



Using ROST CM 6.0 to Analyse the Use of Chinese and English for Psychology Identity Construction among Chinese University Students

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ABSTRACT

The roles that the two languages play in shaping the identity and character of language learners are also worthwhile studying. This study focused on the relationship between language and culture, and between language and speakers to let language teaching be more efficient. Using semi-structured interviews, this article explored Chinese university students' perceptions of their use of Chinese and English. Six Chinese university students, who studied at Chinese-medium universities in China (n = 2), English-medium universities in China (n = 2) and English-medium universities in English speaking countries (n = 2), came up with different perceptions of Chinese and English. ROST CM 6 is a social computing platform developed and coded by Wuhan University to aid research in the humanities and social sciences. Using ROST CM 6's word separation function and social and semantic network analysis, can obtain the high frequency word lists, line feature word lists and co-occurrence matrix word lists of interview transcripts, resulting in a network graph of interview transcripts. By analysis the social network and semantic network analysis diagram, the finding shows more cultural information of a language in the teaching of the language may help language learners to understand the unique cultural background of the language and learn the language. Therefore, the study contributes to the developing English education in China.

Keywords: Chinese and English, RostCM 6.0, co-occurrence matrix word lists, big data, college students, language teaching, social network analysis, semantic network analysis.

1. INTRODUCTION

More and more research in sociocultural linguistics views multilingual interaction in our society as a norm instead of an exception [1]. It is essential to study the use of Chinese and English for identity construction because, in China, there are already a large number of English learners, and learning English will be on the rise in the future. Therefore, the influence of English on the Chinese is non-negligible. Investigating when bilinguals choose these two languages can help scholars analyse the role those different languages play in shaping a person's characters. Numerous scholars have studied the influence of bilingualism, and they have carried out research in a different related fields such as Dovchin and Sender (2021) discovered the relationship between language, identity, and relocalization, and [3] researched how English affected Indonesia identity. English learning is common in China, and there are a crowd of bilinguals in China. However, Fong (2018) argued that regardless of the role English plays in China, people worry that the spread of English culture will weaken the soft power of Chinese culture. Although identity is not always explicitly at issue in language research, Mary

and Kira (2005) argued that the spread of English provided an obvious role in how the language can create social identities.

2. LITERATURE REVIEW

2.1. *The link between language and psychology identity*

Fuller (2007) explored the different social identities and statuses expressed by different individuals when people use different languages. The author followed four Mexican students through case studies to examine the purposes of using different languages and the identity and intentions they revealed when using the language. The results showed that nationality cannot determine social identity but rather something constructed through discourse. The language worked as an amplifier for bilinguals to express their character and simultaneously, the language shaped their effect on their identity. For example, Miguel who was one of the research subjects used English frequently in class to construct his identity as a "good student" but used Spanish among his friends to reinforce his Mexican identity.

This article provides the theoretical cases for my research to refer.

Hansen (2014) investigated the use of the Nahuatl language in a Mexican family. He noted that as Mexican society had grown and changed, Nahuatl, the indigenous language, hindered communication between the adults of the Mexican family and their children. Therefore, the different personalities of the two generations using different languages also reflected the shaping effect of language on their ideology and identity. He reported that less and less young generation could speak Nahuatl, but they still used Nahuatl with the old generation to express their ethnic identity. However, while young generations were connecting with the outside world, they tended to speak Spanish to show their positive affection and proud.

2.2. *The link between language and culture*

Kay and Kempton (1984) had written a review article to analyse the Sapir-Whorf hypothesis. In their article, they argued that to a large extent, the real world is imperceptibly established according to human language habits. People who live in the objective world are largely controlled by language and language determines what the user thinks. The Sapir-Whorf hypothesis also emphasizes that human cognitive activities are inseparable from language, and language is an important medium for the normal development of cognition, it is also affected by human cognition.

Besides that, in the book *Argonauts of the Western Pacific* written by Malinowski (1922), the author argued that language is a way of acting, not a symbol of thought. He believed that language played a critical role in society, the nature and the use of language also reflected the specific characteristics of society. Observing the natives of the Trobriand Islands in the western Pacific, Malinowski found that during their long period fishing voyages, the congregating fleet of lone timber was constantly instructed and regulated by verbal words. One shout meant they had found a shoal of fish, while another shout meant they needed to rearrange the fleet. Therefore, Malinowski summarized that language is a way of cultural behaviour.

In addition, Yu et al (2013) and Halberstadt (2005) both have researched the relationship between language and emotion. Yu et al argued that there is a strong connection between L1 and the concept, and a weak connection between L2 and the concept. Whereas when one expresses an emotion, using L1 is more likely to evoke that particular emotion. Accordingly, Halberstadt considered that emotional language and emotional attributions are not independent and that language can influence emotional perception and memory in return. Thus, the different cultures represented by different languages bring distinguishing strengths of emotional connection to their users. The different strengths of emotional connection

will ultimately lead to various emotional experiences when speakers use different languages to express their feelings.

3. METHODOLOGY

3.1. *Research Design and Sampling*

The present study is qualitative research. This paper used semi-structured interviews to carry out the relevant research. The participants in the research were Chinese university students who lived in Guangdong province and whose English proficiency level was above C1 according to the Common European Framework of Reference for Languages. The study conducted the semi-structured interview online and followed snowball sampling to choose the participants. The first interviewee was a classmate of an author who was studying at a university in China mainland, after the interview, the author asked him to recommend someone who fit the requirements of the next interview turn. Then, after the following interview, the author asked the second interviewee to recommend the next person again, so that the study could ensure all the interviewees met the criteria of the research. Totally six college students participated in the interview: two from an English-medium university in China, Beijing Normal University-Hong Kong Baptist University United International College; two from Chinese-medium public universities, Sun Yat-Sen University and Changchun University of Science and Technology; the rest of two from English-medium universities in English speaking countries, The University of Sydney and Cornell University. By using semi-structured interview questions, the study integrated the viewpoints of all interviewees and summarized the characteristics of a particular language in the construction of Chinese university students' identities. The gender ratio was also equal in this study. The students who were from Sun Yat-Sen University, The University of Sydney and one of UIC students were male, students who were from Changchun University of Science and Technology, Cornell University and the other one in UIC were the female students.

3.2. *Sub Subsection Titles*

The author interviewed six college students and provided four interview questions to collect their language choice and their reasons. The interviews had been recorded with a voice recorder and transcribed into texts for further analysis. The interviewees had been informed before the interview that the recording would only be used for this research and that the author would abide by a confidentiality agreement that this recording would not be released or used commercially. In addition, at any time during the interview, the interviewees could call off this interview and withdraw if the interviewees had any ethical considerations regarding the interview.

They also signed an informed consent form before the interview.

3.3. *Interview protocols*

The semi-structured interview was conducted basically with four questions. The first and second questions were about the situation when the interviewees used English and Chinese to communicate. In these two questions, I explored the chatting object and environment when they use a specific language to talk. Also, code-switch time is vital for me to analyse why people choose one specific language. Therefore, these first two questions are related to my research question one. In my third interview question, I explored whether people use the two languages with the consciousness that they represent different cultures and ideologies. From their answers, I could find evidence of how language constructs people's character and identity. For the fourth question, I considered that people's choice of different languages in communication is influenced by the culture that the language represents. The use of different languages also helps the person to express his or her emotions, even they may give the same answers, but with distinct feelings. Thus, the third and fourth interview questions help the study to explore research question two.

3.4. *Procedures*

The whole interview mainly included three major parts, the preparation for the interview, the interview process and the post-interview summary. The interview was conducted by Tencent Meeting to organize the whole process. Before the interview started, a copy of the informed consent form had been sent for all the interviewees to check. Once the author got the receipt from the interviewees, the meeting would be put on the agenda. Also, the author recorded the interview by the Tencent Meeting recording system once got the permission of all interviewees. Then, the author also emphasized that all assertions about language and culture were not used to analyse political tendencies, but only for academic research. This helped the interviewer to facilitate the interview and gain the trust of the interviewees. At the end of the recording, the interviewer expressed thanks to the interviewees and repeated three confidentiality agreements. The author also transcribed the recording into text for further analysis using online software KEDAXUNFEI.

3.5. *Data analysis*

ROST CM6 is a data analysis software that can perform word separation, high-frequency word analysis, sentiment analysis and semantic network analysis of the

extracted data. Using the ROST CM6 software to extract high-frequency words from the interview transcripts and the links between the two languages can reveal how each interviewee's attitudes and understanding of the two languages clearly. From the semantic network and social network analysis, it is distinct that the interviewees perceived Chinese as a more traditional, internal and natural language, while English was perceived as being used as a tool to present oneself in a more positive and external way.

Basically, the study followed these three parts to analyse the interview data: data reduction, display of the data, drawing conclusions [12]. By using this inductive content analysis methodology, the study summarised what each person's commonality illustrate the inner relationship. Besides that, since interview have collected the interview data from 6 different college students, the presentation of the qualitative data focuses on first giving examples of the interviewer's original sentences from the interview, and then later adding detailed analysis and understanding of the passage. At the same time, the study had set the data by three variable groups separately so that it is clear to do the comparison. The criteria for grouping were based on the education system the interviewees had received (English-medium university in China, Chinese-medium university, or English-medium universities in English speaking countries) and concluded that language affected the construction of the personality of Chinese university students. In addition, the different perceptions of language between male and female students were also a vital part of the presentation in the discussion section.

4. RESULTS AND DISCUSSION

All the interviewees agreed that the two languages are used differently and that they had diverse feeling when they used the languages. The interview also found that when interviewees used a particular language regularly, their character was influenced by the different thinking mode of languages. This depends both on the user's ability to acquire the language and on the interviewee's habitual context of using the language. Through inductive content analysis, the interview data exhibited the following seven themes.

Through the analysis of the social and semantic networks of the Chinese language by using ROSTCM6, it can first be seen in figure one, that all the interviewees' attitudes towards the Chinese language were analysed from a culturally integrated perspective. Chinese is perceived to express the inner feeling and a gentler language.

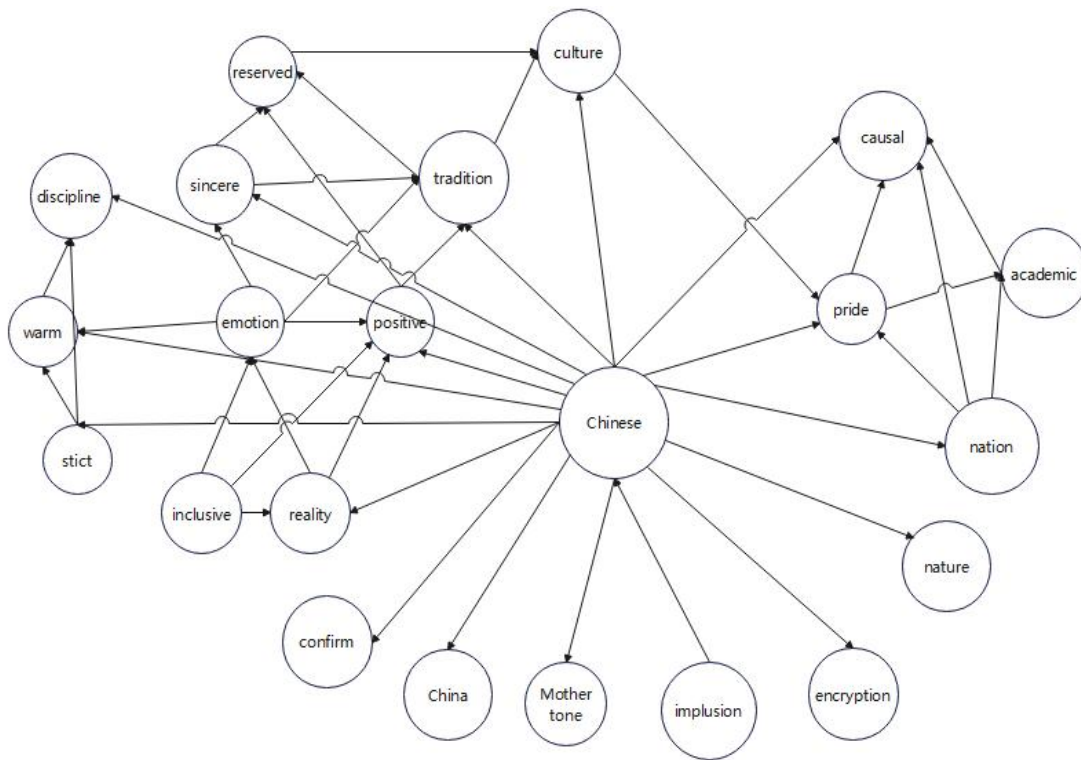


Figure 1: Chinese language social network and semantic network analysis diagram.

Compared to Chinese, English is a more rational and positive language after social network analysis and semantic network analysis using ROSTCM 6.0.

According to the interviewees, English is used more as a tool to express one's personality or certain intentions, to show a positive, enterprising mindset.

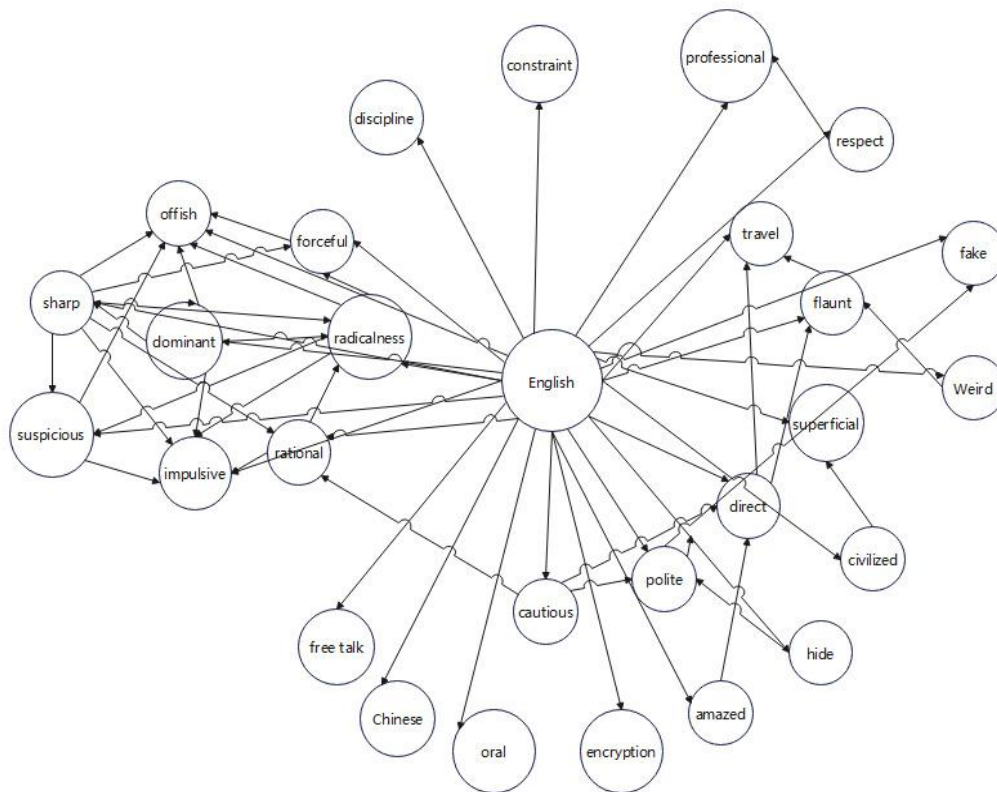


Figure 2. English language social network and semantic network analysis diagram Technology also acknowledged, “When I speak

4.1 English as a tool to cover up one's emotions

During the course of the interviews, all the interviewees said that they used English in their academic communications to appear more academic. In addition, some felt that speaking English could mask their true feelings in conversation better.

The college student who came from Cornell University argued, "Chatting in English can seem contrived or rigid. This language makes me feel like I am pandering to the person I am talking to rather than expressing my true thoughts." Coincidentally, both of the students who came from United International College (UIC) had a familiar opinion, "Talking in English is more disconnected and can be relatively cold. But it can also be better not to show your feelings towards others." The student who came from Changchun University of Science and Technology also acknowledged, "When I speak English I seem to be more objective and rational, which seems to be different from when I speak Chinese."

In summary, interviewees from overseas study, from mainland universities and from UIC expressed similar views on the use of English to mask emotions. These may be related to the identity of English as a second language, for the mother tongue is always the language one uses most intimately and it is used as a more effective language for evoking inner emotions than the second language. A second language is more about being able to ensure fluency of communication among formal discussion such as academic topics.

4.2 English as a more "aggressive" tool

It is interesting to note that even though some of the interviewees saw English as a tool used to hide their emotions, there were still interviewees who felt that English could extend their ability of expression. One of the interviewees suggested the word 'aggressive' to describe how he felt when using English.

The student who came from the Sun-Yat-Sen University raised the word "aggressive" in his argument, "It's true that when I speak English I expressed differently from when I speak Chinese. When I speak English I think I become more aggressive... Yes, I like to use the word aggressive to describe my view of English and how I comprehend it. Speaking English shows my aggressiveness, ambition, or desire to perform. Speaking English is also about showing off that I know the language well, I'm powerful." Meanwhile, the students who came from Sydney University had similar views, "If I were to respond to the same question in English, English would be more able to express how emotional I am, more impassioned or more emotional. For example, if I want to show that I'm surprised, I

would like to say 'Damn it !' or 'What the hell !' rather than just speak in Chinese like "Zen Me Hui Shi?" (what happened?). English comes across more forceful expressions than if I were to use Chinese."

In mainland China, speaking English can still represent a good level of education. However, very few Chinese communicate in English in their daily lives. This, therefore, makes the use of English interspersed with Chinese conversation more purposeful, to show one's ambition, desire or emotional side. Liu and Guo (2012) mentioned that the study of stimulus interval (ISI) showed that both Chinese and English produced switching costs in the long ISI condition and that the switching costs were symmetrical. Thus, listeners need to concentrate on receiving the information after the language switch to activate the schema of the other language. Hence, in a Chinese conversation, most people would be surprised by the intervention of English since English works as a foreign language in China, people seldom use English to chat in daily conversation. The person using English abruptly may better get the attention of the interlocutor and achieve his goal of communication. Following the present results, previous studies have demonstrated that one of the Mexico students Miguel among four objects of research used English in class in order to impress his identity as "a good student" for the teacher and other classmates recorded in Fuller's research

4.3 Chinese as a representative of nationality

All the interviewees felt that using Chinese was a subconscious choice, as it was the mother tongue of all Chinese people. However, when talking about what effect speaking Chinese could have, a small number of interviewees still mentioned that speaking in Chinese could show their identity as a Chinese person. It is not surprising that students studying overseas would feel this way, but some students studying on the mainland also made the same point.

The interviewee from the University of Sydney believed that speaking Chinese, especially when overseas, highlighted his national pride and patriotism, "I would use the most basic language, such as polite words like 'Xie Xie' or 'Ni Hao', to show who I am as a Chinese person. Although speaking Chinese abroad can sometimes bring a discrimination or bad experiences, I am still proud of the Chinese I speak." The male interviewee who came from UIC shared his opinions in another perception, "Chinese is a very classical and elegant language that encompasses the culture of the last five thousand years of China. The diction and connotations of Chinese are unique to the world." The students from Sun-Yat-Sen University complemented, "Chinese language expressions are very immanence, just like the scenery of a Chinese garden, it has a depth of the scene. Chinese may not be as straightforward, but it needs to be savoured to grasp the meaning the speaker

is trying to convey, and this is one of the manifestations of the Chinese people's introversion.”

In short, Chinese university students who study in English-medium universities in English speaking countries believe that speaking Chinese better reflects their national pride and patriotism. In contrast, Chinese university students studying in the mainland conducted their analysis of the Chinese from the perspective of Chinese cultural background.

4.4 Previous studies and language teaching

Generally speaking, the previous studies on the language used by bilinguals in China focus more on the perceptions towards the impact of English in China. Fang (2018) mentioned the challenges and concerns that English would bring to the traditional Chinese culture. Meanwhile, people in China are concerned about how to teach and acquire English.

Henry (2010) also argued that Chinese, on the other hand, can play a supporting role in the learning of English. Previous research has therefore focused more on how the code-switching between Chinese and English can help students learn English and English influence in China. However, rarely study has said about how English and Chinese shape the personalities and identities of Chinese bilingual speakers.

In other parts of the world, research has been developed on the role of English and local languages in shaping people's personalities, but this is lacking in China. Fuller (2018) had conducted research in a Mexican family to explore what characteristics these students bring out in their use of different languages in the classroom and in their daily lives. Hansen (2014) also organized a language using a situation about Nahuatl. Nahuatl is gradually dying out because of the use of Spanish. The older generation used the language to carry on and embody their traditional culture, while the younger generation saw the use of Spanish as a fashion statement.

In short, the study of English and Chinese in China has been more oriented towards the challenge of English to traditional Chinese culture and the teaching of English in China.

5. CONCLUSION

Therefore, combining the above views of Chinese university students, the author believes that language teaching and culture has a potential relationship that cannot be ignored in language learning. To facilitate the acquisition of a language, a comprehension of its culture helps to deepen the understanding of that language. Each language has a culture that it can represent, and this culture can in turn be reflected in the structure of the language. Structural linguists also argue that language is

a symbolic system with a deep structure, culture is a surface phenomenon of language that expresses the generality of human beings who want to arrange and classify their experiences (Jones, 1966). Also, the interviewee who studied at Sun Yat-sen University mentioned that the Chinese tended to lay the groundwork before the outcome, and this was related to the Chinese culture. Chinese culture places more emphasis on the connotation and depth of the scene, which in turn affects the structure of the language. Conversely English generates from a maritime culture, that European countries cultures are more open and communicative. This makes English focus on expressing results before starting conditions.

Therefore, the author suggests that more elements that help students understand the culture represented by the language could be included in language teaching. For example, an introduction to the history of the origins and development of the language and an illustration to the main speakers of the language and the topography of its distribution could add to the lecture time. It is also useful to draw attention to the links between language and culture in the classroom and to engage students in thinking about them. Learning a language is also a method of understanding the way of thinking of the culture, which ultimately feeds into the personality and identity of the speakers.

The previous studies were focused on the influence of the use of Chinese and English on teaching and learning, and how they use of language between English and other languages is a phenomenon that varies from person to person in society. Analysis of the interview data revealed that each interviewee did not have the same views and perceptions towards the use of the two languages, and the emotions shared by the interviewees when they used the two languages were different. These two languages thus constructed the identity of the contemporary Chinese university students in terms of the experience that went into their use and the purposes for which language they were used. Both languages subliminally constructed the character of their users, which was related to the culture represented by the language itself and the context in which it was used.

Firstly, the culture represented by the specific language helped the language to shape one's characters and identity. The influence of Chinese culture on Mandarin was also mentioned by some interviewees during the interviews. Meanwhile, the interviewee mentioned that speaking English made him feel aggressive and more ambitious. Speaking English, therefore, helped to make people more enterprising, or more open-minded and tolerant.

However, most of the interviewees mentioned that speaking English made them more cautious, which was a result of the second finding and has nothing to do with

culture. The context in which the language was most commonly spoken also reminds the speaker of the language that they should react subconsciously, thus shaping the person's character. For example, as mentioned in the interview, the use of English for communication in an academic setting was a view shared by all interviewees. Academic communication was a formal setting and therefore required the speaker to think about the wording before speaking. This process gradually reinforced the conditions for the use of this language and ultimately brought about a discreet character. In addition, the level of English proficiency also affected how this language shaped the personality of its users.

Finally, both the culture represented by a particular language and the habitual environment in which the user used that particular language can influence that person's personality. These can be summarised by the different feelings each person has of the two languages.

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