晋 中 学 院
本科毕业论文（设计）

题　　目 多模态视角下英语学习者口头语篇话语分析——以“科技与伦理”主题为例

院　　系 外语系

专　　业 英语

姓　　名 闫莉芳

学　　号 **1702111127**

学习年限 2017 年 9 月至 2020 年 7 月

指导教师 要文静 副教授

申请学位 文学学士学位

2020 年 4 月 25 日

Acknowledgement

With the completion of the paper, my college life is coming to an end, and here I would like to express my deep gratitude to all the people who have helped me in the paper writing. First of all, I would like to thank my supervisor, assistant professor Yao Wenjing , who is knowledgeable and kind to me. During the writing of the paper, she has given me a lot of constant inspiration, patient guidance and constructive suggestions. Thanks for her help, the paper goes smoothly. In the second place, I would also express my sincere graduation to all teachers had taught me during my postgraduate to program at the university. What impressed me is not only their very exciting professional class but also their insightful views. Those ideas have a far-researching influence on my study and the future life. Last but not least, I want to express my deep gratitude to my family members and roommates. Their selfless love, understanding and support give me the courage and motivation to move on. My gratitude to them cannot be expressed in words.

Discourse Analysis of Oral English Learners from the Multimodal Perspective

—Take the Theme of "Technology and Ethics" as an Example

Name: Yan Lifang　Supervisor: Yao Wenjing

Abstract: In the digital era, human beings have a variety of ways of communication, and the communication of meaning in communicative discourse is more multimodal. Based on college teaching reform project of Jinzhong university in 2019, it analyses the videos of the theme of "Technology and Ethics" in the course of intercultural communication from students majoring in translation in 2018 of Jinzhong University , based on comprehensive theoretical framework of multimodal discourse analysis of zhang Delu, with Elan software, video annotation and data analysis are performed for multi-modal analysis of English learners' oral discourse with a combination of quantitative and qualitative methods.

The research content includes two aspects: cultural level and expression level. It has shown that multimodal discourse plays an important role in the oral discourse of English learners. The output of the content is affected directly by the correct analysis and understanding of the speaker's language, accompanying language modes, gestures, body movements and other modes and have a great impact on the expression of meaning for English learners. The multimodal nature of language communication provides a new means of expression for teaching and has a reference significance for multimodal learning and application of oral English.

Keywords： Multimodal discourse analysis; Oral discourse; Spoken teaching

多模态视角下英语学习者口头语篇话语分析

——以“科技与伦理”主题为例

学生姓名：闫莉芳　指导教师：要文静

摘 要：在现今数字化的时代背景下，人类的交际方式多种多样，交际语篇意义的传达更具有多模态性。该研究基于晋中学院2019教改项目，以晋中学院18级翻译专业学生跨文化交际课程中“科技与伦理”为主题的视频作为研究语料，依据张德禄构建的多模态话语分析的综合理论框架，通过借助软件ELAN对视频进行标注和数据分析，采取定量与定性相结合的方法，对英语学习者的口头语篇进行多模态分析。研究内容包括两个方面（1）文化层面 （2）表达层面。研究表明，多模态话语对英语学习者的口头语篇表达有重要意义。正确分析、理解讲者的语言、伴语言模态以及手势、身体运动等模态会直接影响内容的输出，对英语学习者意义的表达会产生较大影响。语言交际的多模态性为教学提供了新的表现手段，对英语口语多模态学习与应用有借鉴意义。

关键词：多模态话语分析；口头语篇；口语教学

Contents

I Introduction

With the rapid development of digital information technology, the transmission mode of information has been expanded from the single language form to the multimodal form of language, image, color, sound and so on. Obviously, the Analysis of the single modal of language has been unable to adapt to the new features of Discourse such as Multimodal and digitization. Discourse research has turned to multidimensional and systematic, and Multimodal Discourse Analysis (MDA) is emerging gradually. A large number of experts and scholars at home and abroad have made beneficial explorations based on the theory of Systemic Functional Grammar. With the deepening of various disciplines and the integration of disciplines, the research perspectives of multimodal research can be mainly divided into the following three aspects: social semiotics analysis, systemic-functional grammar analysis and social interaction analysis. The theoretical thinking and innovation of multimodal discourse analysis plays a positive role in promoting the research of related fields in Chinese linguistics. As an important and intractable problem, the oral output of second language learners has been highly concerned by the academic field, but few studies have mentioned the multimodal characteristics of oral discourse.

This paper selects the video with the theme of “Technology and Ethics” in the intercultural communication course of 5 students as the research corpus. Based on the comprehensive theoretical framework of multimodal discourse analysis (Zhang, 2009), this paper uses Elan 6.0 analysis software to segment, transcript, annotate and analyze the video, and adopts a combination of quantitative and qualitative methods，conducting a multimodal analysis of English learners’ oral discourse. This study will analyze the oral discourse of English learners from the cultural and expressive levels, and explain the output of these contents from the perspective of multimodal. It researches oral discourse of English learners in the verbal and nonverbal modal, which demonstrates how to construct meaning of the social function and communication, explore the synergies among multimodal symbols, puts forward some suggestions on oral English learning and teaching process. In oral English

teaching of college, teachers can make use of multi-modal symbols to carry out oral English teaching, improve English learners' classroom participation and language output, and then enhance the effect of oral English teaching. At the same time, it can deepen the research and development of multimodal discourse analysis theory, and provide enlightenment for future discourse analysis theory.

II Literature Review

Multimodal discourse analysis combines speech with other symbolic resources such as images and sounds to analyze how different modes cooperate to participate in meaning construction. The study of multimodal discourse is based on Halliday' s systematic-functional linguistics, which includes both theoretical and applied research. This paper reviews the multimodal discourse from these two perspectives.

The multimodal discourse analysis based on the theory of systemic functional linguistics is mainly from the perspective of social semiotics, relying on Halliday's theory of systemic functional linguistics, especially the three meta-functional theories, to explore the modal synergy of discourse, the complementary relationship of different symbolic resources, the function of multimodal discourse and so on.

The theoretical research in China began with the publication of Social Semiotics Analysis of Multi-mode Discourse (Li, 2003), which introduced the social semiotics framework of image analysis （Kress & Van，1996） Then the theoretical basis and research methods of multimodal discourse analysis are systematically reviewed. It explores the construction of the comprehensive theoretical framework of multimodal discourse analysis, for example, Zhang (2009) published exploration of the Comprehensive Theoretical Framework of Multimodal Discourse Analysis to construct the theoretical framework of multimodal discourse analysis from the cultural level, context level, meaning level, form level and media level, and discussed the relationship between modes!".

In addition, domestic scholars also introduced and explored multimodal discourse analysis tools. For instance, Wang and Wen (2008) introduced the multimodal analysis software Elan and its main functions. Feng (2010) introduced the important role and function of digital technology in multimodal discourse

analysis.

The application of multimodal research can be divided into discourse level and teaching level. On the multimodal study of discourse, Royce, T (2002) made an in-depth study on the complementary relationship between image and text generation in multimodal discourse and the coordination relationship between multiple symbolic modes in language teaching. Martinec, Salway and Len (2006) studied and analyzed charts in new and old media, the relationship between image and text, and the relationship between text and text in two-dimensional plane. Hu and Dong (2007) took 23 PPT works in teaching as samples and carried out discourse analysis with the help of computer and the integration of multimodal discourse, and concluded that PPT in class is not only a teaching aid but also discourse analysis. Wei (2008) studied a multimodal media discourse in journals from the perspective of meta-function in systemic functional linguistics.

In terms of teaching application, Jewitt（2006）observed the rhythm, multimode and interactive resource allocation when teachers used the interactive whiteboard. He analyzed the discourse design and teaching principles of the interactive whiteboard, and discussed the relationship between multimode reading and writing, teaching methods and modern technology involved in classroom teaching. Gu (2007) was the first to study the relationship between multimodal and foreign language teaching in China. He makes a conceptual distinction between multimedia learning and multimodal learning. Two kinds of learning models are constructed. Based on the educational context into the situation of meaning, Zhang (2009) analyzes the application of media technology in foreign language teaching with the multimodal discourse theory; Liu (2010) Research on Multimodal Discourse. This paper explores the level of non-verbal communication in oral English of college students in China.

The theoretical innovation of multimodal discourse analysis plays a positive role in promoting the relative research linguistics of China. Oral English output of second language learners' s as an important and difficult problem has been paid close attention to by academic research, but there is little research mentioned many modal characteristics of spoken discourse.

III Multimodal Analysis of Oral Discourse of English Learners

This part mainly introduces the research purpose of this paper, the research subject, research methods, and the research procedure, based on the cross-cultural communication course in the “science and technology and ethics” as the theme of the video assignments for the five students, with the help of a software ELAN with quantitative and qualitative analysis method are being analyzed, combining the content of the subject. In order to make the result of the experiment credible, the process of multimodal analysis is described in detail.

3.1 Research purpose

Language is the main tool of human communication, expression power in language is one of the basic skills with modern talents. With the development of the society and the progress of science and technology, the continuous cultural communication appears in other countries, frequently among different people, the importance of oral skill enjoys a big boom than before, the communicative skills will become more and more important. In the digital era, the multimodal characteristics of human communication are increasingly prominent, so it is incomplete that focus only on language and gestures.

This study is based on Jinzhong college teaching reform project in 2019, using the videos with the theme of “Technology and Ethics” in the course of intercultural communication for students majoring in translation in 2018 of Jinzhong University as the research corpus, based on comprehensive theoretical framework of multimodal discourse analysis (Zhang, 2009), with the help of Elan software, video annotation and data analysis are performed for multi-modal analysis of English learners’ oral discourse using a combination of quantitative and qualitative methods. In order to improve English learners' oral ability and intercultural communication ability, and put forward some suggestions for college oral English teaching.

3.2 Research subject

This paper is a phased achievement of the teaching reform and innovation project based on the construction and application research of the project-based

flipped classroom teaching resource library of foreign languages by VR. The research subject of this project is the core course of English major and the course of Intercultural Communication for English majors. There are 12 themes in the course of intercultural communication, among students which have recorded micro-teaching videos after reading the themes text in the flipping classroom. Science and ethics, as important influencing factors of intercultural communication, have always been concerned by people. As for the discourse content of science and technology and ethics, students make a comparative analysis of Chinese and western ideologies. Each student has his own focus and elaborated from the perspectives of the differences in scientific thoughts, the origin and development of science and technology, and the relationship between science and ethics.

This research selects videos of five students with the theme of "Technology and Ethics" in the cross-cultural communication course for multi-modal analysis. The students, all sophomores majoring in translation and translation in the Foreign Language Department, are labeled student A, student B, student C, student D, student E in the study. Each video lasts about 5 minutes.

3.3 Research methods

Quantitative and qualitative methods were used in the study using Elan 6.0 video analysis software (https://archive.mpi.nl/tla/elan/download), ELAN (EUDICO Linguistic Annotator) is an annotation tool that allows you to create, edit, visualize and search annotations for video and audio data. It was developed at the Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands, with the aim to provide a sound technological basis for the annotation and exploitation of multi-media recordings. ELAN is specifically designed for the analysis of language, sign language, and gesture, but it can be used by everybody who works with media corpora, i.e. with video and/or audio data, for purposes of annotation, analysis and documentation.

The software can be played in a loop, accurate to 0.1 second, and can define language, symbol and mode, annotate, sort, transfer, modify, replace and segment data statistical analysis. Elan has a wide range of applications in body language research and discourse analysis. The labeling process involves three steps: Define

the layer type and layer, select Time Interval, and enter Annotation. “Layer” and “Type” are the two Elan terminology annotations that need to be interpreted in the first position. A layer is a group, and types are assigned to layers during multimodal labeling. For example, pure language and paralanguage belong to the verbal model, while gestures and gaze belong to the physical model.

Table 3.1 A multimodal discourse framework for learners’ oral output

Mode	Pure language	Speech	Speech(S)
	Paralanguage	Speed	Fast(FS) Slow(SS)
		Intonation	Rise(IR) Fall (IF) Flat (FI) Change(IC)
		Pause	(P)
	Body mode	Facial expression	Smile(S) Frown(F) Amaze(A)
		Gaze	(G)
		Head	Up (HU) Down(HD) Nod(HN) Shake(HS) Movement(HM)
	Non-body mode	PPT	(P)
		Video	(V)

Therefore, before annotating the video with Elan, the first step was to categorize the patterns used by the student’ s spoken output. Based on multimodal theory framework (Zhang, 2009), the expression level consists of four parts: pure language, non-language, body mode and non-body mode. The pure language part refers to the spoken output, and the paralinguistic part includes intonation and pauses. Body patterns include head movements, eye contact, facial expressions, and non-body patterns include environment and tools. Pattern types are indicated by their initials, such as IR for rising tones. Based on the actual video, some patterns were added and some were removed. For example, the classroom environment, which is fixed, is not considered to be dependent layer. An Excel table with 4 columns and 9

rows is designed according to its content. Table 3.1 provides the information in details.

3.4 Research procedure

With the help of Elan, obtaining multiple forms of data requires several steps.

(1) Define the type. According to the proposed MDA framework, there are four main types. Click the Type menu and click the Add New Layer Type option. The second is the name pattern of “pure language”, “paralanguage” “body language” and “non-body language”, as shown in Figure 3.1.

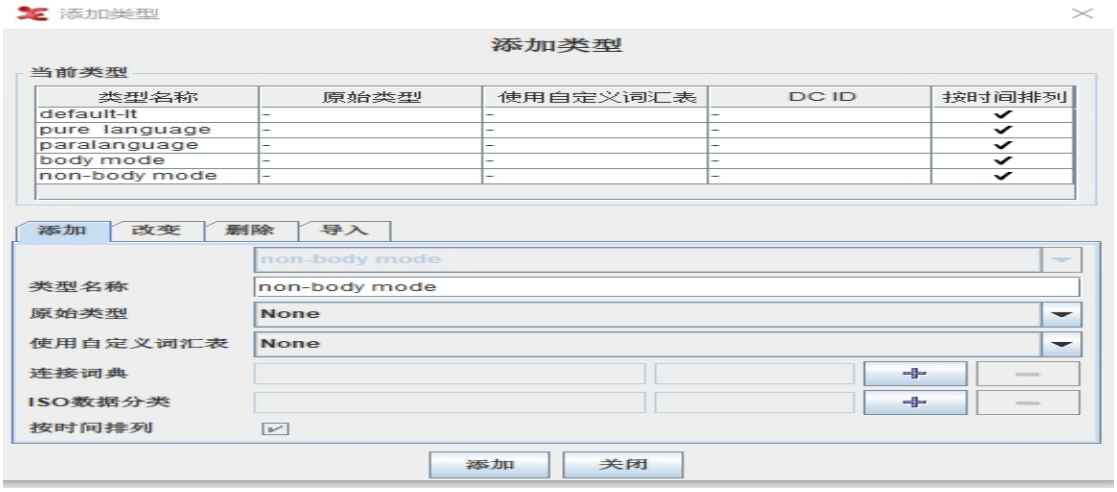

Figure 3.1 Types of ELAN

(2) Defining the classification. Different schemas are defined under different types. For example, when defining the “Intonation” pattern, the author clicks the “Tier” menu. Then click Add New Layer. First select paralanguage Pattern in Hierarchy Type, and then code Tone in the Hierarchy Name menu. Others can be defined in the same way, This is shown in Figure 3.2.

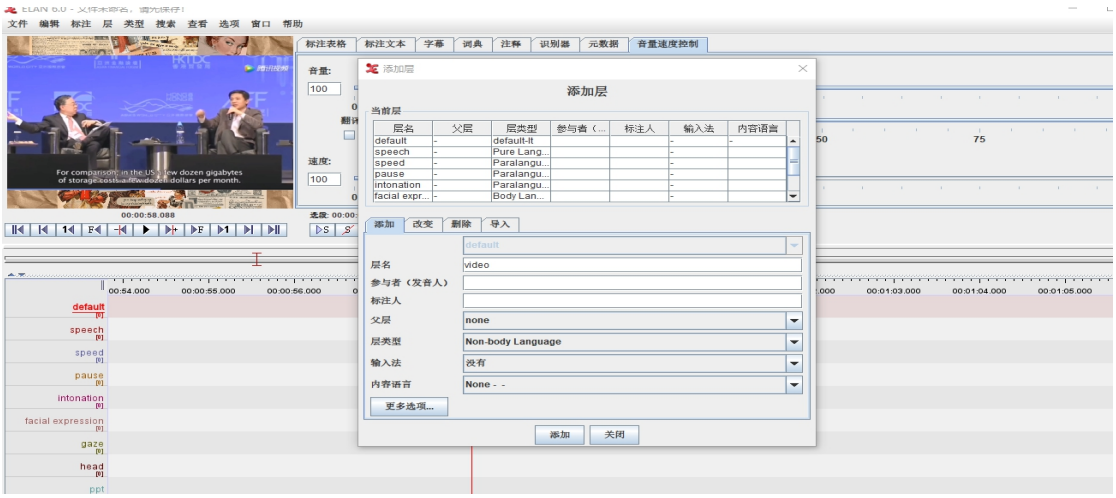

Figure 3.2 Tiers of ELAN

(3) Select the time interval and enter the annotation. The time interval represents the pattern of a complete element of the part. Clicking Select Mode to play the video and pause it at the end of an interval. Then right-click on the selected interval, select “New Annotation Here” and place the corresponding pattern code, such as “G”, to indicate that the Annotation is complete. Figure 3.3 is a fragment processed by an Elan annotation.

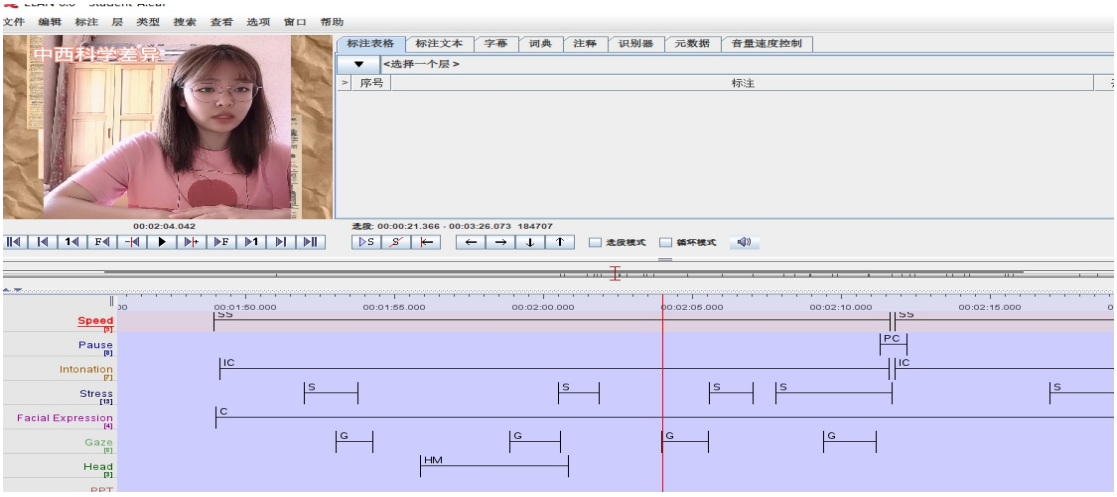

Figure 3.3 A fragment of the annotation processing of ELAN

(4) Collect and analyze data. After annotating all the pattern layers, click the View menu and select the “Comment Data” option to collect statistical results., hierarchy, hierarchy types, actors, annotators, and languages. Click the rank and the details will be displayed automatically, including number of comments, minimum duration, maximum duration, average duration, median duration, total comment time, annotation duration and recovery time.

In the process of multimodal research, the first step is to study the tools, learn the tutorial of how to use the Elan software, and the second step is to understand the video content and categorize the multimodal features of the video application. It took two days to annotate and analyze the video according to the software, and one day to collect and organize the research results, so the total time was three days.

IV Results and Analysis

Based on a multimodal theoretical framework, the content of video is analyzed in this part at cultural and expressive levels with annotated statistics from the Elan

software. The analysis at the cultural level is the analysis of thematic content. The role of multimodal in oral discourse expression is envolved, and the analysis results are illustrated as follows.

4.1 Cultural level

In the theoretical framework of multimodal discourse analysis, the cultural level is the key level, which includes ideology and genre, while ideology also includes all the hidden social rules such as people's mode of thinking. In the world, science and technology are advancing by leaps and bounds, unleashing huge productive forces and greatly promoting economic and social development as well as all-round human development. At the same time, the development of science and technology also derives a variety of complex ethical risks. In this part, videos of 5 students are selected for analysis.

Student A illustrates the contradiction between science and technology and ethics by enumerating two examples of "mass epidemic prevention" and "cloning technology". Student B describes the development of science and technology between ancient China and the West, proposing the gap between China and the West in the process of science and technology development, which advocates learning scientific knowledge. Student C introduces the theme with a video of an authoritative character, pointing out the technology is a double-edged sword and illustrates the threats that technology brings to people. In the video, the student D explains the differences between Eastern and Western science; Student E, starts with the imagination of artificial intelligence in the future, and explains the ethical issues emergence in the development of science and technology and points out the scientific attitude that should be holding.

4.1.1 *Western ideology*

Student A describes how science and ethics are a controversial topic. Science allows us to rethink the world, to break free of the constraints of religion and myth, and to treat things in a rational way, however, science can not be accepted by people, which also causes the conflict between two sides. In the process of elaborating the contradiction between science and technology and ethics, student A use the video of "herd immunity" debate between two British and American experts to explain. Herd

immunity is the resistance of a population or a group of animals to infection. Under the COVID-19, the British authorities say that the goal of government is to delay the peak of COVID-19 so that people could get herd immunity. This strategy of “herd immunity” immediately causes a great deal of controversy. Experts located in the United Kingdom and the United States connected to start a debate on "herd immunity". British experts say there are two ways to deal with new epidemics. One is to cure every case in the world, but that is hard to do, so the only way to stop the epidemic at this stage is to get “herd immunity”. US experts shake their heads, saying the epidemic, if unchecked, will bring down the health system and require radical measures similar to those taken in China and Italy.

In the UK, for example, the population is 66 million. Herd immunity means that 22 million people will be infected with the virus. Of these, 1%, or 200,000, will die. This is scientifically and ethically challenge. These people may be the frail elderly, or people with untreatable heart disease because the health system has broken down. The video begins with such a fierce debate, presenting the readers with ethical contradictions and cultural differences between China and the West. Britain gives us a sense of laissez-faire resignation because it is dominated by simple, austere individualism. Britain is a capitalist country with advocating freedom and independence. Individuals cannot rely on the government, or even the society, but basically rely on themselves. Taking into account the British national conditions and people’s psychology, the approach of British government is almost ruthless, rational and calm. Through group immunity, the content of video enables the audience to have a profound understanding of the ethical contradictions in science. Meanwhile, through the debates of authoritative western experts, it makes us understand the influence of cultural ideology on national policies and measures.

Student B focuses on the comparative analysis of the development of science and technology between ancient China and the West in the discussion of the subject content from three perspectives: history, system and contribution. The Western civilization originate from Greece, which pay attention to the exploration of reasons and provided a way of thinking. After the scientific and technological revolution, the West pursue truth and believe that knowledge is power.

Student C introduces the subject with a video. In the video, Jerini, director of the European Center of Taihe Think Tank, point out that for the new frontier technology, human beings are faced with ethical issues, so it is necessary to discuss the frontier technology and ethics together. Bioengineering and artificial intelligence technologies have a certain interaction with each other, which have a huge impact on human beings. The students explains the accident of artificial intelligence mobile phones, emphasizing the threat of artificial intelligence to people, and points out that nuclear energy is both a weapon of mass destruction and an energy supplier. Artificial intelligence has to be studied under the framework of ethics. For example, Facebook give up one the experiment, because the two intelligent programs seem to use a strange language to chat, only they insist or emphasize that ethics is higher than artificial intelligence. It can be seen that the West's attitude towards science and technology ethics

4.1.2 ***Eastern ideology***

In the video, the US expert suggests that the UK should take the same radical measures like China, China is a socialist country that focuses on the interests of the community and adhere to the principle of life first. In the early stage of the epidemic, the UK should seal off the city and quarantine for treatment. The video focuses on news trends, starting from the Western cut-points on epidemic prevention and control, introducing themes in the form of videos and making cultural differences. Then the students put forward their own opinion that ethics is the bottom line of science. Quoted by Xu Zhihong, Academician of Chinese Academy of Sciences, science and technology ethics are more than just responsibilities. For scientists, it is also necessary to break through the boundaries of disciplines, and experts and scholars in different fields as the government, the media and the public need to participate in prevention and ethical governance of science and technology. The attitude of Chinese government towards science and technology ethics can be seen from ideas of famous Chinese scholars.

Student B, explains the development of science and technology and political thought in ancient China, pointing out that in ancient China, science and technology were the foundation of the country. The Xia Dynasty, China’s first dynasty, which

supported astronomical research and created a more accurate calendar, and in the Song Dynasty produce four great inventions of ancient China. Ideologically, Confucianism has an important influence on ideology. The most outstanding thinker in early China was Confucius, whose philosophy focuse on an orderly human world, emphasizing the importance of traditional etiquette, respect for the elderly, and patriarchal system. Student explains the history of the development of science and technology and ideas in the East and the West, introducing the cultural and historical background, and put forward their own views. In the world, science and technology has increasingly penetrated into all fields of economic construction, the progress of society and mankind has become the most positive factor in productivity. Science and technology are the primary productive forces. The development of China is inseparable from the progress of science and technology. In terms of control and innovation in advanced technology, China has built a solid foundation and is leading the world in some important fields. There is still a gap between China and some developed countries like USA. In order to narrow the gap, it is necessary for us to study science and technology hard, cultivate the spirit of innovation and practice more.

Student D, analyzes the differences between Eastern and Western scientific thoughts. The description of natural phenomena are paid more attention to in China while the reasons behind natural phenomena are paid attention to in western. Chinese prefer to practice, while the western people prefer the pursuit of knowledge. The video explains that the differences between Chinese and Western science are almost equal to the differences in concepts between Chinese and Western nations. Chinese people believe that seeing is believing and care about intuition, while Westerners pay attention to the reasons behind natural phenomena with logical reasoning.

Student E, talks about the imagination of artificial intelligence in the future, which meets daily needs with the special function. The second is that robots have emotional feature, happiness and sadness just like people. The artificial intelligent devices all over the world are conscious. Ethical issues involved in the development

of science and technology. Discrimination, privacy, accountability and security, rights of robots.

About the topic of “science and technology and ethics”, it has always been controversial, from the perspective of the content of selected students, The cultural level is quite necessary to analyze, Through ideological analysis, the reasons why Chinese and Western attitudes to something are different are understood. Despite being influenced by ideology and political system, in the face of science and technology and ethical issues, China and the West basically maintain the same attitude, arguing that the ethical bottom line shouldn’t be crossed by the development of science and technology. "Technology and Ethics" is a part of the cultural content which can make readers have a relatively clear understanding of the whole subject through cultural analysis.

4.2 Expression level

The expression level includes language and non-language. Language can be divided into pure language and paralanguage, while non-language can be divided into body and non-body patterns. This part analyzes the use of patterns in detail from these four aspects and draws conclusions. For example, Table 4.2 analyzes the use of multi-modal features of students.

Table 4.2 The mode of research subjects

Modes / Researh subject	Pure language	Paralanguage			Body mode			Non-body mode	
	Speech	Speed	Pause	Intonation	Facial Expression	Gaze	Head	PPT	Video
A	15	15	8	15	2	9	5	1	1
B	17	17	4	17	1	9	14	1	2
C	21	21	2	21	1	6	1	1	1
D	10	10	7	10	1	7	6	1	1
E	7	7	1	7	0	0	1	1	1

4.2.1 *pure language*

The total length of the videos of the research subjects is less than 5 minutes. The table 2 shows that the total length of oral English output of student A is 440

seconds, and the pure language includes 15 sentences, and the total length is about 280 seconds. 17 sentences are spoken by student B, which last about 373 seconds; Student C produces a total of 21 sentences with a length of 289 seconds, student D produces 10 sentences with a length of 155 seconds, and student E speaks 7 sentences with a length of 198 seconds.

4.2.2 *Paralanguage*

The speech speed and intonation of the five subjects are all based on sentences. The speed and intonation of A' s speech are marked with 15 points each. Her speech speed is mainly slow, with a single intonation and many pauses, which are marked with 8 points in total. The speed and intonation of student B are marked in 17 places, the speed is moderate, and the pause is marked in 4 places. The intonation is mainly in rising tone, and a few sentences are in falling tone. The tone is natural and smooth. The speech of student C speed and intonation is marked with 21 points respectively. She spoke at a fast speed with fewer pauses and fluent sentences. The intonation is mainly in falling tone and 4 points in rising tone were used. Student D' s speech speed and intonation are marked at 10 points, the speed is mainly slow, and the pause mark is marked at 7 points, all of which are due to the need of making pauses in reading. The intonation is relatively rich, mainly with falling tone and tone variation, and the mood is full of emotion. Student E's speech speed marks 7, and her speech speed is fast, the intonation was marked 7, and she uses falling tone with more flat tone.

From the analysis of the above phenomena, it can be concluded that two oral speakers speak slowly, two speak fast and one speaks at a moderate speed. Three students have rich intonation, while the others have monotonous intonation with more pauses. In conclusion, there are many reasons. First of all, the method of oral output in this paper is oral presentation which includes mostly declarative sentences. Therefore, intonation is relatively single with fall intonation. Secondly, there are slow and pauses in spoken English output. Pauses occur in the momentum situational transformation or forget the key words. Therefore, this paper argues that the participants in the process of oral English should take into account the expression of content. The accuracy of vocabulary and grammar has increased the burden of

working memory, and due to their nervousness, it is shown that the speech rate slow down and make pause.

4.2.3 *Body mode*

Body language refers to various movements of the body, including body postures, facial expressions, gestures, eye changes and a series of movements, so as to achieve the purpose of expression and meaning instead of language.

The study on body parts mainly focuses on head movements, which are subdivided into expressions, eye expressions, and head movements. When analyzing the non-verbal characteristics of spoken language producers, it is found that the subject Student B uses more body movements. Student B' s head move a lot and have more eye contact with the listener, and his expression remained natural, with only one change in frowning. The subject student A has more eye contact with the listener and a calm expression. Student D has a lot of eye contact and rich expression. Student C only has eye contact, while student E hardly has eye contact or head movement.

4.2.4 *Non-body mode*

According to the analysis of two tools and environment conditions, the selections of video are all in a quiet environment in spoken discourse output, research subjects are using PPT to render. In summary, it is found that in the non-verbal modal use of spoken language production, the main body movements are head movements. The expressions of the spoken language producers remained natural, without any exaggerated and rich expressions. The four students have better eye contact, two students have a lot of body movements, and one student has almost no changes in eye contact and head movement.

In terms of the oral environment, the oral discourse is produced in a relatively quiet place, and PPT and video are basically used to assist communication. Observe the usage of nonverbal characteristics, it can be analyzed for several reasons, The objects we study are presented to everyone in the form of video recordings. Most of them are sitting on chairs, which may limit the output of body movements. The posture is in a sitting style, so the body movements are mainly head movements. Secondly, some students demonstrate in the form of PPT, The subjects of the

assignment only look at the text in the PPT when they are reading it, which ignores the eye contact with the audience in front of the screen, and there were fewer head movements.

Table 4.3 Multimodal characteristics of student B' s oral output

层	标注数量	最小时长	最大时长	平均时长	中间时长	总标注时长	标注时长...	恢复时间
Speech	17	2.79	22.44	10.055882	9.16	170.95	45.763	0.08
Speed	17	2.79	22.44	10.054412	9.16	170.925	45.756	0.08
Pause	4	0.2	0.51	0.35	0.345	1.4	0.375	16.125
Intonation	17	2.79	22.44	10.054412	9.16	170.925	45.756	0.08
Facial ex...	1	0.77	0.77	0.77	0.77	0.77	0.206	26.43
Gaze	9	0.41	0.66	0.517778	0.53	4.66	1.247	15.27
Head	14	0.46	1.64	0.766429	0.68	10.73	2.872	3.51
PPT	1	373.13	373.13	373.1300...	373.13	373.13	99.886	0.07
Video	2	29.33	171.94	100.6350...	100.635	201.27	53.88	41.1

By comparing the oral discourse expression among the five research objects, from table 4.3, it can be found that student B has effect on the best oral output, and student C is a relatively smooth oral expressive; The student D speaks too slowly but with rich emotions; student A does not speak fluently; student E speaks too fast without eye contact with the audience. In the process of oral discourse output, student B combines verbal and non-verbal modes to perform his assignment, so he achieves better communicative effect. Another students ignore to use body language.

Generally speaking, the learner's oral discourse is based on oral communication. The reason why they will use multimodal discourse for communication is that one modality is not sufficient to fully express the meaning of the communicator and another or multiple modalities are strengthened, supplemented, adjusted, and coordinated to achieve a fuller or as full expression of meaning as possible. Discourses of different modalities collectively reflect the overall meaning of the communicator, and the expression of meaning is multi-modal. Therefore, in the process of oral communication, the choice of mode should be based on the principle of fully expressing the meaning of the speaker, including the effective principle, and the adaptor can better communicate with PPT and video. Body language plays an

important role in communication, which can enhance mutual understanding between the two parties and improve the effectiveness of communication.

V Conclusion

According to the comprehensive framework of multimodal discourse analysis (Zhang, 2009), it is applied to college students' oral English communicative discourse. This study conducts multimodal analysis on the selected students' videos from the cultural and expressive levels, which enables English learners to better understand the role of various modes in oral discourse output, the themes to be expressed, and the contents to be conveyed behind them, so as to improve their oral expression ability and cultural heritage.

Firstly, Language is the carrier of culture, Chinese and English languages respectively carry two cultures. There are similarities, but also great differences due to different cities, historical development and other reasons. When conducting oral English communication, pay more attention to cultural differences, which play an important role in the output of our oral discourse, and will enrich our discourse content. As far as the topic of a certain argument is concerned, the relevant understanding of the cultural aspects of people's thinking patterns and lifestyles in English-speaking countries will also affect the quality of oral discourse. Taking the theme of "science and ethics" as an example, "science and ethics" belongs to a part of culture and reflects ideology. The selected students make a comparative analysis of Chinese and Western cultures from the perspectives of technology, science, and ethical attitudes, so that readers can have a clear understanding of the whole topic. As for the elaboration of the theme content, it can be found that the analysis at the cultural level is very necessary.

Secondly, the expression level is what can be seen most directly in oral communication discourse, which is divided into linguistic modes and non-verbal modes. In the language mode of oral communication, we should first pay attention to the fluency and accuracy of utterance.

The other is intonation. The intonation of a sentence includes flat tone, falling tone, rising tone, rising tone and falling tone. In oral discourse communication,

different tones should be selected according to different situational contexts, so as to avoid the use of a single tone and only flat tone.

Nonverbal modes of oral communication can be divided into body-based and non-body-based modes. Body modes include facial expressions, gestures, postures, body movements, and so on, all of which can express meaning and help in oral communication. For example, a helpless look, mouth curling, shrugging, shaking head can make the other person understand the meaning of the communicator. Non-body modes are more abundant. With the advent of multimedia era, communication media has become very developed. Tools such as PPT and network online platform can be used to help to communicate, and any relevant factors in the environment can also be used for communication, such as people, objects and meaningful symbols in the scene environment.

The generation of meaning includes not only linguistic modes, but also non-verbal modes, such as tone of voice, intonation, gestures during conversation, body posture, facial expressions, and surrounding environment. Through the analysis of college students' oral English communicative discourse from the cultural and expressive levels, it focus that in oral English communication, a good communicator will use multiple verbal and non-verbal modes to cooperate to complete the transmission of meaning. However, both teachers and students tend to ignore the use of nonverbal modes in college oral English discourse teaching. Therefore, in the future oral English class, teachers should try to choose a variety of modes as the carrier, enrich classroom activities, build a multi-modal classroom teaching environment, cultivate students to use multi-modal discourse to communicate consciously, so as to improve students' oral English communication ability.

This is an exploratory study with a small number of selected subjects. Therefore, follow-up studies need to be further improved and multimodal studies on the oral output of Chinese English learners are conducted on the basis of a large sample.

Bibliography

Fe, D. 2014. Digital technology and multimodal discourse. *Journal of University of Science and Technology Beijing (Social Science Edition),* (4):12-17. （冯德正，数字技术与多模态语篇，《北京科技大学学报》2014 年第 4 期。）

Gu, Y. 2007. Analysis of multimedia and multimodal learning. Foreign Language Audio-visual Teaching, (2): 3-12. （顾曰国，多媒体、多模态学习剖析，《外语电化教学》2007 年第 2 期。）

Halliday, M. A. K. 1985. An Introduction to Functional Grammar. London: Arnold.

Hu, Z. & J. D. 2006. A discourse analysis of a PPT presentation contest based on multimodal construction of meaning. *Audio-visual Teaching of Foreign Languages*, (3):3-12. （胡壮麟、董佳，意义的多模态构建一一 一次 PPT 演示竞赛的语篇分析，《外语电化教学》2006 年第 3 期。）

Jewitt, C. 2006. *Technology, Literacy and Learning: A Multimodal Approach*. London: Roufleds.

Kress, G. & T. Van Leeuven. 1996. *Reading Images – The Grammar of Visual Design*. London: Routledge.

Li, Z. 2003. Social semiotic analysis of multimodal discourses. *Foreign Language Research*, (5):1-8.（李战子，多模态话语的社会符号学分析，《外语研究》2003 年第 5 期。）

Liu, Q. & M. P. A study of Chinese college students ’ oral non-verbal communication competence in multi-modal environment. Audio-visual Teaching of Foreign Languages, (02):38-43. （刘芹、潘鸣威，多模态环境下中国大学生英语口语非言语交际能力研究初探，《外语电化教学》2010 第 2 期。）

Lv, M. & W. M. 2014. A study on the influence of multimodal teaching mode on college students’ English reading ability. Chinese Educational Technology, (12). （吕美嘉、牟为姣，多模态教学模式对大学生英语阅读能力影响的研究，《中国电化教育》2014 年第 12 期。）

Ma, Ai. 2015. Interpretation of multimodal discourse theory and its research status.

Journal of Beijing Polytechnic, (1). （马爱梅，多模态话语理论解读及其研究现状，《北京工业职业技术学院学报》2015 第 1 期。）

Martineca, R. & A. Salway. 2005. A System for Image-Text Relations in New and Old Media. *Visual Communication*..

Qin, Yong. 2012. Overview of multimodal discourse research in China in recent 10 years. *Journal of Yulin University*, (5) （秦永丽，我国近 10 年多模态话语研究综述 《榆林学院学报》2012 年第 5 期。）

Royce, T. 2002. Multi-modality in the TESOL classroom: exploring visual-verbal synergy. *Tesol Quarterly*, 36, 191-206.

Wan, P. & Y. H. 2020. A multimodal discourse analysis of English and Chinese oral output of English learners, *Literature Education*, (04). （王平平、洪雅妮，英语学习者英汉口语产出多模态话语分析，《文学教育》2020 年第 4 期。）

Wang, W. & Y. W. 2008. Multi-modal analysis in applied linguistics research. *Foreign Language Audio-visual Teaching*, (03):8-12.（王文非、文艳，应用语言学研究的多模态分析方法，《外语电化教学》2008 年第 3 期。）

Wei, Q. 2008. On the construction of the whole meaning of multimodal discourse: A discourse analysis based on a multimodal media discourse. *Journal of Tianjin Foreign Studies University*, (6):16-21. （韦琴红，论多模态话语的整体意义构建一一基于一个多模态媒体语篇的话语分析，《天津外国语学院学报》2008 第 6 期。）

Yue, Na. 2018. An exploration of college students’ oral English communication Based on multi-modal discourse analysis. *Language Arts and Sports Research*, (7) （岳娜，基于多模态话语分析的大学生英语口语交际探究，《语言艺术与体育研究》2018 年第 7 期。）

Zhang, D. 2009a. On a synthetic theoretical framework for multimodal discourse analysis. *Foreign Languages in China*, (1):24-30.（张德禄，多模态话语分析综合理论框架探索，《中国外语》2009 年第 1 期。）

Zhang, D. 2009b. The application of multimodal discourse theory and media technology in foreign Language teaching. *Foreign Language Teaching*, (4)（张德禄，多模态话语理论与媒体技术在外语教学中的应用，《外语教学》2009 年第 4 期。）

Zhu, Y. 2007. Theoretical basis and research methods of multimodal discourse analysis. *Journal of Foreign Languages*, (5):82-86.（朱永生，多模态话语分析的理论基础与研究方法，《外语学刊》2007 年第 5 期。）

Appendix

统计

标注 | 标注 II | 层 | 层类型 | 参与者（发音人） | 标注人 | 语言

统计参数

层	标注数量	最小时长	最大时长	平均时长	中间时长	总标注时长	标注时长...	恢复时间
Speech	15	1.7	41.99	17.687933	17.49	265.319	60.189	0.54
Speed	15	1.7	41.99	17.687933	17.49	265.319	60.189	0.54
Pause	8	0.37	2.41	1.04125	0.805	8.33	1.89	17.26
Intonation	15	1.7	41.99	17.687933	17.49	265.319	60.189	0.54
Facial ex...	2	0.73	1.09	0.91	0.91	1.82	0.413	25.047
Gaze	9	0.32	2.599	1.008778	0.62	9.079	2.06	5.41
Head	5	0.36	1.42	0.874	0.97	4.37	0.991	7.61
PPT	1	439.46	439.46	439.4599...	439.46	439.46	99.694	0.54
Video	1	168.87	168.87	168.8699...	168.87	168.87	38.309	56.58

Annotation of student A by ELAN

统计

标注 | 标注 II | 层 | 层类型 | 参与者（发音人） | 标注人 | 语言

统计参数

层	标注数量	最小时长	最大时长	平均时长	中间时长	总标注时长	标注时长...	恢复时间
Speech	17	2.79	22.44	10.055882	9.16	170.95	45.763	0.08
Speed	17	2.79	22.44	10.054412	9.16	170.925	45.756	0.08
Pause	4	0.2	0.51	0.35	0.345	1.4	0.375	16.125
Intonation	17	2.79	22.44	10.054412	9.16	170.925	45.756	0.08
Facial ex...	1	0.77	0.77	0.77	0.77	0.77	0.206	26.43
Gaze	9	0.41	0.66	0.517778	0.53	4.66	1.247	15.27
Head	14	0.46	1.64	0.766429	0.68	10.73	2.872	3.51
PPT	1	373.13	373.13	373.1300...	373.13	373.13	99.886	0.07
Video	2	29.33	171.94	100.6350...	100.635	201.27	53.88	41.1

Annotation of student B by ELAN

统计

标注 | 标注 II | 层 | 层类型 | 参与者（发音人） | 标注人 | 语言

统计参数

层	标注数量	最小时长	最大时长	平均时长	中间时长	总标注时长	标注时长...	恢复时间
Speech	21	1.96	26.095	12.122477	10.879	254.572	88.011	0.17
Speed	21	1.96	26.095	12.122477	10.879	254.572	88.011	0.17
Pause	2	0.65	1.38	1.015	1.015	2.03	0.702	72.5
Intonation	21	1.96	26.095	12.122477	10.879	254.572	88.011	0.17
Facial ex...	1	0.59	0.59	0.59	0.59	0.59	0.204	249.35
Gaze	6	0.01	1.07	0.53	0.515	3.18	1.099	63.341
Head	1	0.44	0.44	0.44	0.44	0.44	0.152	216.9
PPT	1	286.248	286.248	286.2479...	286.248	286.248	98.962	0.162
Video	1	31.465	31.465	31.465	31.465	31.465	10.878	7.03

Annotation of student C by ELAN

统计

标注 | 标注 II | 层 | 层类型 | 参与者（发音人） | 标注人 | 语言

统计参数

层	标注数量	最小时长	最大时长	平均时长	中间时长	总标注时长	标注时长...	恢复时间
Speech	10	7.69	40.477	15.5631	12.407	155.631	58.065	108.95
Speed	10	7.69	40.477	15.5631	12.407	155.631	58.065	108.95
Pause	7	0.24	1.17	0.637143	0.48	4.46	1.664	131.49
Intonation	10	7.69	40.477	15.5631	12.407	155.631	58.065	108.95
Facial ex...	1	2.867	2.867	2.867	2.867	2.867	1.07	201.432
Gaze	7	0.34	1.48	0.605714	0.49	4.24	1.582	113.29
Head	6	0.6	2.35	1.148333	1.01	6.89	2.571	124.65
PPT	1	122.87	122.87	122.8700...	122.87	122.87	45.842	145.13
Video	1	104.845	104.845	104.8450...	104.845	104.845	39.117	3.551

Annotation of student D by ELAN

统计

标注 | 标注 II | 层 | 层类型 | 参与者（发音人） | 标注人 | 语言

统计参数

层	标注数量	最小时长	最大时长	平均时长	中间时长	总标注时长	标注时长...	恢复时间
Speech	7	15.303	52.03	29.818285	30.94	208.728	76.28	64.2
Speed	7	15.303	52.03	29.818285	30.94	208.728	76.28	64.2
Pause	1	1.05	1.05	1.05	1.05	1.05	0.384	164.58
Intonation	7	15.303	52.03	29.818285	30.94	208.728	76.28	64.2
Facial ex...	-	-	-	-	-	-	-	-
Gaze	-	-	-	-	-	-	-	-
Head	-	-	-	-	-	-	-	-
PPT	1	272.77	272.77	272.7699...	272.77	272.77	99.685	0.23
Video	1	63.875	63.875	63.875	63.875	63.875	23.343	0.24

Annotation of student E by ELAN