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Exploring Positive Discourse Analysis in Selected Harvard Commencement Speeches: An Interactional Metadiscourse Analysis.

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Abstract

Positive Discourse Analysis (PDA) shifts the focus of Critical Discourse Analysis from detecting injustices to finding and endorsing more positive alternatives. Commencement speeches are practical examples of PDA. Speakers employ metadiscourse markers in their speeches to inspire the audience in an attempt to modify their attitudes, sentiments and actions. The role of metadiscourse markes is more crucial in spoken genre as managing spoken interaction is greater in 'real time' in front of audience. The current study has examined the metadiscourse markers in six Harvard commencement speeches that offer inspiring messages of justice, courage, resilience, empathy as identified by The Harvard Gazette. The study adapted Hyland's (2005) classification model of interpersonal metadiscourse to interactive and interactional with a focus on the interactional ones because of their role in engaging the audience and signaling a speaker's attitude. The results of the study show that the speakers have successfully achieved interpersonal relations with their audience through the use of all interactional metadiscourse resources with the attitude and engagement markers ranking the highest. Moreover, the analysis reveals that, despite the speakers' different background, gender, and specialization, they talk about similar topics. These factors did not affect the intensity of interactional metadiscourse indicators in the six speeches. This study provides insight into linguists' interested in PDA and discourses that promote the change audience wants to see. The results can also be of benefit to teachers, students, and public speakers with understandings about the structure of spoken texts and the interactional metadiscourse features that help developing the speaker-audience rapport and preserving the speaker's personage.

Keywords—Harvard commencement speeches, Interactional Metadiscourse, Positive Discourse Analysis.

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الملخص العربي:

إن تحليل الخطاب الإيجابي يحول التحليل النقدي للخطاب من التركيز على ممارسات الخطاب التي تعكس أو ينشأ عنها المشكلات الإجتماعية إلى إيجاد وتأييد بدائل أكثر إيجابية . وفى هذا الإطار تمثل خطب التخرج نماذج عملية لتحليل الخطاب الإيجابي حيث يستخدم الخطباء أدوات " الميتا خطاب" التفاعلية والتحاورية في خطبهم لإلهام الخريجين في محاولة لتعديل مواقفهم ومشاعرهم وأفعالهم ، وهنا تمثل علامات " الميتا خطاب " أهمية كبرى في الخطب حيث يتم التقاعل الشفهي مباشرا أمام الجمهور. وقد أتخذت الدراسة الحالية مفهوم "الميتا خطاب" كإطار نظري للبحث وهو مصطلح لغوي يشمل مجموعة من الأدوات اللغوية التي توضح العلاقة بين المتحدث و المستمع، وتقوم الدراسة بفحص علامات "الميتا خطاب" في أشهر ستة خطابات تخرج من جامعة هارفارد التى تقدم رسائل ملهمة عن العدالة والشجاعة والمرونة والتعاطف ، ذلك بناء على ترشيح موقع مجلة هارفارد عام 2022. و أعتمدت الدراسة في تحليل الخطب على نموذج هايلاند (2005) الذى يصنف علامات "الميتا خطاب" إلى مؤشرات تقاعلية وأخرى تحاورية مع التركيز على العلامات التحاورية بسبب دورها في جنب الجمهور وبيان موقف المتحدث . وتبين نتائج الدراسة أن المتحدثين نجحوا في تحقيق التواصل الشخصي مع جمهورهم من خلال إستخدام مؤشرات "الميتا خطاب" التحاورية وخاصة مؤشرات تبادل الآراء ومشاركة الجمهور. وعلاوة على ذلك تكشف الدراسة أنه على الرغم من إختلاف خلفية وتخصصات المتحدثين الستة إلا أنهم تحدثوا عن موضوعات متشابهة ، ولم يؤثر هذا العامل على كثافة مؤشرات التماثل التحاورى في الخطب. ويمكن الأستقاده من نتائج هذه الدراسة حيث تقدم الدراسة رؤية لدارسى اللغة المهتمين بتحليل الخطاب الإيجابي والخطابات التى تسعى بفاعلية إلى دعم التغيير الذي يرغب فيه الجمهور، وتقيد النتائج أيضًا المعلمين والطلاب والخطباء في فهم بنية النصوص المنطوقة وميزات علامات "الميتا خطاب" التحاورية والتفاعلية التي تساعد في خلق التواصل بين المتحدث والجمهور وإيراز شخصية المتحدث.

الكلمات الدالة:

خطب التخرج من جامعة هارفارد ـ علامات "الميتا خطاب" التحاورية ـ تحليل الخطاب الإيجابي

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Introduction

Commencement speeches are significant milestones in the lives of graduates, symbolizing a transition into a new phase. These speeches deliver valuable advice for the future and inspire action, emphasizing the core values of society and the speakers themselves. Renowned individuals, who have achieved success in their careers and lives, are chosen as commencement speakers. Previous studies have shown that the manner in which instructions are conveyed greatly influences people's behavior (Antonakis et al., 2014), and careful word choices are often employed to shape public opinion (Lischinsky, 2011). Particularly, during the Covid-19 pandemic, commencement speeches have been a form of discourse capable of influencing the perceptions of individuals, mainly those in the field of education. Commencement speakers employ persuasive strategies in their speeches to effectively deliver their messages and connect with the audience. By analyzing commencement speeches, one can identify social trends and examine the specific messages that speakers opt to include (Rutherford, 2004). Unlike other forms of oratory, commencement speeches can be challenging to find and consequently receive less frequent analysis.

Metadiscourse is a critical aspect of persuasion. It aids authors and speakers in establishing coherence, expressing their intentions and attitudes, and directing the audience. Hyland (2005) explains that "metadiscourse is the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community" (p. 37). This definition clarifies that a certain expression is more than giving information, but also encloses a writer's or speaker's emotions, attitudes, values, and their intention to interact with receivers.

Hyland (2005) categorized metadiscourse resources into interactive and interactional metadiscourse resources. Interactive metadiscourse centers on the content of the text, while interactional metadiscourse focuses on the participants of the interaction. Since interactional metadiscourse deals with the relationship between speaker and listener, it can be more significant than interactive metadiscourse in discourses such as commencement speeches because speakers create desirable interactions and strong relationships with the audience.

There have been few studies conducted on metadiscourse in spoken registers, particularly in the context of commencement speeches. University commencement speeches, being a specific genre, capture the attention of society due to their significant role in shaping students' education and social interactions. Effective delivery of a commencement speech requires speakers to take into account

the audience they are addressing. It is crucial for speakers to communicate information clearly in their speeches and ensure that their values and advice resonate with the audience. Utilizing metadiscourse, as suggested by Intaraprawat and Steffensen (1995), can significantly enhance the persuasiveness of commencement speeches.

The primary objective of this study is to examine the application of personal metadiscourse in spoken interactions, particularly analyzing six commencement speeches from Harvard University. The analysis will examine the use of various metadiscourse resources that the speakers used to project their ideas and support their positions, and at the same time, build rapport with the audience. To this end, this study utilizes Hyland's (2005) metadiscourse interpersonal model with a specific focus on interactional markers. This study addressed the following research questions:

1. Which category of interpersonal metadiscourse, interactional or interactive, occurs more frequently in selected Harvard commencement speeches?
2. What are the most frequently used interactional markers in the selected speeches?
3. How do speakers achieve interpersonal relations with their audiences through the use of interactional metadiscourse resources?

Theoretical Framework

Model of Metadiscourse

Hyland (2004, 2005; Hyland & Tse, 2004) proposed the interpersonal metadiscourse model, which differentiates between interactive and interactional resources. Interactive resources focus on organizing discourse and reflect the writer's judgment on what needs to be explicitly stated to guide the reader's understanding. On the other hand, interactional resources pertain to the speaker's efforts in controlling the level of personal engagement in the text and establishing a connection with the data, arguments, and audience. These resources indicate the degree of intimacy, expression of attitude, communication of commitments, and level of reader involvement (Hyland, 2005). These purposes are realized through an array of features, as shown in Table 1, and elaborated on below.

Category	Function	Examples
INTERACTIVE.	*Help to guide the reader through the text*	
Transitions	Express semantic relation between main clauses	*In addition, but, thus, and*
Frame markers	Refer to discourse acts, sequences, or text stages	*Finally, next/to conclude, /my purpose is*
Endophoric Markers	Refer to the information in other parts of the text	*Noted above, see figure, in section 2*
Evidentials	Refer to source of information from other texts	*According to X /(Y, 1990) /Z states*
Code glosses	Help readers grasp meanings of ideational material	*Namely /e.g., /such as /in other words*
INTERACTIONAL	*Involve the reader in the argument*	
Hedges	Withhold writer's full commitment to proposition	*Might /perhaps /possible /about*
Boosters	Emphasise force or writer's certainty in proposition	*In fact / definitely /it is clear that*
Attitude markers	Express writer's attitude to proposition	*Unfortunately / I agree / surprisingly*
Engagement Markers	Explicitly refer to or build relationship with reader	*Consider /note that /you can see that*
Self-mentions	Explicit reference to author(s)	*I /we /my /our*

Table 1: An Interpersonal Model of Metadiscourse (Hyland, 2005, p.49)

Interactive metadiscourse

Hyland (2005) categorizes interactive metadiscourse into five main groups: transitions, frame markers, endophoric markers, evidentials, and code glosses. Some of these categories have subcategories that highlight their specific forms within the text. Each category serves a distinct purpose. Transitions encompass a variety of devices, primarily conjunctions, used to indicate additive, contrastive, and consequential steps in the discourse, as opposed to the external world. Frame markers denote text boundaries or elements of schematic text structure, such as items used for sequencing, labeling text stages, announcing discourse goals, and signaling topic shifts. Endophoric markers provide extra and crucial information to the reader for understanding the author's intentions by referring to other parts of the text. Evidentials reveal the source of textual information, which may originate from outside the current text. Code glosses involve restating ideational information.

Interactional metadiscourse

In interactional metadiscourse, speakers are focused on finding effective methods of communication. According to Hyland (2004), the utilization of interactional metadiscourse markers (MDMs) indicates the speaker's stance towards the listener and their endeavor to engage directly with the audience, fostering a sense of trust in the speaker's viewpoints. Therefore, the speaker-audience relationship and the preservation of the speaker's persona within a specific community primarily rely on interactional metadiscourse markers. These markers encompass hedges, boosters, attitude markers, engagement markers, and self-mention.

First, hedges serve the purpose of reducing the speaker's level of commitment towards the content or knowledge claims they make (Hu & Cao, 2015). In situations where the speaker expects opposing viewpoints regarding their proposition, hedges can be employed to soften the impact of potentially face-threatening acts. Additionally, speakers utilize hedges to indirectly convey information and express their hesitancy (Hyland & Tse, 2004), thereby indicating uncertainty. Modal verbs (e.g., "could"), verbs (e.g., "indicate," "suggest"), adjectives (e.g., "doubtful"), adverbs (e.g., "plausibly"), nouns (e.g., "possibility"), and expressions (e.g., "to my knowledge") are all forms that hedges can take.

Second, boosters serve the purpose of highlighting the certainty of a particular value and showcasing the confidence that speakers possess in the content they are presenting. By concentrating on a single narrative, boosters are utilized by speakers to steer the audience's focus away from potential conflicting perspectives towards the standpoint they intend to convey. According to Hyland (2005), boosters include modal verbs (such as "will"), verbs (such as "proves"), adjectives (such as "clear"), adverbs (such as "evidently"), nouns (such as "fact"), and expressions (such as "no doubt"). Additionally, Li and Wharton (2012) included superlatives in the list of boosters. Hyland (2005) added a taxonomy of boosters and hedges (Tables 2 & 3) relevant to the current study.

Hyland's taxonomy of hedges.

About, almost, apparent, apparently, appear, appeared, appears, approximately, argue, argued, argues, around, assume, assumed, broadly, certain amount, certain extent, certain level, claim, claimed, claims, could, couldn't, doubt, doubtful, essentially, estimate, estimated, fairly, feels, felt, frequently, from my perspective, from our perspective, from this perspective, generally, guess, indicate, indicated, indicates, in general, in most cases, in most instances, in my opinion, in my view in this view, in our view, largely, likely, mainly, may, maybe, might, mostly, often, on the whole, ought, perhaps, plausibly, possible, possibly, postulate, postulated, postulates, presumably, probable, probably, quite, rather x, relatively, roughly, seems, should, sometimes, somewhat, suggest, suggested, suggests, suppose, supposed, supposes, suspect, suspects, tend to, tended to, tends to, to my knowledge, typical, typically, uncertain, uncertainly, unclear, unclearly, unlikely, usually, would, wouldn't.

Table 2: Hyland's (2005) Taxonomy of Hedges (Vasquez & Giner, 2008, p. 179)

Hyland's taxonomy of boosters

Actually, always, believe, believed, believes, beyond doubt, certain, certainly, clear, clearly, conclusively, decidedly, definite, definitely, demonstrate, demonstrated, demonstrates, doubtless, establish, established, evident, evidently, find, finds, found, in fact, incontestable, incontrovertible, incontrovertibly, indeed, indisputable, indisputably, know, known, must (possibility), never, no doubt, obvious, obviously, of course, prove, proved, proves, realize, realized, realizes, really, show, showed, shown, shows, sure, surely, think, thinks, thought, truly, true, undeniable, undeniably, undisputedly, undoubtedly, without doubt.

Table 3: Hyland's (2005) Taxonomy of Boosters (Vasquez & Giner, 2008, p. 179)

Third, attitude markers signal speakers' attitudes towards the propositional content. Speakers utilize a range of verbs (e.g., "favor"), adverbs (e.g., "astonishingly"), and adjectives (e.g., "intriguing") to convey surprise, agreement, and their beliefs (Hyland, 2005). Authors express their views, judgments, evaluations, and attitudes towards the content and perspectives through the four types of attitude markers: adjectives, adverbs, nouns, and verbs. Their functions can be described in many ways. Table 4 classifies the attitude markers into distinct types of functions.

Functions	Attitudinal Lexicon	Attitude markers
Expressing Importance	Attitudinal Adjectives	Important, significant, major, main, key, validity, meaningful, Valuable, essential, consistent, useful, momentous, influential, potential, complex, developing
	Adverbs	Importantly, only significantly, widely, remarkably, correctly, consistently, broadly
	Adjectival Constructions	It is important that… It is noteworthy that… It is significant that…
Indicating Limitations, gaps, issues	Adjectives	Inappropriate, complex, missing, limited,
	Adverbs	Unfortunately, only dramatically, hardly, inappropriately, critically, partially, strikingly,
	Nouns	Issues, problems, challenges, concern, question, limitation, constraint, neglect
Comparing & Contrasting	Adjectives	Better, best, critical
	Adverbs	Critically, remarkably, noticeably
Praising & Criticizing	Adjectives	Useful, comprehensive, appropriate, validity inappropriate, limited
	Adverbs	Usefully, appropriately, specifically, inevitably

Table 4. The attitude markers and their functions (Hyland, 2008).

Fourth, speakers utilize engagement markers to establish a connection with readers. This involves recognizing their existence and encouraging them to participate in conversations (Hyland, 2005). Careful choice of pronouns (e.g., "we"), interjections (e.g., "by the way"), directives (e.g., "consider"), obligation modals (e.g., "should"), shared knowledge (e.g., "it is well known"), and questions, enables speakers to control the extent of audience involvement (Hyland, 2005).

Lastly, self-mention is the act of speakers explicitly expressing their identities, which can enhance their credibility and roles (Hyland, 2001). This is often done through the use of subject pronouns (e.g., "we"), object pronouns (e.g., "us"), possessive adjectives (e.g., "our"), and nouns (e.g., "the research team"). The level of explicitness in self-mention is influenced by various factors such as social practices within a discipline, and considerations of seniority, experience, relationship to the community, and overall self-perception (Hyland, 2001).

Literature Review

Most of the metadiscourse research in academic genres, as indicated by a survey of existing literature, mostly focuses on written discourse. Yet, it is argued that metadiscourse holds a considerably more prominent role in spoken discourse compared to written discourse, since there is a greater "need to manage spoken interaction in real time" (Mauranen, 2010, p. 37). This makes it motivating and worthwhile to investigate metadiscourse in spoken academic genres.

A number of studies have investigated the use of metadiscourse markers in commencement speeches. Several comparative studies have examined the use of metadiscourse markers in university commencement speeches in different languages or cultural communities. They investigated how linguistic and cultural factors influenced the frequency and function of metadiscourse markers in these speeches. Bogdanowska-Jakubowska (2021) conducted a comparative analysis of commencement speeches in the United States and academic inauguration speeches in Poland, with a specific emphasis on the concept of place encompassing various elements such as situations, locations, and social aspects. Generally, Polish speeches exhibit a lower frequency of references to the speakers or the audience, whereas American speeches often highlight the venue of the speech and provide insights into the speaker's background and personal narrative. Similarly, Zhu (2018) compared English and Chinese commencement speeches from top universities in China and the United States, proving that English speeches have more personal metadiscourse than Chinese speeches. American speakers tend to directly address the audience more often, fostering a closer connection, whereas Chinese speakers used indirect audience references with a focus on building solidarity and shared experiences.

Other studies examined persuasive strategies in commencement speeches, presenting how speakers employ MDMs to build rapport, establish credibility through self-disclosure and hedging, and direct the audience's emotional response through markers such as boosters and hedges. For example, Huang (2021) conducted a quantitative analysis of four hundred American commencement speeches, highlighting trends in topics, metadiscourse markers, and emotional appeals. The research focused on success narratives, future possibilities, and emotional language to inspire graduates. In his study, Konfrst (2017) analyzed the commencement speeches delivered by US presidents. The findings revealed that the content of these speeches varied depending on the stage of their presidency. Specifically, if a speech was given

during the first term, it primarily aimed at promoting their policy agendas. On the other hand, second-term commencement speeches were more focused on establishing a lasting legacy while still advocating for their policy agenda. Rutherford (2004) examined the concept of moral choice and explored how it has evolved throughout the 20th century. According to Rutherford's findings, the notion of choice has become more prevalent and has been predominantly interpreted in an individualistic manner over the course of the 20th century, however, individualization was not always depicted in a positive light. Moreover, Rutherford found that career choices are no longer as prevalent topics among speakers at women's colleges compared to other colleges.

Partch and Kinnier (2011) analyzed ninety commencement addresses given at American universities from 1990 to 2000. Their research revealed that key themes emphasized in the speeches were assisting others, ethical behavior, broadening one's perspective, valuing diversity, perseverance, valuing relationships, and striving for balance. The themes of authenticity and valuing relationships were more prevalent in speeches delivered at women's colleges and by female speakers. Furthermore, the study showed that women's colleges were more likely to invite female speakers compared to coed universities.

In a qualitative study conducted by Mock (2021), a total of 825 commencement speeches delivered at 43 American universities from 1890 to 2020 were analyzed. The research focused on various aspects of the speeches, such as their duration, emotional tone, and usage of pronouns. The results revealed a decline in speech length over the years, while the overall sentiment exhibited fluctuations, particularly during periods of tough historical periods and the sentiment in speeches given by male speakers was more positive than that of female speakers.

Some studies have investigated the role of metadiscourse markers in engaging the audience in commencement speech. They analyzed the use of these markers in establishing speaker credibility, involving the audience, and conveying speakers' intentions and attitudes. Yipei and Lingling (2013) investigated the interpersonal and textual meanings of Steve Jobs' Stanford commencement speech using Hyland's Metadiscourse model. The results of the study show that Steve Jobs has successfully extended his thoughts, created relationships with the audience, supported his stance, and encouraged interaction.

The previous studies are similar to the current study, which is concerned with the use of metadiscourse markers in commencement speeches. However, the data, aims, and approach of the current study are different from those of the previous studies discussed earlier. The researcher aims to analyze interpersonal metadiscourse markers used in six commencement speeches delivered in the same university, Harvard. These speeches were delivered by renowned figures of diverse backgrounds and genders. The analysis is based on Hyland's (2005) interpersonal model with a

focus on interactional markers. Two speeches were conducted virtually because of the Covid-19 pandemic, and one was delivered by a non-American figure, the Germany's first woman chancellor, Angela Merkel. The combination of various speakers' backgrounds, genders, the speeches' special timing, and mode of delivery enriches the analysis and adds significance to the study.

Methodology

This section is about the study design, type and nature of data being analyzed, as well as the reason and criteria for which the data were chosen. This section also describes data processing and the methodology used to identify and analyze metadiscourse markers (MDMs) in the data. The current study aims to examine the use of personal metadiscourse in six commencement speeches delivered at Harvard University. The study uses a combined qualitative-quantitative approach in analyzing the speeches. Quantitative information is employed to compare how often interactive and interactional metadiscourse features are used in the speeches. Qualitative data are employed to identify and describe the MDMs used by the speakers to project their thoughts and support their stance, while building rapport with the audience.

The selected speeches are chosen according to *The Harvard Gazette's* (2022) recommendation as the six "past Harvard Commencement speeches that offer inspiring messages of justice, courage, resilience, empathy." The speeches were delivered between 2008 and 2021. The speakers are three females and three males. The speeches of 2020 and 2021 were delivered virtually due to the COVID19 pandemic. The speakers' professional background and messages vary. The length of speeches also varies from 1676 words (John Lewis speech, 2018) to 2839 words (J.K. Rowling Speech (2008). The speeches are collected from *The Harvard Gazette* website under the title "6 past Harvard Commencement speakers offer inspiring messages of justice, courage, resilience, empathy" (*Harvard Gazette*, 2022). A summary of the data is in Table 5.

Speaker	Speaker's Gender	Year	Speaker's Background	Main Message	Face to Face/ Virtual	Word count
J.K. Rowling (J.K.R)	Female	2008	Novelist	The author of "Harry Potter" draws inspiration from her personal experiences to encourage graduates to embrace failure as a learning opportunity, highlighting the importance of empathy and imagination.	Face to Face	2839 words

Steven Spielberg (S.S)	Male	2016	Filmmaker	The filmmaker urged graduates not avoid the suffering of the world, but rather to examine it and confront it. And find "a villain to vanquish."	Face to Face	2334 words
John Lewis (J.L)	Male	2018	U.S. Rep.	The Civil Rights advocate conveyed a compelling statement regarding the significance of truth, justice, and equality during a period when these principles have faced opposition.	Face to Face	1676 words
Angela Merkel (A.M)	Female	2019	Germany's first woman chancellor	Merkel embraced the possibility of change. Like the Berlin Wall, "anything that seems set in stone or inalterable can indeed change."	Face to Face	2051 words
Martin Baron (M.B)	Male	2020	*Washington Post* executive editor	"Imperfect though [it] may be" an independent press is key to ensuring that facts are presented, and truth defended in society."	Virtual	2775 words
Ruth J. Simmons (R.S)	Female	2021	The president of Prairie View A&M University and former president of Brown University and Smith College	Graduates were encouraged to eliminate inequality and foster diversity and inclusion.	Virtual	2604 words

Table 5: Harvard commencement speeches data summary

To examine the metadiscoursal devices in the selected commencement speeches, Hyland's (2005) interpersonal model is adapted. This model comprises a classification of interactive and interactional metadiscourse devices that highlight the interaction between the speaker and the audience. See Table 1 for the classification of interactive and interactional types of metadiscourse used in this study.

Due to the multiple linguistic markers of the interactive and interactional types, the study used the online text analysis tool Text Inspector and the researcher's manual analysis. *Text Inspector,* a text analysis algorithm that has received prestigious awards, has been utilized by prominent publishers such as Cambridge University Press, as well as 145 universities and colleges across more than 100 countries, for the automated examination of large datasets. *Text Inspector* adapts Hyland's (2005) taxonomy of metadiscourse analysis and is regularly used in metadiscourse-related research and EVP analysis (Ngai & Singh, 2020). *Text Inspector* analyzes thirteen categories of metadiscourse markers. It further divides Interactive Frame markers into four sub-types and assigns different names to some categories. For example, Boosters are called "Emphatics," Transitions are called "Logical Connective," Self-mention is called "Person marker," and Engagement markers are called "Relational markers." The thirteen categories are as follows.

Interactive Markers:
1. Code glosses
2. Endophorics
3. Evidentials
4. Logical connectives (Transitions)
5. Announce Goals (Frame marker)
6. Label stages (Frame marker)
7. Topic shifts (Frame marker)
8. Sequencing (Frame marker)

Interactional Markers:
9. Emphatics (Boosters)
10. Attitude markers
11. Hedges
12. Relational markers (Engagement markers)
13. Person markers (self-mention)

However, it was noted that *Text Inspector's* outputs are not "perfectly accurate." The accuracy of markers identification is enhanced and the risk of missing other metadiscoursal markers is avoided by the researcher through a two-stage text analysis, which involves both automated analysis and manual checking. First, *the Text Inspector* analyzes each of the six speeches separately and sorts the markers according to the list of thirteen categories. The results show examples and statistics of interactive and interactional metadiscourse markers by type. The *Text Inspector's* results also show the number of types of each metadiscourse marker. Moreover, it shows the frequency of occurrence for each type in the text (tokens).

It was observed that *Text Inspector* counted all occurrences of discourse markers irrespective of their "appropriacies." Yet, the *Text Inspector* software was specifically designed to enable analysts to review each instance of coding within its respective context and make any necessary modifications or exclusions for analysis purposes. As a result, the researcher reviewed all *Text inspectors'* outputs and texts in the data pool manually. After manually checking the results, the researcher adjusted the output of the *Text inspector*. Additional Boosters and Attitude markers were

included as per Hyland 's (2005) taxonomy mentioned in the theoretical framework section. Finally, the outputs of the *Text Inspector* of the speeches were manually modified to improve the accuracy of the identification of metadiscourse markers. The statistical results of the speech analysis were downloaded and compared to each other and presented in graphs, as shown in the Analysis section.

Analysis

The study examined how interactive and interactional MDMs are used in the selected Harvard commencement speeches to enhance their persuasiveness, clarity, and engagement for the audience. The *text Inspector* online analysis tool, which adapts Hyland's (2005) classification, was used to detect the use of interactive and interactional MDMs in each of the six speeches. The findings signify the existence of a variety of metadiscourse markers in the speeches. *Text Inspector* has produced results on two levels: analysis by types of MDMs and analysis by tokens which indicates the overall frequency and density of MDMs usage in the speeches. The following graphs in Table 6 are generated by *Text Inspector* showing the highest percentages of the interactive and interactional MDMs types employed in each speech.

Speakers by year	Top Metadiscourse markers	
J.K. Rowling 2008	Logical connective/Transitions 13 types / 140 tokens 1.31% / 4.95% Attitude marker 28 types / 41 tokens 2.81% /1.45%	
Steven Spielberg 2016	Logical connective/Transitions 9 types / 173 tokens 1.10% / 7.37% Emphatic/ Boosters 22 types / 45 tokens 2.69% /1.92%	

John Lewis 2018	Logical connective 8 types / 89 tokens 1.45% / 5.31% Attitude marker 15 types / 34 tokens 2.72% /2.03%	
Angela Merkel 2019	Logical connective/Transitions 11 types / 93 tokens 1.50% / 4.55% Attitude marker 27 types / 40 tokens 3.68% / 1.96%	
Martin Baron 2020	Logical connective/Transitions 13 types / 135 tokens 1.20% /4.87% Attitude marker 32 types / 55 tokens 2.95% / 1.98%	
Ruth J. Simmons 2021	Logical connective/Transitions 14 types / 120 tokens 1.51% / 4.60% Attitude marker 25 types / 41 tokens 2.69% / 1.57%	

Table 6: *Text Inspector's* statistical results of the six speeches

As the results of the interactive MDMs types indicate, logical connective/Transitions markers have the highest rank in the six speeches, followed by frame markers, evidential, and code gloss markers. As for the interactional MDMs types, attitude marker types have the highest rank in the speeches except for Steven Spielberg's speech, in which the attitude markers come second after the boosters. Boosters types follow the attitude markers in the other five speeches. Table 7 below presents the distribution of interactive and interactional metadiscourse markers found

in the speeches. The table shows the number of types of markers by speech and the frequency of their occurrence (token).

Word List		J.K. Rowling 2008		Steven Spielberg 2016		John Lewis 2018		Angela Merkel 2019		Martin Baron 2020		Ruth J. Simmons 2021	
		Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens
Total Metadiscourse Markers		111 (11.16%)	577 (20.38%)	108 (13.19%)	572 (24.37%)	67 (12.14%)	367 (21.91%)	107 (14.60%)	388 (19.00%)	113 (10.43%)	435 (15.69%)	88 (9.48%)	399 (15.31%)
Interactive													
Code gloss		3 (0.30%)	7 (0.25%)	4 (0.49%)	4 (0.17%)	2 (0.36%)	3 (0.18%)	3 (0.41%)	5 (0.24%)	3 (0.28%)	4 (0.14%)	1 (0.11%)	1 (0.04%)
Endophoric		1 (0.10%)	2 (0.07%)	3 (0.37%)	3 (0.13%)	1 (0.18%)	1 (0.06%)	1 (0.14%)	1 (0.05%)	1 (0.09%)	7 (0.25%)	1 (0.11%)	4 (0.15%)
Evidential		5 (0.50%)	7 (0.25%)	3 (0.37%)	4 (0.17%)	2 (0.36%)	16 (0.96%)	5 (0.68%)	5 (0.24%)	3 (0.28%)	4 (0.14%)	2 (0.22%)	2 (0.08%)
Logical connective		13 (1.31%)	140 (4.95%)	9 (1.10%)	173 (7.37%)	8 (1.45%)	89 (5.31%)	11 (1.50%)	93 (4.55%)	13 (1.20%)	135 (4.87%)	14 (1.51%)	120 (4.60%)
Frame markers	Announce Goals	2 (0.20%)	5 (0.18%)	1 (0.12%)	1 (0.04%)	0	0	1 (0.14%)	1 (0.05%)	2 (0.18%)	2 (0.07%)	0	0
	Sequencing	5 (0.50%)	9 (0.32%)	7 (0.85%)	12 (0.51%)	3 (0.54%)	4 (0.24%)	7 (0.95%)	9 (0.44%)	7 (0.65%)	15 (0.54%)	3 (0.32%)	6 (0.23%)
	Topic shift	0	0	1 (0.12%)	2 (0.09%)	0	0	0	0	1 (0.09%)	1 (0.04%)	0	0
	Label stage	0	0	0	0	0	0	0	0	1 (0.09%)	1 (0.04%)	0	0
Total Interactive		29 (2.91%)	170 (6.02%)	28 (3.42%)	199 (8.48%)	16 (2.89)	113 (6.75%)	28 (3.82%)	114 (5.57%)	31 (2.86%)	169 (6.09%)	21 (2.27%)	133 (5.1%)
Interactional													
Emphatic/Boosters		27 (2.71%)	65 (2.30%)	22 (2.69%)	45 (1.92%)	9 (1.63%)	17 (1.01%)	17 (2.32%)	26 (1.27%)	30 (2.77%)	63 (2.27%)	20 (2.16%)	41 (1.57%)
Attitude marker		28 (2.81%)	41 (1.45%)	21 (2.56%)	47 (2.00%)	15 (2.72%)	34 (2.03%)	27 (3.68%)	40 (1.96%)	32 (2.95%)	55 (1.98%)	25 (2.69%)	41 (1.57%)
Hedge		10 (1.01%)	29 (1.02%)	14 (1.71%)	30 (1.28%)	8 (1.45%)	23 (1.37%)	14 (1.91%)	37 (1.81%)	10 (0.92%)	21 (0.76%)	8 (0.86%)	22 (0.84%)
Person marker		8 (0.80%)	176 (6.22%)	9 (1.10%)	132 (5.62%)	8 (1.45%)	79 (4.72%)	6 (0.82%)	77 (3.77%)	4 (0.37%)	33 (1.19%)	7 (0.75%)	61 (2.34%)
Relational marker		9 (0.90%)	96 (3.39%)	14 (1.71%)	119 (5.07%)	11 (1.99%)	101 (6.03%)	15 (2.05%)	94 (4.60%)	6 (0.55%)	94 (3.39%)	7 (0.75%)	101 (3.88%)
Total Interactional		82 (8.23%)	407 (14.38%)	80 (9.77%)	373 (15.89%)	51 (9.24%)	254 (15.16%)	79 (10.78%)	274 (13.41%)	82 (7.56%)	266 (9.59%)	67 (7.21%)	266 (10.2%)
Unlisted		884 (88.84%)	2254 (79.62%)	711 (86.81%)	1775 (75.63%)	485 (87.86%)	1308 (78.09%)	626 (85.40%)	1654 (81.00%)	970 (89.57%)	2338 (84.31%)	840 (90.52%)	2207 (84.69%)
Word count		2839		2334		1676		2051		2775		2604	

Table 7: Distribution of interactive and interactional markers in the six speeches.

The first observation shows that all six speakers used more interactional than interactive markers. On the type-level usage of MDMs, Angela Merkel ranks highest in the use of both interactive (3.82%) and interactional markers (10.78%) types followed by Steven Spielberg (3.42%) in the interactive types and (9.77%) in the

	J.K. Rowling 2008		Steven Spielberg 2016		John Lewis 2018		Angela Merkel 2019		Martin Baron 2020		Ruth J. Simmons 2021	
	Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens
Total MDMs	111 (11.16%)	577 (20.38%)	108 (13.19%)	572 (24.37%)	67 (12.14%)	367 (21.91%)	107 (14.60%)	388 (19.00%)	113 (10.43%)	435 (15.69%)	88 (9.48%)	399 (15.31%)
Interactive												
Total Interactive	29 (2.91%)	170 (6.02%)	28 (3.42%)	199 (8.48%)	16 (2.89%)	113 (6.75%)	28 (3.82%)	114 (5.57%)	31 (2.86%)	169 (6.09%)	21 (2.27%)	133 (5.1%)
Interactional												
Total Interactional	82 (8.23%)	407 (14.38%)	80 (9.77%)	373 (15.89%)	51 (9.24%)	254 (15.16%)	79 (10.78%)	274 (13.41%)	82 (7.56%)	266 (9.59%)	67 (7.21%)	266 (10.2%)

interactional types as shown in table 8.

Table 8 Distribution frequency of the use of interactive and interactional marker **TYPES** in the speeches.

■ 1st rank %   ■ 2nd rank %

However, on the token token-level usage of MDMs, Steven Spielberg has the highest number of occurrences of both the interactive (8.48%) and interactional markers (15.98%) tokens, followed by John Lewis (6.75%) in the interactive tokens and (15.16%) in the interactional tokens, as shown in Table 9.

	J.K. Rowling 2008		Steven Spielberg 2016		John Lewis 2018		Angela Merkel 2019		Martin Baron 2020		Ruth J. Simmons 2021	
	Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens	Types	Tokens
Total MDMs	111 (11.16%)	577 (20.38%)	108 (13.19%)	572 (24.37%)	67 (12.14%)	367 (21.91%)	107 (14.60%)	388 (19.00%)	113 (10.43%)	435 (15.69%)	88 (9.48%)	399 (15.31%)
Interactive												
Total Interactive	29 (2.91%)	170 (6.02%)	28 (3.42%)	199 (8.48%)	16 (2.89%)	113 (6.75%)	28 (3.82%)	114 (5.57%)	31 (2.86%)	169 (6.09%)	21 (2.27%)	133 (5.1%)
Interactional												
Total Interactional	82 (8.23%)	407 (14.38%)	80 (9.77%)	373 (15.89%)	51 (9.24%)	254 (15.16%)	79 (10.78%)	274 (13.41%)	82 (7.56%)	266 (9.59%)	67 (7.21%)	266 (10.2%)

Table 9 Distribution frequency of the use of interactive and interactional markers **TOKENS** in the speeches.

■ 1st rank %   ■ 2nd rank %

Interactive Metadiscourse Markers Analysis

Interactive Markers Types

A commencement speech is considered a kind of monologue where speakers focus extensively on structuring the speech to lead the audience through the progression of ideas. Among the interactive marker types, logical connective/transitions markers have the highest rank in the six speeches followed by the frame markers, evidential and code gloss markers (table 10). Logical connective/transitions markers aid listeners in identifying the organizational structure of texts and the functional or semantic connections between different sections.

| Interactive Markers Types	J.K. Rowling 2008	Steven Spielberg 2016	John Lewis 2018	Angela Merkel 2019	Martin Baron 2020	Ruth J. Simmons 2021
Code gloss	0.30%	0.49%	0.36%	0.41%	0.28%	0.11%
Endophoric	0.10%	0.37%	0.18%	0.14%	0.09%	0.11%
Evidential	0.50%	0.37%	0.36%	0.68%	0.28%	0.22%
Logical connective	1.31%	1.10%	1.45%	1.50%	1.20%	1.51%
Frame markers	0.70%	1.09%	0.54%	1.09%	1.01%	0.32%

Table 10 Distribution of frequency of the use of interactive markers **TYPES** in the speeches.

■ 1st rank %   ■ 2nd rank %

Ruth J. Simmons 1.51% has the highest percentage of logical connective /transitions markers types followed by Angela Merkel 1.50%, John Lewis 1.45%, J.K. Rolwling

1.31%, Martin Baron 1.20% and Steven Spielberg 1.10%. As for the frame markers types which include announce goals, sequencing, topic shift and label stage, Steven Spielberg 1.09% and Angela Merkel 1.09% share the highest percentage followed by Martin Baron 1.01%, J.K. Rolwling 0.70%, John Lewis 0.54% and Ruth J. Simmons 0.32%.
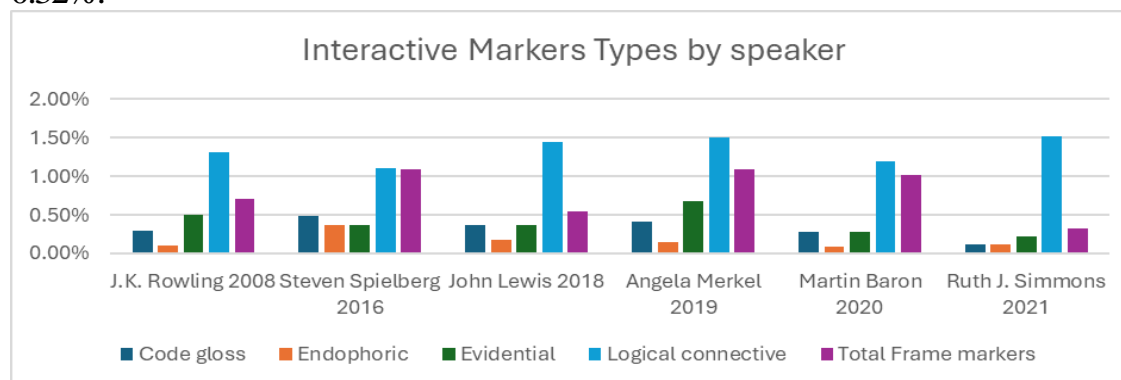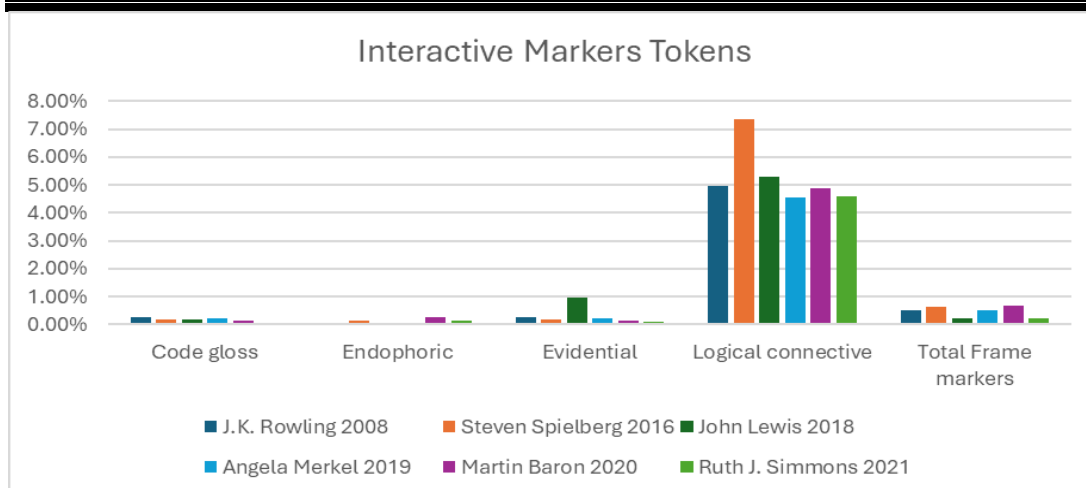

Interactive Markers Tokens

The analysis of the interactive markers by tokens yields almost the same results but with different speakers. Among the interactive markers tokens, logical connective/transitions and frame markers rank first and second respectively, rating at the top of the interactive resources (table 11). This implies that the speakers are skillful in structuring the text, ensuring its clarity and coherence for the audience. Such use of markers facilitates the audience's ability to establish connections between arguments and enhances their comprehension of the conveyed message. Furthermore, the utilization of code glosses and evidentials enhances the cohesion and continuity of the speeches.

| Interactive Markers Tokens	J.K. Rowling 2008	Steven Spielberg 2016	John Lewis 2018	Angela Merkel 2019	Martin Baron 2020	Ruth J. Simmons 2021
Code gloss	0.25%	0.17%	0.18%	0.24%	0.14%	0.04%
Endophoric	0.07%	0.13%	0.06%	0.05%	0.25%	0.15%
Evidential	0.25%	0.17%	0.96%	0.24%	0.14%	0.08%
Logical connective	4.95%	7.37%	5.31%	4.55%	4.87%	4.60%
Frame markers	0.50%	0.64%	0.24%	0.49%	0.69%	0.23%

Table 11 Distribution of frequency of the use of interactive markers **TOKENS** in the speeches.

■ 1st rank %   ■ 2nd rank %

Steven Spielberg 7.37% has the highest percentage of logical connective markers tokens followed by John Lewis 5.31%, J.K. Rolwling 4.95%, Martin Baron 4.87%, Ruth J. Simmons 4.60%, and Angela Merkel 4.55%.

Interactive Markers Tokens

As for the frame markers tokens, Martin Baron 0.69% has the highest percentage followed by Steven Spielberg 0.64%, J.K. Rolwling 0.50%, Angela Merkel 0.49%, John Lewis 0.24%, and Ruth J. Simmons 0.23%.

Interactive Markers Tokens by speaker
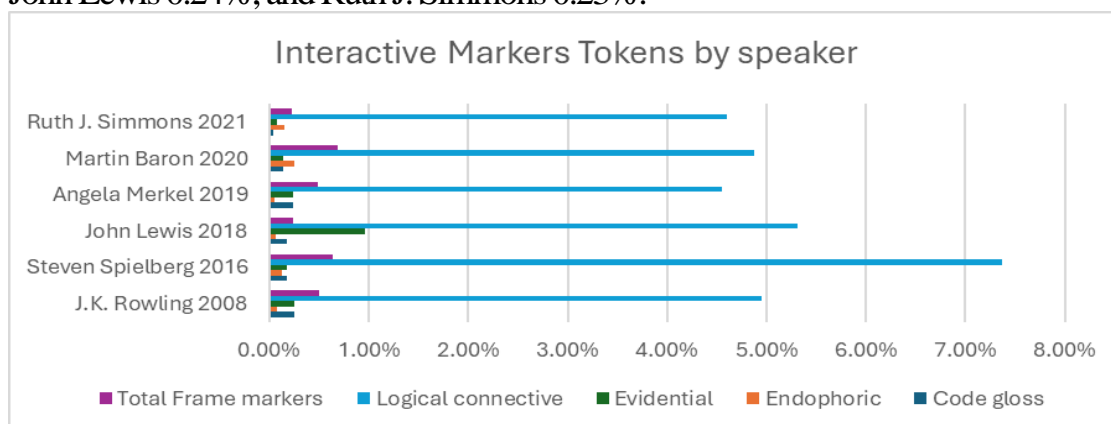
Interactional Metadiscourse Markers Analysis
Interactional Markers Types

A commencement speech, being a form of spoken communication, entails an interaction between the speaker and the listeners. In this regard, the utilization of interactional metadiscourse serves as a powerful tool for speakers to foster a harmonious connection with the audience and successfully convey their intended message. The current study focuses on the analysis of interactional MDMs. Therefore, the following parts will present the quantitative and qualitative analysis of the interactional markers.

Attitude Markers emphasize the speaker's view, influence, and attitude (Hyland, 2005). Attitude markers are also a form of language of evaluation. Among the interactional markers types, attitude markers types have the highest percentage in the speeches except for Steven Spielberg's speech in which they come second. Boosters types follow the attitude markers in rank in five speeches. It is worth mentioning that in John Lewis's speech, the relational/ Engagement markers come second after the attitude markers followed by the boosters (table 12).

Interactional Markers Types	J.K. Rowling 2008	Steven Spielberg 2016	John Lewis 2018	Angela Merkel 2019	Martin Baron 2020	Ruth J. Simmons 2021
Attitude	2.81%	2.56%	2.72%	3.68%	2.95%	2.69%
Booster	2.71%	2.69%	1.63%	2.32%	2.77%	2.16%
Hedges	1.01%	1.71%	1.45%	1.91%	0.92%	0.86%
Person/ self-mention markers	0.80%	1.10%	1.45%	0.82%	0.37%	0.75%
Relational/ Engagement markers	0.90%	1.71%	1.99%	2.05%	0.55%	0.75%

Table 12 Distribution of frequency of the use of interaction markers **TYPES** in the speeches.

■ 1st rank %   ■ 2nd rank %
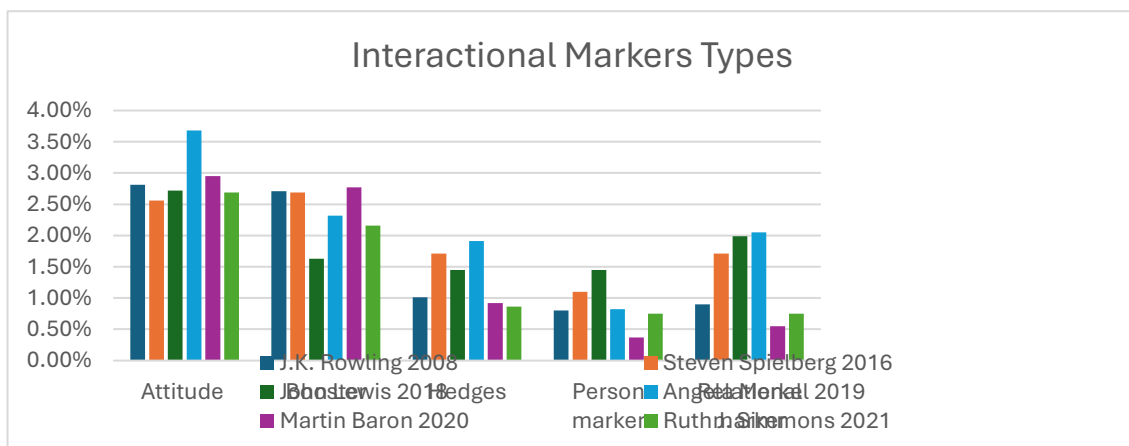
Angela Merkel 3.68% has the highest percentage of attitude markers types followed by Martin Baron 2.95%, J.K. Rolwling 2.81%, John Lewis 2.72%, Ruth J. Simmons 2.69%, and Steven Spielberg 2.56% while Martin Baron 2.77% has the highest percentage of boosters types followed by J.K. Rolwling 2.71%, Steven Spielberg 2.69%, Angela Merkel 2.32%, Ruth J. Simmons 2.16%, and John Lewis 1.63%.
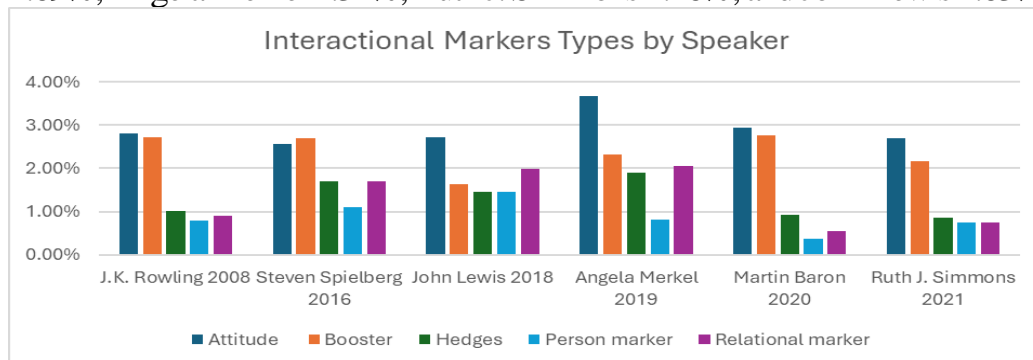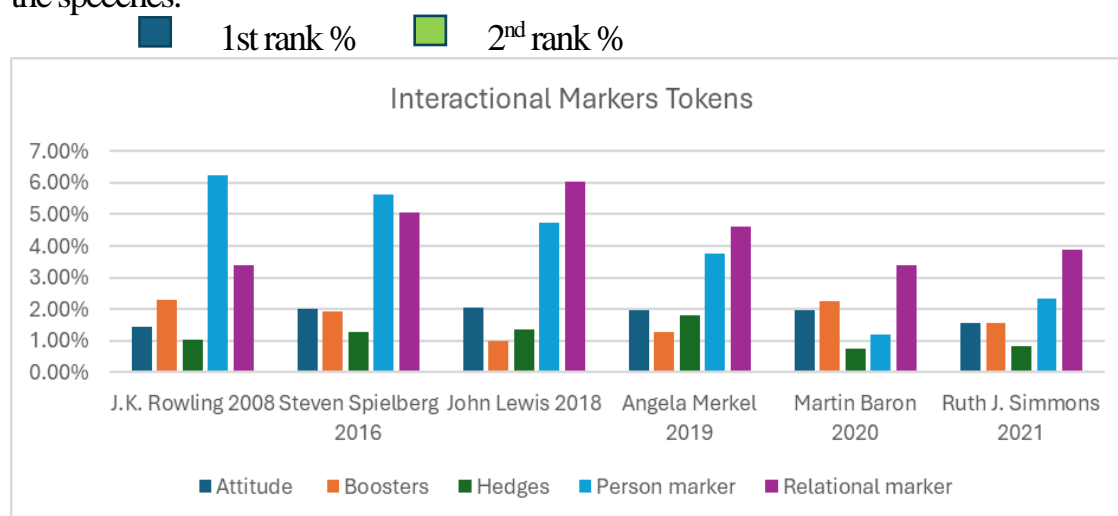
Interactional Markers Tokens

      The analysis of the interactional markers tokens produces different results. Among the interactional markers tokens, relational/engagement markers tokens have the highest percentage in the speeches except for Steven Spielberg and J.K. Rowling's speeches in which they come second. The person marker/self-mention tokens follow the relational/engagement markers in rank in three speeches as they come first in Steven Spielberg's and J.K. Rowling's speeches. It is worth mentioning that in Martin Baron's speech, the boosters come second after the relational/engagement markers followed by the attitude markers (table 13). Since speech is a common interpersonal activity, it is crucial and logical to establish the speaker's identity. Engagement markers, among other metadiscourse markers, can provide a clearer indication of how the speaker shows concern for and engages with the audience. "Engagement is a reader-oriented aspect of interaction which concerns the degree of rapport which holds between communicative participants" (Hyland & Jiang, 2016, p. 29). Moreover, the wide use of person marker/self-mention markers enables the speakers to assert their position and viewpoints with greater impact.

Interactional Markers Tokens	J.K. Rowling 2008	Steven Spielberg 2016	John Lewis 2018	Angela Merkel 2019	Martin Baron 2020	Ruth J. Simmons 2021
Attitude	1.45%	2.00%	2.03%	1.96%	1.98%	1.57%
Booster	2.30%	1.92%	1.01%	1.27%	2.27%	1.57%
Hedges	1.02%	1.28%	1.37%	1.81%	0.76%	0.84%
Person /self-mention markers	6.22%	5.62%	4.72%	3.77%	1.19%	2.34%
Relational/Engagement markers	3.39%	5.07%	6.03%	4.60%	3.39%	3.88%

    Table 13 Distribution of frequency of the use of interaction markers **TOKENS** in the speeches.

John Lewis 6.03% has the highest percentage of relational/engagement marker tokens followed by Steven Spielberg 5.07%, Angela Merkel 4.60%, Ruth J. Simmons 3.88%, then J.K. Rolwling 3.39% and Martin Baron 3.39% with equal percentage while J.K. Rolwling 6.22% has the highest percentage of person marker/self-mention tokens followed by, Steven Spielberg 5.62%, John Lewis 4.72%, Angela Merkel 3.77%, Ruth J. Simmons 2.34% and Martin Baron 1.19%.
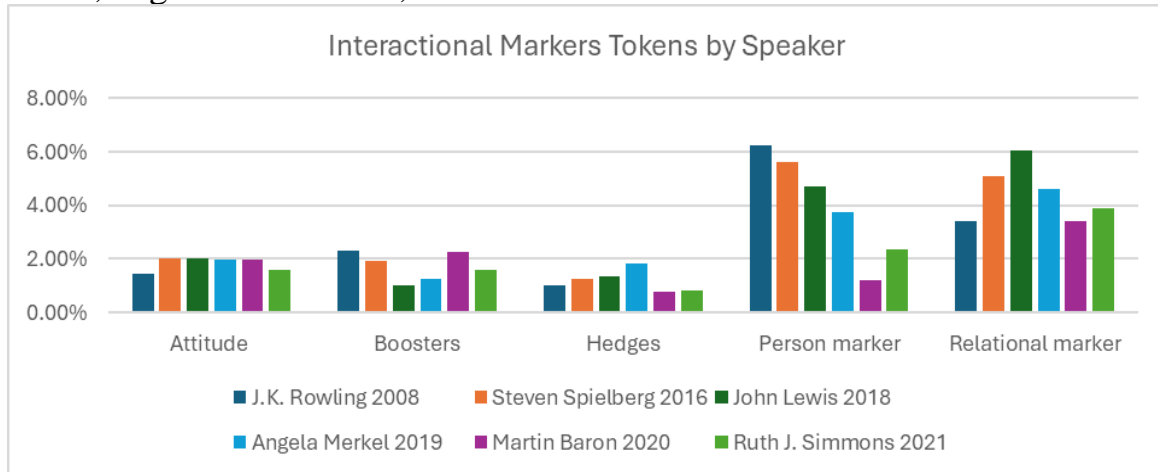
Interpersonal Meaning Achieved Using the Interactional Metadiscourse Resources

As discussed in the interactional MDMs quantitative analysis part, on the type-level of analysis, the attitude markers are the most frequently used markers with Angela Merkel 3.68% having the highest percentage followed by the boosters with Martin Baron 2.77% having the highest percentage of boosters. On the token-level of analysis, relational/engagement markers tokens rank first with John Lewis 6.03% having the highest percentage followed by the person/self-mention markers with J.K. Rolwling 6.22% having the highest percentage. Hedges are in the middle in both levels of analysis. The following section presents and discusses examples from the speeches that identify the speakers' use of the interactional MDMs and relate them to the purposes and persona of the speakers. The speeches are presented in chronological order.

Table 14: J.K. Rowling 2008		
Total	**Types**	**Tokens**
Metadiscourse Markers	**111 (11.16%)**	**577 (20.38%)**
Total Interactive	**29 (2.91%)**	**170 (6.02%)**
Interactional		
Emphatic/Boosters	**27 (2.71%)**	**65 (2.30%)**
Attitude marker	**28 (2.81%)**	**41 (1.45%)**
Hedge	**10 (1.01%)**	**29 (1.02%)**
Person/self-	**8 (0.80%)**	**176 (6.22%)**

mention markers		
Relational/ engagement markers	9 (0.90%)	96 (3.39%)
Total Interactional	82 (8.23%)	407 (14.38%)

J.K. Rowling 2008

J.K. Rowling, the famed author of the Harry Potter series, delivered two core lessons in her speech about the outlying benefits of failure and the value of imagination. As the figures in table 14 show, Rowling uses more interactional markers than interactive ones in her speech. As for the interactional markers, attitude markers types are the most used followed by the boosters. Boosters types are used intensively in the speech making the percent of their token (2.30%) the highest among the six speeches. Rowling's use of self-mention tokens (6.22%) is also the highest among the speeches. These figures indicate Rowling's style of persuasion which focuses on sharing her personal experience and reinforcing her message. Below are examples of the various interactional MDMs.

Attitude Markers

Ex (1) J.K.R: *"it [Imagination] is the power that enables us to **empathize** with humans whose experiences we have never shared"... "We do not **need** magic to **change** the world, we carry all the power we **need** inside ourselves **already**: we have the power to imagine **better."***

The attitude markers convey a positive evaluation of the imagination's role in fostering empathy. They suggest an appreciation for imagination's capacity to bridge gaps in understanding and connecting with others and the ability of individuals to effect change through their own actions and imagination. These markers contribute to Rowling's persuasive tone and inspire the audience by highlighting their inherent capacity to make a difference.

Boosters

Ex (2) J.K.R: *"**the fact that** you are graduating from Harvard suggests that you are not **very well-acquainted** with failure. You might be driven by a fear of failure **quite** as much as a desire for success. **Indeed,** your conception of failure might not be **too** far from the average person's idea of success, **so high** have you **already** flown."*

The booster markers in Rowling's statement reflect an acknowledgment of the audience's achievements and the potential influence of fear of failure on their motivation. The fear of failure is a significant driving force alongside the desire for success. Rowling recognizes the audience's success and suggests that their perception of failure may differ from that of others due to their exceptional accomplishments. Her viewpoint reflects an understanding of the complexities of success, failure, and individual motivations.

Person/Self-mention

Ex (3) J.K.R: *"So why do **I** talk about the benefits of failure? Simply because failure meant a stripping away of the inessential. **I** stopped pretending to **myself** that **I** was anything other than what **I** was, and began to direct all **my** energy into finishing the only work that mattered to **me**."*

These self-mentions collectively illustrate Rowling's personal experiences, reflections, and transformative journey. They highlight her perspective on failure, authenticity, self-discovery, and resilience. These self-mentions contribute to Rowling's authority and credibility in discussing these topics and create a relatable and inspiring tone.

Relational / Engagement markers

Ex (4) J.K.R: *"On this wonderful day when **we** are gathered **together** to celebrate **your** academic success, I have decided to talk to **you** about the benefits of failure. And as **you** stand on the threshold of what is sometimes called 'real life', I want to extol the crucial importance of imagination."*

Rowling actively engages the audience and motivates them to consider unconventional perspectives. She emphasizes the relevance of the upcoming message by relating it to the students' current stage in life. The relational / engagement markers contribute to a sense of anticipation and open-mindedness, setting the stage for a thought-provoking and inspiring speech.

Hedges

Ex (5) J.K.R: *"You **might** never fail on the scale I did, but some failure in life is inevitable. It is impossible to live without failing at **something**, **unless** you live so cautiously that you **might** as well not have lived at all – in which case, you fail by default."*

Hedges introduce a sense of caution and recognition that failure experiences may differ in magnitude. The use of "might" acknowledges the possibility that the audience's failures may not be as significant or profound as Rowling's. The subordinating conjunction "unless" introduces a cautious and conditional element. It suggests that the only way to avoid failure entirely is to live an extremely cautious and risk-averse life. These elements contribute to a nuanced and cautious perspective on failure and living a fulfilling life.

Table 15: Steven Spielberg 2016		
Total Metadiscourse Markers	**Types**	**Tokens**
	108 (13.19%)	572 (24.37%)
Total Interactive	28 (3.42%)	199 (8.48%)
Interactional		
Emphatic/Boosters	22 (2.69%)	45 (1.92%)
Attitude marker	21 (2.56%)	47 (2.00%)
Hedge	14 (1.71%)	30 (1.28%)

Person/self-mention markers	9 (1.10%)	132 (5.62%)
Relational/ engagement markers	14 (1.71%)	119 (5.07%)
Total Interactional	80 (9.77%)	373 (15.89%)

Steven Spielberg 2016

Renowned filmmaker Steven Spielberg reflected on his own career and urged Harvard's graduates to trust their instincts, seek meaningful relationships, and combat animosity by fostering human connections. Table 15 shows that Steven Spielberg has the highest frequency in both the interactive and interactional markers tokens in the six speeches. As for the interactional markers, boosters types (2.69%) are the most used ones followed by the attitude markers types (2.56%). Steven Spielberg talked about several topics and shared his personal experiences that reflected his optimistic view towards life and humanity. He spoke about being adaptive, following one's intuitions, challenging one's abilities, learning, and remembering history and finally the importance of love. The intensive use of boosters and attitude markers helped him emphasize these messages and ascertain his stance. Although he used 9 types of person/self-mention markers, these markers were used 132 times (5.62%) in the speech. Relational/ engagement markers were also employed to influence the audience with a frequency of 119 times (5.07%). Following are examples from his speech.

Attitude Markers

Ex (6) S.S: *"And I've imagined many **possible futures** in my films, but you will determine the **actual future**. And **I hope** that it's filled with **justice** and **peace.** And finally, **I wish** you all a **true,** Hollywood-style happy ending."*

The attitude markers in Spielberg's speech reflect a combination of sentimental, appreciative, empowering, and hopeful stances. He emphasizes the significance of human connection, acknowledges the audience's potential impact on the future, and expresses his desire for a just and peaceful world. Spielberg distinguishes his own job as a filmmaker from the audience's broader responsibility to create a change. He also adds a touch of lightheartedness by referencing Hollywood-style happy endings. His viewpoint reflects a mix of sentimental image, empowerment, and optimism.

Boosters

Ex (7) S.S: *"And to me, and, I **think,** to all of you, the **only** answer to **more** hate is **more** humanity. We gotta repair — we **have to** replace fear with curiosity. "Us" and "them" — we'll **find** the "we" by connecting with each other. And by **believing** that we're members of the same tribe. And by feeling empathy for every soul."*

The booster markers in this extract emphasize the power of humanity, empathy, and connection in countering hatred and promoting understanding. They aim to inspire the audience to embrace compassion, curiosity, and unity as means to counteract division and foster a more inclusive society. These markers contribute to a hopeful and motivational tone and promote a more constructive approach to differences.

Person/Self-mention

Ex (8) S.S: *"Talk to your parents and your grandparents, if you can, and ask them about their stories. And **I** promise you, like **I** have promised **my** kids, you will not be bored. And that's why **I** so often make movies based on real-life events. **I** look to history because the past is filled with the greatest stories that have ever been told."*

These self-mentions create a bond between Spielberg and the audience, emphasizing their shared values and experiences and demonstrate Spielberg's credibility and authenticity, creating a relatable and inspiring tone in the speech. They emphasize his motivation to engage with personal stories and history, highlighting their perspective on the value of intergenerational communication and the power of storytelling.

Relational / Engagement markers

Ex (9) S.S: *"So, **forgive** me, but **let's start** right now. Everyone here, please find someone's eyes to look into. Students, and alumni and **you** too, President Faust, all of **you,** turn to someone **you** don't know or don't know very well. They may be standing behind **you**, or a couple of rows ahead. Just **let your** eyes meet. That's it. That emotion **you're** feeling is **our** shared humanity mixed in with a little social discomfort."*

These relational/engagement markers actively engage the audience, promote interaction, and establish a sense of connection and shared experience among listeners. The brevity and simplicity of the instruction make it easy for the audience to follow and participate in the activity.

Hedges

Ex (10) S.S: *"But I was in a celluloid bubble, because I'd cut my education short, my worldview was limited to what I **could** dream up in my head, not what the world **could** teach me."*

This qualifier adds depth to Spielberg's reflection and emphasizes the importance of a well-rounded education in expanding one's worldview. It highlights Spielberg's recognition of his own limitations and implies the value of seeking knowledge and understanding from the broader world.

Table 16: John Lewis 2018		
Total	**Types**	**Tokens**
Metadiscourse	**67**	**367**
Markers	**(12.14%)**	**(21.91%)**
Total Interactive	**16 (2.89)**	**113 (6.75%)**

Interactional		
Emphatic/Boosters	**9 (1.63%)**	**17 (1.01%)**
Attitude marker	**15 (2.72%)**	**34 (2.03%)**
Hedge	**8 (1.45%)**	**23 (1.37%)**
Person/self-mention markers	**8 (1.45%)**	**79 (4.72%)**
Relational/ engagement markers	**11 (1.99%)**	**101 (6.03%)**
Total Interactional	**51 (9.24%)**	**254 (15.16%)**

John Lewis 2018

John Lewis compelled the graduates of Harvard University to stand up for what is right, to vote during elections and to rescue America. Table 16 illustrates that John Lewis used the interactional MDMs intensively to deliver these messages. He employed 15 types of attitude markers (2.72%) with a frequency of 2.03% tokens which is the highest percent among the 6 speeches. He also has the highest percentage of person/self-mention markers types and the highest percentage of relational/engagement markers tokens. It is clear that John Lewis managed to introduce the serious topics he intended to talk about through employing the markers that reveal his attitude towards these topics and reinforcing the messages through means of self-mention and engaging with the audience. This is clear in the examples below.

Attitude Markers

Ex (11) J.L.: *"It is the **power of the way of peace**, the **power of love**, it is the **power of the philosophy** and **discipline of nonviolence**. We **need** to create a society where we can be reconciled and lay down the **burden** of **hath for hate** is too **heavy** of **a burden to bear."***

The statement emphasizes the strength and significance of peaceful and loving approaches. It suggests a positive evaluation of the power and effectiveness of nonviolent methods. The attitude markers aim to contribute to Lewis' motivational and uplifting tone, urging individuals to embrace peaceful approaches, foster reconciliation, and promote compassion and forgiveness as transformative forces.

Boosters

Ex (12) J.L.: *"Today I say to each and every one of you who graduated from this University, you **must** lead. You're **never too** young to lead, you're **never too** old to lead! We need your leadership now **more than ever before.** We need it! We **must** save our country! We **must** save it! We **must** save our democracy."*

The booster markers in this extract emphasize the imperative for the graduates to assume leadership roles, challenge age-related limitations, recognize the urgency of

their contribution, and emphasize the need to protect the country and democracy. They aim to inspire and motivate graduates to step forward, take responsibility, and make a positive impact. These markers contribute to Lewis' passionate and determined tone, urging graduates to recognize their own potential for leadership, act and be agents of change.

Person/Self-mention

Ex (13) J.L.: *"Some of you have heard **me** say from time to time that **I** grew up in rural Alabama on a farm, picking cotton, gathering peanuts, gathering corn. Sometimes **I** would be out there working and **my** mother would say, "boy, you're falling behind! You need to catch up." And **I** would say "this is hard work." And she said "hard work never killed anybody." And **I** said "well it's about to kill **me**!" **We** need to work hard! There is work to be done."*

These self-mentions create a relatable tone, as Lewis shares a personal anecdote and beliefs about his upbringing and work ethic that resonate with the audience. These self-mentions reflect Lewis' ethos and highlight his ability to inject humor into their storytelling. The self-mentions also emphasize his belief in the importance of hard work.

Relational / Engagement markers

Ex (14) J.L.: *"when **you see** something that is not right, not fair, not just, **stand up**! **Say** something! **Speak** up and **speak out!**"*

Lewis starts with an imperative statement that calls for action. These short and direct relational/engagement markers contribute to creating Lewis' sense of empowerment and activism. Lewis' direct and assertive language encourages the audience to be proactive in addressing injustices and advocating for what is right. By urging them to use their voices, he fosters a sense of responsibility and encourages individuals to play an active role in promoting social justice.

Hedges

Ex (15) J.L.: *"We will create an America that is better, a **little more** humane and no one, but no one can deny us of that."*

This qualifier introduces a cautious and incremental qualifier. It conveys a sense of realism and pragmatism. It recognizes the limitations and difficulties in achieving large-scale societal changes but remains optimistic about the possibility of making small, incremental improvements. It encourages the audience to persevere in working towards a better and more humane America, while acknowledging that meaningful change may take time and effort.

Table 17: Angela Merkel 2019		
Total	**Types**	**Tokens**
Metadiscourse Markers	**107 (14.60%)**	**388 (19.00%)**
Interactional		

Emphatic/Boosters	17 (2.32%)	26 (1.27%)
Attitude marker	27 (3.68%)	40 (1.96%)
Hedge	14 (1.91%)	37 (1.81%)
Person/self-mention markers	6 (0.82%)	77 (3.77%)
Relational/ engagement markers	15 (2.05%)	94 (4.60%)
Total Interactional	79 (10.78%)	274 (13.41%)

Angela Merkel 2019

Angela Merkel warned graduating students about the risks associated with constructing barriers and addressing global issues such as climate change, trade, terrorism, and forced migration with a mindset of isolationism and self-reliance. As shown in table 17, Angela Merkel has the highest percentages in almost all MDMs. First, Merkel ranks highest in the use of both interactive and interactional markers types in the six speeches. Moreover, she has the highest percentage of attitude, hedges, and relational/ engagement markers types. The combination of attitude and engagement mixed with hedges markers makes Merkel's speech motivational and balanced.

Attitude Markers

Ex (16) A.M.: *"Where there was once **only** a dark wall, a door **suddenly** opened. For me, too, the moment had come to walk through that door. I no longer had to turn away from freedom at the last minute. I was able to cross this **border** and venture out into the **great wide** open."*

These attitude markers contribute to Merkel's overall message of personal transformation, freedom, and embracing new horizons. They convey a positive and optimistic attitude toward change and emphasize her personal engagement and commitment to progress.

Boosters

Ex (17) A.M.: *"Don't forget that freedom is **never** something that can be taken for granted. Surprise yourself with what is possible. Remember that openness **always** involves risks. Letting go of the old is part of the new beginning. Above all, **nothing** can be taken for granted. **Everything** is possible."*

The booster markers in this extract emphasize the need to appreciate freedom, embrace the unknown, be open-minded, embrace change, and recognize the limitless potential in life. They aim to inspire the audience to cherish their freedoms, challenge themselves, and approach life with optimism and a willingness to explore new possibilities. These markers contribute to Merkel's motivational and forward-thinking

tone, encouraging graduates to approach life with a mindset of possibility and overcome challenges.

Person/Self-mention

Ex (18) A.M.: *"**I** believe at time and time again, **we** need to be prepared to keep bringing things to an end in order to feel the magic of new beginnings and to make the most of opportunities. That was what **I** learned as a student, and it is what **I** now in politics. Who knows what life will bring after **my** time as a politician? That, too, is completely open."*

These self-mentions highlight Merkel's personal experiences and growth, indicating her ability to draw on her own journey to offer insights and perspectives. These self-mentions also emphasize Merkel's openness to change and her resilience and forward-looking mindset. They create a relatable and aspirational tone, encouraging the audience to embrace new beginnings and adapt to new circumstances.

Relational / Engagement markers

Ex (19) A.M.: *"**Harvard class of 2019**, **your generation** will be faced with the challenges of the 21st century in the coming decades. **You** are among those who will **lead us** into the future."*

The relational/engagement markers in Merkel's speech establish a direct connection with the audience, recognize their collective identity, and emphasize their role in addressing future challenges. By using phrases such as "Harvard class of 2019," "your generation," and "you are among those," Merkel actively engages the audience and highlights their importance in shaping the future. These relational/engagement markers contribute to Merkel's sense of shared responsibility and motivate the audience to embrace their leadership role.

Hedges

Ex (20) A.M.: *"Changes for the better are **possible** if we tackle them together. **If** we were to go it alone, we **could** not achieve much."*

These hedges help to convey Merkel's sense of realism and pragmatism, recognizing the complexities of the task at hand while offering a pathway for progress through collaboration. They also engage the audience and convey Merkel's belief that collective effort and cooperation are necessary for significant achievements.

Table 18: Martin Baron 2020		
Total Metadiscourse Markers	**Types**	**Tokens**
	113 (10.43%)	435 (15.69%)
Interactional		
Emphatic/Boosters	30 (2.77%)	63 (2.27%)
Attitude marker	32 (2.95%)	55 (1.98%)
Hedge	10 (0.92%)	21 (0.76%)

Person/self-mention markers	4 (0.37%)	33 (1.19%)
Relational/ engagement markers	6 (0.55%)	94 (3.39%)
Total Interactional	82 (7.56%)	266 (9.59%)

Martin Baron 2020

During his speech to the graduating class of Harvard University, Martin Baron, *The Washington Post's* top editor, emphasized the critical importance of facts and truth in today's world. He expressed concern over the escalating dangers faced by the press and free expression, as well as science, medicine, and the very concept of factual information, particularly considering the ongoing corona virus pandemic. Baron highlighted the grave consequences of misinformation, which not only undermines public trust but also jeopardizes people's lives. Martin Baron's speech contained urgent messages at a critical time when the world is faced not only with the danger of COVID 19 pandemic but also with growing attacks on free press. The analysis of the interactional MDMs, as indicated in table 18, shows that Baron used boosters intensively to frame these serious issues and attract the graduates' attention to them to perform an action. Baron's use of boosters is the highest in all the 6 speeches.

Attitude Markers

Ex (21) M.B.: "*Facts and **truth** are matters of **life and death**"… "what becomes of democracy if we cannot **agree** on a common set of **facts**."*

The attitude markers convey Baron's strong belief in the life-or-death consequences associated with inaccurate information and a lack of agreement on factual information in a democratic society. These markers contribute to Baron's persuasive tone, as they aim to raise awareness about the dangers of disregarding factual information, encourage critical thinking, and emphasize the need for a commitment to truth-seeking in a democratic society.

Boosters

Ex (22) M.B.: *"At this university, you answer that question with your motto — "Veritas." You **seek the truth** — with scholarship, teaching and dialogue – **knowing** that it **really** matters. My profession shares with you that mission — the **always arduous,** often **tortuous** and yet **essential** pursuit of **truth**. It is the demand that democracy makes upon us. It is the work we **must** do. We **will** keep at it. You **should,** too. None of us **should ever** stop."*

Baron's booster markers in his statement show a common determination to seek the truth,

acknowledgement of the challenges that come with it and its significance in democracy. Baron emphasizes the role of his listeners in the quest for truth, but he

also insists on their need to remain steadfast. His perspective resonates with a sense of mission and resolve to find truth, the importance of intellectual involvement and dialogue, and the recognition that this is a nonstop, necessary process requiring commitment. This booster marker further demonstrates Baron's civic obligation and the relationship between seeking truth and democratic principles.

Person/Self-mention

Ex (23) M.B.: *"**I** want to tell you why free expression by all of **us** and an independent press, imperfect though **we** may be, is essential to getting at the truth. And why **we** must hold government to account. And hold other powerful interests to account as well. When **I** began thinking about these remarks, **I** expected, of course, to be on Harvard's campus. And **I** thought: Not a bad place to talk about a free press. Not a bad place to talk about **our** often-testy relationship with official power."*

The self-mentions in Baron's extract reflect his personal involvement, thoughts, and perspective as the speaker. By using "I" and indirectly referring to himself, Baron establishes a sense of personal connection and positions himself as someone actively engaged in free expression and independent press. The use of "we" and "our" suggests that he includes himself as part of the group discussing the relationship between the press and official power.

Relational / Engagement markers

Ex (24) M.B.: *"But history shows that **we** as a nation become better for that reckoning. It is in the spirit of the preamble to **our** Constitution: "to form a more perfect union." Toward that end, it is an act of patriotism."*

The relational/engagement markers in Baron's speech aim to inspire and motivate the audience towards self-reflection, collective progress, and patriotism. Baron actively engages the audience and prompts them to reflect on the importance of reckoning with the past, striving for improvement, and contributing to the betterment of their nation. These relational/engagement markers foster Baron's sense of responsibility and encourage the audience to actively participate in creating a more perfect society.

Hedges

Ex (25) M.B.: *"Amid today's crisis, it **seems like** another era. And **I guess** it is. But I want to tell you about it — because I think it remains instructive about what a strong, independent press must do."*

The use of "seems like" and "I guess" introduces a cautious and qualifying element. These phrases suggest that the Baron acknowledges the potential for the current crisis to create a significant shift in the world of press. These elements highlight that the Baron's statements are based on his own opinion and interpretation.

Ruth J. Simmons 2021

Table 19: Ruth J. Simmons 2021		
Total Metadiscourse Markers	**Types**	**Tokens**
	88 (9.48%)	399 (15.31%)
Interactional		
Emphatic/Boosters	20 (2.16%)	41 (1.57%)
Attitude marker	25 (2.69%)	41 (1.57%)
Hedge	8 (0.86%)	22 (0.84%)
Person/self-mention markers	7 (0.75%)	61 (2.34%)
Relational/ engagement markers	7 (0.75%)	101 (3.88%)
Total Interactional	67 (7.21%)	266 (10.2%)

Ruth J. Simmons exhorted Harvard's class to engage in fighting inequality, fostering diversity and inclusion and countering discrimination as they go out into the world. Although this part focuses on the interactional MDMs, it is worth noting that Ruth J. Simmons had the highest percentage of the interactive logical connective markers types in the six speeches. This shows that Simmons' speech was not only engaging but also coherent and organized. As table 19 indicates, attitude markers are the most frequently used by Simmons followed by the boosters. There is also an equal use of self-mention and engagement markers types7 (0.75%). However, there is a greater frequency in the use of these markers: relational/engagement markers types were used 101 times (3.88%) and self-mention markers types were used 61 times (2.34%). The analysis shows that Simmons used the interactional MDMs very skillfully to serve her purposes and deliver her messages.

Attitude Markers

Ex (26) R.J.S: *"Further, in such a moment, universities and all of you **must** play a leadership role in reversing the designation of the teaching profession as **less intellectually worthy**, **less glamorous**, and **less important** than the **high-flying careers** of financiers and technologists."*

The attitude markers in Simmons' speech demonstrate her assertive and critical stance towards the perception of the teaching profession compared to other careers. She calls for a leadership role from universities and the students, advocating for a reversal of this designation.

Boosters

Ex (27) R.J.S: *"While the legacy of enslavement, racism, discrimination and exclusion still influences **so much** of contemporary attitudes, we **must never** conclude that it is too late to overcome such a legacy. For it is **never too** late to do justice."*

The booster markers in this extract emphasize the continued impact of historical injustices, the belief in the potential for change, and the importance of pursuing justice. They aim to promote a sense of responsibility and agency in addressing societal inequalities and overcoming the negative legacies of the past. These markers contribute to Simmons' motivational and empowering tone, urging graduates to act and work towards a more just and inclusive society.

Person/Self-mention

Ex (28) R.J.S: *"Today, **I call on all of you** to declare that you will not give sanction to discriminatory actions that hold some groups back to the advantage of others. **I call on you** to be a force for inclusion by not choosing enclaves of wealth, privilege and tribalism such that you abandon the lessons you learned from your Harvard experience of diversity. **I call on you** to do your part to ensure that generations to come will no longer be standing on the outside fighting for fairness, respect and inclusion."*

The self-mentions in Simmons' speech highlight her active role as a speaker, calling for the audience to take specific actions. By using "I" and directly addressing the audience, Simmons establishes a sense of personal connection and emphasizes her commitment to the cause she is advocating for.

Relational / Engagement markers

Ex (29) R.J.S: *"**Those of you** graduating today can well attest to that. When **you** first arrived at Harvard as undergraduate or post-graduate students, **you** most likely could not have imagined the many ways that **your** ability would be tested, **your** insights sharpened and expanded, and **your** prospects in life improved by studying at the University. I certainly didn't expect such results when I arrived at Harvard and yet I know now that it is likely primarily because I studied at Harvard that I have had the deeply rich and satisfying career that I've enjoyed for so many years."*

Simmons actively engages the audience and prompts them to reflect on their own experiences and the potential long-term benefits of their education. These relational / engagement markers foster a sense of pride, gratitude, and appreciation for the educational opportunities provided by Harvard University.

Hedges

Ex (30) R.J.S: *"I thought about the challenge of what **I might** impart in such a pivotal national moment when social gains **seem** more like losses."*

The hedges in Simmons' speech serve to qualify her statements and indicate a certain degree of caution or modesty in her assertions. By using "might," Simmons introduces a level of uncertainty, subjectivity and acknowledges that the perception of

social gains as losses may vary among individuals. It suggests that Simmons is presenting her perspective while recognizing the possibility of differing interpretations.

Discussion

The act of delivering a speech is a common form of interpersonal communication, and the effectiveness of a speech largely depends on how the speakers present themselves during the interaction. The crucial aspect lies in capturing the audience's interest and enthusiasm. In the selected speeches, the speakers successfully achieved interpersonal meaning by the use of the interactional metadiscourse resources as evident in the analysis. As discussed in the interactional MDMs quantitative analysis part, on the type-level, the attitude markers types are the most frequently used markers followed by the boosters and on the token-level, the relational/engagement markers rank first followed by the person markers/self-mention. Hedges are in the middle in both levels of analysis.

Hyland (2005) suggests that attitude markers are linguistic devices used to express the speaker's evaluation, emotion, or stance towards the content they present. In the current study, attitude markers types have the highest percentage in the speeches. Angela Merkel has the highest percentage followed by Martin Baron, J.K. Rolwling, John Lewis, Ruth J. Simmons, and Steven Spielberg. These attitude markers have served two primary functions: revealing the speaker's personality and persuading the audience. Attitude markers have provided insights into the speakers' personality, beliefs, and values. Speakers are given the freedom to voice their subjective views on a topic and take personal positions. The topics addressed by speakers were relevant to the graduates and to the time of delivery. By employing certain adjectives, adverbs or evaluative expressions, the speakers expressed their emotions, preferences, opinions, or knowledge towards these issues. Such markers also assisted the audience in relating to them and appreciating what they talked about. The language that has both positive and negative connotations was used by the speakers to draw feelings from the audience, create emphasis or appeal to the audience's values and interests. In addition, attitude markers helped the speakers establish rapport with the audience, as they created a sense of authenticity and personal engagement. The current study sustains that attitude markers are used by the speakers as persuasive devices to achieve these goals. Hence, the results of the study support Sukma's (2017) analysis of Barack Obama's 2012 campaign speeches that revealed a notable presence of attitude markers, suggesting that Obama aimed to create emotional bonds with his audience to effectively persuade them.

Boosters markers highlighted the speakers' certainty. They reflected their confidence in and commitment to what they intended to say. Boosters also strengthened the speakers' power of persuasion to receive the audience's attention and agreement. Hyland (2005) explains that "boosters suggest that the writer/speaker

recognizes potentially diverse positions but has chosen to narrow this diversity rather than enlarge it, confronting alternatives with a single, confident voice" (p. 52). As the analysis reveals, Martin Baron has the highest percentage of boosters types followed by J.K. Rolwling, Steven Spielberg, Angela Merkel, Ruth J. Simmons, and John Lewis. Boosters enabled the speakers to effectively showcase their authority by emphasizing their assertions and arriving at comparable conclusions as their audience. Through the examples extracted from the speeches, boosters depicted determination, assurance, and conviction, thereby enhancing the credibility of the speeches, and persuading the listeners. Additionally, boosters demonstrated a profound commitment to establishing a confident image for the speakers through robust self-promotion, fostering a sense of unity with the audience during the delivery of arguments, and ultimately achieving a compelling appeal. These results are in line with Esmer's (2017) study that Boosters are frequently used in the campaign speeches of Turkish politicians to emphasize the political leaders' clear expression of personal emotions, concern, and commitment to the well-being of the nation. The current study also supports Ismail's (2012) research which studied three speeches of Barack Obama and found that metadiscourse markers play a crucial role in persuading and influencing people. Additionally, they serve as a means of communication and engaging with the public. The findings of Ismail's study revealed that Obama utilized a greater number of boosters in his speeches compared to hedges, highlighting the impactful nature of his oratory skills. Similarly, the speakers in the currents study utilized boosters more which emphasized their persuasive skills.

According to Hyland (2001), engagement markers play a crucial role in fostering reader solidarity and encouraging reader agreement. Reader solidarity can be established through reader pronouns and personal asides, while reader agreement can be achieved through directives, references to common knowledge, and posing questions. These markers and tools are used intensively in the selected speeches. Steven Spielberg, for example, used them 119 times in his speech and John Lewis and Ruth J. Simmons used them 101 times. The other speakers used them more than 90 times as the quantitative analysis shows. The reader pronouns are clearly shown in the text as discourse participants by using personal pronouns. Second person pronoun 'you' and 'your' are explicit ways in acknowledging audience's presence. As a more binding engagement, inclusive pronoun 'we, our, us, ourselves' which meaning includes 'you' and 'I' are used to show concern on the same issues. The findings of the current study agree with other studies that examined engagement markers in interaction that "the most direct form of reader engagement is through addressing the reader by using reader pronouns *you*, *your*, as well as inclusive *we*, *us* and *our*, which also function as solidarity markers" (Ayyad, et al., 2022). The study also confirms the findings of Kuwoyo and Siregar's (2019) study that engagement markers and

transitions were the most dominant MDMs in oral business presentations delivered by Steve Jobs.

Self-mention markers are pronouns in the first person that can take the form of subjective, objective, or possessive adjectives within statements. They indicate the presence of speakers in texts. Self-mentions, according to Hyland (2001), serve specific discourse purposes. They allow speakers to address listeners directly, aligning with their views and expressing conviction. Self-mention can function as an exemplification device, illustrating the speakers' points and reinforcing their expertise. As the quantitative analysis indicates, the speakers in the current study were involved with their audience through self-mention markers and sharing personal stories and experiences. J.K. Rowling used self-mention markers 176 times while Steven Spielberg used them 132 times. The other speakers' frequency of the use varied from 79 times (John Lewis) to 33 times (Martin Baron). Self-mention as an interactional marker enhanced the speakers' stance and persuasion by establishing credibility, creating relatability, demonstrating commitment, and providing examples or evidence. By incorporating self-mention strategically, speakers strengthened their arguments and connected with the audience on a personal level, increasing the likelihood of persuasive impact. The results of this study support Sari (2014) who studied speeches of Michelle Obama and Yipei and Liu (2013) who investigated the interpersonal and textual meaning of Steve Jobs' Stanford speech and found that self-mentions are the most dominant of interpersonal metadiscourse markers.

Hedges are less frequently employed compared to other interactional resources in speeches. Speakers aim to reassure and persuade; hence they are not reluctant to express their views and affirm the audience. Nevertheless, boosters without hedges can appear too strong, while hedges alone may come across as too soft. Thus, it is essential to maintain a balance between the usage of boosters and hedges. According to Mai (2016), displaying uncertainty in one's claim indicates that the speaker is cultivating a modest and careful manner to enhance the credibility of the discourse. Auxiliary verbs like 'may' and 'would' are utilized by speakers to convey possibility or uncertainty politely, thereby making statements less direct. Unlike boosters, used when reasoning with more certainty, hedges such as 'some,' 'probably,' 'about,' 'nearly,' and 'mostly' are employed to suggest rather than assert with certainty. The finding that hedges were not as frequently used in comparison to other markers contradicts the findings of Dafouz-Milne (2008), Hyland (2004), Hyland and Tse (2004), and Moghadam (2017). A potential reason for this variation could be that these studies analyzed written texts, while the texts in the current study are transcripts of speeches, i.e. spoken language. The primary goal of the chosen speeches was to communicate verbal messages and persuade the listeners. As a result, the speakers would adopt a more straightforward approach in their delivery, leading to a reduction in the use of hedges. However, the study agrees with Sabah, et al. (2022) who studied hedges and boosters in the speeches of Benazir Bhutto revealing a higher

frequency of boosters in comparison to hedges which represents Bhutto as assertive and confident and reveals cautiousness in her speaking style. The proper use of hedging and boosters is essential for the effectiveness of a persuasive argument.

Conclusion

Metadiscourse markers are an important mechanism in structuring the text. Hyland's metadiscourse theory (2005) has been used to analyze the interpersonal meaning of the speeches. By discussing the interactive and interactional metadiscourse resources respectively, the study finds that interactional meaning embodies the use of language that expresses the speakers' opinions, influence the audience's behavior, interact with, and maintain rapport with them; while interactive meaning relates to the structure of text and maintains the coherence and continuity of the text.

Although interactive MDMs result in textual unity, interactional MDMs form the speaker-reader connection. Because of the monologic nature of the commencement speeches, speakers utilized all types of interactional MDMs, indicating that these markers are effective tools in oral communication. The results reveal that the six speakers have made use of all subcategories of interactional MDMs including hedges, boosters, attitude, engagement, and self-mention markers. The combination of the analysis on the types and token levels indicates that attitude and engagement markers are found to be the predominant markers followed by boosters, self-mention, and hedges markers.

Regarding the similarities among the six speeches, the study indicates that both interactive and interactional MDMs can be found in every speech with some differences in their usage. The inclusion of MDMs in commencement speeches underscores their significance in effectively persuading the audience. There are also similarities in the topics the speakers chose to share with the graduates. For example, John Lewis, Angela Merkel, and Martin Baron highlighted the importance of truth and standing up for what is right while Ruth J. Simmons, J.K. Rowling and Steven Spielberg stressed the power of love, empathy, and inclusion. Concerning the differences, the study finds that there is a slight internal variation in the use of metadiscourse markers. One reason behind this variation could be the difference in the professions of the speakers that affects their speaking style. Interestingly, the variation is not due to factors such as the gender of the speakers as three of the speakers are females and three are males, or the means of communication as the speeches of Martin Baron and Ruth J. Simmons were conducted virtually due to COVID 19 pandemic. Such key factors did not affect the choice of topics, nor did they affect the utilization of the types of MDMs.

The current study argues that Hyland's model of interactional MDMs plays a crucial role in commencement speeches by fulfilling various functions. They are effective in captivating the audience's interest with compelling phrases, ensuring clear

and transparent communication, boosting persuasiveness with language that builds credibility, directing the audience through the speech's content, initiating calls to action, and establishing the speaker's unique voice. Furthermore, these markers impact emotional reactions, set expectations, emphasize important details, and assist in navigating the speech. Ultimately, they are vital in shaping how the audience perceives and engages with the speakers, thereby enhancing the overall effectiveness of the speech.

The study has few limitations and recommendations. Although the study has provided statistical analysis and results about the interactive and interactional MDMs, the study mainly focused on the analysis of interactional MDMs. The study could not provide qualitative analysis of the interactive types of medadiscourse markers in detail due to the restricted length of the paper. Qualitative analysis examples of the interactive MDMs would provide an insightful view on how the speakers also managed the organization of their speeches. Another reason for focusing on the interactional MDMs is that the selected data is a spoken discourse. The researcher believes that interpersonal communication and persuasion would be exposed in the commencement speeches through the interactional MDMs that show the speaker's attitude, emphasis, engagement with audience and persona. A hypothesis that has been proved by the current study.

Analyzing the utilization of metadiscourse markers in oral communication poses a crucial challenge for EFL students, particularly those at advanced proficiency levels. The outcomes of this study indicate that in order to enhance their speaking skills, EFL learners should not only acquire proficiency in using metadiscourse markers, but also understand their implications and purposes. The conclusions drawn from this study advocate for students to incorporate a greater number of metadiscourse markers in their verbal presentations. In addition, including attitude markers in classroom instruction can enhance the effectiveness of teaching and learning by strengthening the interpersonal relationship between teachers and students. Teachers may find it helpful to integrate attitude markers into their lessons to make their instruction more persuasive. Moreover, the utilization of the metadiscourse techniques favored by renowned speakers in the current study offers significant implications for speakers aiming to connect with a global or elite audience. To gain a comprehensive understanding of the application of metadiscourse in positive rhetoric, it is vital to thoroughly study a diverse range of speeches delivered by influential speakers in different cultural contexts. The current study focused on how the speakers utilized MDMs in delivering their message; future research may further investigate the topic by focusing on the connection between the speaker's personal traits and the use of interpersonal metadiscourse markers.

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