THINKING CRITICALLY THROUGH DEBATING: PROMOTING STUDENTS' HOTS AND SPEAKING COMPETENCE

Abdul Rosyid, Istiqlaliah Nurul Hidayati

Pakuan University, Bogor, Indonesia, abdulrosyid@unpak.ac.id Pakuan University, Bogor, Indonesia, istiqlaliah@unpak.ac.id

Abstract: The development of technology, information, and even education requires every person to be smart in adapting and adopting new situation. It is no doubt that a new situation leads to new challenges and also new problems. To be able to deal with such a situation, it is needed to train critical thinking skills. One of the ways is through applying a teaching technique in the classroom context, for example, debate technique. This training is also one of the ways to familiarize and to promote students' higher order thinking skills. This research is aimed at promoting students' critical thinking and speaking competence through applying debate technique. The method employed in this study was classroom action research. It was then completed by conducting a focused group discussion. The result of this research shows that there is a great improvement on students' speaking after applying debate technique in two cycles. Besides, the students' critical thinking also increased significantly which was shown by the 'content' of their response in second cycle post-test. The students were able to relate all sources they gathered before performing the debate and used them to upport their arguments during the debate and along with the second cycle post-test. Thus, it can be taken into account that debate technique was found effective in elevating students' speaking competence and promoting their critical thinking as well.

Keywords: debate, critical thinking, higher-order thinking skills, speaking

Introduction

From time to time, communication ability is a requirement in every single aspect of life. No matter what we want to do or to get, we should be able to communicate our feelings, desires, ideas or opinion as effective as possible. However, this skill is not a natural skill that people can master easily. It needs a big effort in order to be able to communicate effectively. Communication skill is really in line with thinking skills. Someone can communicate effectively if the ways of thinking work perfectly. Related to this issue, nowadays Higher Order Thinking Skills becomes a hot issue among researchers and educators. Teachers are required to design teaching and learning activities or strategies so that the students will be familiar with HOTS which is commonly related to critical thinking. One of the purposes of designing such activities is to face current condition where there are so a lot of information spread rapidly. In order to avoid misleading, it needs critical thinking ability to absorb and understand the information. Besides, the ability to operate cognitive domains to think critically will automatically lead to communicate effectively. However, it is difficult to meet all of the expectations. The teachers need to consider some efforts; started from understanding the concepts of HOTS and its relation with critical thinking, and thinking of appropriate ways to train critical thinking and effective communication. Therefore, the research is important to conduct. In this research, the researchers applied debate technique as one of efforts to promote students' HOTS and their speaking competence.

What is Higher Order Thinking Skill?

Nowadays, teachers or lecturers are required to design teaching learning process and to lead the students not only to a level of Low Order Thinking Skill (LOTS) but also to a level of

Higher Order Thinking Skill (HOTS). In Indonesia, HOTS has become a happening issue recently. It is a requirement for the teachers/lecturers to familiarize the students with this way of thinking starting from Elementary school until University level. The question is, do all teachers or lecturers have similar idea regarding the definition of HOTS?

According to some scholars, HOTS is defined as an invention of a new idea or concept (Ciardiello, 2000). He claimed that someone activating higher cognitive domains in thinking skills shows that they are capable of producing a unique characteristic in communication, a unique idea and employ critical and innovative knowledge. Furthermore, HOTS is also defined as the ability to apply knowledge, skills and values in reasoning, reflecting, problem solving, decision making, innovating and creating new things (King, 2002; Kusuma et al., 2017; Sulaiman et al., 2017). From those definitions it can be noted that HOTS is a way of innovative and critical thinking related to knowledge that can be applied in solving problem, making a choice, or constructing new things.

Critical Thinking

According to Angelo and Cross (1995) critical thinking skills are related to higher level skills such as analysis, synthesis, identifying and solving problems, making inferences or conclusions and evaluating things. Hashemi (2012) viewed critical thinking as a skill used by individuals for a lifetime to make a choice related to personal things, academic stuffs or social lives. Furthermore, critical thinking skills can also be defined as the process of finding the meaning, understanding things, considering a number of possibilities, and making reflection to the way of self-thinking (Hasmah & Munirah: 2013). Related to teaching and learning context nowadays, critical thinking is in line with the way of high level thinking that can be applied in solving problems faced by the students either in the classroom when they are learning, or outside the classroom when they deal with real life situation. However, it needs a big effort to familiarize and even to foster the students to have critical thinking. One of the efforts that can be conducted by the teacher is applying an innovative teaching technique.

Debate: An Innovative Teaching Technique

One of the jobs of a teacher/lecturer nowadays is designing a teaching and learning process that leads the students to be active, innovative and to foster students' ways of thinking. Related to the ways of thinking, it is better if the teachers/lecturers give a big effort to familiarize the students with Higher Order Thinking skills. One of teaching techniques that can be applied to make the students be more critical is debate technique. Dale and Wolf (2002) defined debate as a speaking situation where there are arguments about different points of view. Krieger (2005) viewed debate as a good activity for language learning because the activity encourages students to optimize their cognitive and linguistic domain. The use of cognitive and linguistic domain optimally is due to the process of debate itself. It is commonly started by getting a debatable motion, then conducting a research; i.e. finding information from different sources, analyzing the sources and synthesizing the sources, and discussing the sources in order to support the arguments, then performing the debate itself. The whole process, of course, requires the students to think critically, to optimize their thinking and to be active in doing verbal communication. In short, debate is one of teaching techniques that can promote students' critical thinking.

Debate Boosts Students' Critical Thinking and Empowers Speaking Competence

Nowadays, many schools and universities use debate as one of teaching techniques. In debating technique, students are required to prepare themselves by reading many sources before performing the debate. This activity makes debating to be considered effective to promote students' critical thinking ability. Through reading many sources, discussing with many people, or conducting mini-research, students can stand on their arguments, either pro or cons based on the motion given by the teacher/lecturer. Those who do not prepare themselves by reading and discussing will not be able to maintain their argument and might become the losers in the debate.

Gervey, Drout, and Wang (2009) state that after using debate technique in economic class, the students become more inquisitive and this inquisitive mind leads them to build critical thinking ability. Even though in some studies it is stated that debate is considered as not comfortable by students (Gervey, et. al, 2009) yet they are challenged to perform well by preparing themselves through reading different sources. The activity of reading from many sources also lead to foster critical thinking ability. Stewart and Winn (1995) find that debate forces students to analyze what they read. Analyzing means that it is not merely reading but trying to understand the text and if it is needed the students will compare what they find from one source to some other sources.

Not only does debate help students to build their ability to think critically, it also helps them to improve their skills to communicate systematically. This advantage of debate is found by (Gervey, Drout, & Wang (2009). When students can communicate systematically, it improves their cognitive ability. Classroom debate is also seen to nurture the active engagement of students (Zare & Othman, 2013). Besides, they also agree that debate has a great chance to improve speaking ability since this activity requires students to express idea using verbal communication. It means that using classroom debate as a teaching/learning approach brings many advantages to learners, which include promotion of critical thinking skills, mastering the course content and improving the speaking abilities.

Method

The research was conducted to the fourth semester students of English Language Education Study Program of FKIP, Pakuan University. The number of the students was 24. They were chosen purposively. The students were chosen based on the result of last semester speaking class score. The class was chosen because mostly the students have problems in building their critical thinking which is reflected from their speaking test.

The method used was Action Research. The procedures consist of planning, acting, observing and reflecting. The research was started by planning, acting and observing, and ended with reflecting. Having conducted reflecting session, the researcher and observers run another planning for the second cycle. As the previous cycle, acting and observing and then reflecting were accomplished. The students' work in a form of speaking which was recorded was scored by the researcher using Oral Proficiency Categories by Brown (2001). After that, the result was concluded. After completing action research, Focused Group Discussion was conducted. The researcher involved the observers and all the students to talk and discuss what happened in the class session. Every students shared their opinion about the use of debate to promote their critical thinking skill and speaking competence.

The data gathered were analyzed quantitatively and qualitatively. The data taken from pretest and two different post-tests were analyzed quantitatively. Then the results were crosschecked with the results of observation notes taken from the first and the second cycle. Last but not least, the data was crosschecked again with the result of FGD, which was analyzed qualitatively.

Results

The First Cycle of the Action Research

Planning

The planning session was conducted by the researcher and three observers which were also the team teaching in Speaking for Specific Purposes class. In this session, it was decided that from the total number of the students; 24, they were grouped into eight consisting of three students for each. In each meeting in this cycle, there were two debate sessions performed by three speakers in each group for each debate session. So, there were six students debating for one session. Each of the group might belong to a pro or a cons group, yet in the response they could express their personal opinion and argument towards the issue. While certain groups were debating, the rest of the students should watch and pay attention. In this cycle, it was also planned that the debate sessions would talk about four different motions, they are: (1) Voting in national election should be banned, (2) The death penalty should be abolished, (3) Single-sex classes are better for students, and (4) All parents should be required to attend parenting class before having a child. All of the motions were given a week before the debate session. However, the students did not have an idea yet whether they would be pro or cons. It would be assigned on the D-day of debate session. So, they needed to prepare the arguments for two different perspectives. In this session, it was also designed the questions given for the first cycle post-test. The questions were related to the motions given in this cycle.

Doing

This session was conducted by the researcher and the observers in a class chosen by certain consideration. The class was chosen because they had problem in the previous speaking class based on the information gathered from the previous speaking lecturer. The acting was accomplished by the researcher who was also the lecturer, all the students in the classroom and three observers. Everything happened in the classroom was exactly the same as what had been designed in planning session.

Observing

As it was mentioned in advance, there were three observers involved in this research. All of them were also the lecturers of Speaking for Specific Purposes teaching in different classes. They observed what happened in the classroom and took a note on every single thing including the students' reaction towards teaching and learning process. The result of the notes were discussed in reflecting session.

Reflecting

As the final session of this cycle, reflecting session involved the lecturer, the observers and some of the students. From this session, it was discovered that almost all of the students still did not clearly understand the role of each speaker. They also got difficulties to find appropriate sources to support their arguments related to the motions given. Hence, their arguments was still shallow. Besides, in the debate session, the students just read the notes that they had prepared instead of tried to speak with giving eye contact to the rest of the

students. Another finding was the students still had problem the area of grammar in the sentences they had constructed and also in terms of pronunciation. Based on the findings, the debate rules and the roles of the speakers should be emphasized. It also needed to give a correction focusing on grammar and pronunciation errors at the end of the debate session.

The following is the speaking score gained by the students in the first cycle.

Table 1. The speaking score from the first cycle

No	Initial	Score
1	MRR	67
2	NM	65
3	DE	68
4	HK	75
5	UG	65
6	WA	72
7	ONH	66
8	ENM	63
9	SFR	60
10	RMR	60
11	NWT	65
12	AN	64

No	Initial	Score
13	MZA	78
14	MFJ	73
15	MNR	58
16	FS	60
17	ER	60
18	HDH	62
19	SH	65
20	FSF	68
21	NAN	67
22	AR	75
23	SN	77
24	IHA	65

The Second Cycle of the Action Research

Planning

The result of the first cycle has not met the expectation yet. Besides, the findings from the reflection session in the first cycle became the basic idea to plan some actions in this second cycle. Therefore, the researcher and all observers planned to give one session in the class discussing the rules of the debate and emphasizing the students on grammar and pronunciation. The lecturer also guided the students how to get appropriate sources to support their arguments by giving an example of texts, articles or journals related to certain motions. The lecturer also reminded the students about some expressions that could be used to start giving arguments. In this planning session, the lecturers and observers also decided four different motions, they are: (1) The voting age should be lowered, (2) Selling human organs should be banned, (3) Teachers should not be allowed to contact students through social media, and (4) It is never appropriate for the government to restrict freedom of speech.

Doing

After all the plan had been designed, then the acting was conducted. First thing first, the lecturer and the students discussed the rules of the debate and the role of each speaker in the group. Then, the lecturer also gave a short review related to grammar and pronunciation based on the findings from the first cycle. The lecturer also explained some expressions that could be used in giving arguments. It was done in one meeting as it was planned. On the next meetings, the debate session was carried out. Everything happened in the classroom in this cycle was based on what had been designed by the lecturer and the observers in the planning session.

Observing

From the note taken by the observers, it was found out that in the debate session all of the speakers had taken the roles as it was explained by the lecturers. The speakers also tried their best not to read the notes all the time. Besides, they also mentioned some sources from articles or journals that supported their arguments. Surprisingly, since they had a week to prepare, they showed a great improvement in the area of grammar and pronunciation.

Reflecting

The reflecting session was done a week after the acting session completed. It took time to asses and to analyze the second post-test. From the result of the second posttest, it was found out that the students' speaking competence has improved significantly. It might be the result from their good preparation on the motions given. Like it was in the debate session, the students expressed their arguments related to questions given in the second post-test by quoting from journals or articles that they had read.

No	Initial	Score
1	MRR	73
2	NM	75
3	DE	78
4	HK	84
5	UG	75
6	WA	80
7	ONH	68
8	ENM	68
9	SFR	65
10	RMR	65
11	NWT	75
12	AN	70

Table 2. The speaking score from the second cycle

No	Initial	Score
13	MZA	80
14	MFJ	75
15	MNR	65
16	FS	65
17	ER	65
18	HDH	65
19	SH	70
20	FSF	75
21	NAN	78
22	AR	85
23	SN	85
24	IHA	75

The Result from Focused Group Discussion

Having accomplished all the session in CAR, Focused Group Discussion was conducted. The researcher, the observers and all students were involved in this FGD. The main objective of FGD is to investigate students' perception whether or not their critical thinking and speaking competence improve after doing debate sessions along two cycles. Therefore, all of the students were given a chance to express their opinion. The following are some students' opinion taken from FGD:

Excerpt 1

Dengan banyak membaca sumber-sumber, vocabulary saya jadi bertambah,, jadi kalo ngomong bahasa Inggris enggak susah..

[Thorugh reading some sources, it enriches my vocabulary. So, I find no difficulties to speak English.]

Excerpt 2

Debat ini memaksa saya untuk ngomong bahasa Inggris karena kan setiap orang harus ngomong. Ini benar-benar melatih speaking saya. Jadi pas tes kemarin saya sedikit terbiasa berbicara bahasa Inggris.

Debate session forced me to speak because every speaker should speak. This activity really gives me a practice to speak English. As a result, on the last post-test, I was a bit used to speak English.

Excerpt 3

Saya selalu merasa bahwa speaking bahasa Inggris itu sangat susah sehingga saya takut berbicara bahasa Inggris. Tapi setelah mengikuti debat saya merasa bahwa saya mampu dan tidak takut lagi berbicara bahasa Inggris walaupun masih banyak salah-salahnya.. heheh..

I always feel that speaking English is completely difficult, so that I am always afraid to speak English. However, after having debate session, I feel like I am capable of speaking English and I am not afraid to speak English though I still make many mistakes.

Excerpt 4

Saya sangat menyukai pembelajaran speaking dengam menggunakan sistem debat ini, karena saya merasa kemampuan speaking saya meningkat dan saya merasa lebih percaya diri berbicara bahasa Inggris.

I do love learning how to speak English through debate. I feel my speaking skill significantly develops and I feel more confident to speak English.

Excerpt 5

Pada dasarnya saya memang suka membaca, tapi hanya sekedar untuk update informasi saja. Tapi, di kelas speaking yang menggunakan debat ini, saya lebih banyak membaca sumber-sumber yang tujuannya untuk mendukung opini-opini saya saat menyampaikan argumen atau membantah argumen lawan debat saya.

Basically, I love reading. I read for updating information. But, in this speaking class, I read more sources due to get some information to support my opinion when I expressed my arguments or when I did rebuttal.

Excerpt 6

Kelas speaking dengan debat ini memaksa saya untuk membaca lebih banyak untuk menyelesaikan permasalah yang terkait dengan motion yang diberikan. Selain itu, saya juga harus menggabungkan informasi dari sumber-sumber yang berbeda sehingga argumen yang saya sampaikan lebih masuk akal.

This class forced me to read alot to solve problems related to the motions given. Besides, I had to be able to conclude information from several sources so that my arguments sound more logical.

Excerpt 7

Kegiatan debat ini membuat saya lebih kritis. Setiap ada persoalan di organisasi, misalnya, saya tidak asal memberikan pendapat, tapi harus mencari sumber-sumber yang bisa mendukung pendapat saya.

This debate activity encourages me to be more critical. If I found a problem, for example in my organization, I did not express my argument directly, but I tried to find sources to support my opinion.

The 10th AISOFOLL

"Taking Students' Thinking to Higher Levels Through Creative Language Teaching"

Excerpt 8

Karena pada saat debat kita gak tau akan ada di bagian pro atau cons, jadi kan kita baca dua pendapat berbeda tentang motionnya.. nah itu membuat saya terbiasa melihat masalah dari dua sisi yang berbeda, sisi positif dan negativenya. Jadi lebih kritis gitu..

In the debate session, we had no any idea whether we would belong to pro or cons, so we had to read and made some arguments from two different perpectives. This activity makes me get used to see a problem from two different points; possitive and negative one. It is like being more critical.

Excerpt 9

Sebelum tampil debat, kita melakukan diskusi dengan grup tentang apa yang harus kita sampaikan, atau sharing sumber-sumber. Itu membuat kita semakin mengerti tentang motionsnya dan melatih kita berpikir kritis tentang motionsnya.

Before performing the debate, we used to have a group discussion dicussing what we would say, or sharing sources. It made us to understand more the motions and to be more critical of the motions.

Excerpt 10

Saya jadi terbiasa membaca dari banyak sumber baik yang berbahasa Inggris ataupun yang berbahasa Indonesia. Awalnya hanya untuk mendukung pendapat saya pada saat debat. Tapi meskipun motions yang dikasih bukan untuk grup saya, saya jadi penasaran untuk mencari informasi.

I become accustomed to read from many sources written in English or in Bahasa. At first, I did it to support my arguments in debate session. But then, everytime the lecturer wrote the motion I became very curious to get information although the motion did not belong to my group.

Discussion

This study focuses on boosting students' critical thinking and speaking competence through debate technique. The data displayed in advance revealed several interesting findings. The first finding can be seen from the first post-test and the second post-test. It showed that there is a significant improvement on students' speaking competence after applying debate technique in the classroom. The comparison between those post-tests can be seen in the following figure.

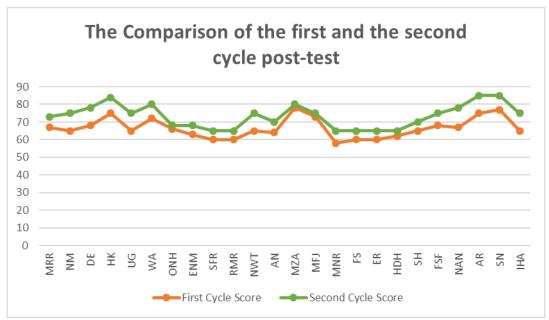


Figure 1. The Comparison of the first and the second cycle post-test

Seeing the figure, it can be concluded that debate technique works well in empowering students' speaking competence. At the first cycle, based on the findings from the reflecting session, it is found that some students get difficulties in finding appropriate sources related to the motions given by the lecturer. This condition influences their performance in the first post-test since the questions given are all related to the motions given. Besides, their unprepared conditions related to the debate materials in the first cycle also influences 'the content' of their answer in the first post-test. It can be said that their critical thinking still needs to be sharpened.

Compared with the first cycle, the second cycle post-test result shows a great improvement. The students' speaking competence is much better than the previous cycle. In the area of 'content' of the answer, the students also had been able to relate their answers with the information they got from their readings or discussion before or along the debate session in the second cycle. It means that the whole process of the debate, starting from preparing the sources until performing the debate itself really boosts their speaking and critical thinking.

The findings from the post-tests are in line with the findings from FGD. As it can be seen in the excerpts above, it is revealed that the students agree the debate technique helps them to enhance their vocabulary since they have to read a lot before performing the debate. Besides, their speaking confidence also improves and their speaking anxiety decreases significantly. It is actually the influence of the debate technique that always forces them to do verbal communication. The results are actually in accordance with the points of view stated by (Gervey, Drout, & Wang (2009).

Related to critical thinking, the data in the excerpts revealed that debate encourages students' to think critically. It can be seen from the statement that the students become get used to 'conclude some information from different sources to support their arguments related to the motion given'. Besides, the students' critical thinking can also be seen from the students' way to see the problems from different perspectives as they do not know whether they belong to pro or cons group in the debate session. It also leads them to be more curious in a positive way. In short, this debate technique leads them to be able to solve the problems related to the

motions. It is in line with the definition of critical thinking that is a skill to make a choice in personal, academic and social lives (Hashemi, 2012)

Conclusion

From the action research conducted in two cycles, it is discovered that debate technique can boost students' critical thinking and empowers their speaking competence. The process of debate started from reading many sources related to the motions given, discussing with friends in groups, taking conclusion from the readings and discussion, designing logical and critical arguments to be delivered in the debate and also performing the debate itself leads them to a process of thinking critically, and of course encourages them to do a lot of verbal communication.

The result of Focused Group Discussion also revealed that the students think the whole process of debate helps them to be more critical and influences their speaking performance. Considering the findings of this research, there is still a shortcoming, especially in the area of measuring students' speaking competence. The improvement of speaking competence is only seen from the result of two post-tests. The results must be more reliable and convincing if one of the measurements also focused on students' speaking performance when the students were performing the debate.

Acknowledgements

This research is supported by *Direktorat Riset dan Pengabdian Masyarakat*, *Direktorat Jenderal Riset dan Pengembangan Kementerian Riset*, *Teknologi*, *dan Pendidikan Tinggi* for the financial assistance so that the research can run smoothly. The researchers also say the gratitude to the Dean of FKIP, Pakuan University for the permission to conduct the research in his institution.

References

- Angelo, T. A., & Cross, P. (1995). Classroom Assessment Techniques: A Handbook for College Teachers, 2nd edition.
- Ciardiello, A. V. (2000). Student questioning and multidimensional literacy in the 21st century. *The Educational Forum*, *64*(3), 215-222.
- Brown H. Douglas. (2001) *Language Assessment Principle and Classroom Practices*, NY: Pearson Education
- Gervey, R., Drout, M. O. C., & Wang, C.-C. (2009). Debate in the classroom: An evaluation of a critical thinking teaching technique within a rehabilitation counseling course. *Rehabilitation Research, Policy, and Education, 23*(1), 61.
- Hashemi, M. R., & Ghanizadeh, A. (2012). Critical discourse analysis and critical thinking: An experimental study in an EFL context. *System*, 40(1), 37-47. doi:10.1016/j.system.2012.01.009
- King, A. (2002). Structuring peer interaction to promote high-level cognitive processing. *Theory into Practice*, 41:33-39.
- Krieger, Daniel. (2005). Teaching debate to ESL students: A six-class unit. *The Internet TESL Journal*, 11(2).

- Kusuma, M. D., Rosidin, U., Abdurrahman, A., & Suyatna, A. (2017). The Development of Higher Order Thinking Skill (Hots) Instrument Assessment In Physics Study. *IOSR Journal of Research & Method in Education (IOSRJRME)*, 07(01), 26–32. https://doi.org/10.9790/7388-0701052632
- Paulette Dale and James C Wolf, *Speech Communication Made Simple*, (NY: Miami- Dade Community College, 2000, 2nd Ed), p.176
- Stewart, K. A., & Winn, J. (1996). The case debate: A new approach to case teaching. *Journal of Management Education*, 20(1), 48-59.
- Sulaiman, T., Muniyan, V., Madhvan, D., Hasan, R., & Rahim, S. S. A. (2017). Implementation of higher order thinking skills in teaching of science: A case study in Malaysia. *International Research Journal of Education and Sciences (IRJES)*, *1*(1), 2550–2158. Retrieved from http://www.masree. info/wp content/uploads/2017/02/20170226- IRJES-VOL-1-ISSUE-1-ARTICLE-1.pdf
- Wan Hasmah Wan Mamat & Nur Munirah Teoh Abdullah. (2013). *Kemahiran Berfikir Kritis dan Kreatif*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Zare, P., & Othman, M. (2013). Classroom debate as a systematic teaching/learning approach. *World Applied Sciences Journal*, 28(11), 1506-1513.

Bio Statement

Authors: Abdul Rosyid is a lecturer in English Education Study Program, Faculty of Teacher Training and Educational Sciences, Pakuan University. He received a Master Degree in English Education from University of Muhammadiyah Prof. DR. HAMKA (UHAMKA) in 2014. He is interested in English Pronunciation, Phonetics and Phonology, Foreign Language Acquisition, and Critical Thinking in Language Study.

Istiqlaliah Nurul Hidayati is a lecturer in English Education Study Program, Faculty of Teacher Training and Educational Sciences, Pakuan University. She received a Master Degree in English Education from Indonesia University of Education in 2012. She is interested in English for Specific Purposes, Discourse Analysis and Linguistics.