

The Persuasive Power of Hedges: Insights from TED Talks

Marina Jovic¹, Iranda Kurtishi¹, & Mohammad Awad AlAfnan¹

¹ American University of the Middle East, Egaila, Kuwait

Correspondence: Marina Jovic, Liberal Arts Department, American University of the Middle East, Egaila, P.O. Box: 220 Dasman, 15453, Kuwait.

Received: February 16, 2023

Accepted: March 20, 2023

Online Published: March 30, 2023

doi:10.5430/wjel.v13n5p200

URL: <https://doi.org/10.5430/wjel.v13n5p200>

Abstract

The corpus-based study focuses on the use of hedges in persuasive TED Talk speeches, which are powerful, premeditated speeches delivered in a distinctive communicative environment that combines elements of both spoken and written discourse. The authors employ both quantitative and qualitative methods to analyze the hedging devices used to bolster the three rhetorical appeals: ethos, pathos, and logos. The results show that only 2% of the words in the corpus serve as hedging devices, which is lower compared to previous studies on written and spoken discourse. The incidence of hedges is highest in the logos parts, followed by pathos, with the lowest incidence in ethos. Strong credibility is generally established by avoiding hedging devices. To evoke emotions in the audience, the speakers mainly rely on adverbs and verbs. The use of approximators and shields to strengthen logos resembles the use of hedges in written academic discourse. The qualitative analysis focuses on the four most commonly used hedges: 'actually', 'just', 'could', and 'think'. 'Actually' has a mitigating effect when it promotes intimacy, indicates the speaker's commentary, or introduces a challenging, even reinforcing effect. 'Just' is often used to convey a mildly positive or reassuring tone in communication. Both the parenthetical phrase 'I think', used in a variety of meanings, and the modal verb 'could', used as a hypothetical possibility, most often enhance the logical strength of an argument. The paper suggests incorporating these findings into ESL teaching materials and conducting further studies on the topic, as most existing studies focus on developing a scientific argument in writing. Developing an argument in speech is distinct and deserves attention.

Keywords: hedging devices, TED Talks, persuasive speech, rhetorical appeals

1. Introduction

Pragmatic competence refers to the ability to proficiently express a message with its nuances in diverse socio-cultural environments and comprehend the intended meaning (Fraser, 2009). Hedging is part of the speaker's pragmatic competence (Hyland, 1995). During a conversation, interlocutors have "face" needs that must be protected from "face-threatening acts" (Brown & Levinson, 1987). Hedging strategies allow interlocutors to reduce the impact of imposing, authoritative, or direct comments. A recent study found that advanced EFL learners, despite their proficiency in English, did not possess the necessary social and communicative skills to convey a nuanced form of disagreement (Chaqmaqche & Jasim, 2022). Underusing hedging can lead to overstating, while overusing it can make statements appear unreliable. In persuasion, the audience rarely accepts the presented ideas automatically. The key to an effective persuasive text lies, among other things, in the artful use of weakening expressions (i.e., hedges) to produce a discourse that strikes a balance between being neither too forceful nor too ambiguous (Dafouz-Milne, 2008). A modest and sensible use of hedging is essential for boosting ESL learners' credibility, persuasiveness, and socio-pragmatic skills in general.

The purpose of this study is to analyze the use of hedging in TED Talks, which are a popular and influential method of disseminating scientific knowledge and, as such, have a significant impact on language usage today. The study aims to contribute to the fields of linguistics, particularly pragmatic and EFL studies, by conducting a quantitative analysis of the frequency and manner of hedging in TED Talks and a qualitative analysis of the relationship between hedging and persuasive strategies. The study will focus on the most common hedges and compare its findings to those of other related studies in the field. The research questions are as follows:

- 1) What types of hedges are typically used in ethos, pathos, and logos?
- 2) Which hedges are most commonly used in each rhetorical strategy?
- 3) What is the reason behind using certain hedges in specific rhetorical strategies?

After a theoretical review of the hedging and persuasion phenomena, the study will present quantitative results. The findings are expected to reveal varying degrees of approximators and shields, including modal and lexical verbs, adjectives, adverbs, and phrases – mostly introductory. The subsequent qualitative analysis will mostly focus on the meaning and usage of the four most frequent hedges. Finally, concluding remarks and the results of the study will offer possibilities for future investigation on the use of hedges in speech.

2. Literature Review

2.1 Hedging

The concept of hedging (Weinreich, 1966; Lakoff, 1972), though a relatively new term, is already well-established in linguistics. Lakoff defined hedges as words that either attenuate or reinforce class membership and was primarily interested in the words “whose job is to make things fuzzier or less fuzzy” (1972, p. 195). For a long time, these elements were thought to be minor, even redundant, and primarily semantic; however, later hedging was given a broader pragmatic definition (ibid., 17), leading to more interest, especially in pragmatics and applied linguistics. Fraser (1975) introduced the notion of ‘hedged performative’, a combination of a modal (can, must, and should) and certain performative verbs (apologize, promise, request). Brown and Levinson (1978) found that hedging impacts not only the propositional content or explicit performative clauses, but also the speaker’s level of commitment and the illocutionary force in general, which led to the development of the concept of illocutionary force hedging. Prince et al. (1982) was among the first to take a corpus-based approach. The framework (Prince et al., 1982, p. 85) distinguishes between two types of hedges. Approximators operate on the propositional level and include “adaptors” (markers adapting an existing phrase to a new instance; Lakoff’s original hedges) and “rounders” (markers conveying a range or imprecision). Shields express a level of uncertainty about the speaker’s commitment to the truth condition of a proposition and can be divided into “plausibility shields”, expressions that relate to doubt, and “attribution shields”, expressions that attribute the responsibility of the message to someone other than the speaker, often via plausible reasoning. Hyland (1998) proposed the following classification: 1. Modal auxiliaries and semi-modal verbs 2. Verbs 3. Epistemic adjectives 4. Epistemic adverbs 5. Quantifiers/determiners 6. Nouns. Other taxonomies have also been used for the categorization of hedging (e.g., Hübler, 1983; Crompton, 1997; Caffi, 1999; Koutsantoni, 2004; Uysal, 2014). The present study relies on Hyland (1998) and Prince et al. (1982). It also adopts the following definitions: i) Hedges are statements signaling that the speaker did not abide by Grice’s (1975) maxims (Brown & Levinson, 1978); ii) hedging is “a pragmatic function that involves all levels of linguistic analysis from prosody to morphology, syntax, and semantics.” (Kaltenböck et al., 2012, p. 3). The authors do not analyze prosody, but the stress and the tone informed the authors’ decision in a few ambiguous instances.

In terms of hedging functions, the authors follow Fraser’s (2010) classification: Hedging is most frequently used when a speaker is trying to make a negative statement, to avoid taking responsibility for the truth of a statement that might deliver unfavorable news to the listener, to avoid taking accountability for action, or to negotiate or pose a potentially delicate question. It is also used to come across as friendly and build rapport with a stranger, to be ambiguous in order to hide the truth, or to evoke sympathy and show helplessness. When making a point directly in an academic lecture or piece of writing, it is politically acceptable for the author to modify any assertions stated in order to be seen as modest, accepting, or open to criticism.

Hedges have been researched in speech act and politeness theory (e.g., Fraser, 1975; Brown & Levinson, 1978, 1987; House & Kasper, 1981; Terraschke & Holmes, 2007); genre-specific investigations (e.g., Markkanen & Schröder, 1992); interactional pragmatics (e.g., Jucker et al., 2003); or studies of vague language (e.g., Cutting, 2007). In written discourse, hedges were investigated in both general language texts and academic writing (Prince et al., 1982; Salager-Meyer, 1995). Myers (1989) found that some of the politeness strategies used in spoken interaction can be extended to scientific texts, thus highlighting the inseparable connection between spoken and written discourse and emphasizing the potential significance of the current study. The link between written and spoken discourse is even more pronounced in historical linguistics, where only written texts are available. These texts are often seen as imperfect transmissions of spoken language or as samples containing spoken language. If a linguistic item appears frequently in written language during a particular time, it is likely that it was also commonly used in speech during that same period (Jacobs & Jucker, 1995).

In spoken discourse, researchers have covered a variety of language genres (mathematics talk, politician talk, negotiation talk, the speech of language learners, etc.). Genres enable professionals to perform their everyday tasks, and language is used in a conventionalized communicative setting to achieve specific communicative goals (Bhatia, 2004). Thus, there should be a set of conventionalized hedging devices used for persuasive strategies of ethos, logos, and pathos, which is what the present paper aims to investigate.

The use of hedges in spoken language has been explored from various perspectives. Kaltenböck et al. (2012) examined the pragmatic use of ‘I think’ as a parenthesis; studied the use of parenthetical hedged performatives in different languages; and looked into approximation marker ‘so to say’ in Plato’s dialogue Gorgias. By comparing native and non-native speakers in a cross-linguistic study, Hinkel (1997) sought to identify referential, lexical, syntactic, and rhetorical indirectness techniques or hedges. Holmes (1985) argued that women’s use of hedges communicates interpersonal friendliness, while men are more likely to use hedges to indicate uncertainty and ambiguity, and Al-Rashady (2012) found that frequent use of some modals and the parenthetical ‘I think’ can make a speaker’s argument more effective in political discourse. Liu (2020) examined the characteristics of hedges in spoken English among English as Foreign Language (EFL) learners, specifically looking at differences based on gender, language proficiency levels, and the types of hedges used. He stressed the need to thoroughly analyze hedges, understand their value and usage, improve our ability to express ourselves using them, and enhance the effectiveness of our language expression in spoken discourse. Nuraniwati and Permatasari (2021) explored hedges in monologues of TED Talks. They analyzed 130 transcripts of the talks, taped from 2002 to 2019, and found that the most frequently-used hedges in the corpus are ‘just’ (1107 occurrences), ‘could’ (554), ‘you know’ (541), ‘actually’ (530), ‘I think’ (390), and ‘kind of’ (309). They also found that each of the hedges served a distinctive pragmatic strategy.

Despite the significant amount of research on hedging, one might assume that the topic is exhausted. However, advancements in

technology and innovative communication methods have introduced new dimensions to hedge research. Moreover, the relationship between specific hedges and persuasive strategies remains uncertain. Thus, the present study aims to examine how hedges reinforce persuasive appeals, including ethos, pathos, and logos.

2.2 Persuasion

Persuasion is often referred to as ‘the art’ because it requires the adept use of language and tactics to sway the audience towards one’s viewpoint on a particular issue. The topic of persuasion has been investigated in various fields of study, such as public speeches (Tillery, 2006), politics (Nelson & Garst, 2005), biblical texts (Joosten, 2016), advertising (Preston, 2005), etc.

Aristotle’s Rhetoric provides a formula for effective persuasive speaking, and it comprises three distinct means of persuasion: ethos, pathos, and logos. The first principle highlights the importance of the speaker’s credibility and character as the most effective traits for persuading the audience. The next principle centers on the speaker’s ability to evoke emotions and gain the audience’s sympathy through their speech. The final principle emphasizes the use of logical arguments and evidence to create a convincing argument. Combining these three means of persuasion establishes the speaker as a credible, emotionally appealing, and reasonable individual, ultimately fostering trust with the audience.

The art of persuasion has been a topic of interest throughout history. While the scope of this article is limited, there are still several noteworthy examples to consider. Komulainen et al. (2019) conducted a rhetorical discourse analysis of persuasive speech and discourse used in multi-professional organizational change facilitation meetings at a hospital. Similarly, Borichevskaya (2020) analyzed the content and communication tools used in popular persuasive public lectures. Hosman and Siltanen (2011) sought to investigate how tag questions, hedges, and the quality of arguments used by a speaker impact listeners’ perceptions of the speaker, the quality of the message, cognitive responses, and attitude change. Durik et al. (2008) conducted two experiments to investigate the impact of hedge positioning and the type of hedge used on attitudes, evaluations of the source, and perceptions of the strength of the argument presented. Zhang and Chen’s (2020) study on Chinese environmental news commentaries explored the persuasive functions of hedges by interpreting their meaning and the authors’ intention in the context. Research results revealed that authors used a high percentage of epistemic adjectives/adverbs and modal verbs. Lexical verbs were used to illustrate new findings in research articles, and modal verbs were used to show the authors’ attitudes. The authors found that hedges contributed to enhancing ethos, pathos, and logos by establishing a negotiable persona, generating resonance, and strengthening reason and logic. Etemadfar and Namaziandost’s (2020) study aimed to examine the concept and types of interpersonal metadiscourse markers used in Donald Trump’s campaign speeches as a persuasion tactic.

This paper distinguishes itself from prior studies that focused on TED talks and persuasive speeches separately by adopting a unique approach that combines all relevant elements. The objective is to identify potential correlations between these elements and gain a deeper understanding of their interplay.

3. Method

The present qualitative and quantitative research is based on a corpus comprising ten TED Talks. The organization TED Talks (Technology, Entertainment, Design) has existed since 2006 and includes speakers with different academic and non-academic backgrounds (artists, researchers, social innovators, writers, businesspersons, etc.). TED Talks are interactive conversations that are broadcast in front of live audiences (Theunissen, 2014). TED Talks, like scientific conferences, are organized and presented professionally, indicating that they are not impromptu or unplanned. This is evidenced by the well-constructed sentences that the presenters use. They also include humor and hedges to interact with the audience (Frobenius, 2014).

The selected speeches include 10 speeches with around 17,500 words. This word count does not include supplementary information such as titles, speaker names, or locations. The authors chose persuasive speeches that cover a variety of popular topics (i.e., social media, race, climate change, gender equality, sleep benefits, free and fair Internet, a right to affordable medications, space research, and leadership), presented by both genders and native and non-native presenters alike.

The authors took the following steps when conducting quantitative analysis: First, we identified the parts of speech where speakers employed the persuasive strategies of ethos, pathos, and logos. Second, the authors manually searched for hedging devices, recognizing that almost any linguistic item can serve as a hedge. To ensure accuracy, each author separately identified and counted the hedges, which were then compared and discussed. The total count of all the hedging devices was tallied, and the frequency of their occurrence was related to the parts of speech intended to boost ethos, pathos, and logos. To validate the findings, an automated search was performed to confirm the manual results. Due to the potential ambiguity of some hedging devices, native speakers were consulted to ensure their proper identification.

The findings were classified based on Prince et al.’s classification (shield or approximator) and modified Hyland’s taxonomy (1998), which includes modal auxiliaries and semi-modal verbs, lexical verbs, epistemic adjectives, epistemic adverbs, quantifiers/determiners, nouns, and phrases. We use the term ‘phrase’ to refer to instances of hedged performatives, double or treble hedges, or cases where the entire phrase serves a hedging function. For example, phrases like “data are quite persuasive” and “I don’t think anyone here would disagree” fall into this category. The words were classified by their part of speech, regardless of their pragmatic function.

The most frequently occurring hedging devices, such as the modal verb ‘could’, the first-person singular form of the lexical verb ‘think’, and the adverbs ‘actually’ and ‘just’, serve to attenuate or soften the impact of a statement. For a more nuanced understanding, the

frequency of each of these devices was recorded in relation to their use in ethos, pathos, and logos.

4. Findings and Discussion

As part of the quantitative analysis, the authors found that the total number of words in the ten TED Talks (ranging from 754 to 2,526 words per speech) is 17,054. Out of the total number of words analyzed, 339 were identified as hedging devices, which accounts for approximately 2% of the total word count. The number of hedges used per individual speech varies from 0.8% to 3.1%, depending on the sensitivity of the topic, gender, native vs. non-native presenter, and expertise level, though analysis of these factors is beyond the scope of this paper. Regarding the occurrence of hedges in rhetorical devices, the highest number of hedges was found in logos (62.5% of the total number of hedges), followed by pathos (28.9%), and the fewest number was found in ethos (8.5%). On average, 2.9 hedges were used to boost ethos, 10 to boost pathos, and 22.9 to boost logos.

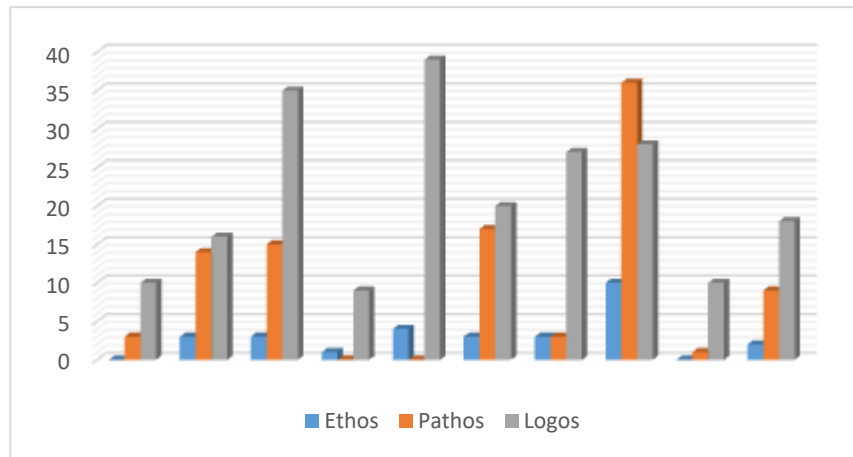


Figure 1. Hedge distribution per rhetorical appeal

The most common hedges identified were the modal verb ‘could’ (7.7%), the lexical verb ‘think’ (7.7%), the adverb ‘just’ (9.4%), and the adverb ‘actually’ (12.1%). Regarding the distribution of rhetorical strategies, it is worth noting that ‘think’ is an exception, as it is rarely used in the pathos sections.

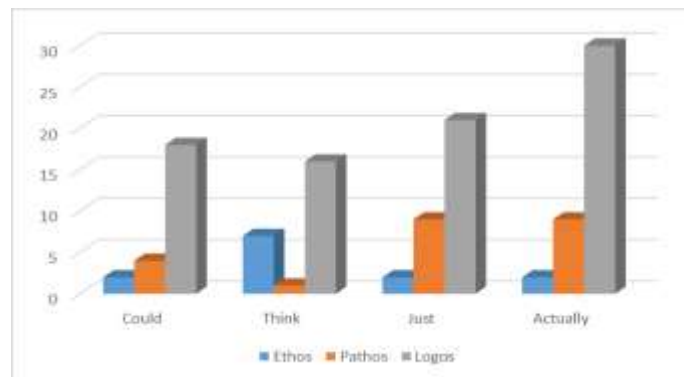


Figure 2. Distribution of most common hedges per rhetorical strategy

4.1 Actually

Figure 1 shows that ‘actually’ is the most frequently used hedge in the analyzed text. Although formally classified as an adverb, ‘actually’ has undergone grammaticalization and developed into a discourse particle. It has been considered an adversative type of conjunction that introduces a proposition contrary to expectation, to express “contrastive avowal” (Halliday & Hasan, 1976), and an “elaborative” conjunction, belonging to the clarification category, meaning that the elaborated part is not merely restated but also reinstated, summarized, made more precise, or otherwise clarified (Halliday, 1985). It is used to signal meaning reformulation (Martin, 1992) or to support or refute an implicit or declared proposition (Williams, 1996). As a discourse particle, it allows the speaker to change perspective and draw attention to something that he has just thought of (Aijmer, 2002). Its position in a sentence also determines its function. When used initially, it serves a cohesive function; when used finally, it serves a broader social purpose, such as promoting intimacy, and when used in the medial position, it hedges the proposition or a single element (Aijmer, 1986). Watts (1988) regards ‘actually’ as a commentary pragmatic marker.

Ex 1: Can you believe that? *Actually*, I can, because this has been sort of the norm at COP since its beginning (Bineshi Albert, 2022).

Biber and Finegan (1988) classify ‘actually’ as a stance adverbial that marks a speaker’s or writer’s attitudes, feelings, judgments, or commitment concerning the message. Tognini-Bonelli (1993) differentiates two discourse functions: “unexpectedness” and

“self-correction, mitigation, and challenge”.

Ex 2: But after that, things settle down, and **actually**, life after social media can be quite positive (Newport, 2016).

In order to determine the functions of ‘actually’, the authors used the following test: The function of the pre-verbal intensifier ‘actually’ can be paraphrased by ‘really’ or ‘in fact’. On the other hand, the discourse particle can serve multiple functions, such as marking an opinion, an objection, or a topic change. Stating a personal opinion is one of three discourse functions (Lenk, 1998).

Ex 3: (Now Harold and I -- (Applause) — we still laugh about that story, and in many ways, the moment caught me off guard, *but deep, deep down inside, I actually* wasn't surprised) (Hobson, 2014).

We accept the definitions provided by Biber and Finegan (1988) and Tognini-Bonelli (1993), as well as the claim made by Quirk et al. (1985) that ‘actually’, even when used as an emphaser with a reinforcing effect, may also serve the function of a hedge.

Ex 4: And so I decided to **actually** talk about race (Hobson, 2014).

4.2 Just

The meaning of ‘just’ is complex, as it has various overlapping interpretations. For instance, ‘just now’ is temporal, ‘just frightful’ is emphatic, and ‘just a little’ is downtoning. Wierzbicka (1991) notes that ‘just’ has “mildly positive (reassuring, defensive, apologetic, even praising) interpretations” (p. 351) because it is seen as insignificant yet desirable. Holmes (1985) describes ‘just’ as a type of mitigation, while Brown and Levinson (1987) consider it a hedge often used in argumentation as a positive or negative politeness strategy. Quirk et al. (1985) view ‘just’ as an “attitude diminisher”, suggesting that it tries to convey that the item’s power is limited. Finally, Salager-Mayer (1995) describes it as a shield used to soften the utterance for pragmatic purposes. In this paper, we examine the particle ‘just’ as a hedge that reduces the intensity of the utterance by softening it.

The transcript excerpt from the TED talks demonstrates a frequent use of the word ‘just’ as a hedge to attenuate the force of the speaker’s statement, which is evidenced in the following illustration:

Ex 5: So that kind of leadership, if we **just** shifted those two things about urgency and values, that would help all of us worldwide (Bineshi Albert, 2022).

4.3 Could

The meaning of modal verbs is context-dependent (Coates, 1983; Lyons, 1977; Perkins, 1983), and establishing these meanings requires careful examination of each occurrence. These meanings often overlap as a consequence of grammaticalization and pragmaticalization (see Jovic, 2019). Dynamic meaning is the most dominant, followed by epistemic possibility, while deontic possibility is rare (Coates, 1983). Hedging is related to epistemic meaning. While root possibility concerns the role of enabling conditions and external constraints on its occurrence, epistemic possibility refers to the writer’s assessment of the likelihood of the truth of a proposition (Hardjanto, 2016). Fraser (2010) considers ‘could’ as a hedging device expressing presupposition.

Ex 6: In fact, many of the, shall we say, unpleasant characteristics that we chalk up to being a teenager -- moodiness, irritability, laziness, depression -- **could** be a product of chronic sleep deprivation (Troxel, 2017).

The hypothetical ‘could’ expresses epistemic possibility and refers to the present, past, and future. In the following example, hypothetical ‘could’ is used in prothasis with a bleached meaning, forming a hedged performative with the verb ‘convince’.

Ex 7: Let’s see if I **could** actually convince more of you that you too **would** be better off if you quit social media (Newport, 2016).

Compared to ‘might’, ‘could’ is more considerate and polite (Coates, 1983). There is an opinion that ‘might’ gradually becomes an exponent of epistemic possibility in everyday spoken language and, as such, no longer expresses caution and politeness, and that this gap is filled by epistemic could (Collins 2009). This study supports the finding. While both ‘could’ and ‘might’ express probability, ‘could’ always implies a higher degree of probability than ‘might’ and is never used purely in an epistemic sense. This possibility always depends on the characteristics or features of the referent/subject (Collins, 2009). Consequently, there are a few ambiguous cases. One of the tests used when deciding on the meaning was the following: If a statement implies that an outcome depends on externally enabling or disabling circumstances, it has a root meaning; otherwise, it is epistemic. This type of ambiguity is sometimes purposeful, as it may give speakers extra security, allowing them to distance themselves from their propositions. In determining the meaning, the authors also used paraphrasing with ‘I believe’, ‘perhaps’, ‘It is possible that/for’, or substitution with ‘might’.

4.4 Think

It has been observed that some speakers use the lexical verb ‘think’ or the parenthetical expression ‘I think’ to hedge their statements. Holmes (1985) identified two functions of ‘I think’: deliberative, which is used to show confidence and support for a claim, and tentative, which is used to indicate uncertainty or to soften the impact of a statement. The following example illustrates the tentative function:

Ex 8: So **I think** it’s time for us to be comfortable with the uncomfortable conversation about race: black, white, Asian, Hispanic, male, female, all of us, **if** we truly believe in equal rights and equal opportunity in America (Hobson, 2014).

In an attempt to identify various uses of ‘I think’, the authors have relied on Baumgarten and House’s (2010) classification, as shown in the table:

Table 1. Different uses of the parenthetical ‘I think’ as classified by Baumgarten and House (2010)

1. expressing agreement	Ex 9: “I guess, in other words, this would be my vision of the future, would be one in which fewer people actually use social media. That’s a big claim, I think I need to back it up” (Newport, 2016).
2. drawing a conclusion	Ex 10: “And Skipper says his answers were always the same: “Yes.” And by saying yes to diversity, I honestly believe that ESPN is the most valuable cable franchise in the world. I think that’s a part of the secret sauce” (Hobson, 2014).
3. contradiction or a contrasting view	Ex 11: “To reject social media would be an act of extreme [bloodism]. It would be like riding to work on a horse or using a rotary phone. I can’t take such a big stance in my life.” My reaction to that objection is I think that is nonsense” (Newport, 2016).
4. displaying knowledge	Ex 12: “I tell the uniform story because it happened. I cite those statistics around corporate board diversity because they are real, and I stand here today talking about this issue of racial discrimination because I believe it threatens to rob another generation of all the opportunities that all of us want for all of our children, no matter what their color or where they come from. And I think it also threatens to hold back businesses” (Hobson, 2014).
5. elaborating previous (own) utterance	Ex 13: “Again, I look back and I say: this objection also is nonsense. In this case, what it misses is what I think is a very important reality that we need to talk about more frankly, which is that social media brings with it multiple, well-documented, and significant harms” (Newport, 2016).
6. examples from personal experience	Ex 14: “OK without social media, but I think I’m actually better off. I think I’m happier, I think I find more sustainability in my life, and I think I’ve been more successful professionally because I don’t use social media” (Newport, 2016).
7. rejecting other’s contribution	No examples identified
8. reinforcing own preceding claim	Ex 15: “This is the third comment objection I hear when I suggest to people that they quit social media; in some sense, I think it might be one of the most important. This objection goes as follows...” (Newport, 2016).
9. giving explanations	Ex 16: “So I hope you all can see; this is what objectivity looks like. Disembodied Western rationality. And that, by the way, is why I think men so often wear ties” (Kimmel, 2015).
10. conceding	Ex 17: “Now, I will say, just to remind the men in the audience, these data were collected over a really long period of time, so I don’t want listeners to say, ‘Hmm, OK, I think I’ll do the dishes tonight” (Kimmel, 2015).

4.5 Hedges and Ethos

To increase persuasiveness, TED speakers need to build a strong ethos by creating a trustworthy and credible persona that uses credible evidence and demonstrates care and good character. In their 2020 study, Zhang and Chen found that the Chinese authors of news commentaries used hedges that weakened their authority but at the same time created a negotiable persona and made it easier for readers to accept the message. Our corpus findings show very few hedges used to bolster ethos. Strong credibility was generally established by avoiding hedging devices.

Ex. 18: Of the Fortune 250, there are only seven CEOs that are minorities, and of the thousands of publicly traded companies today, thousands, only two are chaired by black women, and you’re looking at one of them, the same one who, not too long ago, was nearly mistaken for kitchen help (Hobson, 2014).

The same speaker consistently avoids hedging ethos claims throughout her speech. She does not even use them when she presumes the audience’s opinion in counterarguments. In two out of ten speeches (Chomba-Kinywa, 2021; Busaidi, 2021), no hedges are used in ethos parts. Out of all the transcripts analyzed, Cal Newport’s speech on social media had the highest percentage of hedges in the ethos category (59.6%). This may be due to the controversy of the topic and the likely opposition from the audience.

The following adverbs are used to hedge ethos statements: ‘sometimes’, ‘probably’, ‘somewhat’, ‘maybe’, and ‘actually’.

Ex 19: I’m here to recruit men to support gender equality. Wait, wait. What? What do men have to do with gender equality? Gender equality is about women, right? I mean, the word gender is about women. Actually, I’m even here speaking as a middle-class white man (Kimmel, 2015).

As shown in Ex19, ‘actually’, a discourse particle serving an interpersonal role, was placed at the beginning of the sentence. The speaker enhances his credibility through an unconventional approach by perplexing the audience, creating an element of surprise, which Tognini-Bonelli (1993) describes as unexpectedness – presenting a proposition that contradicts their expectations. He starts by questioning his right to speak on gender equality, not only as a man but also as a white middle-class man. The speaker takes a humble yet risky stance that he reinforces with compelling personal anecdotes.

Ex 20: Now, I will say, just to remind the men in the audience, these data were collected over a really long period of time, so I don’t want listeners to say, “Hmm, OK, I think I’ll do the dishes tonight.” These data were collected over a really long period of time (Kimmel, 2015).

In Example 20, the excerpt begins with a strong performative statement, ‘I will say’, which is followed by a softening device, ‘just to remind’. The speaker then reinforces his credibility by reminding the audience that the data presented was collected over a long period,

and this statement is repeated twice to further assure the listeners. This use of repetition satisfies the audience’s desire to hear from a knowledgeable and trustworthy speaker. Additionally, a downtoner is used to reduce the intensity of the utterance and to reassure the audience, particularly since the topic may be potentially sensitive to some individuals.

Ex 21: There is nothing I want to achieve more in my career than seeing humans step foot on that planet, because I know it could be the start of humanity spreading into the cosmos (Hinterman, 2021).

With the exception of one instance of ‘would think’, the only modal verb that functions as a hedge is ‘could’, which appears twice. In Example 21, ‘could’ is used in a tentative and hypothetical sense, with traces of an ability meaning present. Its use adds to the author’s credibility as a visionary scientist. Although ‘I know’ is used assertively, ‘could’ acts as a softening device for a categorical statement, contributing to a negotiable persona while also opening up the world of possibilities.

In addition to the above, the lexical verb ‘think’ appears as part of an introductory phrase (such as “I don’t think anyone here would disagree”) and as a parenthetical expression.

Ex 22: So I’ve been OK without social media, but I think I’m actually better off. I think I’m happier, I think I find more sustainability in my life, and I think I’ve been more successful professionally because I don’t use social media (Newport, 2016).

In example 22, the speaker derives credibility from personal experience. The frequent repetition of ‘I think’ and the use of parallelism strengthen the rhetorical appeal. These devices are necessary as the main goal, quitting social media, is likely to encounter opposition from the audience.

The number of approximators (nearly, quite, a little bit, a few, kind of) is low as well – one or two occurrences.

4.6 Hedges and Pathos

When discussing pathos, the focus is on generating feelings of happiness, grief, sympathy, or dread by emphasizing emotions. In TED Talks, it is crucial for the speaker to emotionally engage the audience, particularly in persuasive speeches. In comparison to ethos and logos, the use of hedges to strengthen pathos is moderate. It is influenced by the topic and the method of delivery, such as narration and description. Consequently, in two out of ten speeches (Williams, 2020; Ruffo, 2022), no hedges related to pathos were identified.

Table 2. Hedging devices in pathos parts

Approximators		sort of, kind of, about, at least, thousands, pretty much, over, little, little bit, quite	
Shields	Adverbs	actually, just, somewhat	
	Epistemic adverbs	maybe, probably, perhaps	
	Adverbs of frequency	often, rarely, sometimes, regularly	
	Adjective	possible	
	Modal verbs	could, might, can’t	
	Lexical verbs	think, believe, seem, hope	
Introductory phrase		I am not sure	

In news commentaries, epistemic adjectives and adverbs, especially those showing degree, functioned to build pathos to evoke emotions among readers, generating resonance (Zhang & Chen, 2020). In TED Talks, our findings indicate that the most common hedges used to strengthen pathos are adverbs (approximately 60%) and verbs (approximately 30%).

The use of the hedge ‘just’ was identified nine times in four different speeches. Its increased use correlates with the use of narration (i.e., personal stories). In Example 23, the speaker humorously concludes his advocacy against social media by asking the audience to send all negative feedback to his non-existent Twitter account, as someone who has no social media presence. In this context, ‘just’ serves the purpose of softening the utterance and the verb ‘ask’.

Ex 23. Some of you might disagree, some of you might have scathing but accurate critiques of me and my points, and of course, I welcome all negative feedback. I just ask that you direct your comments towards Twitter (Newport, 2016).

In the next example (Example 24), the speaker addresses the sensitive topics of race, gender, and entitlement. He softens a direct and sensitive question with the phrase ‘have just one question’. Although ‘just’ can serve as an intensifier, in this context, it has a reassuring and defensive function that has a downtoning effect. This use of ‘just’ is typical for argumentation and persuasion when the speaker is attempting to make a point.

Ex 24. And the reason I’m telling you this is I want you to hear the title of this particular show. It was a quote from one of the men, and the quote was, "A Black Woman Stole My Job." And they all told their stories, qualified for jobs, qualified for promotions, didn't get it, really angry. And then it was my turn to speak, and I said, "I have just one question for you guys, and it's about the title of the show, 'A Black Woman Stole My Job.' Actually, it's about one word in the title. I want to know about the word 'my.' Where did you get the idea it was your job? Why isn't the title of the show, 'A Black Woman Got the Job?' or 'A Black Woman Got A Job?'" (Kimmel, 2015).

Ex 25. You probably don't realize that right now, you're **actually** looking at something quite rare. Because I am a millennial computer scientist book author standing on a TEDx stage, and yet, I've never had a social media account. How this happened was **actually** somewhat random (Newport, 2016).

In each sentence, ‘actually’ is used as a hedge to soften the impact of the statement that follows and signal to the listener that what follows may be unexpected or surprising. The use of ‘actually’ emphasizes the rarity of something in the first sentence and qualifies the speaker’s descriptions of their situation in the second.

Ex 26: I’d be happy to be that first person on Mars, but my wife thinks that a three-year vacation to a deserted planet with no oxygen, no real atmosphere, nothing to eat or drink, freezing temperatures, bone-depleting gravity and space radiation, is a bad idea, for some reason. So, I’ll settle for sending someone else. In fact, maybe some of you watching this could be the first to go to Mars (Hinterman, 2021).

This introductory part of a speech (example 26) serves as an attention grabber. The speaker is painting a verbal image of life on a desolate planet with a humorous twist. The modal ‘could’, which is a medium certainty modality (Alafnan, 2022), expresses the speaker’s assumption and tentative possibility, preceded by another hedge ‘maybe’. Such ‘could’ is replaceable with ‘might’, but it is better suited because of its layered, dynamic meaning of ability and stronger tentativeness.

Ex 27: So I hope you all can see, this is what objectivity looks like. Disembodied Western rationality. And that, by the way, is why I think men so often wear ties. Because if you are going to embody disembodied Western rationality, you need a signifier, and what could be a better signifier of disembodied Western rationality than a garment that at one end is a noose and the other end points to the genitals? That is mind-body dualism right there (Kimmel, 2015).

4.7 Hedges and Logos

To appeal to the audience’s need for good reasoning, logos emphasizes the clarity and coherence of the argument. Just as the written text requires coherence to be clearer, more understandable, and more persuasive, the same strategy should be applied to speech. A good argument demands speakers to prove its validity, it should be treated as both a process and a product, and it incorporates fact-finding and persuasion (Salih, 2021). Using the thoughts and data of others can make the language more descriptive, provide specific information, and make the demonstration of one’s own views more convincing. Additionally, it can strengthen arguments and increase persuasiveness (Liu, 2020). The use of hedges in the analyzed speeches within logos reflects the use of hedges in written academic texts.

Logos exhibits the highest occurrence of hedges among the analyzed speeches. The speech on color-blindness or race (Hobson, 2014) contains the largest number of words associated with logos, consistent with the author’s aim of providing facts without emotional investment in a sensitive issue. As the author asserts, “But I work in the investment business, and we have a saying: The numbers do not lie,” highlighting significant and quantifiable racial disparities in household wealth, household income, job opportunities, and healthcare. In the analyzed speeches, a wide range of approximators was identified. Their purpose in logos is to make accurate and reliable predictions or estimates, even if they are not precisely exact.

Table 3. Hedging devices in logos analysis

Approximators		around, over, kind of, sort of, a million, little, a little, a bit, a little bit, about, approaching, hundreds of, at least, thousands, a host of, nearly, and number approximations like (25 to 30%; eight to ten, two to three)
Shields	Modal verbs	can, could, should, may, would, will
	Lexical verbs	hope, think, don’t think, propose, estimate, (honestly) believe, guess, suggest, indicate, seem
	Adjectives	possible, potential, prone
	Adverbs	just, actually, somehow, barely, basically, in theory, generally
	Epistemic adverbs	likely, probably
	Adverbs of frequency	most of the time, often, sometimes
Phrases		my position is that, data are quite persuasive, in my view, I think it might

In the speech “Women and girls, you are part of the climate solution”, the speaker compares statistics to raise the issue of unequal gender distribution in the Gulf economy. The modal ‘could’ follows the verb imagine, expressing a hypothetical possibility and the speaker’s presupposition. Figure 2 illustrates that ‘could’ is the most frequently used hedge in logos appeals, appearing eight times in the ten speeches analyzed.

Ex 28: In 2020, women made up about 40 percent of the global workforce. Women’s shares in the Middle East are just under 25 percent. And these figures are way lower in the Gulf countries. And considering that women make up nearly half of the Gulf, imagine how women’s equal involvement in the economy could enhance the overall growth of the region (Busaidi, 2021).

In the speech “Women and girls, you are part of the climate solution”, the speaker uses statistics to highlight the issue of gender inequality in the Gulf economy. The modal ‘could’ is used after the verb ‘imagine’ to express a hypothetical possibility, the speaker’s presupposition. The modal retains its ability meaning in this context.

The lexical verb and hedge ‘think’ appears in four out of ten speeches, all of which address a sensitive social issue that may elicit opposition from the audience (such as gender, race, sleeping teenagers, and social media). ‘Think’ is used with different pronouns, with the most common being the parenthetical ‘I think’. Other examples include ‘we think’, negative ‘I don’t think’, ‘(To the naysayers who) may think’, and ‘you might think’.

Ex 30: Data from psychologists and sociologists are quite persuasive here. I think we have the persuasive numbers, the data, to prove to men that gender equality is not a zero-sum game, but a win-win. Here's what the data show. Now, when men begin the process of engaging with balancing work and family, we often have two phrases that we use to describe what we do. We pitch in and we help out (Kimmel, 2015).

The hedge 'I think' is used to assert knowledge and reinforce the idea of credible data to persuade men that gender equality is a win-win scenario. It also serves to draw conclusions. By using the hedge 'I think' and reinforcing his argument with credible data, the advocate for gender equality is able to present it as a beneficial outcome for all. This rhetorical strategy also enables the speaker to draw clear and convincing conclusions.

Ex 31: And here's the best part I haven't told you about yet: going to space actually helps the Earth tremendously (Hinterman, 2021).

In example 31, 'actually' is used as a hedge to downplay or soften the potential surprise or skepticism the listener might feel upon hearing the claim that going to space helps the Earth tremendously. The word 'actually' also conveys a sense of authority or credibility, implying that the speaker has knowledge or evidence to back up their claim.

Ex 32: So that kind of leadership, if we just shifted those two things about urgency and values, that would help all of us worldwide (Bineshi Albert, 2022).

This example is part of the solution, where the speaker, after presenting facts, concludes by reiterating the two most important qualities needed in future leaders. 'Just' softens the utterance to show how easily the solution could be implemented, thus adding to the persuasiveness of the idea.

As demonstrated above, the use of hedges in the ten speeches proved to be a powerful tool for determining the speakers' intended meaning and degree of certainty in the context of persuasive speeches. The strategic use of adverbs, adjectives, verbs, lexical verbs, and introductory phrases as hedging devices is intended to strengthen persuasive appeals by reflecting the level of certainty and, at times, reducing imposition.

The present study had several strengths and limitations. The strengths of this study are that it employs a mixed-methods approach to gain a comprehensive understanding of the use of hedging devices in persuasive TED Talk speeches and that it focuses on a unique and specific communicative environment that combines elements of both spoken and written discourse. The study provides new insights into the use of hedges in persuasive language and identifies the most commonly used hedges in TED Talk speeches. These findings can inform ESL teaching materials and encourage further research on the topic. The study's limitations are that it only focuses on TED Talk speeches and may not be generalizable to other forms of persuasive discourse, and that its reliance on a corpus-based approach may limit the analysis of social and contextual factors that influence the use of hedging devices. It is also worth noting that this study was conducted on a relatively small scale, which means that the generalizability of its findings may be limited. To enhance the applicability of the study's conclusions to other contexts, it may be helpful to conduct further research using larger corpora.

5. Conclusion

In a study of ten TED Talks, only 2% of the total words were identified as hedging devices, which is a lower percentage compared to the findings of studies on written and spoken discourse (Hyland, 1998; Salager-Meyer, 1995). The highest number of hedges was found in logos (62.5%), followed by pathos (28.9%), and the least in ethos (8.5%). A variety of approximators and shields (modal and lexical verbs, adjectives, adverbs, and phrases, mostly introductory) were found to varying degrees, depending on the rhetorical appeal used.

Very few hedges were used in the corpus to bolster ethos, as strong credibility was generally established by avoiding hedging devices. A significant number of hedges occurred only in the speech on social media, which may be due to the controversial nature of the topic and potential opposition from the audience. Adverbs (such as actually, just, sometimes, probably, somewhat, maybe, and very) were among the most popular methods of hedging ethos in the speeches.

Furthermore, the study found a moderate use of hedges when appealing to the audience's emotions (pathos), with the topic and preferred method of delivery potentially affecting the occurrence and type of hedges used. Adverbs were the most commonly used hedges in pathos (approximately 60%), followed by verbs (approximately 30%).

In logos, the highest number of hedges appeared, with the authors using a variety of approximators to make predictions or estimates that are accurate and reliable, even if they are not exact. The study found that speakers frequently use hedging language to make their argument more understandable and persuasive, as well as to acknowledge alternative perspectives. The use of hedges in speech is similar to the use of hedges in written academic texts.

The qualitative analysis focuses on the four most frequent hedges: 'Actually', 'just', 'could', and 'think'. 'Actually' has a mitigating effect when promoting intimacy, serving as a commentary marker, or in challenging situations, even reinforcing the argument. The modal verb 'could' often serves as a hedge to express hypothetical possibilities and the speaker's presuppositions. The lexical verb 'think', preceded most often by the pronoun 'I', occurred in both affirmative and negative forms. It is used to reduce the amount of certainty or reduce imposition. The adverb 'just' introduces a mildly positive and reassuring attitude, for example, in pathos parts it is used to soften the speaker's language and make it less direct, especially when addressing sensitive topics.

The use of hedges was found to vary depending on the speech topic, speaker characteristics, and expertise. Notably, speeches discussing free Internet and climate change had the fewest hedges linked to ethos, pathos, and logos. These findings offer intriguing possibilities for

future investigation. The present study might prompt additional exploration utilizing the same electronic corpus, highlighting variations in the usage of hedges based on factors such as gender, educational level, topic sensitivity, and native vs. non-native speakers. Furthermore, it recommends integrating the study's conclusions into teaching materials for English as a Second Language (ESL) and pursuing additional research in the area. This is because most existing studies concentrate on developing a scientific argument in writing, while developing an argument in speech is distinct and merits attention.

These results suggest interesting avenues for further research. The current study may inspire further research on the same electronic corpus. It highlights variations in hedge usage based on factors such as gender, educational level, the sensitivity of the topic, native vs. non-native speakers, etc. Additionally, it suggests incorporating the study's findings into ESL teaching materials and conducting further studies on the topic, as most existing studies focus on developing a scientific argument in writing. Developing an argument in speech is distinct and merits attention.

References

- Aijmer, K. (1986). Why is actually so popular in spoken English? English in speech and writing: A symposium, ed. by Gunnel Tottie and Ingegerd Backlund, 119–29.
- Aijmer, K. (2002). English discourse particles. *English Discourse Particles*, 1-315. <https://doi.org/10.1075/scl.10>
- AlAfnan, M. A. (2022). Public discourse: Systemic functional analysis of Trump's and Biden's inaugural speeches. *Journal of Language and Linguistic Studies*, 18(1), 1-14.
- Al-Rashady, F. (2012). Determining the role of hedging devices in the political discourse of two American presidentiables in 2008. *TESOL Journal*, 7(1), 30-42.
- Aristotle. (1991). *On Rhetoric*, trans. G. A. Kennedy (New York and Oxford: Oxford University Press).
- Baumgarten, N., & House, J. (2010). I think and I don't know in English as lingua franca and native English discourse. *Journal of Pragmatics*, 42(5), 1184-1200. <https://doi.org/10.1016/j.pragma.2009.09.018>
- Bhatia, V. K. (2004). *Worlds of written discourse: A genre-based view*. A&C Black.
- Biber, D., & E. Finegan (1988). Adverbial stance types in English. *Discourse Processes*, 11(1), 1-34. <https://doi.org/10.1080/01638538809544689>
- Borichevskaya, E. A. (2020). The features of persuasive speeches at the ted conferences.
- Brown, P., & Levinson, S. C. (1978). Universals in language usage: Politeness phenomena. In *Questions and politeness: Strategies in social interaction* (pp. 56-311). Cambridge University Press. <https://doi.org/10.1017/CBO9780511813085>
- Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage* (Vol. 4). Cambridge University Press.
- Caffi, C. (1999). On mitigation. *Journal of Pragmatics*, 31(7), 881-909. [https://doi.org/10.1016/S0378-2166\(98\)00098-8](https://doi.org/10.1016/S0378-2166(98)00098-8)
- Chaqmaqchee, O. M., & Jasim, Z. F. (2022). EFL Undergraduate Learners Politeness Strategies in the Speech Act of Disagreement. *World Journal of English Language*, 12(8), 1-1. <https://doi.org/10.5430/wjel.v12n8p1>
- Coates, J. (1983). *The semantics of the modal auxiliaries*. Routledge.
- Collins, P. (2009). Modals and quasi-modals in world Englishes. *World Englishes*, 28(3), 281-292. <https://doi.org/10.1111/j.1467-971X.2009.01593.x>
- Crompton, P. (1997). Hedging in academic writing: Some theoretical problems. *English for Specific Purposes*, 16(4), 271-287. [https://doi.org/10.1016/S0889-4906\(97\)00007-0](https://doi.org/10.1016/S0889-4906(97)00007-0)
- Cutting, J. (2007). Introduction to vague language explored. In *Vague language explored* (pp. 3-17). Palgrave Macmillan. https://doi.org/10.1057/9780230627420_1
- Dafouz-Milne, E. (2008). The pragmatic role of textual and interpersonal metadiscourse markers in the construction and attainment of persuasion: A cross-linguistic study of newspaper discourse. *Journal of Pragmatics*, 40(1), 95-113. <https://doi.org/10.1016/j.pragma.2007.10.003>
- Durik, A. M., Britt, M. A., Reynolds, R., & Storey, J. (2008). The Effects of Hedges in Persuasive Arguments: A Nuanced Analysis of Language. *Journal of Language and Social Psychology*, 27(3), 217-234. <https://doi.org/10.1177/0261927X08317947>
- Etemadfar, P., & Namaziandost, E. (2020). An investigation of interpersonal metadiscourse markers as persuasive strategies in Donald Trump's 2016 campaign speeches. *Critical Literary Studies*, 2(2), 117-130.
- Fraser, B. (1975). Hedged performatives. In *Speech acts* (pp. 187-210). Brill. https://doi.org/10.1163/9789004368811_008
- Fraser, B. (2009). An account of discourse markers. *International Review of Pragmatics*, 1(2), 293-320. <https://doi.org/10.1163/187730909X12538045489818>
- Fraser, B. (2010). Pragmatic competence: The case of hedging. *New Approaches to Hedging*, 1534.

- Frobenius (2014). The pragmatics of monologue: Interaction in video blogs. Dissertation. Universität des Saarlandes.
- Frobenius, M. (2014). Audience design in monologues: How vloggers involve their viewers. *Journal of Pragmatics*, 72, 59-72. <https://doi.org/10.1016/j.pragma.2014.02.008>
- Grice, H. P. (1975). Logic and conversation. In *Speech acts* (pp. 41-58). Brill. https://doi.org/10.1163/9789004368811_003
- Grice, H. P. (1978). Further notes on logic and conversation. In *Pragmatics* (pp. 113-127). Brill. https://doi.org/10.1163/9789004368873_006
- Halliday, M. A. K. & Hasan, R. (1976). *Cohesion in English*. Longman.
- Halliday, M. A. K. (1985). *Spoken and written language*. Geelong Vict.: Deakin University.
- Hardjanto, T. D. (2016). Hedging through the use of modal auxiliaries in English academic discourse. *Humaniora*, 28(1), 37-50. <https://doi.org/10.22146/jh.v28i1.11412>
- Hinkel, E. (1997). Indirectness in L1 and L2 academic writing. *Journal of Pragmatics*, 27(3), 361-386. [https://doi.org/10.1016/S0378-2166\(96\)00040-9](https://doi.org/10.1016/S0378-2166(96)00040-9)
- Holmes, J. (1985). Sex differences and miscommunication: Some data from New Zealand. In J. B. Pride (ed.), *Cross-cultural encounters: Communication and miscommunication*. Melbourne: River Seine. 24-43.
- Hosman, L. A., & Siltanen, S. A. (2011). Hedges, Tag Questions, Message Processing, and Persuasion. *Journal of Language and Social Psychology*, 30(3), 341-349. <https://doi.org/10.1177/0261927X11407169>
- House, J., & Kasper G. (1981). Politeness markers in English and German, in Coulmas (ed.) *Conversational Routine* (ed.), 157-85. The Hague: Mouton. <https://doi.org/10.1515/9783110809145.157>
- Hübler, A. (1983). Understatements and hedges in English. *Understatements and Hedges in English*, 1-202. <https://doi.org/10.1075/pb.iv.6>
- Hyland, K. (1995). The author in the text: Hedging scientific writing. *Hong Kong Papers in Linguistics and Language Teaching*, 18, 33-42.
- Hyland, K. (1998). Boosting, hedging and the negotiation of academic knowledge. *Text & Talk*, 18(3), 349-382. <https://doi.org/10.1515/text.1.1998.18.3.349>
- Jacobs, A., & Jucker, A. H. (1995). The historical perspective in pragmatics. *Pragmatics and Beyond New Series*, 3-36. <https://doi.org/10.1075/pbns.35.04jac>
- Joosten, J. (2016). Biblical rhetoric as illustrated by Judah's speech in Genesis 44.18-34. *Journal for the Study of the Old Testament*, 41(1), 15-30. <https://doi.org/10.1177/0309089216628417>
- Jovic, M. (2019). Прагматикализација модалних глагола could и would у енглеском језику од 1800. до данас. *Универзитет у Београду*.
- Jucker, A. H., Smith, S. W., & Lüdge, T. (2003). Interactive aspects of vagueness in conversation. *Journal of Pragmatics*, 35(12), 1737-1769. [https://doi.org/10.1016/S0378-2166\(02\)00188-1](https://doi.org/10.1016/S0378-2166(02)00188-1)
- Kaltenböck, G., Mihatsch, W., & Schneider, S. (Eds.). (2012). *New approaches to hedging*. Brill.
- Komulainen, H., Mertaniemi, E., Lunkka, N., Jansson, N., Meriläinen, M., Wiik, H., & Suhonen, M. (2019). Persuasive speech in multi-professional change facilitation meetings: A rhetorical discourse analysis. *Journal of Health Organization and Management*, 33(4), 396-412. <https://doi.org/10.1108/JHOM-12-2018-0366>
- Koutsantoni, D. (2004). *Relations of power and solidarity in scientific communities: A cross-cultural comparison of politeness strategies in the writing of native English speaking and Greek engineers*. <https://doi.org/10.1515/mult.2004.001>
- Lakoff, G. (1972). Hedges: a study in meaning criteria and the logic of fuzzy concepts. *The 8th Regional Meeting of the Chicago Linguistic Society*: 183-228.
- Lenk, U. (1998). *Marking discourse coherence: functions of discourse markers in spoken English*. Tübingen: Narr
- Liu, H. (2020). A Corpus-based Study of Shields in Conversations of Chinese EFL Learners. *Theory and Practice in Language Studies*, 10(7), 828-832. <https://doi.org/10.17507/tpls.1007.15>
- Lyons, J. (1977). *Semantics: Volume 2* (Vol. 2). Cambridge University Press. <https://doi.org/10.1017/CBO9781139165693>
- Markkanen, R., & Schröder, H. (1992). Hedging and its linguistic realizations in German, English and Finnish philosophical texts: A case study. *Fachsprachliche Miniaturen*. Frankfurt: Peter Lang, 121-130.
- Martin, J. R. (1992). *English text: System and structure*. John Benjamins. <https://doi.org/10.1075/z.59>
- Myers, G. (1989). The pragmatics of politeness in scientific articles. *Applied Linguistics*, 10(1), 1-35. <https://doi.org/10.1093/applin/10.1.1>
- Nelson, T. E., & Garst, J. (2005). Values-based political messages and persuasion: Relationships among speaker, recipient, and evoked values. *Political Psychology*, 26(4), 489-516. <https://doi.org/10.1111/j.1467-9221.2005.00428.x>
- Nuraniwati, T., & Permatasari, A. N. (2021). Hedging in TED talks: A corpus-based pragmatic study. *JEELS Journal of English Education*

and *Linguistics Studies*, 8(2), 203-226. <https://doi.org/10.30762/jeels.v8i2.2969>

Perkins, M. R. (1983). *Modal expressions in English*. Pinter Publishers for Royal Instit RS London.

Preston, P. (2005). Persuasion: What to say, how to be. *Journal of Healthcare Management*, 50(5), 294. <https://doi.org/10.1097/00115514-200509000-00004>

Prince, E. F., Frader, J., & Bosk, C. (1982). On hedging in physician-physician discourse. *Linguistics and the Professions*, 8(1), 83-97.

Quirk, R., S. Greenbaum, G. Leech, & J. Svartvik (1985). *A comprehensive grammar of the English language*. Longman.

Salager-Meyer, F (1995). 'I think that perhaps you should: a study of hedges in written scientific discourse'. *The Journal of Tesol France*, 2(2), 127-143.

Salih, A. A. (2021). Investigating rhetorical aspects of writing argumentative essays and persuasive posters: Students' perspective. *Theory and Practice in Language Studies*, 11(12), 1571-1580. <https://doi.org/10.17507/tpls.1112.09>

Terraschke, A., & Holmes, J. (2007). 'Und Tralala': Vagueness and general extenders in German and New Zealand English. *Vague Language Explored*, 198-220. https://doi.org/10.1057/9780230627420_11

Theunissen, G. (2014). Analysis of the visual channel of communication in a corpus of TED Talks presentation. Master's thesis. University of Gent.

Tillery, D. (2006). The problem of nuclear waste: Ethos and scientific evidence in a high-stakes public controversy. *IEEE Transactions on Professional Communication*, 49(4), 325-334. <https://doi.org/10.1109/TPC.2006.885868>

Tognini-Bonelli, E. (1993). Interpretative nodes in discourse: Actual and actually. Text and technology: In honour of John Sinclair, 193-212. <https://doi.org/10.1075/z.64.13tog>

Uysal, H. H. (2014). A cross-cultural study of indirectness and hedging in the conference proposals of English NS and NNS scholars. *Occupying Niches: Interculturality, Cross-culturality and Acultrality in Academic Research*, 179-195. https://doi.org/10.1007/978-3-319-02526-1_12

Watts, R. (1988). A relevance theoretic approach to commentary pragmatic markers: the case of actually, really, and basically. *Acta Linguistica Hungarica*, 38(1/4), 235-60.

Weinreich, U. (1966). On the semantic structure of English. In J. H. Greenberg (Ed.), *Universals of Language* (2nd ed., pp. 142-217). Cambridge, MA: MIT Press.

Wierzbicka, A. (1991). Semantic rules know no exceptions. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"*, 15(2), 371-398. <https://doi.org/10.1075/sl.15.2.06wie>

Williams, H. (1996). *An analysis of English conjunctive adverbial expressions*. Unpublished PhD Dissertation. Applied Linguistics, UCLA.

Zhang, L., & Chen, Y. (2020). Strategic pro-environmental persuasion: Use of hedges in Chinese environmental commentary. *International Journal of Languages, Literature and Linguistics*, 6(3), 155-161. <https://doi.org/10.18178/IJLLL.2020.6.3.268>

TED Talks Excerpts

Bineshi Albert, O. (2022, February). Climate action needs new frontline leadership. [Video]. TED Conferences. https://www.ted.com/talks/ozawa_bineshi_albert_climate_action_needs_new_frontline_leadership?language=en

Busaidi, A. R. (2021, May). Women and girls, you are part of the climate solution. [Video]. TED Conferences. https://www.ted.com/talks/rumaiitha_al_busaidi_women_and_girls_you_are_part_of_the_climate_solution?language=en

Chomba-Kinywa, P. (2021, Decembar). Why a free and fair internet is more vital than ever. [Video]. TED Conferences. https://www.ted.com/talks/priscilla_chomba_kinywa_why_a_free_and_fair_internet_is_more_vital_than_ever?language=en

Hinterman, E. (2021, December). How going to Mars improves life on Earth. [Video]. TED Conferences. https://www.ted.com/talks/eric_hinterman_how_going_to_mars_improves_life_on_earth?language=en

Hobson, M. (2014, May). Colorblind or color brave [Video]. TED Conferences. https://www.ted.com/talks/melody_hobson_color_blind_or_color_brave?language=en

Kimmel, M. (2015, September). Why gender equality is good for everyone — men included [Video]. TED Conferences. https://www.ted.com/talks/michael_kimmel_why_gender_equality_is_good_for_everyone_men_included?language=en

Newport, C. (2016, September). Why you should quit social media [Video]. TED Conferences. https://www.ted.com/talks/cal_newport_why_you_should_quit_social_media?language=en

Ruffo, S. (2022, February). The ocean's ingenious climate solutions [Video]. TED Conferences. https://www.ted.com/talks/susan_ruffo_the_ocean_s_ingenious_climate_solutions?language=en

Troxel, W. (2017, May). Why school should start later for teens [Video]. TED Conferences. https://www.ted.com/talks/wendy_troxel_why_school_should_start_later_for_teens?language=en

Williams, K. (2020, September) .You shouldn't have to choose between filling your prescriptions and paying bills [Video]. TED Conferences.
https://www.ted.com/talks/kiah_williams_you_shouldn_t_have_to_choose_between_filling_your_prescriptio_and_paying_bills?language=en

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).