Corpus-driven Analysis on Chinese Image in APEC -- Speeches at Economic Leaders' Meetings

Yuhang Liu

College of Humanities and Information Changchun University of Technology, Changchun, Jilin, China

Abstract: This paper conducts an analysis of Chinese image construction. Under the circumstance of Corpus controlled, two research questions are proposed. For the first question of linguistic features, the paper utilizes the keywords and the diachronic N-grams analyses respectively to find that three groups of Lemmas and four key diachronic headwords. For the last question, according to semantic prosody of Concordance analysis, the images are constructed by the economic vigorousness, the environmental friendliness, and an abided role in APEC rules.

Keywords: corpus, APEC, Chinese image, image construction

Introduction

Image construction has been a continuing concern within the fields of interdisciplinary. In Linguistics, analyses of image construction could be pertinent to identity of different generations[4], to national image[7], and to diplomatic image[6]. Traditionally, image construction analysis is conducted by the frameworks of social constructionism[1], the theory of conceptual metaphor[3], the theory of critical metaphor analysis[2] and appraisal theory[5]. Meanwhile, there are methodologies applied in image construction studies mostly involving Corpus. Hence, this analysis molds the notion of Corpus and discourses from APEC and evokes the following outline.

1. Analysis design

The Target Corpus is established with 6,927 tokens and 1,287 types with respect to 5 texts of discourse which have been cleared and managed in Sketch Engine. Figure 1 shows the Token coverage in Corpus. By compiling, except speech of 2020 occupies 29.6% as maximum but speech of 2022 is 16.7% of minimum. The average on this discourse distribution is fluctuating from about 17% to 19%. Therefore, the APEC Corpus in this analysis is reasonably well-constructed.
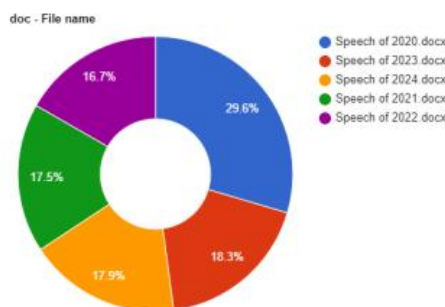

Figure 1 Distribution of discourses in APEC Corpus constructed

Then, two research questions are proposed:

i. What are the linguistic features used in the construction of Chinese Image in APEC Corpus?

ii. Based on these features, what kind of Chinese Image does the APEC Corpus constitute?

To address the issues, this analysis firstly uses the keywords interface identifying the Multi-word Lemmas and groups of Lemma. Secondly, diachronic N-gram analysis is depicted so as to show the trend of Lemma changed. Finally, combined with the discourse prosody, the conspicuous Left-to-Right Concordance will tell the   Chinese Image in APEC Corpus compiled.

2. Result and discussion

2.1 Keywords analysis

Generally, there are 100 keyword clusters, which are counted as 100 Multi word Lemmas. In these charts, the higher the rank it is, the more frequent the Lemmas are mentioned. Firstly, it is the Asia-Pacific cooperation and community that have been emphasized from 2020 to 2024. *Regional economic integration, shared future, technical cooperation, APEC economic leaders' meet, multilateral trading, Asia-Pacific economy, Open trade, free trade area, Putrajaya Vision, green development* as well as *connectivity blueprint* are all in the leading ranks. Besides, clusters, which are in the low ranks, illustrate the significance of some notions, encompassing *modernization of all countries, concern of developing members, integration of the early realization, featuring mutual trust, Chinese path, road to cooperation,challenge, trading regime and road forum*.

Specifically, three groups of Lemmas can be drawn. First, Lemmas group of Economy (Economy Lemmas Group). The fundamental members are mainly involving (*regional) economic integration, trading, Progressive Agreement, free trade area, trading system, trade rule, world economy and etc.* Second, Lemmas group of Inclusiveness (Inclusiveness Lemmas Group). The members are *shared future, open trade, high-standard free trade area, open regionalism, open world economy, investment liberalization, concerns of developing members, openness and support micro.* Finally, Lemmas group of ecological development (ECO Lemmas Group). This group is identified by the members, such as *green development, low-carbon and non-discriminatory environment.*

2.2 Diachronic N-gram analysis

Figure 2 indicates the result of diachronic N-gram Analysis, which contains three rising trends and one declines, which are statistically all significance difference. First of all, the lemma <promoting> (P=0.043) has the trend of 2.75 with respect to the frequency of 8 times, <important> (P=0.043) has the trend of -2.48 by 7 times, and <opportunity> (P=0.027) with the trend of 1.6 is pertinent to the frequency of 6. On the contrary, although <important> (P=-2.48) contains the frequency of seven, it has constantly decreased in the number in the past 5 years.

	Word	Trend	Frequency	P-value	Sample
1	promoting	↗ 2.75	8	0.043	
2	important	↘ -2.48	7	0.043	
3	opening	↗ 2.36	8	0.027	
4	opportunities	↗ 1.60	6	0.027	

Figure 2 Snapshot II in Sketch Engine

2.3 Chinese image construction

Combined with the results from Keywords and N-gram Analyses, the following headwords are identified, *economy*, green, promoting, opening* and *opportunities*. Table 1 is some concordance and results are as follow.

Table 1 Major Concordance Information in APEC Corpus

Left Context	Headwords	Right Context
systems for a higher-standard open	economy	and continue to share our development

to the formal and global	economy	China welcomes this effort
international cooperation on the digital	economy	and have applied to join the DEP
making the region the most dynamic	economy	and primary engine of global economic growth
agriculture, sustainable city development,	green	and low-carbon energy transition and marine
Second, we need to make	green	innovation a catalyst for the Asia-Pacific.
It has played a robust role in	promoting	Asia-Pacific trade and investment liberalization
This year, Peru has been actively	promoting	cooperation on the transition from the informal
Colleagues, Reform and	opening	up is a historic process in which China
We will advance a broader agenda of	opening	up across more areas and in greater depth,
further development will provide new	opportunities	for the Asia-Pacific region and the world
will bring the world more and greater	opportunities	for the modernization of all countries.

Louw suggests the collocates of the headwords can be rife with the concrete semantics, i.e. the semantic prosody. (1993:156-159) In this respect, the semantic prosody of <economy> includes *higher-standard, open, formal, cooperation, dynamic, growth, join*, engendering the positive prosody. It leads to the vigorous image that China participants into the development of Asia-Pacific economy. Additionally, the semantic prosody of <green> evokes the negative image in that these detrimental issues are desperate for tackling, like *marine pollution, sustainable development, low-carbon energy*. For the rising trends of <promoting, opening, opportunities> are all surrounded by the positive prosody. As a result, a standing figure of upholding the APEC principles is well established, which yields to an accountably international image.

3. Conclusion

In conclusion, this observational analysis suggests that there are at least three kinds of linguistic features contributed to the construction of Chinese images at the speeches of economic leaders' meeting in APEC, which may help constitute three images internationally. On the one hand, the analysis argues three groups of Lemmas, i.e. Economy, Inclusiveness and ECO. Meanwhile, four headwords in a historical trend contain the obvious significance difference, i.e. <promoting>, <important> and <opportunity> (Population < .05). On the other hand, the major findings of Concordance analysis have shown two semantic prosodies and one negative prosody in image construction.

Despite these promising results, questions remain. In future, the investigation should clear out the standards of classification upon the groups of Lemmas, and may propose the effective standards of annotation.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

[1] Burr V. An introduction to social constructionism [M]. London: Sage. 1995.

[2] Charteris-Black, J. Corpus Approaches to Critical Metaphor Analysis [M]. Basingstoke: Palgrave Macmillan. 2004

[3] Lakoff G. Johnson M. Metaphors we live by [M]. Chicago: Chicago University Press. 1980.

[4] Liu Guiling. Zhang Cun. From Other-construction to Self-construction: The Discursive Construction of Chinese Youth's Identity in the New Era from a Social Constructive Perspective [J]. Journal of Jilin Normal University (Humanities & Social Science Edition). 2022.

[5] Martin, J.R. P.R. White. The Language of Evaluation [M]. New York: Palgrave Macmillan. 2005.

[6] Wu Jianguo, Ma Chunyu, Song Yue. A Critical Metaphor Analysis of the Chinese Diplomatic Discourse from the Perspective of National Image Construction [J]. Chinese Language Strategy. 2024.

[7] Zhang Cun. Liu Guiling. A Study on Audiences' Acceptance and Reconstruction of City Image from the Perspective of Appraisal Theory [J]. Journal of ZheJiang International Studies University. 2024.

[8] Zhang Yilin. Liu Guiling. A Study on National Image Construction from the Perspective of Framing Theory [J]. Journal of Changchun University of Science and Technology. 2020.