Reviewing the Importance and Application of Conversation Analysis to Educational Studies

Xingchen Fan

Abstract—This paper reviews the importance and application of Conversation Analysis (CA) to educational studies. Firstly, this paper introduces the development and definition of CA, as well as its basic process. Then the application of conversation analysis in the institutional talk is introduced. CA provides evidence for analyzing EFL classrooms through video recording analysis. The advantages and disadvantages of the current CA research and development are also summarized for further research on CA in the future. At the end of the article, some ideas and views on the future development of CA are put forward.

Index Terms—Conversation analysis, educational studies, importance and application.

I. INTRODUCTION

Conversation Analysis (CA) is a research method to better grasp the main points of dialogue through observing and analyzing [1]-[3]. In this paper, the analysis of the dialogue and interaction between teachers and students in classes are mainly focused on, so as to better understand more teachers' discourse rhythm skills. The main body of this paper is divided into three aspects: 1) The first one is how to translate the dialogue into text, which provides easier methods for researchers' analysis; 2) the second is to explore teacher's discourse skills through the combination of CA and IT (Institutional talk) 3) the third is to explore how teachers make use of reasonable and effective interactive parties to achieve good teaching effect when facing second foreign language students through the study of the second foreign language classroom. Although CA has many advantages, its disadvantages are obvious. How to effectively learn from the strengths so that researchers can more effectively conduct discourse analysis through CA is also the direction of future exploration.

II. DEFINITION AND DEVELOPMENT

CA is an inductive, micro-analytic, and predominantly qualitative method for studying language as it is used in social interaction [4]-[8]. This method developed as an approach to the analysis of the practices of reasoning and inference that inform the production and recognition of intelligible courses of action [9], [10]. The most important feature of CA is to analyze the dialogue by transcribing the real scene language. And the CA process has the following

Manuscript received October 19, 2021; revised Decmber 22, 2021. Xingchen Fan is with School of University of Colorado (Denver), Denver, Colorado 80201 (post), United States (e-mail: xingchen.fan@ucdenver.edu). aspects: 1) Recording videos in class and collecting data; 2) quoting and establishing a transcription rule suitable for this research; 3) conducting transcription based on the transcription rule; 4) data analysis can be conducted with some software, such as Elan.

III. INTRODUCTION OF CA APPLICATION

A. How Does CA Collect Data

As CA is to analyze people's conversations, it is necessary to collect a large number of dialogue data using CA research methods. According to Waring, "CA requires naturally occurring data that has been recorded and transcribed" [11]. However, the process of translation is not a very simple record. On the contrary, the requirements of translation are very strict. Transcriptions are exacting in these minute ways because it is the participants that are so exacting in talk-in-interaction [12], [13]. Inbreaths, outbreaths, silence, sound stretches, cut-offs, pitch rises and falls, and so on, are not extraneous elements of ordinary talk [14]-[16]. For example, if a teacher's tone becomes higher or the voice suddenly becomes particularly loud, it may be because the knowledge to be mentioned is particularly important or the teacher wants to attract students' attention as much as possible [17].

Careful translation is one of the characteristics of CA in data collection. Researchers can also make a detailed analysis of the text data of dialogues. In classroom teaching, researchers can record the classroom dialogue data, conduct relevant analysis, and then draw some conclusions. For example, what kind of teaching discourse can be used by teachers to promote effective classroom interaction so that students can absorb effective knowledge, and how do students cooperate with teachers and to strengthen the classroom interaction.

The following is an example of CA ranscription that I extracted from Le Van Canh and Willy A. Renandya's article [18]. It is an interactive dialogue between teachers and students. From this example, we can more intuitively understand what transcription is. (T=teacher, S=student)

18 T: Now practice (after presenting some words about kinds of films on board)

19 T: If you want to ask me what kinds of films I like which questions can you ask? Can you tell me (0.2) which question? (one hand raised)

20 T: [nominates one student who raises hand) You

21 S1: I like cartoons=

22 T: =Questions not the answer which question? =(5.0)

23 S1: What do you like ... what you like .. what kind of film do you like

24 T: =Good correct sit down [write on board: what kind of film do you like?] and what is the answer? Can you answer this question? (3.0) [18].

In this paragraph, the actual situation of classroom interaction and the dialogue are translated into words, we can clearly and intuitively see what level of language and way teachers use to interact with students and guide students' thinking. This is undoubtedly convenient for researchers to analyze teachers' teaching language and help to improve the level of teachers' teaching language.

However, since translation work is meticulous and is very much detailed, CA type spellings will help learners access the actual sounds of oral language [18]. At present, translators generally translate dialogues with a kind of software called Elan, which records all conversations of the subjects in a specific situation, pause in the dialogue, speed and volume, etc.

However, due to these traits, this CA research method has obvious advantages and disadvantages. The advantage is that it can analyze and study every dialogue through translation in a very detailed way [19]. However, the dialogue translation is overly meticulous and microscopic, which will bring too much burden to the translator [20]. Therefore, current research usually combines CA with corpus analysis.

B. Institutional Talk

Institutional Talk interaction usually involves participants with specific goal orientations, which are related to their institutional identities, and this interaction involves special constraints, which will be regarded as the allowable contribution of the counterpart business [21], [22]. In short, institutional Talk is the interaction produced by specific people for specific conditions in a specific environment.

Institutional talk can provide more opportunities for communication and interaction in the activities. Though different from CA, institutional talk can be well combined for analysis. CA embodies a theory that argues that previous actions are a primary aspect of the context of an action. The meaning of an action is heavily shaped by the sequence of previous actions from which it emerges, and the social context itself is dynamically created, which is expressed in and through the sequential organization of interaction [23]. For example, in classroom practice, the teacher will promote interaction in the classroom through a variety of discourse routines. Taking a Chinese class as an example: Chinese teachers will increase the volume of complex sentences when explaining ancient poetry, so as to deepen students' image; if students can not answer correctly, teachers will urge students to think more deeply by asking repeatedly; this method will also help teachers motivate students by asking questions quickly in the middle of the lecture. The more active and positive students use their brains, the more efficient the classroom interaction can be.

Next, we can see a transcribed institutional conversation from Kim's Hide and Seek.

1332 T: [they're all so funny. (0.5) but they also

1333 (.) played games with us, (1.0) like uh, (.)

 $1334 \rightarrow$ do you guys know what hide and seek is?

1335 C: yeah (under coughing)

1336 J: heh heh

1337 T: they had played that game with us all the time,

(1.1)

1338 ((smacks lips)) (.) and ta:g, (1.1) tag, (0.6) you [24].

Here, we can observe that repair, a method of maintaining or restoring mutual understanding, as well as correction of other forms of language, a practice aimed at learning language. When the correction is replaced from the revisable items in turn, the participants have to do extra interactive work to recover the errors [25]. In the process of teaching, teachers can guide students to find mistakes and gradually repair them through purposeful dialogue, so as to achieve profound learning and memory and good teaching effect. Therefore, CA helps to record how the teacher guides the dialogue in class and how the students gradually correct the answers through the teacher's guidance. After that, researchers use CA to help improve teachers' role in Institutional Talk.

C. Application of CA in EFL

With the development of international globalization, exchanges and contacts between countries are increasingly close. As English is a common language for international communication, English teaching is more important. The efforts to improve the quality of English teaching put forward higher requirements for teachers' target language ability. Teachers' English teaching quality will also affect students' learning. However, if it is not clear what kind of language proficiency a teacher needs to acquire, or the relationship and information between the teacher's classroom language proficiency and teaching quality. It is difficult to design an effective teacher education program to help teachers improve their proficiency in the target language to the desired level [26].

CA provides evidence for English as a Foreign Language (EFL) classroom analysis. From a micro perspective, CA can not only analyze the speech/discourse of teachers and students, but also analyze their pause, repetition, and correction. Therefore, it is very necessary to observe EFL classroom. For example, in the process of a student's learning a second foreign language, any pause that needs the help and guidance of the teacher can be observed through CA. And in EFL, the specific grammar points that teacher repeats indicate that this knowledge is very important. There is a big difference between the two modes of teaching in English. Knowing how to teach conversation is of critical importance for language teachers. This knowledge begins with a solid understanding of what constructs conversation or talk in interaction [27].

Another situation is that second language learners may not be able to use the new language skillfully and flexibly as native speakers do. For example, when the phrase "bye-bye" is used at the end of a conversation, the closing standards are convertible to opening up, perhaps for longer than someone might wish. If a conversation were to close too abruptly, something might amiss. EFL learners do not necessarily know how to get out of a conversation or how to extend it in a second language. They may not understand that closing a conversation is not always as simple as just saying goodbye [28].

An important goal of second language teaching is to develop learners' communicative competence [29, 30]. For example, at the beginning of a course, the teacher will let the

students introduce their basic information. In the middle of the course, teachers will set up some time for group discussion and stipulate that students only use the foreign language for a heart-to-heart discussion. The basic question and answer method in class is also a way of exercise. When students have problems or errors, teachers will guide students to solve their own problems or correct their mistakes by means of persuasion and communication.

The following section shows a classroom completed by the interaction between teachers and students in EFL classroom. The classroom interaction is transcribed into the form of words, which makes it more convenient and intuitive for researchers to analyze teachers' teaching language and study methods to improve teaching quality. (The unmarked dialogue is teacher, L: – learner, LL: – several learners at once or the whole class)

89 [the match] was . . . what?

90 L: [match]

91 LL: nil nil

92 nil nil (reading) and it remained the same after 30 minutes OF (3)

93 L5: extra time

94 extra time very good Emerson (reading) but then Italy?

93 L5: extra time

96 but then Italy . . . what?

97 L5: lost =

98 = lost ok 3 2 in the penalty shoot-out after

Venessi and Bagio (mispronounced) both missed

99 L: Bagio (correcting teacher's

pronunciation)

100 Bagio yes Spanish (reading) this was the fourth time that Brazil had?

101 = won =

 $102 = \text{won} \dots$

103 LL: /won won/

104 the World Cup very good (5) and ((2)) what's

that word? ((5))

(Walsh's data, 2001) [31]

Here, we can see the interaction and communication between teachers and students, and how teachers guide students' learning and thinking through language. It is undeniable that CA is of great help to the research and improvement of education and teaching quality. In the classroom of foreigners learning English, the biggest difficulty between teachers and students is usually the incomprehension caused by the language barrier. Therefore, how to design classroom language, how to use concise language to guide students to understand knowledge and smooth communication and interaction, I think this is the key direction of future teaching research.

IV. SUMMARY AND THOUGHTS

CA is an interesting but time-consuming method for language learning. Much time should be spent on transcription work. In the future, it is hoped to complete the translation work through more technical support, such as the development of related apps, to reduce the workload and increase the credibility of the research results in a more efficient way. As teachers' discourse has a great influence on

students, the education circle should pay attention to this situation and improve teachers' teaching quality. With the help of CA, researchers can analyze the methods to improve teachers' teaching quality through the interactive dialogue between teachers and students in the actual classroom, and promote the improvement of classroom efficiency and quality.

V. CONCLUSION

CA is not only helpful in EFL classroom teaching but also in the development of the whole education industry. Researchers can transcribe the dialogue in class and all kinds of situations in detail through CA, and then improve the teaching language and teaching methods by analyzing the dialogue language and the effects. At present, the transcription steps in CA research are complicated. In the future, related technologies and app can be developed to make transcription clearer and more concise, so as to improve the research efficiency. At the same time, I hope to appeal to more scholars to participate in the research of educational language and the design of classroom interaction. Since ancient times, education, like food and water, has been an eternal theme. More technical means facilitate the research of scholars. In order to provide a more equal and excellent education environment for the next generation, we still need to continue our efforts.

CONFLICT OF INTEREST

The authors declare no conflict of interest".

AUTHOR CONTRIBUTIONS

Xingchen Fan conducted the research, analyzed the data and wrote the paper.

ACKNOWLEDGMENT

The author thanks the revision suggestion from Dr. Ren.

REFERENCES

- 1] P. Jonathan, "Discourse analysis and constructionist approaches: Theoretical background," *British Psychological Society*, 1996.
- [2] L. L. Nancy and A. J. Onwuegbuzie, "Qualitative data analysis: A compendium of techniques and a framework for selection for school psychology research and beyond," *School Psychology Quarterly*, vol. 587, 2008.
- [3] T. H. Paul, "Doing conversation analysis," Sage, 2007.
- [4] E. M. Hoey and K. H. Kendrick, "Conversation analysis," A. M. B, in Press.
- [5] K. H. Kendrick, "Using conversation analysis in the lab," 2017, pp. 1-11.
- [6] S. Melisa and E. Weiste, "Conversation-analytic data session as a pedagogical institution," *Learning, Culture and Social Interaction*, vol. 15, 2017, pp. 1-17.
- [7] M. H. Elliott, "Drinking for speaking: The multimodal organization of drinking in conversation," Social Interaction: Video-Based Studies of Human Sociality, 2018.
- [8] S. H. Liberty and A. G. Huth, "The revolution will not be controlled: Natural stimuli in speech neuroscience," *Language, Cognition and Neuroscience*, 2020, pp. 573-582.
- [9] C. Goodwin and J. Heritage, "Conversation analysis," *Annual Review of Anthropology*, vol. 19, pp. 283-307, 1990.
- [10] G. J. Paul, "An introduction to discourse analysis: Theory and method," *Routledge*, 2014.
- [11] J. Wong and H. Z. Waring, Conversation Analysis and Second Language Pedagogy: A Guide for ESL/EFL Teachers, 2010.

- [12] H. J. Kelly, "Teaching and researching: Language and culture," *Routledge*, 2013.
- [13] O. L. Rebecca, "Teaching and researching language learning strategies: self-regulation in context," *Taylor & Francis*, 2016.
- [14] E. Rod, "Second language acquisition, teacher education and language pedagogy," *Language Teaching*, vol. 43, no. 2, 2010, pp. 182-201.
- [15] G. Ofelia and L. Wei, "Language, bilingualism and education," *Translanguaging: Language, Bilingualism and Education*, Palgrave Pivot, London, 2014, pp. 46-62.
- [16] G. M. Susan, "Input, interaction, and the second language learner," *Routledge*, 2017.
- [17] C. Ismail, "The use of video as an audio-visual material in foreign language teaching classroom," *Turkish Online Journal of Educational Technology-TOJET 5.4.* 2006, pp. 67-72.
- Technology-TOJET 5.4, 2006, pp. 67-72.
 [18] V. C. Le and W. A. Renandya, "Teachers' English proficiency and classroom language use: A conversation analysis study," RELC Journal, vol. 48, 2017, pp. 67-81.
- [19] L. J. Anthony, An Introduction to Conversation Analysis, Bloomsbury Publishing, 2011.
- [20] W. Ronald, An Introduction to Sociolinguistics, John Wiley & Sons, vol. 28, 2011.
- [21] J. Heritage, "Conversation analysis and institutional talk," Handbook of Language and Social Interaction, 2005.
- [22] W. Ronald, An Introduction to Sociolinguistics, John Wiley & Sons, vol. 28, 2011.
- [23] G. Charles, "The co-operative, transformative organization of human action and knowledge," *Journal of Pragmatics*, 2013, pp. 8-23.
- [24] G Kasper and Y Kim, "Conversation-for-learning: Institutional talk beyond the classroom," The Handbook of Classroom Discourse and Interaction, 2015.
- [25] K. Todd et al., "Principles of explanatory debugging to personalize interactive machine learning," in Proc. 20th International Conference on Intelligent User Interfaces, 2015.

- [26] L. D. Hammond et al., "The design of teacher education programs," Preparing Teachers for a Changing World: What Teachers Should Learn and be Able to Do, 2005, pp. 390-441.
- [27] Y. A. Lee, "Learning in the contingency of talk-in-interaction," Text & Talk, 2010.
- [28] P. G. Herbert, "Logic and conversation," Speech Acts, Brill, 1975, pp. 41-58
- [29] C. M. Marianne, "Rethinking the role of communicative competence in language teaching," *Intercultural Language Use and Language Learning*, Springer, Dordrecht, 2008, pp. 41-57.
- [30] J. S. Sandra, "Communicative competence," The TESOL Encyclopedia of English Language Teaching, 2018, pp. 1-7.
- [31] S. Walsh, "Developing interactional awareness in the second language classroom through teacher self-evaluation," *Language Awareness June*, vol. 1, no. 2, pp. 124-142, 2010.

Copyright © 2022 by the authors. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited (\underline{CC} BY 4.0).



Xingchen Fan was born in Hohhot, Inner Mongolia, China. Currently She is studying in the University of Colorado and China Agricultural University. She is a junior in communication.

Her currently main research interests are pedagogy and communication, and she has been in contact with the internship of early childhood education. Recently, she is studying the causes and solutions of inequality in China's education quality caused by different regions. She attaches great importance to the

development of education quality.