Title	Genre-based investigation into macro-structure of academic discussions
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FINAL REPORT

Genre-based investigation into macro-structure of academic discussions / SUG 14/17 TSL

By

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Part II

EXECUTIVE SUMMARY

Purpose / Research Question
This project aims to describe a macro-structure for academic discussions using a genre perspective as well as identify the common language features and patterns in each stage of a discussion.

Background
In recent years, the teaching of speaking has gained increasing importance in Singapore with the increase in activities involving oral skills. For example, there has been emphasis on phonetical understanding in order to enable students to read aloud or communicate with the correct pronunciation. However, more can be done to reap the benefits of improving communicative competence among students in terms of academic discussions so as to help them become critical thinkers and collaborative learners.

Participants
42 PDGE and graduate students of NIE participated in the research. They were already in groups of 2 to 5 with discussion topics for group assignments from the courses that they were attending.

Research Methodology / Design
Each group who were willing to participate in the project was provided with an audio recorder and asked to record themselves in a quiet venue during their group discussion for any one of their school assignments. During the recording, PI was not present so as to ensure that students conduct their discussions as naturally as possible. After the recording, students returned the audio recorder for transcription. 9 audio recordings were collected. From the moment of transcription, the students' names were anonymized. As such, other than the audio recordings, the identities of the subjects are protected in all other documentation.

After the transcription, a conversation analysis (CA) of the discussions was conducted. Based on McCarthy and O'Keeffe's (2004) review of past studies, it is generally found that discourse and conversation analysis have helped to inform the teaching of speaking through descriptive frameworks. As the focus of my paper is on the macro-structure, my transcription of the discussions did not include the micro-features like aspirations and corrections although as noted by Slade (1997), both micro- and macro- perspectives are needed for CA. This is also to help improve readability and understanding of the content presented in the transcription. Thereafter, a more fine-grained analysis using systemic functional grammar was used to examine the common lexico-grammatical features of each stage of a discussion.

Findings / Results
To briefly summarize my initial findings, my proposed macro-structure of a discussion text is (refer to Appendix B for key to notation symbols):

(Clarification)^[[Opinion●(Initial Development of Idea^Elaboration)^Reaction●(Reformulation)●(Evidence)]^n^(Resolution)]^n

A further elaboration of what each stage means and an initial list of language features/patterns are included in Appendix A. What is of note in this macro-structure is the section (Initial development of Idea^Elaboration), which I term as a co-construction of knowledge. A co-construction of knowledge requires participants to actively seek opinions regarding an initial idea that they may have while other participants contribute by elaborating on the same idea and checking with the others that they have similar views. Through such exchange of ideas, participants are constantly monitoring, evaluating, and negotiating their own and others' understanding. Past studies based on social theoretical perspective have made recommendations on improving the quality of discussions by setting 'ground rules' (Rojas-Drummond & Zapata, 2004; Swann, 2007) of ensuring that everyone give their opinions, question opinions, and agree on an opinion before moving on. However, as shown from my CA, such rules do not necessarily teach students to co-construct knowledge, which deepen understanding of topic, and as such, discussions can be superficial.

Conclusion
After more fine-grained analysis is done, I hope that it will aid in teaching the different stages of a discussion, and improve understanding of what a discussion entails.

Keywords
Genre; Academic discussions; Communicative competence; Metalanguage; Oracy

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Part III

INTRODUCTION

In recent years, the teaching of speaking has gained increasing importance in Singapore with the introduction of the STELLAR program in primary schools and the increase in weightage for the oral exam component. Though there has been emphasis on phonetical understanding to enable students to read aloud with the correct pronunciation, more can be done to reap the benefits of improving communicative competence among students in terms of helping them become critical thinkers and collaborative learners.

One area of research that has helped informed teaching pedagogy is the development of descriptive frameworks for talk. I find this area of research to be interesting and helpful in guiding teachers on how to teach features of speaking explicitly. I was thus motivated to search for a descriptive framework for discussion as I believe that it would help in encouraging quality talk during group discussions in the classroom. In my personal experience with teaching young children, I found it difficult to teach them how to discuss. Moreover, I found it frustrating to be unable to explain to students how a discussion should be structured so as to produce the quality talk that I wanted. Similar situations are faced in secondary schools where teachers have difficulties modelling and guiding students in open-ended academic discussions (Teo, 2013). This is despite the numerous guidebooks available for teachers to learn how to organize, conduct, or prepare students for group discussions (Green, Christopher & Lam, 2002; Hollander, 2002).

However, I found that past studies focus on the effectiveness of discussion strategies rather than the explicit features of discussions (Bejarano, Levine, Olshtain & Steiner, 1997; Green, Christopher & Lam, 2002; Hollander, 2002; Lam & Wong, 2000; Swann, 2007). While they are generally prescriptive in how to conduct discussion effectively with the suggested strategies, I feel that authentic quality discussions should be analyzed to provide a descriptive framework as well. Thus, in my study, by describing the macro-structure of a discussion and examining how it can be taught using genre-based pedagogy, I hope to contribute to the current body of research by providing a metalanguage for teachers and students to talk about discussions. This can help students to be more aware of the structure of discussions, and monitor and evaluate the areas in their own discussions that need improvement.

RESEARCH BACKGROUND

As mentioned by Goh (2014), communicative competence (comprising of both listening and speaking) plays a crucial role in the 21st century. However, despite the many studies that have shown that explicit teaching of speaking skills are beneficial in language acquisition and learning (Mercer 1996; Corden 2001; Goh 2014; Newman 2016), there has not been much direct teaching of such skills in the classrooms. Studies like Goh's (2014) have also emphasized that metacognition is important in helping learners' to reflect, plan, monitor, and evaluate their learning. As such, a metalanguage that can be used to help in metacognitive processes will prove helpful. Building on this, my study involves a couple of aspects of oracy – description of a macro-structure for the genre of discussions and language features/patterns of each stage of the discussion. Presented below are some studies that have guided my own investigation.

Firstly, in order to learn more about the various research in the teaching of speaking, I found McCarthy and O'Keeffe's (2004) review to be especially helpful due to their objective

presentation of the current studies and issues in this area. Of particular interest to me is their review of past studies on how discourse and conversation analysis have helped to inform the teaching of speaking through descriptive frameworks. Although there have been a few studies that view such descriptive frameworks as inadequate, most of the studies summarized by McCarthy and O'Keeffe are supportive of them. They also highlighted that researchers have recommended the teaching of speaking to be taught explicitly as such an "active promotion of language awareness" is beneficial in helping students to gain deeper understandings of speaking (p. 32). Burns (2001) also suggested that descriptive frameworks of genres, for instance, "can help students to increase their linguistic repertoire as well as equipping them with skills to renegotiate their positions in encounters outside of the classroom" (as cited in McCarthy & O'Keeffe, p. 33). With this comprehensive summary of past research into the area of descriptive frameworks and their useful application in the teaching of speaking, a description of the macro-structure for discussions for teaching will be beneficial for students, not only in improving their quality of discussions, but also in speaking skills in general.

Secondly, as I find that discussions are mainly an exchange and negotiation of opinions before reaching a consensus, I believe that Horvath and Eggins' (1990) work on opinion texts is particularly relevant to my study. In order to describe the macro-structure of opinion texts, they chose the variationist and systemic approaches to analyze chunks of conversation. They demonstrated using systemic functional linguistics that opinions are expressions of attitudes which are usually realized through the use of relational processes. Horvath and Eggins' analysis led them to conclude that the macro-structure of an opinion text is (see Appendix B for key to notation symbols):

Opinion ^ Reaction ^ (Evidence) ^ (Resolution)

In their study, they cautioned that such a macro-structure for opinion texts is "only a part of the interaction that is going on at the time" (p. 44). Thus, the macro-structure is simply a broad description of the interaction in the sense that not every element in the macro-structure is realized with one turn in the conversation – an element can be realized in several turns and by different speakers. Nevertheless, Horvath and Eggins observed that participants in a conversation know that an opinion text is not closed until a resolution is reached. Thus, they argue that an opinion text is a fundamental text type that is possibly universal. Their observations, thus, led me to use their opinion text structure as a foundation for the macro-structure of discussions.

Thirdly, a study by Gan, Davison and Hamp-Lyons (2008) using conversation analysis (CA) examined topic initiation, development and transition in peer-to-peer group discussions. Of particular relevance are their findings on topic initiation or orientation at the beginning of students' discussions. They noted that the 'false first' or 'transitional first' topic that occurs in the beginning of a discussion is a way for the group to clarify the requirements for the discussion. Such an observation is also supported by Stokoe's (2000) findings from university students' group discussions. Although Gan, Davison and Hamp-Lyons' research focuses more on the micro-view of discussions, I feel that it provides a better understanding of how a discussion text is similar and different from an opinion text. Additionally, in Newman's (2016) study, students were provided with a framework comprising of participating, understanding, and managing for collaborative talk. Thus, the terms 'participating', 'understanding', and 'managing' became the metatalk or metalanguage for students to review their performance during collaborative talk. Newman found that students' collaborative talk became more elaborated and effective and that there was possibly deeper learning about the interpersonal dimension of language. Overall, such findings help shape the initial opinion text structure to better describe the macro-structure of discussions.

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Thus, in light of these past research, I intend to follow the study by Horvath and Eggins (1990) in using a combination of Labov's variationist framework and Halliday's systemic functional linguistics to describe a macro-structure for discussion.

METHODOLOGY

The data used for my analysis for the macro-structure of discussions are 9 audio recordings of academic discussions, totalling 12 hours. Altogether, 42 students from the National Institute of Education (NIE) were recruited to participate in the project. This was done through online announcements in a course's Blackboard after approval from the course chair. Some of the participants were from the PI's tutorial classes. The IRB is satisfied that there is no conflict of interest for the PI's students to participate in the research and gave its approval (IRB-2017-09-022). All participants were reimbursed with a $10 Popular voucher as a token of appreciation for their time and effort.

In recording the discussions, participants were already in groups of 2 to 5 with discussion topics for group assignments from the courses that they were attending. As such, the purpose of the academic discussions was the completion of their group project or presentation. Each group who participated in the project was provided with an audio recorder and asked to record themselves in a quiet venue during one of their group discussions. During the recording, the PI was not present so as to ensure that firstly, students conduct their discussions as naturally as possible; and secondly, students have the flexibility of deciding when to record which of their discussions. After the recording, students returned the audio recorder for transcription. From the moment of transcription, the students' names were anonymized. As such, other than the audio recordings, the identities of the subjects are protected in all other documentation. My assumption in choosing these participants was that students in higher educational settings would be more skilled in engaging in discussions. Thus, a more predictable form of the discussion structure would probably be found through such data.

The relevant parts of the conversation showing the macro-structure of a discussion was used for the analysis and application to the teaching of discussions. To facilitate my study, I used the terms of 'chat' and 'chunk' as defined by Slade (1997) in describing the different segments of the conversation. In order to further identify the 'discussion chunks' in my data, I used Gan, Davison and Hamp-Lyons' (2008) description that a discussion is "characterized by intensive engagement and active participation between peer participants" (p. 315). After the identification of the chunks, I proceeded with the analysis to determine the stages that make up a macro-structure of discussions. The transcription made use of Atkinson and Heritage's (1984) notation symbols for CA (as cited in Gan, Davison and Hamp-Lyons; see Appendix C). The structural formulae for discussion followed Slade's (1997) notation symbols (see Appendix B). As the focus of my paper is on the macro-structure, my transcription of the chunks did not include the micro-features in detail although as noted by Slade (1997), both micro- and macro-perspectives are needed for CA. This is also to help improve readability and understanding of the content presented in the transcription.

FINDINGS AND DISCUSSION

To briefly summarize my initial findings, my proposed macro-structure of a discussion text is:

(Clarification) ^ [[Opinion ● (Initial Development of Idea ^ Elaboration) ^ Reaction ● (Reformulation) ● (Evidence)]^n ^ (Resolution)]^n

Further elaboration of what each stage means and an initial list of language features/patterns are included in Appendix A. To illustrate the above macro-structure, Excerpt 1 shows a chunk of academic discussion that comprise of the various stages listed above (with the exception of the clarification stage).

Excerpt 1

Turn	Speaker		Stage
1	A	4 kinds of powers for example like the, I'm just thinking aloud lah.	Opinion: seek
2	B	Mm.	
3	A	For example, like the authorities, the higher power (.)	Initial Development of Idea
4	B	Ya?	
5	A	people in the higher power has: =	
6	B	= higher position.	
7	A	Higher position.	
8	B	So they'll be the ones who have the would you say they'll have cultural capital, the knowledge the skills, the education, they have the connection, social (.)	Elaborate Idea Opinion: seek
9	A	Mm.	Reaction: agree
10	B	Ok symbolic may or may not. Say for example a government?	Opinion: seek
11	A	A government will have symbolic [capital], gaining the respect of the people, having the:: being trustworthy, that's why people will follow them.	Opinion: provide
12	B	[Ya]	Reaction: agree
13		Would you say that a government has all 4 kinds of capital?	Reformulation
14	A	Not all government have. Some of them are military power right?	Reaction: disagree Evidence: provide
15	B	Ya, that's true.	Reaction: agree
16	A	Aye? Maybe we can, economic, cultural and social (.) what about military?	Opinion: seek
17	B	Military? Will it come under group membership ah? Military is with group membership	Opinion: seek and provide
18	A	But this one is by gun. Maybe we can put down our own views? Bracket military question mark. [((laughs))]	Reaction: disagree Opinion: provide
19	B	[((laughs))] Ok	Resolution: agree

As shown in Turn 14, when there are differences in opinions, participants provide evidence to support their opinions in order for other participants to accept the opinion in

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question. However, in discussions, not only are evidences sought and provided, opinions too are sought and provided (Turns 1, 8, 10, 11, 16-18). By seeking other participants' opinions, it gives others a chance to voice their opinions and ensures that no one participant dominates the discussion. Thus, such a macro-structure of discussion allows participants to explore ideas together, understand the different point of views, and think critically before accepting an opinion.

The depth of a discussion does not need to rely on disagreements because it is unrealistic to tell students to deliberately raise differing opinions. Furthermore, I believe that discussions should encourage collaboration not only in negotiation of opinions but also in helping each other to better understand the topic being discussed. Overall, Excerpt 1 demonstrates a co-construction of knowledge between the participants where a discussion develops due to the need to negotiate a better understanding of a concept before completing the task. As can be seen from the stages listed, such a co-construction of knowledge requires participants to actively seek opinions regarding an initial idea that they may have while the other participants contribute by elaborating on the same idea and checking with the others that they have similar views. Through such exchange of ideas, participants are constantly monitoring, evaluating and negotiating their own and others' understanding. After a general consensus about the developed idea is reached, a reformulation stage (Turn 13) may occur whereby a participant rephrases or summarizes the developed idea in a more concise manner. This stage helps participants to check that they have reached the same understanding. Should there be any differences of opinions regarding their understanding at this stage, counter-opinions and/or counter-evidence have to be given before a resolution can be reached.

Past studies based on social theoretical perspective have made recommendations on how to improve the quality of discussion by setting 'ground rules' (Rojas-Drummond & Zapata, 2004; Swann, 2007). They have included rules to ensure that everyone give their opinions, question opinions, and agree on an opinion before moving on. However, as shown from my CA, such rules do not necessarily teach students to co-construct knowledge, and as such, discussions can remain at a superficial level.

CONCLUSION

As more fine-grained analysis needs to be done to further corroborate the stages and the language features/patterns of each stage, I am unable to make further recommendations. However, once these findings are completed, I hope that it will aid in teaching the different stages of a discussion, and improve understanding that a discussion does not always entail agreeing and accepting one opinion, i.e. it is also a way for participants to help each other deepen their understanding of a concept that they are not familiar with.

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APPENDICES

Appendix A

Generic stages	Language features and patterns
(Clarification) Establishing task requirements and teacher's expectations	Reference to instructions
Opinion Seeking or providing personal thoughts about the topic	Use of first and second person pronouns Use of mental processes like 'think' and relational processes to indicate participants' judgment/attitude
(Initial Development of Idea) Raising an undeveloped idea for others to comment on	Use of modality to indicate uncertainty/certainty
(Elaboration) Providing further details about the undeveloped idea raised	
Reaction Agreeing / disagreeing with opinions / elaborations	Use of yes/no or words like *but, another way of looking at this…*
(Reformulation) Summarizes and rephrases the developed idea for consensus	Use of logical connectives (*so, therefore…*)
(Evidence) Seeking or providing reasons to support one's opinions	Use of discourse organizers (because, *firstly, secondly…*)
(Resolution) Reaching an agreement about an opinion or idea	Use of logical connectives (*so, therefore…*)

Appendix B

Key: (based on Slade, 1997)

^	=	is followed by
●	=	occur in either sequence
( )	=	optional
[ ]	=	domain of recursion of sequencing
n	=	recursion

Appendix C

Key: (based on Jefferson Transcription Notation, in Atkinson and Heritage, 1984)

.   falling intonation

,   continuing intonation

?   rising intonation

(0.5)   pauses in seconds; in this case, 0.5 seconds

(.)   pauses shorter than one tenth of a second

<u>underline</u> stress

[ ]   overlapping talk

=   a latched utterance, no interval between utterances

:   a lengthened sound or syllable; more colons prolong the stretch

(( ))   nonverbal action / transcriber's description