



A Discourse Analysis of Speech Structure from TED Talks Corpus

Jittima Kraisriwattana* Kornwipa Poonpon^{1**}

(Received: April 24, 2020; Revised: May 14, 2020; Accepted: May 27, 2020)

ABSTRACT

With an intention to reveal how successful public speakers construct their speeches, this study aimed to investigate structure of speeches delivered in TED Talks, one of the influential public speaking platforms these days. The study compiled a corpus of twenty-five most viewed TED speeches in 2019, and all of them were transcribed. Biber et al.'s discourse analytical approach (2007) was adopted for analytical procedures, and Chang and Huang's conceptual framework (2015) was adapted for rhetorical moves and steps analysis. The study found nine rhetorical moves with the respective steps constructing the TED speeches. Further analysis into different sections of the speeches revealed that the dominant moves were Topic Introduction moves for the introduction section, Topic Development moves for the body section, and Acknowledgement moves for the conclusion section. Focusing on the body section, this study found three possible Topic Development move types, namely Topic Development in Topical Order, Topic Development in Narrative Order and Topic Development in Problem-Solution Order respectively. The knowledge on structure of TED speeches is contributing to public speaking spheres and provides both research and pedagogical implications.

Keywords: Public speaking, TED talks, Discourse analysis

¹Corresponding author: korpul@kku.ac.th

*Student, Master of Art Program in English, Faculty of Humanities and Social Sciences, Khon Kaen University

**Assistant Professor, Faculty of Humanities and Social Sciences, Khon Kaen University

Introduction

Public speaking is a common medium of communication emerging in several circumstances of people's lives these days. The instances in which public speaking takes place are, for example, a classroom presentation, an oral report at work or a speech for special occasions such as a wedding ceremony or a commencement. Obviously, public speaking revolves around people's daily lives, so the ability to deliver it will enable speakers to disseminate knowledge and messages to the audience effectively. Effective speaking, thus, inevitably plays an important role in ensuring people's achievements in a particular event. According to Mehrabian, effective public speaking consists of three elements, namely body language, voices and words, each of which contributes to effective public speaking at 55%, 38% and 7%, respectively [1]. Apparently, body language and voices have a considerable influence on public speaking effectiveness, while words only exert a relatively marginal effect. Despite that, words, also referred to as speeches in this context, are still the element which could not be disregarded as they are a repository of speakers' ideas and information [2]. Thus, a well-developed speech comes into play in the success of the speaking.

To do so, several public speaking handbooks provide guidelines on development of a public speech [1–7]. These scholars have given suggestions on organization of speech structure, including an introduction, a body, a conclusion, and the possible elements or strategies to be employed in developing an effective public speech. However, a body of knowledge besides these theoretical public speaking concepts is still very restricted, especially structural examples from authentic public speeches. Hence, knowledge on how the speeches are constructed from practical speaking instances could be beneficial for developing an effective public speech.

Among the available pervasive public speaking forums these days, one of pervasive public speaking forums known as TED Talks can be considered a great model for successful public speaking. TED Talks is in fact a form of a conference in which myriad speakers of diverse professions and areas of expertise are to “spread ideas” within an 18-minute talk. Additionally, these speeches are not only limited to their live audience but also widespread to their online viewers through the official website - www.TED.com, and other online channels as in YouTube, Facebook and Twitter. Given that TED Talks are speeches delivered to equip the audience with ideas and knowledge communicated by various experts and are at the audience's disposal at any time and place across the world, they become a predominant public speaking genre which has sparked growing interests from millions of listeners. Hence, considering these assertions of TED Talks, this study sought to reveal how the speeches of these successful speakers were constructed. In doing so, the following section will discuss related literature.

1. Speech Structure from Theoretical Aspect

Grounded from different public speaking handbooks [2–6], this section provides conceptual knowledge on the structure of public speeches. It is proposed that a speech can be divided into three main structural sections: an introduction, a body and a conclusion.

1.1 Introduction

An introduction is a beginning part of a speech. In this part, a speaker attempts to capture the audience's attention, talks about a topic of the speech and establishes his or her credibility as an expert of a topic

presented. Attention grabbers, as in telling a story, asking a question, presenting an illustration or quotation, using a visual aid, presenting a demonstration or greeting, can be used at this stage to call for the listeners' interest in the speech [2,4-5]. The key role of the introduction can be claimed as to draw the audience's attention to the speech.

1.2 Body

A body is widely known as the longest part of a speech. In this section, the speaker provides a main point to support the central idea of the speaking [2,6]. A main point can be broken down into a sub-point as well as a smaller level of a sub-sub point depending on how the speech is composed [6]. As the body can contain a number of main points, there are many possible ways to organize these details suggested among the public speaking scholars [2-6]. These orders are, for example, topical order, chronological order, spatial order, causal order, problem-solution order and narrative order. In brief, topical order arranges ideas in a logical sequence, while chronological order organizes ideas in a time sequence. Spatial order presents ideas based on their physical position. For causal and problem-solution order, main points are presented by two main aspects. Causal order presents a cause-effect relationship, while problem-solution introduces a problem and presents a solution to the problem. Narrative order basically offers a narrative leading to a climax or a conclusion. Each organizational order is proper for different contents or purposes of speaking. It is a speaker's role to consider which organizational order would suit his or her ideas in order to produce an effective speech.

1.3 Conclusion

A conclusion is the final part of a speech. It is known as the section where a speaker reinforces the central idea of speaking and signals the end to the audience. Reinforcing the central idea can be accomplished by several strategies. Specifically speaking, it can be achieved through summarizing the speech, ending with a quotation, giving a dramatic statement and reiterating the introduction [2]. Apart from that, giving an illustration, issuing a challenge, stating a personal intention, or supplying an additional inducement to belief or action are other available choices [4,5]. Similar to introduction, a speaker can employ attention grabbers when providing concluding remarks to make the leave even intriguing and memorable.

2. Speech Structure from Authentic Public Speeches

Apart from the concept of speech structure presented, several research studies have attempted to understand structure of public speeches from diverse authentic speaking settings. They can be contextually categorized into speeches of EFL learners [8–11], speeches of experts [12–14], and speeches of TED speakers [15–18]. Based on the review, the structure of the authentic speeches is explained in terms of the rhetorical moves structure. Rhetorical moves, also called moves, refer to communicative functions within a particular text [19]. They are typically derived from move analysis following the concept of Swales [19], Bhatia [20] or Biber et al. [21]. Hence, to discuss the speech structure of authentic speeches, the rhetorical moves from related studies will be discussed by the sections of speeches.

2.1 Introduction

There are several moves employed at the introduction of speeches suggested among different studies. However, considering their communicative purposes, there are four frequently employed moves: greeting audience [8,10-11,13,18], orienting audience [8–14,18] introducing the topic [8,9,12,15–18] and presenting the speaker

[15-16,18]. Consequently, it can be claimed that introduction moves for public speeches typically deal with greeting the audience, orienting the audience, introducing the topic, and presenting the speaker.

2.2 Body

For the body section, one major move discussed among the speeches is concerned with elaborating or developing a topic of the speeches [8–10,12,15,16]. Therefore, developing the topic is the major move for these practical speeches. In addition, topic development moves are organized in various orders, including topical order [8-9,12], problem-solution order [9,12,18], chronological order [8,12] and comparison and contrast [8-9]. Hence, it can be concluded that topic development is the primary move structure of the body section which can be arranged in different orders as discussed.

2.3 Conclusion

A variety of moves are found to structure the conclusion. Similar to the introduction moves, these moves can be grouped taking account of their communicative purposes. It is indicated that the moves of the conclusion typically involve giving the conclusion of the speech [8–10,15-16,18], closing the speech [15-16] and thanking the audience [8,10,15,18]. Therefore, it can be concluded that concluding the speech, closing the speech and thanking the audience are the moves structuring these speeches' conclusion.

Objective of the study

Despite information on the structure of public speeches from both theoretical and practical aspects as discussed, knowledge about the structure of effective speeches is still limited. Therefore, this study applied the insights gained to reveal how TED speakers construct their effective speeches. The present study addressed the research question on what the speech structure including moves and steps was found in the corpus of the most popular TED Talks.

Methodology

The Conceptual Framework for Structure of TED Speeches

This study followed the analytical approach named a corpus-based discourse analysis of Biber et al. [21], which has been employed to investigate rhetorical moves in many studies [15,17,22-23]. In the analytical approach, the initial step is to develop an analytical framework used for examining discourse characteristics of a particular text. Therefore, a conceptual framework for analyzing the structure of TED speeches was developed.

Among the prior studies on TED speech structure [15–18], this study adapted Chang and Huang [15]'s framework of rhetorical moves analysis to reveal the whole structure of TED speeches. In addition, this study aimed to broaden the insights into the topic development move, considered a major part of speeches as it represents ideas contributing to the topic. Therefore, the organizational orders discussed in the section of public speaking theoretical concept was adapted to explore how the body of TED speeches is organized.

Table 1 Analytical Framework for Rhetorical Moves of TED Speeches

| Moves and Steps | Descriptions |
|---|--|
| 1. Listener orientation | Dealing with issues not directly related to the topic of the talk; speaker's try to connect with audience |
| 1.1 Greet audience | Saluting/welcoming their audience |
| 1.2 Engage in meta-level discussion | Making references to the TED conference /participants |
| 2. Topic introduction | Introduce the topic to the audience |
| 2.1 Set the scene | Providing background information and the rationale for the talk |
| 2.2 Announce topic | Stating the topic directly or paraphrasing it; also embedding it within background |
| 2.3 Outline structure | Pointing out aspects to be covered in the talk |
| 3. Speaker presentation | Introducing the speaker's background, making the connection between the speaker and topic. |
| 3.1 Introduce oneself | Describing vignettes of their present or past life, e.g. their origins |
| 3.2 Establish authority | Introduce the speaker's achievements and/or knowledge in their areas of expertise, asserting their credentials |
| 3.3 Show stance/position | Explaining the speakers' attitudes towards the focal topic |
| 4. Topic development by topical order | Delving into the meat of the talk by dividing main points into logical and consistent subtopics |
| 5. Topic development by chronological order | Delving into the meat of their talk by dividing main points using a time pattern |
| 6. Topic development by spatial order | Delving into the meat of their talk by dividing main points by a physical position |
| 7. Topic development by causal order | Delving into the meat of their talk by dividing main points in a cause-effect relationship |
| 8. Topic development by problem-solution order | Delving into the meat of their talk by having two main points about a problem and a solution |
| 9. Topic development by narrative order | Delving into the meat of their talk by following a body of narrative |
| 10. Closure | Signaling, preparing the audience for the end of the talk by certain methods, e.g. summary, question answering, story confirmation |
| 11. Concluding messages | Giving statements to reflect on the purpose of the talk and answer the "So what?" question |
| 11.1 Call for action | Telling their audience how to think and act after the talk |

Table 1 Analytical Framework for Rhetorical Moves of TED Speeches (Cont.)

| Moves and Steps | Descriptions |
|--|--|
| 11.2 Call for action | Telling their audience how to think and act after the talk |
| 11.3 Make generalization/offer speculation | Making a forecast based on the topic and/or talking about new possibilities, offering broader implications e.g. to the world/field, asking rhetorical questions to provoke thoughts. |
| 12. Acknowledgements/gratitude | Acknowledging or complimenting audience or show appreciation for the invitation to speak at TED |

Apart from developing the analytical framework, a corpus of the target speech samples was compiled. The following section provides details of the compiled corpus of the present study.

The TED Talks Corpus

The TED Talks corpus is a collection of twenty-five most viewed TED videos suggested in a playlist named “Most popular talks of all time” on www.ted.com. They were purposely selected and retrieved in November, 2019 as they captured considerable attention from millions of audiences evidenced in their viewership illustrated in the official TED website. The speeches, together with transcripts, were delivered in English by TED speakers of diverse disciplines. In total, the corpus consisted of 65,651 running words.

Data Analysis

The prepared transcripts were manually analyzed by the researcher according to the analytical steps of discourse analysis proposed by Biber et al. (2007). Each speech was segmented into discourse units and then classified into move types. Then sequences of discourse units shifting among move types were analyzed. Finally, the generic patterns of discourse organization embedded in the corpus were described. Besides this qualitative analysis, quantitative analysis was conducted to reveal the occurrences of the rhetorical moves and steps. To assure the reliability, the results were cross checked by two experts working in the discourse area. Using Cronbach’s alpha coefficient to interpret, their rating agreement was represented for 0.78 indicating consistency of the derived results for further discussion.

Results

This section reports the results of the present study in two sections: the rhetorical moves of TED speeches and their structure as follows.

1. Rhetorical Moves of TED Speeches

From the analysis, this study found nine rhetorical moves with their respective as represented in Table 2. Each move will be discussed in detail in the following sections. These moves are presented according to their order appearing in the TED speeches.

Table 2 Frequency of Rhetorical Moves of TED Speeches

| Rhetorical Moves and Steps | No. of Occurrence (N = 455) | Percentage |
|---|--------------------------------|------------|
| Move 1: Listener orientation | 4 | 0.88 |
| Move 2: Topic introduction | 44 | 9.67 |
| Move 3: Speaker presentation | 33 | 7.25 |
| Move 4: Topic development in topical order | 198 | 43.52 |
| Move 5: Topic development in narrative order | 95 | 20.88 |
| Move 6: Topic development in problem-solution order | 15 | 3.30 |
| Move 7: Closure | 17 | 3.74 |
| Move 8: Concluding message | 25 | 5.49 |
| Move 9: Acknowledgements/gratitude | 24 | 5.27 |

Move 1 - Listener Orientation: Most rarely was Listener Orientation used with 0.88% of occurrences among the corpus of TED Speeches. It consisted of two steps that are: **1) Greeting audience** - such as “*Good morning. How are you?*” [24] and **2) Engage in meta-level discussion** such as “*There have been three themes running through the conference, which are relevant to what I want to talk about*” [24]. However, its infrequent occurrence indicated that TED speakers tended to omit the steps of greeting and referring to the conference.

Move 2 - Topic Introduction: Topic Introduction was the third frequently used move with 9.67% of occurrences. It included three following steps: **1) Set the scene** - such as “*The human voice: It's the instrument we all play. It's the most powerful sound in the world, probably. It's the only one that can start a war or say "I love you." And yet many people have the experience that when they speak, people don't listen to them.*” [25]; **2) Announce the topic** as “*So I want to talk about education, and I want to talk about creativity.*” [24], and **3) Outline structure** as “*What I'm going to do today is I'm going to show you what the research says about why we're all liars, how you can become a liaspotter and why you might want to go the extra mile and go from liaspotting to truth seeking, and ultimately to trust building.*” [26]. The speakers employed these moves to prepare their audience before going through the speech by providing them with background information of the topic, or using it to attract the audience's attention. They may state the central idea of the speech or outline the overview of the speech.

Move 3 - Speaker Presentation: Speaker Presentation emerged as the fourth frequently used move with the occurrence of 7.25%. There were three steps as follows: **1) Introduce oneself** as “*I am a writer. Writing books is my profession but it's more than that, of course.*” [27], **2) Establish authority** as “*I've spent the last 20 years studying human behavior from a rather unorthodox way: picking pockets.*” [28], and **3) Show stance/position** as “*So today, for me, being fearless means being honest. And I am on this stage because I am a model. ... I'm going to answer the questions that people always ask me, but with an honest twist.*” [29]. The speakers employed this move type to present their personal background to the audience and to form a relation between the speaker and the speech being presented.

Move 4 - Topic Development in Topical Order: Topic Development in Topical Order appeared to be most frequently used with 43.52% of occurrences. In this move, the speakers developed the speeches through main ideas. There were three steps: **1) Orientation** to a main idea may be done to connect their audience to an idea as “*Whatever it is, if it's really important, you owe it to yourself to look at this toolbox and the engine that it's going to work on, and no engine works well without being warmed up.*” [25]; **2) Presenting idea** was done to propose a particular idea to support the topic as in “*Warm up your voice*” [25], **3) Providing supportive information to a main idea** was to reinforce the idea proposed with supporting information as “*Actually, let me show you how to do that. Would you all like to stand up for a moment? I'm going to show you the six vocal warm-up exercises that I do before every talk I ever do. Any time you're going to talk to anybody important, do these. First, arms up, deep breath...*” [25].

Move 5 - Topic Development in Narrative Order: Topic Development in Narrative Order was found to be the second frequently used move 20.88% of occurrences. The speakers utilized this move type to develop their ideas of speech through a narrative structure, or simply called a story-telling structure. It consisted of five steps. **1) Orientation** was a step to present the audience with relevant aspects such as people, place or time, for example, “*When I woke later that afternoon.*” [30]. **2) Action** was a step telling the event as “*I was shocked to discover that I was still alive And I remember thinking, there's no way I would ever be able to squeeze the enormousness of myself back inside this tiny little body.*” [30]. **3) Evaluation** was a step to the critical point of the story as “*But then I realized, but I'm still alive! I'm still alive, and I have found Nirvana. And if I have found Nirvana and I'm still alive, then everyone who is alive can find Nirvana.*” [30]. **4) Result** was the action after the evaluation as “*And I pictured a world filled with beautiful, peaceful, compassionate, loving people who knew that they could come to this space at any time. And that they could purposely choose to step to the right of their left hemispheres -- and find this peace. And then I realized what a tremendous gift this experience could be, what a stroke of insight this could be to how we live our lives. And it motivated me to recover. Two and a half weeks after the hemorrhage, the surgeons went in, and they removed a blood clot the size of a golf ball that was pushing on my language centers. Here I am with my mama, who is a true angel in my life. It took me eight years to completely recover.*” [30]. **5) Coda** may provide some impacts of the story to the present time as “*Here I am with my mama, who is a true angel in my life. It took me eight years to completely recover.*” [30].

Move 6 - Topic Development in Problem-solution Order: Topic Development in Problem-solution Order emerged as the eight frequently used move with 3.30% of occurrences. These moves were employed to develop their speech through a discussion of problems and solutions to the problem. They were generated through four respective steps as follows. **1) Presenting the problem** was found as the major step of this move to inform the audience of a particular issue as “*And I definitely know that, in my case -- in my situation, it would be very dangerous for me to start sort of leaking down that dark path of assumption, particularly given the circumstance that I'm in right now in my career. And it's exceedingly likely that anything I write from this point forward is going to be judged by the world as the work that came after the freakish success of my last book, right? I should just put it bluntly, because we're all sort of friends here now -- it's exceedingly likely that my greatest success is behind me.*” [27]. **2) Situation of the problem** may be provided to broaden the circumstance of the problem as “*We writers, we kind of do have that*

reputation, and not just writers, but creative people across all genres, it seems, have this reputation for being enormously mentally unstable.” [27]. **3) Solutions** would be presented to the audience after presenting the problem as “And for me, the best contemporary example that I have of how to do that is the musician Tom Waits, who I got to interview several years ago on a magazine assignment. One day he was driving down the freeway in Los Angeles, and this is when it all changed for him. And he's speeding along, and all of a sudden he hears this little fragment of melody, that comes into his head as inspiration often comes, elusive and tantalizing, and he wants it, it's gorgeous, and he longs for it, but he has no way to get it. He doesn't have a piece of paper, or a pencil, or a tape recorder. So he starts to feel all of that old anxiety start to rise in him like, "I'm going to lose this thing, and I'll be haunted by this song forever. I'm not good enough, and I can't do it." And instead of panicking, he just stopped. He just stopped that whole mental process and he did something completely novel. He just looked up at the sky, and he said, "Excuse me, can you not see that I'm driving?" "Do I look like I can write down a song right now? If you really want to exist, come back at a more opportune moment when I can take care of you. Otherwise, go bother somebody else today. Go bother Leonard Cohen.” [27]. **4) Evaluation of the solution** was further provided in some speeches as “And his whole work process changed after that. Not the work, the work was still oftentimes as dark as ever. But the process, and the heavy anxiety around it was released when he took the genie, the genius out of him where it was causing nothing but trouble, and released it back where it came from, and realized that this didn't have to be this internalized, tormented thing. It could be this peculiar, wondrous, bizarre collaboration, kind of conversation between Tom and the strange, external thing that was not quite Tom.” [27].

Move 7 – Closure: Closure was discovered as the seventh frequently used move with occurrences of 3.74%. Although this move type may not have its own step, the explanation of this move based on the analytical framework did show its possible characteristics. The speakers employ this kind of move to lead the audience to the end of the speech. It can be done through summarizing or answering the issue or question posed in the speech. An example of the move is “Let me wrap up. There is a mismatch between what science knows and what business does. Here is what science knows. One: Those 20th century rewards, those motivators we think are a natural part of business, do work, but only in a surprisingly narrow band of circumstances. Two: Those if-then rewards often destroy creativity. Three: The secret to high performance isn't rewards and punishments, but that unseen intrinsic drive-- the drive to do things for their own sake. The drive to do things cause they matter.” [31].

Move 8 - Concluding Message: Concluding Message was ranked as the fifth frequently used move with 5.49% of occurrences. They were employed to provide the audience with generalization of the ideas presented in the speech or to forecast the future possibilities through the use of **1) Make generalization/Offer speculation** step as “What I think it comes to is this: Al Gore spoke the other night about ecology and the revolution that was triggered by Rachel Carson. I believe our only hope for the future is to adopt a new conception of human ecology, one in which we start to reconstitute our conception of the richness of human capacity. Our education system has mined our minds in the way that we strip-mine the earth for a particular commodity. And for the future, it won't serve us.” [24]. In addition, these moves were used to provoke the listeners' thoughts or actions on the issue by **2) Call for action** as “We have to rethink the fundamental principles on which we're educating our children” [24].

Move 9 - Acknowledgements/gratitude: This move type without its respective step emerged as the sixth frequently used move with 5.27% of occurrences throughout the corpus. These moves were simply the stage where the speakers pay compliments to their audience at the end of the speech. Examples of the move are such as *Thank you* [32–34] or *Thank you very much* [24,35,36].

2. Move Structure of TED Speeches

To uncover the generic structure of these rhetorical moves, this study further observed their position of occurrences based on the three sections of public speeches, namely an introduction, a body and a conclusion. The occurrences were also determined in terms of percentage to reveal the proportion of moves found in each section. The results of analysis are presented in Table 3.

Table 3 Move Structure of TED Speeches

| Rhetorical Moves | Section of Occurrence | | |
|--|-----------------------|-------------|-------------|
| | Introduction | Body | Conclusion |
| Move 1 - Listener Orientation | 7.14% | - | - |
| Move 2 - Topic Introduction | 54.76% | - | - |
| Move 3 - Speaker Presentation | 38.10% | 1.64% | 3.70% |
| Move 4 - Topic Development in Topical Order | - | 76.23% | - |
| Move 5 - Topic Development in Narrative Order | - | 18.03% | - |
| Move 6 - Topic Development in Problem-solution Order | - | 2.46% | - |
| Move 7 - Closure | - | - | 25.93% |
| Move 8 - Concluding Message | - | 16.4% | 25.93% |
| Move 9 - Acknowledgements/gratitude | - | - | 44.44% |
| Total Occurrence | 100% | 100% | 100% |

According to Table 3, it can be obviously seen that there are three rhetorical moves appearing in the introduction of the TED speeches. These moves are Listener Orientation (7.14%), Topic Introduction (54.76%) and Speaker Presentation (38.10%). As for the body section, there are four moves, namely Speaker Presentation (1.64%), Topic Development in Topical Order (76.23%), Topic Development in Narrative Order (18.03%), and Topic Development in Problem-solution Order (2.46%). For the last section, there are three moves occurring in the conclusion section of TED speeches; these moves are Closure (25.93%), Concluding Message (25.93%) and Acknowledgements/gratitude (44.44%).

Additionally, there are some moves that can be found in different speech sections. The first one is Speaker Presentation moves. This move type is primarily present in the introduction part. Despite that, it is also employed in the body and conclusion with relatively fewer proportions. This can be inferred that in TED speeches, the related information can be presented not only at the beginning of the talk but also throughout or at the end. Apart from

this move, Concluding Message moves usually employed in the conclusion are used in the body of the speech. This phenomenon can be extrapolated from the fact that the step Call for Action was inserted within the body to ask their audience to think or to take action regarding the focal issue.

In conclusion, the observation on occurrences of the rhetorical moves based on structure of public speeches illustrates the move types which develop each speech section. In addition, it is found that Topic Introduction, Topic Development in Topical Order and Acknowledgement/gratitude are the essential moves for the introduction, body and conclusion of TED speeches respectively. Certain moves as in Speaker Presentation and Closure may be presented in different sections according to the use of those TED speakers.

Discussion and Conclusion

In the previous section, the findings from discourse analysis of TED speeches revealed the rhetorical moves found in the speeches of TED speakers, together with discussing the frequency and position of occurrences for each move type. Hence, this section discusses the findings with the related public speaking literature.

Corresponding to Chang and Huang's study [15], this study found that TED speakers employed three moves including Listener Orientation, Topic Introduction and Speaker Presentation. Moreover, in line with Chang and Huang's study [15] and Khajornphaiboon and Vungthong's [17], Topic Introduction moves – connecting the story to the topic in focus – were found to be the obligatory move for the introduction part in this study. The presence of Topic Introduction moves as a prominent move can be extrapolated from the fact that this move served to provide the audience with the background of the talks which could capture their attention and allow them to understand the points or the topics in focus. The results of this study are also akin to Chang and Huang [15] and Jiang [16] in that Listener Orientation and Speaker Presentation served as an optional introductory move. This phenomenon may be explained by the fact that the speakers' information and conference themes were provided by hosts or in the conference programmes prior to their talk. Beside TED Talks, these introduction move types are also utilized in other speech contexts. They are found in research presentation settings of Maktiar Singh et al.'s study [11] and Hu and Liu's study [14], or in anniversary speeches of public senior high schools of Gyamera's study [13]. These facts hence represent the importance of these moves when providing a public speech.

In respect of the body section of TED speeches, adapting the rhetorical moves analytical framework of Chang and Huang [15] with the concept of body structure from several public speaking principles [2–6], the study found three types of Topic Development moves, namely Topic Development in Topical Order, Topic Development in Narrative Order and Topic Development in Problem-solution Order respectively. The nature of these moves shared the same purpose as the Topic Development move of Chang and Huang [15] to develop ideas and provide information to support the central idea of speaking, which is also similar to the move named Developing the Speech of Liu [8]. Notwithstanding the shared features, given that the present study explored this type of move based on the characteristics of how ideas are organized within the body section, this study hence found that Topic Development move can be discussed into three patterns of body structure. The findings also confirm and reveal examples of three organizational

orders, including topical order, narrative order and problem-solution order as suggested by German, Gregory, Lucas and Turner et al. [2,4–6]. Furthermore, as evidenced in Liu’s study [8] and Wang’s study [9] in the context of EFL learners, topical order was used to arrange ideas; similar to their studies, it was employed among TED speakers. As found to be employed in a speech contest context of Xu [10], Topic Development Move in Narrative Order proposed by Turner et. al. similarly emerged as another pattern in TED speeches [6]. In conformity with Ratanakul’s [18] and Zhan [12]’s study Topic Development Move in Problem-solution Order was also found to be employed to develop a topic among some speeches in the present study.

For the conclusion section, the results are consistent with Chang and Huang’s study [15]. This study found three moves, including Closure, Concluding message and Acknowledgements/gratitude. Particularly, it was also found that Acknowledgements/gratitude moves are the obligatory move, just as Chang and Huang’s study. The explanation of this commonality may be because this move has been frequented and regarded as the traditional move which can signal the end of the speeches.

In conclusion, this study sought to investigate the structure of successful TED speeches in contributing to both research and pedagogical implications. In doing so, the findings on rhetorical moves of TED speeches were conceptualized for further adaptations. For the use of research sphere, the results of the structure of TED speeches can be applied as an analytical framework for other investigations in other contexts of public speaking such as a political sphere and a commencement, to provide insightful knowledge about the structural elements of public speeches. The findings also yield pedagogical implications in that they can serve as a guideline for material design or course design in teaching public speaking courses and classroom settings.

Limitations and Further Studies

Regarding the limitation of the present study, the number of samples may be too limited to be generalized for the overall TED speeches. Hence, future research may observe rhetorical moves using the present study’s framework with larger samples to offer comprehensive insights. In addition, linguistic features such as cohesive or coherence devices, together with persuasive features, are in need of further investigations as they might affect the structural development and achievements of the speeches. Besides, some discourse features such as lexical bundles, stance bundles, keyness or others are also interesting to be discovered in extending knowledge to the areas.

References

1. Mehrabian A Verfasser. Silent messages. Belmont, Calif.: Wadsworth; 1971.
2. Lucas SE. The Art of Public Speaking. 12th ed. United States of America: McGraw-Hill Education; 2015.
3. Beebe SA, Beebe SJ. Public Speaking Handbook. 5th ed. Pearson; 2014.
4. German KM. Principle of Public Speaking. 19th ed. New York: Routledge; 2017.
5. Gregory H. Public Speaking for College & Career. 11th ed. New York: McGraw-Hill; 2016.
6. Turner K, Osborn M, Osborn S, Osborn R. Public Speaking. 8th ed. Pearson Education; 2018.

7. Verderber RF, Verderber KS. *The challenge of effective speaking*. Australia: Thomson Wadsworth, c2006.; 2006.
8. Liu H. Genre analysis of English public speeches by Chinese college students based on the corpus study. *Tech Bull*. 2017 15; 55(14): 193–199.
9. Wang C. A Comparative Genre Analysis of Schematic Structures in Public Speeches of Native and Nonnative English Speakers. *Linguist Lit Stud*. 2016 Sep; 4(5): 320–330.
10. Wei Xu. *Exploring language in Chinese college students' English public speaking contests from a genre perspective and its implications for English Language Teaching*. [England]: Durham University; 2017
11. Maktiar Singh KK, Mohamad Ali A, Chan MY, Tan H. A genre-based investigation of the introduction sections of academic oral presentations. *Asian J Univ Educ*. 2019; 15(2): 1–31.
12. Zhan L-L. Understanding Genre in Use. *Concentric: Stud Linguist*. 2012 Nov 1; 38(2): 211–335.
13. Gyamera S. *Rhetorical Analysis of Anniversary Speeches of Heads of Wesley Girls' High School and St. Augustine's College in Cape Coast [Thesis]*. University of Cape Coast; 2016. Available from: <http://erl.ucc.edu.gh/dspace/handle/123456789/3487>
14. Hu G, Liu Y. Three minute thesis presentations as an academic genre: A cross-disciplinary study of genre moves. *J Engl Acad Purp*. 2018 Sep 1; 35: 16–30.
15. Chang Y-J, Huang H-T. Exploring TED talks as a pedagogical resource for oral presentations: A corpus-based move analysis. *Engl Teach Learn*. 2015 01; 39(4): 29–62.
16. Jiang J. *Investigating the rhetorical structure of TED talks: a corpus-based study [Thesis]*. Nanyang Technological University; 2017.
17. Khajornphaiboon P, Vungthong S. Analyzing the introduction of TED Talks: A corpus-based analysis of discourse organization. *MANUTSAT Parit J Humanit*. 2019 May 9; 41(1).
18. Ratanakul S. A Study of Problem-Solution Discourse: Examining TED Talks through the Lens of Move Analysis. *LEARN J Lang Educ Acquis Res Netw*. 2017; 10(2): 25–46.
19. Swales J 1938-, Verfasser. *Genre analysis English in academic and research settings*. Cambridge [u.a.]: Cambridge Univ. Pr.; 1990. (The Cambridge applied linguistics series).
20. Bhatia VK 1942-, Verfasser. *Analysing genre language use in professional settings*. London [u.a.]: Longman; 1993. (Applied linguistics and language study).
21. Biber D, Connor U, Upton TA. *Discourse on the Move: Using Corpus Analysis to Describe Discourse Structure*. Amsterdam: John Benjamins Publishing Co; 2007. (Studies in Corpus Linguistics).
22. Anthony M, Gladkov K. Rhetorical Appeals in Fundraising. In: *Discourse on the Move: Using Corpus Analysis to Describe Discourse Structure*. Amsterdam: John Benjamins Publishing Co; 2007. (Studies in Corpus Linguistics).
23. Upton TA, Thomas A, Cohen MA. An Approach to Corpus-based Discourse Analysis: The Move Analysis as Example. *Discourse Stud*. 2009; 11(5).
24. Robinson SK. Do schools kill creativity?. *TED2006*; 2006.
25. Treasure J. How to speak so that people want to listen. *TEDGlobal 2013*; 2013.



26. Meyer P. How to spot a liar. TEDGlobal 2011; 2011.
27. Gilbert E. Your elusive creative genius. TED2009; 2009.
28. Robbins A. The art of misdirection. TEDGlobal 2013; 2013.
29. Russell C. Looks aren't everything. Believe me, I'm a model. TEDxMidAtlantic; 2012.
30. Taylor JB. My stroke of insight. TED2008; 2008.
31. Pink D. The puzzle of motivation. TEDGlobal 2009; 2009.
32. Cuddy A. Your body language may shape who you are. TEDGlobal2012; 2012.
33. Brown B. The power of vulnerability. TEDxHouston; 2010.
34. Adichie CN. The danger of a single story. TEDGlobal 2009; 2009.
35. Sinek S. How great leaders inspire action. TEDxPuget Sound; 2009.
36. Roach M. 10 things you didn't know about orgasm. TED2009; 2009.