which they are produced and received. Whereas corpus linguistics often uses procedures that decontextualize individual texts and concentrates on repetitive patterns of small-scale elements such as words and phrases. Swales (2002) calls this approach a 'bottom-up' approach. In other words, they analyse enormous amounts of data from several texts and offer frequency and distributional information on the language's surface features. Nevertheless, it is often argued by researchers that the availability of both approaches provides an opportunity for enhanced analysis that integrates complementary methodologies with alternative theoretical frameworks. Consequently, the merging of the two agendas is increasingly grasped in practical applications.

2. LITERATURE REVIEW

The definition and the semantic categorization of stance adverbials in this study is based on the theoretical framework adopted in Biber, Johansson, Leech, Conrad, and Finegan's (1999). They define stance as "the expression of personal feelings, attitudes, and value judgements, or assessments". Regarding the semantic categorization of stance adverbials, the authors distinguish between epistemic, attitude, and style stance adverbials. Epistemic adverbials often communicate the author's evaluation of the credibility of a proposition. Epistemic adverbs are related to six primary kinds of meaning, namely "certainty and doubt," "actuality and reality," "source of knowledge, limitation, viewpoint or perspective, and imprecision. These subcategories are defined as follows:

1. Certainty and doubt adverbials: these adverbials indicate whether the speaker is sure or uncertain about the proposition being stated.
2. Actuality and reality adverbials: these adverbials emphasize the factuality or reality of a statement.
3. Source of Knowledge: these adverbials refer to the source of knowledge by which information is taken from.
4. Limitation: adverbials of limitation refer to the "limitation of a proposition". (Biber et al, 1999: 855)
5. Viewpoint : adverbials referring to viewpoint or perspective identify the point of view from which the statement holds true.
6. Imprecision: the adverbials in this group refer to the lack of preciseness of a stated proposition.

Attitude Adverbials express the author's attitude towards a proposition such as importance, evaluation, expectation. Adverbials such as "astonishingly", "inevitably", "disturbingly", "sensibly", "importantly", and "significantly" belong to this type.

Style adverbials are those adverbs of style, such as "honestly," "literally," "technically speaking," "generally speaking," "in short," "truly," "to put it," "to tell you the truth," "confidently," etc., serve the purpose of offering evaluative remarks on the way in which the message is being communicated or expressed.

Within the category of epistemic adverbials, there is a distinction between doubt and certainty adverbials and other types of epistemic adverbials. According to Biber et al. (1999: 854), adverbials of certainty and doubt are used to "show the speaker's certainty or doubt about the

proposition in the clause. They include both absolute judgments of certainty and indication of belief in various levels of probability." The following examples are taken from Biber et al's LGSWE (1999).

a) *During the action the person will **undoubtedly** have certain feelings towards it and gain satisfaction from achievement.*

b) *In spite of that it was **probably** more comfortable than the home they'd left anyway.*

The table below enumerates the primary adverbials expressing certainty and doubt that are

the focus of investigation. It is important to highlight that Biber et al. (1999) classified "doubt and certainty" as a single grouping. However, the current study has undertaken the division of the acknowledged epistemic category, "Doubt and Certainty," into two separate subcategories, namely "Doubt" and "Certainty," with the aim of conducting a more comprehensive examination of distribution disparities within each semantic category.

Table (1): Adverbials of certainty and doubt used in the current study

Epistemic Adverbials	
Certainty Adverbials	<i>As anticipated, as expected, as might be expected, as one might expect, certainly, clearly, decidedly, definitely, doubtless, I believe, I bet, Incontestably, incontrovertibly, indeed, inevitably, most likely, No doubt, obviously, Of course, Surely, undeniably, undoubtedly, very likely, without doubt.</i>
Doubt Adverbials	<i>Perhaps, probably, possibly, maybe, arguably, presumably, I guess, I think, It appears, It seems, Quite likely, Who knows</i>

3. PROBLEM OF THE STUDY

Numerous researches have been conducted on the use of stance within the linguistic system of academic writing. However, there exists a dearth of knowledge about the application of adverbial markers of stance in academic written works, particularly those composed in a second language (L2) or foreign language (FL). Further evidence of the significance of examining stance indicators in academic discourse is the increasing number of international scientific research publications, particularly those authored by individuals for whom English is a foreign language (EFL Kurdish writers). The challenge of adopting suitable stance in terms of certainty and doubt based on existing evidence and assumptions is a complex task faced by non-native scholars.

This work synthesizes the findings from these several lines of linguistic research in this field and attempts to fill a gap in the field by investigating the usage of certainty and doubt adverbials as indicators of stance in first-language English authors (L1) and Kurdish EFL writers of academic discourse. It is hypothesized that the use of those adverbials will differ between the two groups of writers due to differences in language background and/or cultural disparity.

4. OBJECTIVES OF THE STUDY

The study aims at finding answers to the following questions:

1. Do both groups of writers use the same indicators of certainty and doubt domains?
2. Do Native English writers significantly differ from Kurdish non-native authors in the frequency of use of certainty and doubt adverbials in their academic research?
3. To what extent is the use of these adverbials determined by cultural and pragmatic factors related to the rhetorical conventions and communication goals of academic discourse?

5. SIGNIFICANCE OF THE STUDY

The research has an immense significance due to its ability to transcend linguistic and educational barriers, while also exploring unexplored areas at the junction of several fields. This study is a pioneering effort in the Kurdistan area of Iraq, where there is a notable lack of corpus-based research. By using corpora, this methodology surpasses the limitations of conventional language research, providing a novel standpoint for examining academic literature within the Kurdish intellectual community. The use of this unique technique has the capacity to significantly broaden the scope of scholarly investigation inside the area

6. PREVIOUS STUDIES

The use of stance adverbials in academic research has been the focus of many studies. In 1988, Biber and Finegan conducted a significant study in a specific research area. They utilized academic literature from various scientific fields and employed cluster analysis to group texts based on the similarity of certain stance adverbials. Their findings revealed that stance adverbs have meanings that go beyond their literal definitions. In simpler terms, adverbs can express unity and intensification rather than objective truth. Adverbs don't consistently convey conviction or confidence; instead, they require verification and exclude certain assertions in polite discourse. Furthermore, adverbials expressing doubt were more common in academic writing than those expressing certainty.

In 1997, Hyland and Milton conducted a comparative analysis of how doubt and certainty were used in written English by students from Britain and Hong Kong. The results showed that both groups of students had limited language skills, especially in the second language (L2) corpus. In the first language (L1) corpus, most stance expressions primarily indicated probability or doubt, using words like "appear," "likely," "perhaps," and "possible." However, in the second language (L2) corpus, about half of the 75 identified expressions served as markers of certainty, using words like "always," "actually," "certain," and "definitely." The essays in L2 exhibited more "personalized forms" and a departure from the conventional formal language typically found in academic writing. Hyland and Milton (1997: 201) suggested that non-native students struggled to express degrees of doubt and tended to make more assertive statements due to their limited exposure to fundamental academic and genre-specific conventions.

Additionally, a similar study by Hinkel (2003) was conducted in which he analyzed occurrence rates of deictic, modifying, and intensifying adverbials, as well as other semantic categories of adverb clauses. The findings revealed that there were notable distinctions between articles written by native speakers (NS) and non-native speakers (Chinese, Japanese, Korean, and Indonesian students) who mostly manifested in the use of amplifiers and emphatic adverbs, which were more prevalent in their writing compared to native students.

In 2007, a study done by Simon-Vandenbergen and Aijmer that focused on the use

of adverbs of certainty across several academic disciplines. The findings showed that writers in the humanities and social sciences employ adverbs of certainty more frequently than their peers in the scientific sciences.

In a similar vein, Gilquin et al. (2007) discovered that non-native authors in academic contexts have a tendency to excessively use adverbs that express a high degree of certainty, while simultaneously displaying a deficiency in the utilisation of often employed hedging adverbs which according to a study on learner corpora highlighting a number of findings from corpus analyses of EAP writing produced by second-language speakers.

Ummul Ahmada and Maryam Mehrjoosereshtb (2012) examined the use of stance adverbials in the abstracts of 30 doctoral theses in the field of Engineering. The results showed that those adverbs were widely used as important means for indicating writers' degree of certainty about the presented information and to mark their stance and comment on certainty and reliability of their research. Among stance adverbials, epistemic stance seemed to enjoy the highest frequency of use.

According to Zhang and Sabet (2014), there were discernible differences in the expression of epistemic stance between native speakers (NSs) and non-native speakers (NNSs). In research done on a large number of students who were native speakers (L1) and proficient Chinese and Persian students speaking American English, in an attempt to show some linguistic features of (*I Think*), exhibiting elasticity across three dimensions, such as frequency, location, and cluster distributions.

Çakir (2016) analysed lexico-grammatical features in research article abstracts written by Turkish and native writers of English focusing specifically on stance adverbs, to explore how academic writers from different scientific communities to construct author's stance in research article abstracts. The corpus consisted of 240 abstracts from disciplines of sociology, psychology, linguistics, physics, chemistry, and biology. The results revealed significant differences in the total number of stance adverbs. Native writers of English employed more stance adverbs in their abstracts than Turkish writers. differences of stance adverbs were also found in soft sciences and hard sciences. Academic writers in the soft sciences used more stance adverbs in their abstracts.

In a study conducted by Rozumko (2017), the use of epistemic adverbs in research articles from six different academic disciplines across the humanities (linguistics and literary studies), social sciences (law and sociology), and natural sciences (physics and medicine) was investigated to determine discipline-specific trends. The findings revealed that the frequent utilization of epistemic adverbs was predominantly observed in research articles from the humanities and social sciences, whereas medical and physics research articles employed them less frequently. Among the most commonly used epistemic adverbs in the analyzed research articles were "indeed," "perhaps," "clearly," "certainly," "of course," "arguably," "possibly," and "reportedly." Some of these adverbs were associated with specific disciplines, such as "clearly" (used in physics, linguistics, sociology, and medicine), "indeed" (found in linguistics, literary studies, and sociology), "possibly" and "reportedly" (mainly in medicine), and "arguably" (common in law).

7. METHODOLOGY

The goal of this study was to examine and contrast authorial stance in academic discourse written by two groups of academics, namely, native English academics and non-native Kurdish authors, using a corpus-based approach. The data for present investigation are taken from two corpora. The Kurdish Non-Native Speakers Corpus (KNNSC) and the Cambridge Academic English Corpus (CAEC).

7.1. Research design

The design of the current study follows a mixed methodology (quantitative and qualitative) approach. The quantitative part deals with the frequencies of the data analysis and their percentages. Whereas the qualitative part deals with the interpretation of the results gained from these frequencies.

7.2. Samples

Given that this study is corpus-based in nature, the focus was only on scholarly works produced by academics affiliated with the University of Duhok. These include PhD theses, MA/MSc dissertations, and research papers created by

academics associated with the aforementioned university.

7.3. The implemented corpora

The first corpus was generated using the Sketch Engine (SkE) and comprises 62 scholarly publications. These papers, including PhD theses, MA/MSc dissertations, and journal articles, together include 831,911 words. All 62 literary works were authored by scholars whose mother language is Kurdish and who live in Kurdistan Region. In order to minimise the risk of plagiarism, only the results and conclusion parts of the selected papers were analysed. This phenomenon arises from the observation that non-native scholars often exhibit their linguistic background in the research sections mentioned earlier, whereby they were expected to articulate their results and conclusions in their own manner.

The second source of our data was the Corpus of Academic English (CAEC) which contains written and spoken academic English texts from numerous US and UK educational institutions, including lecture notes, seminar notes, student presentations, journal articles, essay prompts, and textbooks. The corpus has 3,163,648 words. These samples span undergraduate through graduate degrees. A subset of the Cambridge Academic English Corpus (CAEC) was assembled with careful attention given to factors such as the language of origin, educational level, and area of study. This was done in order to enable dependable comparisons. Consequently, a reduced subcorpus consisting of 974,346 words were generated to serve as the principal reference corpus.

7.4. Statistical tools

By using the Log-likelihood calculator, it was possible to determine if there exist statistically significant differences in the use of stance markers between the two datasets. The test computes the absolute frequency of an item in each database and the cumulative sizes of the two databases. The Log-likelihood calculator automatically transforms the raw frequency of an item into its normalised occurrences per 100 words. The test does a comparison between the two databases by normalising the data and analysing the frequency of occurrences

Item	O1	%1	O2	%2	LL	%DIFF	Bayes	ELL	RRisk	LogRatio	OddsRatio	
Word	237	0.03	1292	0.13	-	643.56	-78.52	629.16	0.00005	0.21	-2.22	0.21

Fig. (1): Log-Likelihood Test Result of Certainty Adverbials

Item	O1	%1	O2	%2	LL	%DIFF	Bayes	ELL	RRisk	LogRatio	OddsRatio
Word	117	0.01	880	0.09 -	546.71	-84.43	532.30	0.00005	0.16	-2.68	0.16

Fig. (2): Log-Likelihood Test Results for Doubt Adverbials

In the figures above, O1 & O2 refer to the raw frequency of both items investigated, namely certainty & doubt adverbials. The values %1 and %2 indicate the normalized frequencies of the item being analysed per 100 words in the datasets. These values are calculated by dividing the raw frequency of the item by the total number of words in the relevant database. The presence of a positive sign and a negative sign in the first database (O1) signifies the higher and lower frequencies of usage, respectively. The presence of a negative sign in the picture above signifies that the item under analysis exhibits a lower frequency in the first database (O1). In other words, the frequency of usage for this item in the first database (O1) is comparatively lower than that in the second database (O2). Different LL values are used to indicate different levels of accuracy and ranges of uncertainty. The distinction becomes more apparent when considering greater LL values, as seen in the following citation.

- 95th percentile; 5% level; $p < 0.05$; critical value = 3.84
- 99th percentile; 1% level; $p < 0.01$; critical value = 6.63
- 99.9th percentile; 0.1% level; $p < 0.001$; critical value = 10.83
- 99.99th percentile; 0.01% level; $p < 0.0001$; critical value = 15.13

LL numbers ranging from 3.84 to 6.62 indicate a 95% level of accuracy with a 5% margin of error. Conversely, LL values equal to or beyond 15.13 suggest a higher level of importance and accuracy. The results indicate a statistically significant result with an accuracy rate of 99.99% and a margin of error of 0.01%. Rayson, Berridge, and Francis (2004:926) propose using the higher cut-off value as a recommendation upon concluding their examination of the Chi-squared and Log-likelihood tests, “in order to extend applicability of the frequency comparisons to expected values of 1 or more, use of the log-likelihood statistic is preferred over the chi-squared statistic, at the 0.01% level. The trade-off for corpus linguists is

that the new critical value is 15.13”. In every Log-likelihood estimate in the current study, the analysis employs a cutoff value of 15.13, which is consistent with the work cited.

For the sake of arranging the data and the investigated adverbials taken from both corpora, Excel sheets were used. Microsoft Excel sheets were used for data organization and analysis, enhancing efficiency in data management. It offers various features for arranging and investigating adverbials, by grouping adverbials according to their types and subtypes. The data, both in numerical and normalized formats, were inputted into a spreadsheet in Microsoft Excel. The data was afterwards grouped and organized based on their semantic and syntactic categories via the use of Pivot charts.

7.5. Data analysis procedures

To start the implementation of our study, we conducted a search for all epistemic stance adverbials referring to certainty and doubt, mentioned in Biber et al.'s (1999) work, as shown in table (1), using the Sketch Engine programme. According to Tymoczko (1998), every research using a corpus necessitates the use of a software. When doing a comprehensive examination of textual data on a significant scale, it is challenging and irrational to disregard the use of software tools. Therefore, the selection of the Sketch Engine was made from a range of available software for the purpose of this work. The Sketch Engine software by Adam Kilgariff 2003 was selected by the researchers to search the certainty and doubt stance adverbials in both corpora. Sketch Engine has been widely utilised as a Windows-supported corpus programme for a wide range of applications, including dictionary compilation, phraseology, collocation research, and text analysis. The creation of this valuable tool is attributed to Lexical Computing Ltd. (<https://www.sketchengine.eu/>) (McGillivray & Kilgariff, 2013). Concordance tool, word list, and word sketch tools are the major tools used in the SkE. The concordance tool is used to identify and analyse the stance adverbials being examined inside a certain text or corpus, together with the adjacent phrases. On the other hand, the adverbials included in the text were readily

examined and juxtaposed using the word list tool. Word sketch tools provide a comprehensive overview of the examined stance adverbials, emphasizing common collocations and grammatical structures. Collectively, these sites provide significant insights about the types and frequencies of adverbials use in the SkE.

After deciding about which part of the academic texts to be under investigation, every selected section is read carefully and filtered from pictures and their descriptions. This is because the software does not process or read any pictures. Every text was uploaded to the SkE as a *pdf* file or *word* file. All the files were transformed from (.docx) or (.pdf) to (.txt) files in order to be machine-readable. The uploaded data were then annotated using a document annotation tool called Metadata, which is a tool especially used for annotating the files that are uploaded . Using the metadata, all the files were coded by with special letters and numbers to refer to the authors and to keep their information confidential and prevent it from being viewed by anyone other than the corpus's primary

7.6 . Data collection procedures

The first stage of data collection was determining the number of academic works to be

gathered for the research. The primary focus of our investigation was on the findings and conclusions derived from each scholarly work since it was believed that the true linguistic expression of the author was most evident in those sections. Additionally, I composed a letter of consent in which I explicated the reasons for my data collection and the goals of my project. The informants were provided with the assurance that their names would be maintained in strict confidence and their contributions would be safeguarded. Upon collecting a total of 62 scholarly publications, I started the construction of my corpus. The selected portion was exclusively included and refined to exclude any redundant sentence fragments or numerical figures.

7. DATA ANALYSIS AND RESULTS

The computational analyses of the data revealed important information regarding the distribution of certainty and doubt as markers of stance in both KNNSC and CAEC. Figure (3) below provides the results of the analysis.

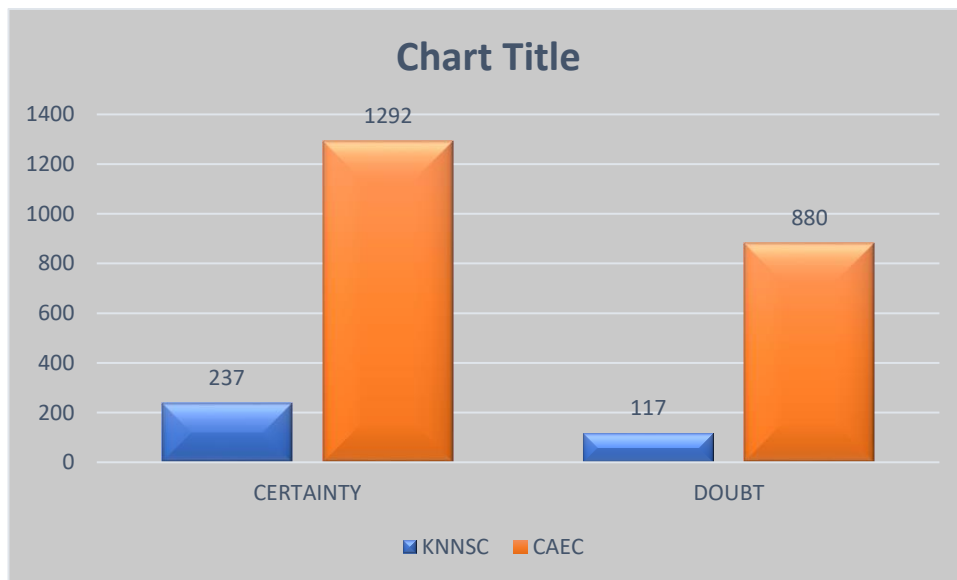


Fig. (3): Distribution of certainty and doubt adverbials in KNNSC and CAEC

According to the data in Fig (3), the native writers scored 1292 instances of certainty adverbs on the CAEC, while non-native Kurdish authors had a substantially lower score, with 237 entries in KNNSC. The distribution of doubt adverbials shows a similar frequency in KNNSC (117 hits) and CAEC (880 hits). The results above are

proven by the Log-Likelihood test to be significantly different.

7.1. Distribution of Certainty Adverbials in KNNSC and CAEC:

Of all the items of the certainty group, Kurdish authors used seventeen markers, whereas native writers used twenty-one.

Table (2): Overall frequency of certainty adverbial in both corpora

	KNNSC	CAEC	LL Ratio
Frequency of occurrence	237	1292	643.56
Normalized occurrences	0.03%	0.13-	

The above table represents the overall frequency of certainty adverbials in both KNNSC and CAEC and the LL ratio for them. A statistically significant difference is seen between the CAEC and the KNNSC in relation to the total utilisation of certainty adverbials (LL value = 643.56, $p < 0.0001$). Specifically, the LL calculation provides evidence that the CAEC exhibits a higher frequency of certainty markers

compared to the KNNSC (Critical LL value is 15.13). Concerning the distribution of the individual members in the certainty group, the data in table (3) below reveal that Kurdish researchers use fewer certainty adverbials in their writing than native writers. out of the total of 23 adverbials of certainty, native researchers use 20, while Kurdish scholars use only 17.

Table (3): certainty adverbials in both KNNSC and CAEC

ADVERBIALS	KNNSC Frequency	Normalised per million	CAEC Frequency	Normalised per million
Clearly	110	95.1	326	215.17
Obviously	21	18.16	61	36.48
Certainly	17	14.7	121	79.86
Of course	16	13.83	155	92.7
Indeed	15	12.97	302	180.61
No doubt	9	7.78	37	22.13
As expected	7	6.05	22	14.52
I believe	7	6.05	4	2.39
Inevitably	7	6.05	43	25.72
Surely	7	6.05	34	20.33
Definitely	6	5.19	25	14.95
Undoubtedly	5	4.32	28	16.75
Without doubt	4	3.46	3	1.79
Most likely	3	2.59	107	63.99
As might be expected	1	0.86	4	2.64
Undeniably	1	0.86	10	5.98
Very likely	1	0.86	3	1.79
As anticipated	0	0	3	1.98
As one might expect	0	0	0	0
Decidedly	0	0	1	0.6
Doubtless	0	0	2	1.2
I bet	0	0	0	0
Incontestably	0	0	0	0
Incontrovertibly	0	0	1	0.6

The data in Table 3 above further demonstrate that of the 237 instances of certainty adverbials in KNNSC . The adverb *clearly* was the most frequent adverb in the group with 110 hits (95.1

wpm). The other adverbials, such as *obviously*, *certainly*, *of course*, and *indeed* occur quite less often, with fewer than 30 occurrences. While the adverbials *no doubt*, *I believe*, *inevitably*, *surely*,

as expected, definitely, undoubtedly, without doubt, most likely, as might be expected, undeniably, and very likely have fewer than 10 occurrences. Finally, as shown in the table below, eight of the adverbials in this group had no tokens in the corpus.

In CAEC, on the other hand, the data in the table above demonstrates that almost all the adverbials in the certainty domain were used by native researchers. The top four positions in the list are occupied by *clearly, indeed, of course, certainly* and *most likely*. The adverb *clearly*, with 326 hits, was the most commonly used

adverb, followed by *indeed* (302 hits), *of course* (155 hits), *certainly* (121 hits) and *most likely* (107 hits). The other members in this class had lower frequencies that range between 61- 01 hits, while the adverbials *as one might expect, I bet* and *incontestably* came at the end of the list with zero tokens.

7.2. Adverbials of Doubt in KNNSC and CAEC:

Doubt adverbials scored 117 (159.08 wpm) instances in the corpus of KNNSC while the native English authors scored 880 hits in their corpus.

Table (4): overall frequency of doubt adverbials in both corpora

	KNNSC	CAEC	LL Ratio
Frequency of occurrence	117	880	546.71
Normalized occurrences	0.01%	0.09 -	

The table above shows the overall frequency of doubt adverbials in both KNNSC and CAEC and the LL ratio for them. A statistically significant difference is seen between the CAEC and the KNNSC in relation to the total utilisation of doubt adverbials (LL value = 546.71, $p < 0.0001$). Precisely, the LL calculation provides evidence that the CAEC exhibits a higher

frequency of doubt markers compared to the KNNSC (Critical LL value is 15.13) .

The adverbial *probably* appears to be the most commonly used with 44 occurrences, and less often *possibly, perhaps, it appears, and maybe* hit from 28 to 13 times as shown in the table below.

Table (5): Adverbials of Doubt in KNNSC and CAEC

Doubt Adv.	KNNSC FREQUENCY	NORMALISED PER MILLION WORDS	CAEC FREQUENCY	NORMALISED PER MILLION WORDS
Perhaps	27	24.21	428	255.96
Probably	44	38.04	184	110.04
Possibly	28	23.34	123	73.56
Arguably	0	0	48	31.68
Presumably	3	2.59	37	22.13
Maybe	13	11.24	32	19.14
I think	2	1.73	16	9.57
It seems	0	0	7	4.19
Quite likely	0	0	4	2.39
I guess	0	0	1	0.6
It appears	0	0	0	0
Who knows	0	0	0	0
Total	117	101.15	880	529.26

The least used adverbials referring to doubt were *presumably* and *I think* with three and two occurrences respectively. Last but not least, adverbials such as *arguably, I guess, it appears,*

it seems, quite likely, and who knows had zero occurrences in the corpus.

On the other hand, in the native corpus, the table above illustrates that doubt-related adverbials scored (880 hits/ 529.26 words per

million). The counts in the table above show that the adverb *perhaps* was the most frequently used one in the category of doubt with 428 hits (255.96 wpm), followed by *probably*, with 184 hits (110.04 wpm), *it seems* (159 hits) and *possibly* (123 hits). The other adverbials in this category (*It appears, arguably, presumably, maybe, I think, quite likely and I guess*) appeared at markedly low rates.

8. DISCUSSION

The results of data analysis in the preceding clearly demonstrates that non-native Kurdish authors utilized fewer certainty and doubt adverbials (17, 6 tokens respectively) than native authors (21, 10 respectively). These findings provide a negative response to research question 1 which reads “*Do both groups of writers use the same indicators of certainty and doubt domains?*”.

Concerning research question 2 which reads “*Do Native English writers significantly differ from Kurdish non-native authors in the frequency of use of certainty and doubt adverbials in their academic researches?*”, the results indicate that Native researchers use those adverbials much more frequently than non -native Kurdish researchers . The analysis of both corpora in relation to the use of adverbials that convey certainty and doubt demonstrates a significant difference in the application of these linguistic elements across the two corpora .

As mentioned in the literature review , certainty adverbials indicate the author's highest level of assurance in a statement's authenticity and academic prose places a great emphasis on ensuring the certainty of information and therefore, these adverbials are employed to frame the writers' absolute judgments of certainty regarding the expressed propositions.

Concerning the distribution of certainty and doubt adverbials, the overall frequency results clearly demonstrate that certainty adverbials are more prevalent than doubt adverbials in both corpora. This finding contradicts Biber and Finegan's (1988) finding that doubt adverbials exhibit greater frequency compared to certainty adverbs in academic writing. Furthermore, the results of the data analysis conducted in the context of the CAEC and KNNSC study are consistent with the findings reported by Biber et al. (1999).

Concerning research question 3 which reads “*To what extent is the use of these adverbials*

determined by cultural and pragmatic factors?”, the distribution of the various items in the certainty and doubt groups in both corpora indicate that the adverb *clearly* is the most frequently used among other certainty adverbials in both corpora, at different ranges, though. In both corpora, the adverb *clearly* is used to function as an evidential marker as it explicitly references the evidence mentioned within the sentence.

1. <s> *This is clearly manifested in her admission that she is in the prison because of Achari.* <s>. (KNNSC Doc #23)

2. <s> *Clearly , if the improvement in performance using real data over randomized data is statistically insignificant, then the assertion of having derived a true structure-activity relationship is dubious and is likely the result of chance correlation or overfitting.* <s> (CAEC Doc #238)

In the CAEC corpus the frequency of the adverb *indeed* is notably higher compared to KNNSC, Table 3 shows a frequency of 302 hits in CAEC compared to only 15 hits in the KNNSC. This adverbial is used by the native writers as an anticipatory component due to its capacity to reference, reaffirm, and underscore an already established concept within the given context. It is often used to demonstrate the writer's authority and his desire to persuade the reader. This goes in line with the finding of Simon-Vandenberg and Aijmer (2007).

1. <s> *by Professors Ian Deary and Peter Visscher have persuasively demonstrated that natural variability in many genes is indeed heritable and partly contributes to intelligence.* <s> (CAEC Doc# 218)

Additionally, the adverb *indeed* is occasionally utilized in our data as a connective to provide new information. This goes in line with the findings of Wierzbicka (2006) .

2. <s> *Because of their enthusiasm regarding the stature and socio-political roles of Kurdish women, these writers have endeavored to depict dozens of Kurdish women in different shapes and positions through one female character, which may- or, indeed , may not- be a very practical, truthful or realistic image.* <s> (KNNSC Doc #23)

3. <s> *Many learners, or indeed native speakers, could make these errors so on their own, they are not indicative of the native language of the author.* <s> (CAEC Doc #38)

With notable frequency fluctuations when compared to KNNSC, the adverb *of course* ranks

as the third highest certainty adverbial in CAEC. In our setting, the adverb *of course* is used as a shield against criticism because the author wants to maintain their credibility. The following examples clarify its function:

1. <s> *This, of course, is not an exclusively Kurdish issue.* <s> (KNNSC Doc #23)
2. <s> *The bigger things are, of course, our moral values, our civic values, how we perceive ourselves, and how we contribute to our community, our country, and our society.* <s> (CAEC Doc #22)

As shown in table 5 above, in the CAEC, doubt adverbials occur eight times as often as in the KNNSC. Doubt adverbials convey a relatively lower degree of certainty on the part of the author, thereby rendering the content open to discussion. In both corpora, the writers use these adverbials as qualifiers or hedges that lessen the authors' commitment of the likelihood of the proposition. This finding goes in line with Hyland's thesis (1998) that the use of hedging expressions indicates a lack of full commitment to the truth value of a corresponding proposition or a purposeful avoidance of absolute commitment:

1. <s> *Nevertheless, it appears that most learning of non-core word senses does not occur explicitly but rather through exposure to language, perhaps through reading of LLL.* <s> (CAEC doc #7)
2. <s> *Perhaps our voices couldn't be transmitted on a screen?* <s> (KNNSC doc #3)
3. <s> *First, the individual systems perform better when training with the sum loss function, and this is probably due to the larger proportion of training data used.* <s> (CAEC Doc #2)
4. <s> *Space, and the opposition between public/male and private/female spaces, it seems, is at the heart of patriarchal power politics and of feminist resistances.* <s> (CAEC doc#31)
5. <s> *The differences in circumstantiation are possibly due to the wide-ranging nature of this data.* <s> (CAEC doc#54)

Among doubt adverbials, The adverb *perhaps* is the most visible and the most excessively used by native speakers, and it is used fifteen times as often as its use by Kurdish researchers. It is notable that native authors possess a more profound awareness of the different potential uses of the adverb *perhaps* in scholarly work compared to non-native Kurdish writers, as it is used to indicate doubt about predictions,

suppositions, explanations, and interpretations that need to be proven.

1. <s> *Then we could perhaps, under one condition adsorb the salt and, changing polarity, desorb it.* <s> (CAEC Doc 25)
2. <s> *In this way they hoped to arrive at a system of analysis for their data, but perhaps because of the very specific nature of the definitions of their acts they make no claim to a comprehensive system for all types of everyday conversation.* <s> (CAEC Doc 25)
3. <s> *In the traditional teacher-fronted classroom, it is perhaps easier to conceive of these notions as situation-bound owing to the very strictly circumscribed limits of action and language imposed by the nature of classroom teaching.* <s> (CAEC Doc 26)
4. <s> *Perhaps because even the participants in an interaction are only partially aware of these pieces of speech, this area of discourse has in the past been under researched by analysts.* <s> (CAEC Doc 25)

The findings in these examples support the findings of Biber et al., (1999:867-869) .In the KNNSC , though underused compared to other doubt adverbials, the adverb *perhaps* serves the same functions mentioned above.

1. *Nevertheless, when solid loading further increased, the quantity of acetic acid increased again, perhaps due to the excessive amount of hemicellulose present in the reaction medium. 112 Enzymatic hydrolysis was achieved in order to increase the amount of mono- sugars, especially glucose and xylose for the fermentation process.* . (KNNSC Doc 59)
2. *Perhaps a major reason for the increase total AGB Mg ha-1 was the increase in the D of the trees in the B. Sadeen strata .* (KNNSC Doc 47)
3. *This concern may perhaps hinder the process of values education.* . (KNNSC Doc 28)
4. *At this level perhaps one can infer that, "Ionesco wishes the audience to appreciate the admirable effort of withstanding the forces of evil and the absurd struggle from which Berenger can never emerge as victor" (Krauss, 3).* (KNNSC Doc 8).

Further, Kurdish researchers resort to other doubt adverbials such as *it seems, probably, and possibly* as shown in Table 5 above which show higher scores (46, 44, 28 hits) than the score of *perhaps* (27 hits / 24.21 wpm).

The limited use of doubt adverbials by Kurdish authors can be explained from a socio-cultural perspective. In my opinion, The formation of the Kurdish individuals' personality

might be, to a certain extent, shaped by thoughts and ideals derived from sacred texts or revered religious figures, whose authority is widely accepted. The influence of this cultural standard has had a significant impact on their cognitive processes, resulting in a diminished level of attentiveness towards the audience and a subsequent deficiency in audience awareness. Without doubt, this topic requires more investigation in further research endeavours.

Moreover, the underutilization of adverbials relating to certainty among Kurdish authors result in their inability to create their own personalities and they typically represent themselves as followers and cannot show their voices in their writings or confront alternative propositions with a single confident voice. This might be attributed by the fact that Kurdish society is characterized by a communal orientation and people conform to a cultural norm characterized by prevalence of a group-oriented voice, resulting in the absence of the individual's voice and his/her identity. The English community, on the other hand, is an individualistic one in which speakers and writers endeavour to express their unique perspectives and establish their own identities via their creative output. It is worth noting to mention that further study will be done in this context. This finding is consistent with Hyland's (2002) findings.

9. CONCLUSIONS

The insufficient research on stance markers among non-native English speaking Kurdish academic authors is obvious, despite the increasing attention this subject has received in international scholarly publications. The present study aimed to perform a comprehensive examination of adverbials that express doubt and certainty by comparing two distinct cohorts of authors: Kurdish non-native writers of English and native writers of English. The analysis was conducted using a corpus-based methodology in order to get definitive outcomes. The primary findings of this research may be summarised as follows:

1. The use of all kinds of certainty and doubt markers by both groups of writers serves as evidence for the universality of the concept of stance. The findings of the current research indicate a correlation between the different use patterns of adverbs expressing certainty and doubt in the works of the both groups of writers. Despite often using doubt adverbs or noncommittal language, it seems that English

writers rely more heavily on their own stance rather than on other's information. Hence, it may be argued that English academic discourse is characterized by a significant presence of authorial voice, resulting in a saturation of authorship within these works. While Kurdish authors have a limited tendency to use certainty stance markers as a mechanism for self-identification.

2. The apparent discrepancy in the utilisation of certainty adverbials between non-native Kurdish authors and their native counterparts may be ascribed to the non-native writers' limited proficiency in using these adverbials effectively, or it might be explained by considering the rhetorical conventions governing academic writing. In the context of Kurdish culture, the use of clear and straightforward stance adverbials to express unwavering certainty and confidence in one's views may not necessarily be highly esteemed.

3. The disparity in the frequency of certainty and doubt adverbials between English writers, who tend to overuse them, and Kurdish authors, who tend to underuse them, may be attributed to variations in language structure and vocabulary. English exhibits a diverse range of structures and lexicons to convey certainty and doubt, whereas Kurdish possesses a more restricted set of expressions for expressing these concepts. Consequently, the Kurdish language is unable to fully capture the extensive range of meanings conveyed by their English counterparts, leading to the utilisation of specific expressions within the semantic domains of certainty and doubt.

4. The limited set of doubt and certainty expressions in the KNNSC indicates a weak authorship in academic writing which is characterised by the absence of the author's voice.

5. The ability native authors to cite, reinforce, and emphasise a pre-existing notion within various settings may be ascribed to the fact that the English language includes a diverse range of adverbials that express both certainty and doubt.

6. The prevalence of doubt adverbials among native authors indicates their deliberate choice to recognise and consider different perspectives and ideas. Consequently, they may exhibit a lack of complete dedication to a certain idea. In other terms, these texts provide readers the ability to engage in discourse over their interpretation. However, the limited use of these adverbials by Kurdish writers suggests a deficiency in their knowledge of the target audience.

7. The disparity in the use of certainty expressions between the two cohorts of writers may further be elucidated by considering the writers' cultural views towards authority, social figures, and pre-existing beliefs. The Kurdish population tends to exhibit quiet or neutral expressions of stance due to deference towards authority and adherence to pre-existing ideas. In contrast, within English culture, there exists a greater level of acceptance towards opposition or critique of established concepts. This often leads to a clearer expression of certainty or doubt about claims. Therefore, our hypothesis which states that the use of doubt and certainty adverbials will differ between the two groups of writers due to differences in language background and/or cultural disparity is verified.

10. IMPLICATIONS

The investigation conducted on the use of certainty and doubt adverbials in academic writing has significant pedagogical implications for both English language education and academic writing pedagogy. Educators have the opportunity to use these research results in order to raise awareness among non-native Kurdish authors about the significant function of these adverbials in academic discourse. The integration of this knowledge may be implemented inside language training programs and writing courses. In addition, educators have the ability to develop targeted instructional materials aimed at teaching the proficient use of stance indicators, while considering the discrepancies identified between native English writers and non-native Kurdish authors. To develop cross-cultural understanding, workshops and seminars could be arranged, fostering conversations regarding the cultural and contextual aspects impacting writing styles. Engaging in comparative analyses of academic texts published by both native and non-native writers may provide students with valuable benefits, as they have the opportunity to learn from the writing practices of native authors. The importance of prioritizing feedback and revision procedures cannot be overstated, particularly when including corpus-based learning tools that provide access to authentic instances from the real world. Promoting critical analysis of the utilisation of attitude adverbials and fostering more investigation in this field might jointly help to the advancement of academic writing proficiency and the development of cultural awareness among non-native authors.

REFERENCES

- Adams, H. & Toledo, E. (2013). Adverbial stance marking in the introduction and conclusion sections of legal research articles. *Revista de Lingüística y Lenguas Aplicadas*, 8, 13-22. <http://dx.doi.org/10.4995/rlyla.2013.1028>
- Biber, D. & Finegan, E. (1988). Adverbial stance types in English. *Discourse Processes*, 11(1), 1-34. <https://doi.org/10.1080/01638538809544689>
- Biber, D., Johansson, S., Leech, G., Conrad, S. & Finegan, E. (1999). *Longman grammar of spoken and written English*. Essex: Longman. <https://doi.org/10.1162/089120101300346831>
- Çakir, H. (2016). Native and Non-Native Writers' Use of Stance Adverbs in English Research Article Abstracts. *Open Journal of Modern Linguistics*, 6, 85-96. <http://dx.doi.org/10.4236/ojml.2016.62008>
- Charles, M., Pecorari, D., & Hunston, S. (Eds.). (2009). *Academic Writing : At the interface of corpus and discourse*. Continuum International Publishing Group
DOI:[10.1016/j.jslw.2011.10.001](https://doi.org/10.1016/j.jslw.2011.10.001)
- Connor, U. (2004). Intercultural rhetoric research: beyond texts. *Journal of English for Academic Purposes*, 3, 291-304. <https://doi.org/10.1016/j.jeap.2004.07.003>
- Conrad, S. & Biber, D. (1999). Adverbial Marking of Stance in Speech and Writing. In S. Hunston & Thompson, G. (Eds.), *Evaluation in text: authorial stance and the construction of discourse* (pp.56-73). New York: Oxford University Press. DOI: 10.4236/me.2022.133016.
- Crismore, A. & Farnsworth, R. (1990). Metadiscourse in Popular and Professional Science Discourse Writing Scholar. *Studies in Academic Discourse*. Sage, Newbury Park, CA. https://scholar.google.com/scholar_lookup?title=Metadiscourse%20in%20popular%20and%20professional%20science%20discourse&publication_year=1990&author=Avon%20Crismore&author=Rodney%20Farnsworth
- Gilquin, G., Granger, S. & Paquot, M. (2007). Learner corpora: The missing link in EAP pedagogy. *Journal of English for Academic Purposes*, 6(4), 319-335. doi:10.1016/j.jeap.2007.09.007
- Hinkel, E. (2003). Adverbial Markers and Tone in L1 and L2 Students' Writing. *Journal of Pragmatics*, 35, 1049-1068. [http://dx.doi.org/10.1016/S0378-2166\(02\)00133-9](http://dx.doi.org/10.1016/S0378-2166(02)00133-9)
- Hunston, S. & Thompson, G. (2000). *Evaluation in text: Authorial stance and the construction of discourse: Authorial stance and the construction of discourse*. Oxford University Press, UK. <https://books.google.iq/books?hl=en&lr=>

- <https://doi.org/10.1016/j.jslw.2004.02.001>
- <https://doi.org/10.1016/j.esp.2004.02.002>
- <https://doi.org/10.1007/s40607-014-0009-9>
- https://www.sketchengine.eu/wp-content/uploads/2015/05/Latin_historical_corpus_2013.pdf
- Rayson, P., Berridge, D. & Francis, B. (2004). Extending the Cochran rule for the comparison of word frequencies between corpora. *7^{es} Journées internationales d'Analyse statistique des Données Textuelles (JADT 2004)*, 2, , 926–936, Louvain: Presses Universitaires de Louvain.
- <https://eprints.lancs.ac.uk/id/eprint/12424>
- Shaw, P. (2003). Evaluation and promotion across languages. *Journal of English for Academic Purposes*, 2(4), 343–57. doi:10.1016/S1475-1585(03)00050-X
- Simon-Vandenberg, A. & Aijmer, K. (2007). *The semantic field of modal certainty: A corpus-based study of English adverbs*. 56, Walter de Gruyter.
- <https://doi.org/10.1515/9783110198928>
- Swales, J. M. (2002). Integrated and fragmented worlds: EAP materials and corpus linguistics. In J. Flowerdew (Ed.), *Academic discourse*, 150–164. London: Longman.
- [https://books.google.iq/books?hl=en&lr=&id=1zJAwAAQBAJ&oi=fnd&pg=PA150&dq=Swales,+J.+M.+\(2002\).+Integrated+and+fragmented+worlds:+EAP+materials+and+corpus+linguistics&ots=kqzBlaN6zi&sig=EukodH8ErhzUhQ7puF0ZrzCvWoM&redir_esc=y#v=onepage&q&f=false](https://books.google.iq/books?hl=en&lr=&id=1zJAwAAQBAJ&oi=fnd&pg=PA150&dq=Swales,+J.+M.+(2002).+Integrated+and+fragmented+worlds:+EAP+materials+and+corpus+linguistics&ots=kqzBlaN6zi&sig=EukodH8ErhzUhQ7puF0ZrzCvWoM&redir_esc=y#v=onepage&q&f=false)
- Tymoczko, M. (1998). Computerized Corpora and the Future of Translation Studies. *Meta: Journal des traducteurs*, 43(4), 652–660.
- <https://doi.org/10.7202/004515ar>
- Wierzbicka, A. (2006). *English: Meaning and Culture*. Oxford University Press.
- <https://www.jstor.org/stable/20108162>
- Zhang, G. Q. & Sabet, P. G. (2014). Elastic 'I think': stretching over L1 and L2. *Applied Linguistics*, 37 (3), 334-353. https://www.researchgate.net/publication/307598606_Elastic_%27I_think%27_Stretching_over_L1_and_L2
- Online Log-Likelihood Calculator : <https://ucrel.lancs.ac.uk/llwizard.html>
- Sketch Engine : <https://www.sketchengine.eu>

پوخته

دئقیسینا ئەکادیمی دا بکارئینانا هه ههلوپستی پر گرنگه چونکی شیانیان کارتیکرنن لسه ههلوپسن ریتۆریکیی نقیسکاری هه نه. رهنگدیرین کو پشتراستبون وگومانی دیاردکهن د نیشانکرنا ریزهیا پابه ندبوونا نقیسکاران ل هه مبهر ئاگه هداریا کو نه و راگه هاندنن دکهن دا رۆله کن بهرچاف وهر دگرن. ئەف هه کولینه چه ندین هه دیتنا پیشکیش دکهت کو لسهر بنه ماین بکارئینانا کورپوسی هاتیه نه نجامدان بۆ لیکولینا بکارئینانا هه فالکارین دلنیا یی وگومانی دیاردکهن ژلاین نقیسه رین خوزمان ئینگلیز و نقیسه رین نه خوزمانی یین کورد. داتا بو شروهه کرنا هژماری هاتینه وهر گرتن ژ دوو کورپارایا : کورپوسا (KNNSC) یا نه خوزمانی و به شه کورپوسا گوتارا ئەکادیمی ژلاین خوزمان ئینگلیزیا هاتیه وهر گرتن ژ کورپوسا کامبریج یا ئینگلیزیا ئەکادیمی (CAEC) وهک کورپوسا ژێدهر. شروهه کرن د ههردوو کورپورا یا دا هاتبوو نه نجامدان بریکا بکارئینانا پروگرامی (SKE) ده رنه نجامین هاتینه وهر گرتن ژ شروهه کرنا داتایان د هه کولینی دا جیاوازیه کا بهرچاف دیارکرد ریزا دوو باره بونا بکارئینانا هه فالکارین نا هیری دا، دناقههرا ههردوو گروپین نقیسهرا دا ، زیده باری هه چهنه، دبیت کیم بکارئینانا فان هه فالکاران ژلاین نقیسه رین نه خوزمانی یین کورد بیینه راهه کرن لسهر بنه ماین که لتوری و ئاستن شاره زاییا بکارئینانا هه فالکاران دا ژلاین نقیسه ران.

الخلاصة

ان بیان وجهة نظر الكاتب وموقفه في الكتابة الاكاديمية ذو تأثير كبير على بلاغة النص الاكاديمي. وفي هذا المجال، تلعب ظروف الموقف التي تشير الى اليقين او الشك حول الأفكار المطروحة في النص دورا حاسما للدلالة على مدى التزام المؤلف تجاه الأفكار التي ينقلها النص. هذا البحث هو دراسة مقارنة للظروف التي تعبر عن اليقين والشك في النصوص الاكاديمية المكتوبة من قبل الباحثين الناطقين باللغة الإنجليزية كلفة ام والباحثين الكرد الذين يستخدمون اللغة الإنجليزية كلفة اجنبية في بحوثهم. الدراسة مبنية على البيانات الكمية المأخوذة من مجموعتين من النصوص، أولهما (KNNSC) وهي البيانات الكمية المستخرجة من الخطاب الاكاديمي من قبل الباحثين الكرد، والمجموعة الثانية (CAEC) مأخوذة من كوريس كامبردج الاكاديمي الإنجليزي وتشمل النصوص الاكاديمية المكتوبة من قبل ناطقين باللغة الإنجليزية كلفة ام. تم تحليل البيانات في كلتا المجموعتين من النصوص باستخدام برنامج Sketch Engine (SKE). أظهرت النتائج التي تم الحصول عليها من تحليل البيانات في هذا البحث عن وجود تفاوت ملحوظ في تواتر استخدام الظروف المذكورة أعلاه بين مجموعتي المؤلفين. ومن خلال التحليل، ظهر أيضا ان نقص الاستخدام لهذه الظروف من قبل الباحثين الكرد يعزى الى عدم اتقانهم للقوانين النحوية لاستخدام هذا النوع من الظروف في الخطاب الاكاديمي.