

Círculo de Lingüística Aplicada a la Comunicación ISSN: 1576-4737

EDICIONES COMPLUTENSE

http://dx.doi.org/10.5209/CLAC.61353

A comparative study of discursive constructions of Chinese smog documentary in Chinese and American news coverage

Qiuyang Li 李秋杨¹; Ya Yang 杨雅²

Recibido: 5 de junio de 2018/ Aceptado: 23 de julio de 2018

Abstract. This article investigates the corpus-based discourse study of the representations of smog documentary *Under the Dome* in five Chinese media (*Xinhua News*, *People's Daily*, *China News*, *Guangming Daily* and *Caijing Net*) and four American media (*The New York Times*, *The Wall Street Journal, The Washington Post* and *USA Today*). It is found that dialectical relationship between discourse and culture, discourse and politics as exemplified by the historical issues, various linguistic forms and discursive strategies. The findings suggest that Chinese media discourse about Chai's smog documentary tends to be unitary, while American media discourse focuses on the whole story of the event and constructs an integrated discourse event with diverse perspectives. American news reports inclined to take a determinative attitude to accuse Chinese government' censorship while Chinese news report focuses on expressing people's emotion and opinion toward the smog documentary and Chai Jing.

Keywords: *Under the dome*; smog documentary; Chai Jing; contemporary Chinese discourse studies; media discourse; environmental communication

[zn]中美新闻报道对中国雾霾纪录片话语构建的对比研究

摘要:本文借助语料库方法考察中美媒体对雾霾纪录片《穹顶之下》的话语再现。通过对历时事件、语言形式和话语策略的研究发现话语与文化、话语与政治的辩证关系。研究结果表明,中国媒体有关雾霾纪录片报道的新闻话语趋向于单一化,美国媒体话语则聚焦于整个事件,通过多角度构建整个话语事件。美国新闻报道更倾向于指责中国政府对该雾霾纪录片的监管,而中国新闻报道更侧重于表达民众对该纪录片的情感和观点。

关键词:《穹顶之下》,雾霾纪录片,柴静,当代中国话语研究,媒体话语,环境传播

Contents. 1. Introduction. 2. Data collection and methodology. 3. Findings and discussion. 3.1. Who is speaking vs. who is not speaking. 3.2. Discourse themes. 3.3. The relations of History and Culture. 3.4. Attitude resources. 3.5. Engagement resources. 3.6. Graduation resources. 4. Conclusions. Acknowledgments. References.

¹ Xiangtan University (China). Email: lqiu@unileon.es

² Xiangtan University (China).

How to cite: Li, Q. 李秋杨; Yang, Y. 杨雅 (2018). A Comparative Study of Discursive Constructions of Chinese Smog Documentary in American and Chinese News coverage. *Círculo de Lingüística Aplicada a la Comunicación* 75, pp. 205-228. http://webs.ucm.es/info/circulo/no75/li.pdf, http://dx.doi.org/10.5209/CLAC.61253

1. Introduction

Under the Dome (Smog Investigation: Under the Dome, the Same Breath and a Common Destiny) issued by Chai Jing, a former journalist of CCTV, about air pollution in China on the Internet on February 28, 2015 had garnered six million hits and over 12,000 online comments on various social media platforms within 12 hours. In a little over 48 hours, over 200 million Chinese people had seen it. As a documentary film, it aroused an unexpectedly extensive discussion on the Internet about the air pollution, PM 2.5, the government, Chai Jing's purpose and capital source and etc. In the day before "two meetings", the documentary gave rise to heated discussions from the members of the CPCC and NPC delegates, some of which were criticisms about energy structure, regional environmental projects and the enforcement of environmental protection departments. The documentary adopts a presentation mode and recording form of public speaking with the video's format of TED talk and an Apple product launch. Despite the overwhelming transnational reaction to the video upon its immediate release, however, the event evaporated as quickly as it took place (Yang, 2016). On March 2, the central publicity Department ordered major Chinese outlets to remove the video and its coverage from the spotlight (Pan, 2015). This documentary attracts tremendous attention from various news media. Both positive and negative news reports can be found massively not only in Chinese official and nongovernmental media, but also in the mainstream media of the west. Thus, the film attracted public's attention, and triggered hot debates, and produced a certain impact in a very short time.

Researchers have observed that news in all its forms is seldom a value-free reflection of the facts (Fowler, 1991; Van Dijk, 1988). The news report of smog documentary, from the view of environmental communication suggests the importance of investigating the representations of a given environmental issue by news media from different origins in view of the fact that different or comparative ways of conceptualizing environmental issues may have significant implications for decisions and actions (Fløttum and Dahl, 2012). In addition, news media plays a crucial and indispensable role in contemporary environmental issues (Lester, 2010), the news reports on *Under the Dome* is especially influential in shaping public perception of this environmental affairs. Meanwhile, news discourse is not a mere reflection of environmental problems that occur in our daily life, but rather socially produced, manufactured or constructed (Hansen, 2010). Discourse analysts pay much more attention on political discourse and economic discourse to explore hidden ideology and power than on environmental discourse.

Besides, previous environmental discourse studies focus so much on the theory construction and introduction, that relatively few investigations are concerned with environmental discourse in real news form in the context of comparison, especially China and the west, due to the following facts. Environmental communication in China, as one of the most important and urgent Chinese contemporary discourse issues, has been under extensive scrutiny in the past decades in view of its mounting environmental challenges, its communication discourse in both Chinese and western media news not only concern about China's social stability, but also China's international image (Chen, 2014; Ma, 2015; Xu, 2012). From the rough scanning of past studies, the China-related reports are constricted by the deep-rooted political, historical and cultural factors in China, while the western ideologies and values manipulate the direction of the Chinarelated reports in America. This study aims to contribute to the growing literature of China's environmental communication studies through a comparative research of the representations of China's smog news about Chai Jing's Under the Dome reported in Chinese and American newspapers, unveiling the social, cultural and political motivation in the news reports and elaborate the different discourse between Chinese and American media. As Partington (2015) has suggested, a comparative perspective for discourse analysis is very necessary for it can reveal some discursive features that might otherwise be ignored. However, the existing comparative media studies of environmental issues focused on the coverage among developed countries or compared media coverage of environmental issues that are of common interests to China and the USA, such as the communicative relationships regarding the environment (Liu & Goodnight, 2008; Tilt & Xiao, 2010), climate change (Jiang and Lei, 2010; Xie, 2015). In order to achieve this aim, this paper intends to answer the following questions: (1) What are the main focuses of Chinese and American media discourse on Chai Jing's smog documentary? (2) What are the systematic differences in the presentation of Chai Jing's smog documentary in Chinese and American media discourse? (3) What kind of discursive strategies and influencing factors to environmental situation are manifested in Chinese and America media to serve their different purposes and shape the thinking of their audience? The analysis of discourse speakers, topics and historical-cultural relation will be analyzed by the framework of cultural discourse approach (Shi, 2010; 2013; 2014). And three subsystems of Appraisal Theory (Martin, 2000; Martin & White, 2005), attitude, engagement, and graduation will be comparatively investigated in the two news discourse corpora, aiming at finding the contrast between the news discourse with regards to speakers, topics, source, discursive strategies and historical relations, as well as socio-cultural factors reflected in the current environmental issues between the media in the two countries.

2. Data collection and methodology

Research data of the present paper consist of 18 pieces of news chosen from Chinese media including *Xinhua News*, *People's Daily*, *China News*, *Guangming Daily* and *Caijing Net*, and 24 from American media including *the New York Times*, *the Wall Street Journal*, *the Washington Post* and *USA Today*. These news media are the most authoritative and influential press in the respective countries to provide the latest news home and abroad for the political statesmen and even the grassroots, so that the reports chosen from them for study can represent the mainstream attitude towards Chai Jing and her smog investigation to a great degree. All news coverage mentioning the keywords "Chai Jing" and "Under the Dome" were extracted from the above newspapers' official websites, and built into their respective corpora after a manual elimination of some irrelevant information in the news texts. The temporality of the documentary online allows us to collect the data in a rather closed way. The timeline between the release of the film to the disappearance of it lasts no more than four days, and the relevant news number dropped after one month. Therefore, 42 news reports are finally selected with the publication time of the research samples is from Feb. 28, 2015 to March 31, 2015.

Discourse speakers in this study was defined as a person, official department, organization that gives opinions in the news coverage. It was classified into 7 categories as been shown in table 1. In order to identify the two corpora's preference for frame, enhance the study's validity, representation of the issue (Baker et al., 2013), this study adopts AntConc 3.4.1 keywords function. Based on Baker (2006: 125)'s finding, it is possible to identify keywords that occur more frequently in one corpus as compared to a second corpus by using statistical tests which take into account the keyword frequency and total word count of both corpora. They can be ranked in a keyword list by their keyness values, which are based on the calculation of log-likelihood. In this study, the concordance (for finding all instances of a word or phrase), and key words (to help find salient words in a text or set of texts) are applied to help with analysis of the collected data. BFSU Qualitative Coder 1.1 (Xu, 2011) was used to calculate the token and type of each target category for identifying the difference and similarities of evaluative strategies and discourse features in the two media discourse corpora.

3. Findings and discussions

3.1. Who is speaking? v.s. Who is not speaking?

According to the two corpora, there are dozens of discourse speakers who have participated in the discussion of Chai Jing's smog documentary. On the basis of different social status, they are categorized into seven groups: government department, state officials (referring in particular to those whose comments are on behalf of the individual instead of their departments), non-government organizations of environmental protection, representatives of company, media and journalists, ordinary people, experts and scholars. The main discourse speakers showed in news discourse of Chinese and American media are respectively listed in the table 1.

"Discourse speaker" refers to the specific person or social organization use linguistic symbols to generate meaning in the particular context, including the speaker who produces discourse behavior, and the listener who consumes that (Shixu, 2010; 2013; 2014). The analysis of discourse speaker should include both "who is speaking" and "who is not" (Shi-xu 2010:71). Therefore, the question of "who is speaking" is mainly concerned with various discourse speakers actually engaged in social activities, their social identities and the possible influence from status on the social activity. The question of "who is not" focuses on those discourse speakers who are supposed to speak but not, the possible better effects in case of speaking and the potential problems or subsequent impacts. As the Table 1 shows, the discourse speakers who took part in the discourse interaction are government sectors, state officials, non-government organizations of environmental protection, media and journalists, ordinary people, and experts and scholars in the media news of China and America, except the representatives of company in Chinese side. With consideration of context, the following analysis will contain the social identities of discourse speakers, their status in the news discourse, and the effect of their discourse activities upon such a discourse event.

Speaker Types	Discourse Speaker (China)	Discourse Speaker (America)
Government Departments	Premier(总理)	Premier, the National Development and Reform Commission, Chinese President, the Shanghai International Communication Department, Beijing, China's Ministry of Science and Technology, the Supreme People's Court
State Officials	the minister of environmental protection Chen Jining (环境保护部部长陈吉宁); the spokesman for CPPCLv Xinhua (中国政协发 言人吕新华); member of the CPPC, Sun Taili, Song Fengqiang, He Xiangjiu(全国政协委员 孙太利、宋丰强、何香久), deputy to the NPC, Song Xinfang, Bao Jingling, Xue Haiying, Guan Mucun (全国人大代表宋心 仿、包景岭、薛海英、关牧村); secretary general of ACFIC, Luo Jianhua (全国工商联 环境商会秘书长骆建华); Mayor of Beijing,Wang Anshun (北京市市长王安顺)	the minister of environmental protection, Chen Jining; the vice mayor of Beijing; China's former health minister; NPPLSTC, Cao Xianghong; a Beijing housing official, Han Fuli
NGOs of Environmental Protection	Public Environment Research Center(公共环 境研究中心), Friends of Nature(自然之友)	Beijing-based climate and energy campaign manager for environmental group Greenpeace, Shanghai-based environmental advocacy group JUCCCE, the Beijing-based China climate and energy policy director of the U.S. environmental group, the Natural Resources Defense Council, Public Environment Research Center, Friends of Nature
Company Representatives		Daniel H. Rosen, the Rhodium Group; Wan Zhanxiang, senior oil company official; a senior executive at CNPC; Pan Shiyi, SOHO China; Sinopec; the World Bank
Media and Journalists	PhoenixNet (凤凰网), Phoenix Satellite Television(凤凰卫视), China Youth News(中 国青年报), Global Times(环球时报), the Xinhua News Agency(新华社), People's Daily Online (人民日报), Huffington Post (赫芬顿 邮报), China News (中国新闻), propaganda chief of Youku (优酷网宣传负责人), Cui Yongyuan (崔永元), Ren Chonghao (任冲昊), journalist Wang Tao (记者汪涛), chief editor Zhuang Yongzhi (主编庄永志), Xi Po (西坡), journalist Li Jingyun (记者李靖云)	newspaper employees, Xinhua, China News Service, several journalists, the New York Times, the WSJ's Andrew Browne, Australia's Business Spectator Peter Cai
Ordinary People	Netizens (网友), Liu Chun (刘春), Wang Kai (王凯),Mao Anlin (毛安林), Wu Qing (吴青), Xin Li (李新), Fu Weigang (付伟刚), Zhang Tianwei (张天伟), Ran Yunfei (冉云飞), Du Jianguo (杜建国), Cao Shanshi (曹善石), Murong Xuecun (慕容雪村)	Wang Zhen, Yuan Ling, one Internet user on Weibo, people familiar with, one commenter on Youku

Experts and Scholars	Professor Wu Jing(吴靖), Director Zhang Zhian (张志安), General Engineer Zhou Chaohong (总工程师周朝红), Professor Fang Jingyun (方精云教授), Director Gao Shu (高 抒), Vice President of Association, Lan Fenghui (副会长蓝逢辉), Professor Lv Xinyu (吕新雨 教授), Researcher Jia Jinjing (贾晋京研究员), Dr. Zhou Lei (周雷博士), Professor Chen Ping (陈平教授) Expert Gao Jixi (专家高吉喜)	Yu Guoming, Tao Ran, Zhan Jiang, Willy Lam, Tang Yinghong, Anders Hove , David M. Lampton, Liu Jinmei, Jennifer Turner, Joanna Lewis experts, one journalism professor, environmental experts, analysts (in journalism, economics, politics, psychologist, environment, lawyer, science and technology, and international affairs)
Щ	(陈平教授), Expert Gao Jixi (专家高吉喜)	

Table 1: Layout of discourse speakers in news discourse of Chai Jing's smog documentary

Government departments are the combination of social public power and public trust of one country with unconditional authority of discourse within its jurisdictional limits. The news in Chinese media cites the Premier Li Keqiang's words in the session of the National People's Congress in Beijing, which expressed the strong determinations to cut back on major pollutants, improve energy efficiency and fight air pollution with all might. Although he didn't mention and comment on Chai Jing's smog documentary, the intensive resolution and definite declaration in the top leader's discourse, undoubtedly, alleviated the outrage and dissatisfaction towards terrible air pollution to some extent. Besides the premier, there are far more Chinese government departments involved in the discussion of documentary in American news reports, including the departments related to economics, science, propaganda and law. Opinions and statements from these departments on documentary or the criticized pollutants are on behalf of their own stances and functions, showing all-round attitudes and interests towards air pollution. As for the American newspapers, the discourse speakers of state officials have been drawn little attention in the two sessions during this special period. There are five unrelated officials in Beijing involved. State officials participate in the discourse interaction with their individual identities instead of their positions in the departments that they belong to, who are the member of the CPPC (the Chinese People's Political Conference) and the deputy to the NPC (the National People's Congress) who spoke during the two sessions of 2015. Although their standpoints cannot represent the state, it is essential to show the attitudes of the interest groups towards the documentary and air pollution, which exerts a considerable impact on the final decision made by the government. They showed great concern about pollutant source emission, environmental law enforcement and economic reform. According to Hofstede and Hofstede (2005), people in high power distance cultures, such as China are more likely to defer to authority figures whereas people from low power distance cultures tend to adopt an egalitarian approach. Chinese culture is characterized by high power distance (ranked 12th to 14th among the 76 countries examined), whereas, U.S. culture ranked 57th. It is well indicated in the table 1, speakers of legitimate authorities, like the state leader and government officials, are considered credible and decisive in the environmental communication. Apart from cultural influence, the social factor that in China, environmental news discourse is subject to the state control. Environmental communication embodies such authoritarian feature (Tong, 2017).

American media pays far more attention to the discourse practice of nongovernment organizations than Chinese media when reporting Chai Jing's smog documentary. The non-government organizations have been found to play an increasing important role in pushing forward environmental movements and campaigns. A rising awareness of environmental problems and grass-roots environmental non-governmental organizations, accompanying the greening tendency of the Chinese state in the late 1990s, Friends of Nature, as has been found in table 1, is one of them. However, the influence of environmental NGOs and movements in China is far from being powerful enough to make fundamental changes in the environmental situation at present (Stalley & Yang, 2006).

Representatives of company are one of the direct stakeholders in pollution fighting, especially the company related to environmental protection business, whose discourse truly reflects their attitudes toward the documentary and future actions to environment. American media keep a watchful eye on the discourse practice of Chinese enterprises and American enterprises, particularly those criticized state-owned companies in the documentary as Sinopec and CNPC (China National Petroleum Corporation). Clearly, they disagreed with the documentary and counterattacked that it puts too much emphasis on the oil industry and exhaust from cars and trucks and not enough blame on the use of coal in power generation and steelmaking. But, the related companies are not taken as the discourse speaker in Chinese media.

Media and Journalists' news reports provide a main source for all sectors of society to comprehend all the ins and outs of the smog documentary, propagate viewpoints and stances one's own side, and lead the public opinion at home and abroad. In the news discourse of Chinese media, mainstream media make their voice aloud on the documentary and air pollution, such as *PhoenixNet*, *Phoenix Satellite Television*, *China Youth News*, *Global Times*, *the Xinhua News Agency*, *People's Daily Online* and *China News*. Some famous journalists also show great concern and interest in such a phenomenal event and the objects queried by the documentary. Media and journalists as discourse speakers in Chinese media demonstrate a hot atmosphere and debate on Chai Jing and her smog investigation. In contrast, American media tend to indicate the great sensation caused by the documentary by quoting the comments from several Chinese and foreign media and applying such vague discourse speakers as "newspaper employees" and "several journalists" to disclose the possibilities that China's propaganda, and alerting editors and journalists to stop paying close attention to the film.

Ordinary people are another direct stakeholder in pollution fighting and main followers of this documentary. Their voice in Chinese media news is much stronger than that in American media, for Chinese media involved more specific individual' s stories, hot debate about Chai Jing and the smog investigation among the public into the news, which indicates popularity of Chai's documentary. But few voices on questions raised by Chai appear as discourse practice.

Experts and scholars analyzed and comments on the documentary with considerable specialty and neutrality for their incomparable professional knowledge. In Chinese news, the experts and scholars, expressed their views in the news of communication, environment, geography, and financial announce about Chai's smog documentary and ways to reduce pollution whereas, these speakers are rather event-based. In contrast, American media focused on the whole story with various perspectives from a wide range of experts and scholars in journalism, economics, politics, psychologist, environment, lawyer, science and technology, and international

affairs. These speakers are rather context-based. This distinctive feature is reflected in later discourse analysis.

"Who is not speaking" is concerned with discourse speakers who are supposed to speak but not, and the possible better effects in case of speaking. There are discourse groups who almost keep silent in the whole context as indicated in Table 1. The first missing discourse speaker group in Chinese media is the state-owned enterprise questioned by Chai Jing in her documentary. The powerful oil and gas industries, mostly state-owned, which are blamed for resisting raising fuel standards as the higher costs of production and their strong influence over environmental policymaking. That is to say, CNPC and Sinopec are on the opposite sides as direct benefit losers. At this point, the criticized oil company ought to strive for their discourse power. The insufficient discourse group in American newspaper is ordinary people to which air is closely linked. Chinese government names pollution as a blight on people's lives and a trouble that weighs on their hearts. Whereas only one netizen's feeling about popularity of the documentary is presented in American media. It is clear that the public's comments on Chai Jing, the smog documentary, air pollution, Chinese government, state-owned enterprise has is not the focus of American news, but rather, they tend to dramatize their discourse towards the sensation of the documentary and the responsibility that Chinese governments should shoulder.

An absent discourse group in both Chinese and American media news is inefficient capacities, the major pollutant of smog, the awkward existence of this industry, has been purposefully unmentioned, which is for one essential reason that the substantial tax and abundant employment are at the expense of the fresh air. The unfavorable position of outdated capacity results in owning no right to practice any discourse actions in the coverages. What is noteworthy is that the discourse practice of ordinary people, state-owned oil companies and outdated capacities are barely brought into Chinese media news, which means the voice and interest of those who are closely related to the documentary and air pollution are totally ignored.

3.2. Discourse themes

Discourse theme or topic is generally about the most important information in discourse that the speaker wants to pass on to the hearer (van Dijk, 1988; 1998). This section is to dissect and analyze the different discourse theme from news headlines and keywords in Chinese and American media discourse about Chai's documentary.

A news report is usually composed of headline and main body. As the soul of news discourse, the headline is a unique discourse type for its high generalization of central arguments. Implying report tendency and journalists' attitudes, compact words are utilized to concentrate the core and noteworthy messages in news. In this study, it is found that 18 pieces of Chinese media news mainly cover the documentary issue from in the view of Chai Jing, the documentary, government officials' response and proposals for public to fight against smog pollution with Chai Jing. The discourse themes are set surrounding the sensation and all-round attention on the investigation. In contrast, American media employed 24 news headlines with 29 clauses to cover four political themes: sensation, censorship, evaluations of the documentary, and environment agenda of Chinese government. Headlines and keywords are integrated to show themes of news discourse.

Each discourse group speaks for its own opinion and interest. The appearance of

each discourse speaker possesses a featured purpose and abundant social meanings. Chinese media are inclined to focus on the discourse practice of three speaker groups, state officials, media and journalists, and experts and scholars whose statements are authoritative, dependable and professional for readers. Ordinary people's outrage and disappointment are easily relieved by vigorous statement about combatting air pollution from state officials, superficial transparency of media and journalists, and specialized understanding of experts and scholars. By contrast, American media from the angle of foreign media pay close attention to the attitudes of Chinese government departments and the reaction of non-government organizations of environmental protection. Chinese media discourse about Chai's smog documentary tends to be unitary because of the dominating attention on the coverage about Chai Jing and the content of her smog documentary. American media discourse focuses on the whole story of the event and constructs an integrated discourse event with diverse perspectives, such as the event itself, statements of Chinese government and reactions of state-owned companies.

As the identification of keywords can indicate what a corpus is basically about, the 'aboutness' of a text or homogeneous corpus, the two-word concgrams between Chinese and American media news offers "a first glimpse of the dominant theme and topic throughout the texts" (Cheng and Lam, 2013: 180). Keywords act as a standard reference for normal frequencies of words that reveal something of the 'aboutness' of a particular corpus group. Keywords can be directly retrieved after word segmentation, while the obtaining of English two-word concgrams depends on the retrieval of keywords. The top ten most frequently occurring keywords and two-word concgrams retrieved from AntConc (Table 2) are with the exclusion below of function/grammatical words.

Rank	Keywords in Chinese media	Keywords in American	Two-word concgrams in
	news	media news	American media news
1	Chaijing 柴静(236)	China (186)	Air/pollution (44)
2	wuran/pollution 污染(124)	Chai, pollution (144)	China/pollution (34)
3	wenti/problem 问题(105)	Environmental (118)	Environmental/pollution (34)
4	huanjing/environment 环境 (101)	Film (114)	Environment(al)/minister (29)
5	huanbao/environmental protection 环保(95)	Documentary (98)	Chai/film (23)
6	zhongguo/China 中国(63)	Chinese (97)	State/television (17)
7	jilupian/documentary 纪录片(63)	Government (92)	China/air (16)
8	jizhe/journalist 记者(57)	Air (91)	Air/quality (15)
9	gongzhong/public 公众(50)	Dome (72)	People/congress (15)
10	diaocha/investigation 调查(46)	People (69)	State/owned (15)

Table 2: The top 10 keywords in Chinese and American media news

As shown in Table 2, the two corpora share many keywords referring to the dominant topic on Chai Jing's smog documentary, such as *documentary*, *film*, *Chai Jing*, *Pollution*, and *environmental*. This suggests that Chinese and American media

news showed great concern on Chai's documentary. The noticeable difference of the two countries' media discourse is that Chinese media news is present Chai Jing and documentary as the issue of air pollution and environmental problem which call for public environmental protection. However, the keywords in American media such as government is noted not only as the air pollution issue, but also as politic concern, which suggests that the attitude and reaction of Chinese authority are major concerns in American media news. A close examination of the two word collocates in the American corpus reveals that People/congress, State/owned confirm the political discourse concern and report perspective. Besides, the topic on air pollution and popularity of the smog documentary, the two-word collocates environment(al)/ minister are an important discourse speaker to the American corpus, indicating related governments are very much concerned about the issue of Chai's investigation. Another noteworthy concgram *people/congress* implies the news topic about Chinese political environment, the National People's Congress (NPC). The news themes about Chai's smog documentary and NPC demonstrate the interest of America in China's environmental agenda. With regard to the final concgram, the frequent mention of state-owned oil companies contributes to the theme of their influence and responsibility for air pollution that are raised and criticized by the documentary as historical citation and film footage to indicate their similarities.

3.3. The Relations of history and culture

The Chinese central government has shown increasing awareness of environmental protection in recent decades (Macbean, 2007). However, air pollution, as a development issue, is fairly recent environmental problem, and also a social problem in China. It was not until 2008 became a serious concern when the project of "Blue Sky" was conducted during the period of Beijing Olympic Games. With the sever shrouding Beijing and large parts of eastern China in early 2013, the air pollution has arisen a large number of coverage in the media and concern from the public (Liu, 2017). The smog documentary is partly the respond to these concern. The host starts with the smog in a large area of Northeast and North China, and discusses the air pollution, related governance and the existing administrative omission on China's mainland. It also refers to Los Angeles (the incident of photochemical smog), London (London smog incidents) and their current situations. Four historical environmental communication events similar to Chai Jing's smog documentary are mentioned in Chinese and American media news discourse, Rachel Carson's Silent Spring, Al Gore's An Inconvenient Truth, Cui Yongyuan's transgene investigation and democracy movement of China in 1988. The times of referring these events in Chinese and American news are as in Table 3.

Events	Chinese media	American media
Rachel Carson's Silent Spring	12	13
Al Gore's An Inconvenient Truth	1	7
Cui Yongyuan's transgene investigation	12	0
Democracy movement of China in 1989	0	1

Table 3: The times of referring historic events in Chinese and American media

Silent Spring is an environmental science book written by the American marine biologist Rachel Carson and published in 1962. The book documented the hazardous impacts on environment, particularly on birds, of the abuse of pesticides. Carson accused the chemical industry of propagating disinformation and public officials of allowing industry claims unquestioningly. Carson's work and the activism it inspired are significant for the deep ecology movement and the strength of wide environmental movement since the 1960s. Both of Chinese and American media associate this event in American history with Chai's smog documentary at an approximate frequency. In American media, Silent Spring is directly employed in the headline of news in the New York Times as China's 'Silent Spring' Moment? Why 'Under the Dome' Found a Ready Audience in China, which makes a resonance and arouses readers' curiosity whether the landmark of history will reemerge in China. For Chinese readers, the association of other country's historical event is not so beneficial for striking a chord since not so many Chinese have such cultural background. But An Inconvenient Truth is a 2006 documentary film about former United States Vice President Al Gore's campaign to educate citizens about global warming via a comprehensive slide. Since the film's issue, An Inconvenient Truth has played an important role in raising international public awareness of global warming and reenergizing the environmental movement. Al Gore's work is mentioned by American media basically to visualize Chai Jing's documentary for their readers because of the similar style of a TED talk, which suggests that the similar approach did not carry the same consequences and implication.

Cui Yongyuan's transgene documentary was released in November 2013, in which Cui aimed to explore the debate on whether genetically modified food is safe to eat. Cui's documentary was mentioned in Chinese media news for 12 times mainly on account of the similarity between Chai Jing and Cui Yongyuan. As former personnel of Chinese Central Television, they, out of professional ethics, investigated the issues that they concerned at their own expense. Besides, two documentaries focused on air and food problems that are essential to people's daily. As for the democracy movement of China, a 1988 episode in which reformers within the Party produced "River Elegy," a television series, advocating a 'full-scale adoption of Western ideas', and 'total abandoning of Chinese traditional culture' encouraged debate about China's political development. American media referred to this issue once to indicate that River Elegyhas enormous implications for contemporary Chinese politics, in particular the use of television as a public forum on controversial issues (Lau & Lo, 2009). Similarly, Under the Dome shows that an element within the Party wants to overcome resistance to environmental regulation by appealing directly to the public, therefore, American media discourse considered Chai's smog documentary as a positive movement.

The relations of history and culture observe the discourse connection between current events and past ones with the view of history and culture. Two historic environmental incidents in American history repeatedly appeared in news reports about Chai's smog documentary, leading readers to unconsciously associate and compare these events and being curious about the attitude and future environmental policy of Chinese government. The tentative comparison between the smog documentary directed by Chai with the two American and one Chinese series has suggested their different fate experience within the two social and political context. This is because America has gone through environmental pollution, public awakening, environmental protection movement and environmental policy establishment these four phases with its mature discourse power of environment communication. Correspondingly, the reporting mechanism of environmental news in China experienced the past 40 years, the censorship of Chinese government towards Under the Dome also suggests a strong control over the communication of environmental issue, including even the investigation of smog problem partly because it might cause damage to China's image, especially in the international context. However, the official's compliments cited in the Chinese media as one of the positive comment towards Chai's investigative contribution also reflects the fact of confirming the severity of China's air pollution and the strong determination of Chinese government to communicate to the public to tackle these problems (Tong, 2014). These inconsistent ways of communication of environmental issues have to great extent disclosed the discrepancy of interest conflict in China towards environmental governance. The dual purpose of political correctness and journalistic objectivity in its environmental communication (Geall, 2011) are featured in the current studies. When covering an environmental event, American media attach importance to polybasic perspectives and serializing one single incident for readers' integrated discourse cognition of environmental news. Besides, the cited positive speech of Chinese authorities ran in the opposite direction of the censorship. There are potential contradictions in cultural ideas between democracy and liberty advocated by America and stable harmonious society pursued by China. As is also held by Hilton (2017) that the first priority of the Chinese state is rightly social and economic stability, it is also true that environmental issues are of fundamental concern. China started a profound economic reformation in the late 1970s. For almost 40 years, the liberalization of the economy has allowed more flexibility and freedom within the media system. Therefore, the media system is now influenced both by the state and the economic market system (Meng & Rantanen, 2015). Environmental communication in China has developed in scope and sophistication in the past 40 years, along with the greater opportunities afforded by the internet, and a more open official media. The range of voices has greatly expanded through the growth of internet-based citizen communication. It has been found that Chinese media's control are restricted to the extent that the contents do not pose a threat to the ruling party. This might help explain why China has been recently found to be increasingly open and transparent in environmental reporting (Kay et al., 2015; Tong, 2014), but only when issues are not extremely politically sensitive.

3.4. Attituderesources

Appraisal is concerned with how language users negotiate and express their intersubjective positions in discourse. Attitude, about 'things' as opposed to 'human beings', focusing on the people's feelings, including emotional reaction, judgements of behavior and evaluation of objects (Marin & White, 2005: 35) and it is further divided into three subcategories: affect, judgement and appreciation. Here is a comprehensive view of attitude resources in the collected corpus at a high level

Attitude		Types of Attitude								
Resources		A	Affect	Judgement			Appreciation			
Media	+	-	total	+	-	total	+	-	total	
Chinese	29	11	40(22.3%)	56	22	78(43.6%)	44	17	61(34.1%)	
Media										
American	22	9	31(15.2%)	67	28	95(46.3%)	55	24	79(38.5%)	
Media										

of delicacy (Table 4). Each subtype is divided into positive side and negative side with respective symbols as "+" and "-". And the three subtypes in a lower level of delicacy can be presented in Table 4.

Table 4: Statistics for attitude analysis (Abbr.: +positive, -negative)

Affect construes emotions, feelings, and has positive and negative types. For the analysis of affect, the first step is to code the words and phrases relating to the features of affect in both Chinese and American media news reports. The statistics is automatically counted through the functions of code list and auto code in the BFSU Qualitative Coder. After identification, the final number of the positive and negative affect is counted and listed in the above Table 4. It is found that Chinese media intend to employ more positive and less negative words with emotive meanings than American media. Since the affect resource is mainly concerned with human being and people's consciousness. Chinese media focus on conscious participants than American media with strong feelings.

The judgment system concerns the remarks for human behavior: what people say and believe. According to Table 4, there are 78 judgement items in the 18 reports of Chinese media while 95 judgment items in American media. Judgment pertains to the attitudes toward human actions, behaviors or characters and also endowed with positive and negative value. The number of the positive dimension in Chinese media is 56 and the number of positive items in American media is 67, while the negative items in Chinese media is 22 and the number of negative items in American media is 28. Both the positive and the negative judgment items in Chinese media are less than the defined items in American media. The target of judgement is ascribed to focus on personal behavior from the perspective of the social regulation and the morality.

The appreciation system is a discourse semantic resource for remarking objects, processes and phenomenon with both negative and positive dimensions. According to Martin and White (2005: 56), appreciation is those resources by which values of things are construed: "our 'reactions' to things (do they catch our attention; do they please us?), their 'composition' (balance and complexity), and their 'value' (how innovative, authentic, timely etc.)". It is shown that the appreciation targets things, no matter they are material or semiotic, concrete or abstract, which is more serious and more objective than affect. The appreciation items in Chinese media (34.1%) is less than that of American media (38.5%).

As Table 4 shows, the overall distribution of "attitude" resources are presented in details with definite statistics. There are total 179 defined items in Chinese media to express attitude while 205 in American media. In table 4, the three subtypes of "attitude"

in Chinese media, "affect", "judgement" and "appreciation", account for 29.8%, 39.4%, and 30.8% respectively and the proportion of these three aspects in American media is 23.3%, 41.9% and 34.8%. According to these numbers, the similarities between Chinese media and American media are found. First, the judgment takes up the first place of the whole attitude. As judgement evaluation belongs to social and ethic category, the application of it greatly contributes to the authority, seriousness and objectivity of the news discourse, so Chinese media and American media are relatively objective. Second, both media discourse in Chinese media and American media held the positive attitude toward Chai Jing and her smog investigation. Table 4 indicates that the positive exemplifications in Chinese media are 129 which take up 72% of the total number of the attitude items. It is also obvious in American media discourse that the positive items are 144 which hold 70% of the total number of the defined items. In all, both Chinese and American media discourse perform the principle of news, which is to be objective, and they think highly of Chai Jing and her documentary and positively report it as a whole.

However, the different culture and environmental policy in Chinese and American environmental communication discourse are fully exemplified in their news discourse. The differences contain three aspects. First, the number of affective items in Chinese media (22.3%)is much higher than that of American media (15.2%). It is clear that Chinese media focus on conscious participants than American media with strong feelings. Second, judgment items in American media (46.3%) is slightly higher than that in Chinese media (43.6%). Compared with Chinese media, American media report more about the attitude to people's behavior according to the social esteem and social sanction. Third, the number of the appreciation items in American media (38.5%) is higher than that of in Chinese media (34.1%). Since it targets things no matter they are concrete or abstract, material or semiotic, appreciation is a category of aesthetic which stands for objectivity and seriousness. Therefore, Chinese media pay more attention to the emotions of people and American media focus on the evaluation for people in terms of social behavior and moral qualities. As a national news, Chai's documentary stirred argument among the public toward the origin of air pollution in China and arouse people's consciousness on the most related health anxiety around the people. Meanwhile, as an international news in American media, it has more been constructed related to the Chinese social context and behaviors.

3.5. Engagement resources

Engagement concerns how the evaluator indicates and the interpreters identify the relationship between the evaluator and the addressees in discourse. It operates from the dialogistic perspective, which has two subcategories: Contraction and Expansion. Under Contraction, proclaim and disclaim are subtypes; under Expansion, entertain and attribute are subtypes. As for the contrast and analysis of engagement resources, the steps are taken as follows. First, the detailed classifications and code of defined items are made from the perspective of the qualitative approach. Then, the distribution of each subtype is presented from the angle of quantitative aspects. Because monogloss is realized by means of bare assertions which have been analyzed in media discourse speakers, the main

contrast and analysis will focus on subcategories of heterogloss presented in great details as follows. Heterogloss in reports indicates different purposes and thus represents different attitudes.

Engagement	Types of Engagement						
Resources	C	ontract		Expanse			
Media	Disclaim	Proclaim	Total	Entertain	Attribute	Total	
Chinese Media	186 (54.8%)	42 (12.4%)	228	49 (14.5%)	62 (18.3%)	111	
American Media	207(59.6%)	36 (10.4%)	243	58 (16.7%)	46 (13.3%)	104	

Table 5: Attitude analysis in Chinese and American media

The subtype contract restricts the scope of positions and voices, which can be divided into "disclaim" and "proclaim". As can be seen from the above Table, the number of the contract clauses in Chinese media is less than that in American media. The disclaim resources in Chinese media is higher than American counterpart and proclaim resource in Chinese media is slightly higher than the American counterpart. Disclaim is construed as the textual voice which positions itself at odds with, or rejects some contrary position (Martin & White, 2005: 97) The statistics show that disclaim is preferable to express ideology, as the example (5) showed in American media in Table 6. Those prior views and contrary opinions are brought in to reject, replace or to be unstainable by applying deny and counters resources of disclaim. Proclaim means to represent a proposition as highly warrantable, and rules out alternative positions (Martin & White, 2005: 98). The use of proclaim resources is try to indicate the supporting proposition.

Contract					
	(1) Qiongding Zhixia weiyi de zuoyong shi qimeng. 穹顶之下的作用是启				
	蒙。(China Daily, March 1, 2015)				
	(1a) Under the Dome's <u>only</u> function is enlightment.				
	(2) Wo bujuede Chaijing zuo wumai neng bi Cui Yongyuan zuo jiyin				
	haodaonaliqu. 我不觉得柴静做雾霾能比崔永元做基因好到哪里去。				
	(People's Daily, March 2, 2015)				
	(2a) I don't think Chaijing's Smog documentary is better than Cui				
	Yongyuan's transgene investigation.				
Chinese	(3) Ganjue Qiongding Zhixia ye queshi zhishi yibu geren de jilupian, suiran				
media	jinli zuodao shuju xiangshi, dan haishi you zhuduo <u>buyanjin</u> . 感觉穹顶之下				
moulu	也确实只是一部个人的纪录片,虽然尽力做到数据详实,但还是有诸多				
	不严谨。(China Daily, March 1, 2015)				
	(3a) Under the Dome is indeed a personal documentary, though it tries to				
	have accurate data, it is <u>unprecise</u> .				
	(4) Dui Chaijing biaoda jingyi, buguo duita zhebu pianzi zhimai de xiaoguo				
	bingbu kanhao.对柴静表达敬意,不过对她这部片子治霾的效果不看				
	好。(China Daily, March 2, 2015)				
	(4a) showing respect toward Chaijing, but <u>not optimistic</u> to the				
	documentary's effect of governing the smog.				

	(1)The documentary offers little in the way of new information. (The New
	<i>York Times</i> , March, 18, 2015)
	(2) "You <u>don't</u> have any choice about breathing, there's no way to avoid it"
	(The Wall Street Journal, March 2, 2015)
	(3)Clearly the documentary could not have appeared without some tacit or
American	direct support from official quarters. (The Washington Post, March 9, 2015)
media	(4) This documentary went viral in China. Then it was censored. It won't be
	forgotten. (The Washington Post, March 16, 2018)
	(5) Chai has a gentle manner, but her documentary goes on to take a tough
	and sophisticated look at self-interested state-owned coal and oil companies,
	impotent environmental regulators, and ineffective national legislation. (The
	Washington Post, March 16, 2018)

Table 6: Examples about contract in evaluations about the documentary

The above table listed all the contract clauses that made comments on the documentary in Chinese and American media. Although there is only a slight difference in contract resources between Chinese media and American media, a tendency can also be seen that American media uses more words or phrases, such as *little*, *don't*, *could not*, *won't*, *im-*, *in-*, to expect readers to obey the instructions and purposes of the reporter. While the words *bujuede* (not think) used by Chinese media apparently show the statements are the speaker's subjective opinion, allowing the dialogical spaces for different opinions.

The subtype expanse demonstrates how the dialogically alternative positions and voices are made, which is classified into entertain and attribute. As table 5 has shown, Chinese media conclude more expanse items than that in American media. If we take a close attention at the resources of entertain and the attitude, we will find that Chinese media tend to use more attribute and less entertain resources than American media. Entertain represent the authorial voices that invoke alternative voices internally and they based on some individual subjectivity. Attribute resources are those formulations which disassociate the proposition from the text's internal authorial voice by attributing it to some external resources. This is typically achieved through the grammar of directly and indirectly reported speech and thought (Martin & White, 2005: 111) Miller (2004) argues that the attribute resources can recognize the possibility of a proposition's truthfulness, and meanwhile they can disassociate the author from the proposition by representing it as open to questions. Although the total number of the heterogloss resources of Chinese and American media news are a little distinct (339 labels in Chinese media and 347 in American media), high frequency of the heterogloss indicates that both Chinese media and American media are objective in the reports through referring to different voices, and in return, can make the reports persuasive and attract readers to participate in the discussion. The contract resources narrow down the space for dialogic alternatives, while the expanse clauses widen the allowing spaces for alternative positions. The contract clauses take up 67.2% in Chinese media while 70.0% in American media; the expanse clauses take up 32.8% in Chinese media while 30.0% in American media. The differences are easily summarized from the disparate number of sub-classifications in heterogloss resources.

	Expanse					
Chinese	(1)Chaijing zifei jinxing wumai diaocha sihu hen zhengchang, dan					
media	Qiongding Zhixia bugai rang Chaijingmen gudu qianxing. 柴静自费进行雾					
	霾调查似乎很正常,但穹顶之下不该让柴静们孤独前行。(People's Daily,					
	March 2, 2015)					
	(1a) It seems normal that Chaijng investigates on the smog on her own					
	expense, but we shouldn't let the people like Chaijing alone under the dome.					
	(2) Bixu chengren zai Qiongding Zhixia zhebu changda yixiaoshi					
	sishifenzhong de shipin zhong 必须承认在穹顶之下这部长达一小时四					
	十分钟的视频中(People's Daily, March 1, 2015)					
	(2a) It has to be admitted that in the documentary of Under the Dome, one					
	hour and forty minutes					
	(3) Yexu youren huishuo, Chaijing zhisuoyi xuanze paishe xuanchuanpian					
	shiweile ziji de siren enyuan. 也许有人会说,柴静之所以选择拍摄宣传片					
	是为了自己的私人恩怨。(People's Daily, March 1, 2015)					
	(3a) Maybe someone will say that the reason why Chaijing choose to					
A	director this documentary is out of her private matters.					
American	(1) If the film had been this way, it would have been long, heavy and $\frac{1}{10000000000000000000000000000000000$					
media	depressing. (The New York Times, March 6, 2018)					
	(2) <u>Maybe</u> she doesn't have enough brains and not enough knowledge or					
	thoughts. (The New York Times, March 6, 2018)					
	(3)Under the Dome, then, <u>may</u> have provided a safe "public" space for (1)					
	Chinese citizens to (The New York Times, March 18, 2018)					

Table 7: Expanse in evaluations about the documentary

The expanse clauses play a role in widening the dialogical space. For example, the usage of Sihu (seem) in the first sentence and Bixu Chengren (have to admit) in the fourth sentence in Chinese media presented subjective and personal opinion of the speaker. The speaker uses Keneng (may, maybe or might) to admit that the statements are arguable and other different opinions are allowed, which open up a space for others' inter-action and thought. According to the Table 7, Chinese media include less contract items than American media in all, especially obviously less disclaim codes. Chinese media are not as inclined to illustrate opposite attitudes and positions through context as American media are, but are easier to take own opinions as proper ones and deny the reasonability of other opinions. The number of expanse resources shows that Chinese media utilize more expanse items, particularly more attribute items than American media, which exemplify the conclusion that Chinese media emphasize more proposition of the text's internal authorial voice conveyed in certain external resource. In all, what can be concluded from the above comparative statistics is that Chinese media widen more dialogical spaces than that of American media, while American media narrow down more space for alternative positions.

3.6. Graduation resources

Graduation is the third subsystem of appraisal theory, which is utilized to grade attitudes to show how strongly appraisers feel about people and things. The domain

of Force is a means of grading Attitudes in two sub-domains, quantification and intensification. The items of Focus "sharpen or soften" evaluative attitudes (Martin & Rose, 2003: 138). The contrast and analysis of graduation resources mainly fall onto quantificational words. The specific frequencies of force and focus in Chinese and American media are presented in the Table 8.

Graduation	Types of Graduation						
Resources	Force			Focus			
Media	Raise	Lower	Total	Sharpen	Soften	Tot al	
Chinese Media	96(37.8%)	89(35.1%)	185	59(23.2%)	10(3.9%)	69	
American Media	146(53.1%)	47(17.1%)	193	68(24.7%)	14(5.1%)	82	

Table 8: Graduationanalysis of Chinese and American news discourse

According to the above statistics, it is found that the similarities in Chinese and American media discourse. Force resources outnumber than that of Focus. Besides, the numbers of subtypes "raise" items or "sharpen" items far exceed over those of "lower" or "soften" categories respectively. Secondly, the total number of the focusing items is of a little gap, but both the sharpen items and soften items in Chinese media are slightly less than the ones in American media. Force is a resource to grade people's attitude from how strongly they feel about someone or something. It can be graded on the scale of intensity between raise and lower. Chinese media and American media employ different lexical words to amplify the force of attitudes in the news discourse of the smog documentary. The number of force resources in the two countries' media are approximate. However, there are great disparities in the two subtypes of force resources. As "raise" highlights the opinions and lead the readers to agree with the speakers in both countries' media, that is to say, American media maximally lean to their mentioned value and try to persuade the readers to stand on the same side with the speakers. The raise items in American media are distinctively higher than that in Chinese media. The items most, very and quite raise Chai's powerful and scientific performance and construe the reporter as maximally committed to the readers of shared value, while more, many and all raise the investigative contents in the documentary. On the contrary, Chinese media adopt more lowering items but less raise items than the defined items in American media. Zhi (only), jinjin (only) and just as lower items in Chinese and American news corpora towards the comments on the smog documentary and Chai's investigative behavior.

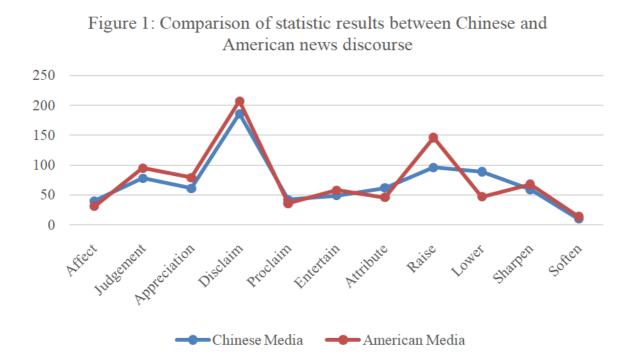
Focus is a resource for scaling something that is inherently non-gradable values between core and marginal membership, involving "sharpening" or "softening" categories of people and things. The one subtype "sharpen" negotiates core membership while the other subtype "soften" negotiates marginal membership. As Table 8 shows, both sharpen and soften items in Chinese media are slightly lower than those in American media. For instance, when referring to the coal scrubbers, Chinese media and American media cited different opinions as the following examples.

(1) Tidao meide wuran, ta shuodao ximei, que meiyou shenjiu ximeishui de

keneng houguo; tidao nenghao he youhao, ta fenxi hangye neimu he zongliang, que meiyou fenxi zhexie nenghao de shengcheng xijie.

- (1a) When comes to the coal pollution, she mentioned about coal washing, but <u>did</u> <u>not</u> explore the possible result of the coal water; when comes to energy consumption and oil consumption, she analyzed the inside stories and total amount of industries, but did not analyze the details of generation of energy consumption. (*China Daily*, March 1, 2015)
- (2) Steel manufacturers lack pollution controls while many coal-fired power plants turn off scrubbers that reduce soot and acid rain because the scrubbers use <u>a little bit</u> of power that could otherwise be sold. (*The Washington Post*, March 16, 2015)

The two quotations both analyze the content of the scrubbers that were investigated and talked by Chai Jing. However, Chinese media focus more on the disadvantages of the content that were not mentioned in the documentary. Based on what has been revealed, American media further discuss the behind reasons with the use of <u>a</u> little bit to soften the expressing of ideas, which is more likely to invite the readers to support them.



To summarize, with all these aspects taken into consideration, a rough tendency (as shown in Figure 1) is find that the distribution of affect and engagement resources in the news report of Chinese and American media toward' Chai's documentary are very similar. Both of them held positive attitude toward Chai Jing and *Under the Dome*, as the positive attitude resources are more than negative items. They all greatly praised Chai's courage and the explanatory content of the documentary. Besides, the use of judgment items in both countries' media are more than the affect items and appreciative items, as well as the heterogloss resources are of high frequency. Therefore, both Chinese media and American media represent objectivity to some degree. This result proves the idea of Van Dijk (1998) that

news reports across the world are rather similar under the influence of format of the report of international news agencies.

However, there are slight differences between Chinese and American news discourse. First, the different usages of contraction and expansion. As we know that Contract acts to challenge, fend off or restrict the scope of the alternative positions and voices; whereas expand actively makes allowances for dialogically alternative positions and voices. Therefore, there are slightly higher contract values in American news discourse shows that it takes a determinative attitude by leaving less space for readers to think about while Chinese news discourse tends express their opinions rather than restrict the reader's viewpoints. Chinese media tends to widen more dialogical space than that of American media, therefore, it seems more negotiable while American media is more hegemonic. Chinese media include more affect items and less judgement items than American media, which indicate that Chinese media focus more on emotional variable in this issue, while American media intend to highlight the behavior of participants' conscious. Secondly, the different usages of expanse values. In Expand system, Chinese news discourse uses more attribute values than American. Attribute shows external voices and is mainly realized through indirect speeches. That is to say, Chinese news discourse is more objective about smog documentary issue as neutral standpoint while New York Times pays more attention to persuading the readers to change their previous mind and agree with the writers of the news reports. Thirdly, the different usage of graduation. As we know that graduation is concerned with the values that act to provide grading or scaling (Martin & White, 2005: 136), which is used to show the different levels of appraisal power and the involvement grades of attitude. American media tends to highlight their potential attitudes and persuade the readers to stand on the same side with the speaker.

The similarities and differences between Chinese media and American media reveal the fact that when reporting Chai Jing and her smog investigation, American media lay more emphasis on the pursue of acknowledgement and potential interaction with readers than Chinese media does, which indicates that American media not only concentrates on their lexical expression of reports but also bring readers' opinions into their consideration. It is widely known that American media is deeply influenced by the editorial line while Chinese media is controlled by the state. Van Dijk (2006: 125) shows every detail in the encodings of discourse entail choices based on ideology. That is to say, news report is not free from the conveyance of ideology. This also consonants with the previous historical and cultural analysis.

4. Conclusions

A comparative study of Chinese and American media has revealed differences and similarities in their news discourse practice of a smog documentary, *Under the Dome*. First of all, Chinese media and American media did different discourse construction in discourse speaker, discourse theme and the relation of history and culture. Chinese media concentrates more on discourse practice of three speaker groups, state officials, media and journalists, and experts and scholars, while American media pays close attention to the attitudes of Chinese government departments and the reaction of non-government organizations of environmental protection. As for the discourse theme, Chinese media discourse about Chai's smog

documentary tends to be unitary, while American media discourse focuses on the whole story of the event and constructs an integrated discourse event with diverse perspectives. Potential contradictions have been found in socio-cultural ideas between democracy and liberty advocated by America and stable harmonious society pursued by China, the priority of economic development and smog problems on public health. Moreover, both Chinese media and American media hold positive attitude toward Chai Jing and her smog documentary. Media of these two countries obey the objective rule of news reporting.

The differences fall on attitude, engagement and graduation. For the aspect of attitude, the items represented judgments and appreciations in American media are more than the items in Chinese media, while the affective items in Chinese media are more than that in American media. Thus, Chinese media pays more attention to the emotions of people and American media focus on the evaluation for people in terms of social behavior and moral qualities. Chinese media employ less contract items and more expanse items than American media in all, which means more dialogical spaces and alternative positions. For the final graduation part, both the sharpen items and soften items in Chinese media are less than the ones in American media. A conclusion can be drawn that the usages of engagement resources in Chinese news discourse and American are very similar, authors prefer to use dialogic expansive resources, especially the acknowledge resource to claim the validity, objectivity and authority of the news reports, which shows that the author of news reports pays much attention to interact with and show respect to the audience. However, the difference preference to disclaim and proclaim resources has shown that American news reports tend to take a determinative attitude to accuse Chinese government' censorship while Chinese news report focuses on expressing people's emotion and opinion toward the smog documentary and Chai Jing. Different culture and thinking models determine different representation of micro discourse. Taking the attitude contrast for example, China, affected by Confucianism which advocates emotional activities and harmony, use more affect items, whereas American media focuses on the evaluation for people in terms of social behavior and moral qualities. Besides, Chinese media include more sharpen items and less soften items than the defined items in American media. Therefore, American media try to maximize the value and persuade readers to support them. In the USA, influenced by the ideology of liberalism, American media are expected to serve as being responsible for supplying public information with the aim of preventing abuse of power (Strentz and Keel, 1995; Zeng et al., 2014). Limiting their coverage of developing countries to a few topics to represent their negative image around the whole world when report the international issues. China has long been constructed under the frame of anti-communism ideology (Luther & Zhou, 2005; Wu, 2006; Guo et al., 2012), such as the "human right frame" and "environmental pollution frame".

The comparative corpus-assisted discourse study of the representations of smog documentary in China by media from both Chinese and American socio-political contexts contributes to the exposure of the influences of different socio-political factors lying behind their representations and their particular ways of representing the issue. However, a more comprehensive coverage to the environmental issues in contemporary China would expand the discussion and avoid generalization by collecting data for a longer period and using a diachronic history-cultural approach to analyze the resulting corpus. Moreover, a variety of factors that are at multiple levels of analysis would deserve to test their predictive power under the influence of social systems and the news flows. For instance, the diagnosis of the different discourse practice lies behind (Kenix, 2005; Fowler, 2013) is to be perceived through both countries' ambivalent stance in a broader context of their environmental pollution. These could also help to better apply and examine the theoretical and practical model in the comparative media study contexts.

Acknowledgments

This work was supported by the Fund of the Ministry of education of Humanities and Social Science project for Distinguished Young Scholars of China 2016 年教 育部人文社科青年项目(No. 16YJC860005) and the Fund of Education Bureau for Distinguished Young Scholars of Hunan Province, China. 2017 年湖南省教 育厅优秀青年项目 (No. 17B261).

References

Baker, P. (2006) Using Corpora in Discourse Analysis. London: Continuum.

- Baker, P. et al. (2013) Sketching Muslims: A corpus driven analysis of representations around the word 'Muslim' in the British press 1998–2009. *Applied Linguistics* 34 (3): 255–278.
- Chen, Y. (2014) Exploring the attitudinal variation in the Chinese English-language press on the 2013 air pollution incident. *Discourse & Communication*, 8 (4): 331-349.
- Cheng, W. Y., & Lam, P. W. Y. (2013). Western Perceptions of Hong Kong Ten Years On: A Corpus-driven Critical Discourse Study. *Applied Linguistics*, 34 (2): 173–190.
- Duan, R. and Takahashi, B. (2017). The two-way flow of news: A comparative study of American and Chinese newspaper coverage of Beijing's air pollution. *International CommunicationGazette* 79 (1): 83–107.
- Eberhardt, C. (2015). Discourse on climate change in China: A public sphere without the public. *China Information* 29 (1): 33–59.
- Fairclough, N. (2005). Critical discourse analysis in transdisciplinary research. In: Wodak,
 R. And Chilton, P. (eds.) A New Agenda in (Critical) Discourse Analysis: Theory, Methodology and Interdisciplinary. Amsterdam: John Benjamins, 53–70.
- Fløttum, K. and Dahl, T. (2012). Different contexts, different 'stories'? A linguistic comparison of two development reports on climate change. *Language & Communication* 32(1): 14-23.
- Fowler, R. (1991). Language in the News: Discourse and Ideology in the Press. London: Routledge.
- Fowler, R. (2013). Language in the News: Discourse and Ideology in the Press, 2nd ed. London: Routledge.
- Geall, S. (ed.) (2013). *China and the Environment: The Green Revolution*. London: Zed Books.
- Gore, A. (2006). An Inconvenient Truth. British Board of Film Classification. Retrieved December 9, 2017.

- Guo, L., Holton, A. & Jeong, S. H. (2012). Transnational comparative framing: A model for an emerging framing approach. *International Journal of Communication* 6: 24.
- Hansen, A. (2010). Environment, Media and Communication. New York: Routledge.
- Hilton, I. (2017). Guidance and transgression: The contest for narratives of environment and Pollution in China. *International Journal of Communication* 11: 1323–1341.
- Hofstede, G. & Hofstede, G. J. (2005). *Culture and organizations: Software of the mind: Intercultural cooperation and its importance for survival*. New York: McGraw Hill.
- Jiang, X. L. and Lei, L. (2010). Discourse analysis of environmental coverage of China and The United States. *Journal of Southwest Nationality University*, (4): 197–200.
- Luther, C. A. & Zhou, X. (2005). Within the boundaries of politics: News framing of SARS In China and the United States. *Journalism & Mass Communication Quarterly* 82(4):857–872.
- Kay, S., Zhao, B., and Sui, D. (2015). Can social media clear the air? A case study of the airpollution problem in Chinese cities. *The Professional Geographer*, 67(3): 351–363.
- Kenix, L.J. (2005). A comparison of environmental pollution coverage in the mainstream, American, and other alternative press. *Howard Journal of Communications*, 16 (1): 49– 70.
- Lau, T. & Lo, Y. (2009). Heshang (River Elegy) a television orchestration of a new ideology in China. *Asian Journal of Communication*, 1 (2): 73-102.
- Lester, L. (2010). *Media and Environment: Conflict, Politics and the News*. Malden, MA: Polity Press.
- Liu, J. and Goodnight, T. G. (2008). China and the United States in a time of globalenvironmental crisis. *Communication and Critical/Cultural Studies*, 5(4): 416–421.
- Liu, M. (2017). Competing discursive constructions of China's smog in Chinese and Anglo-American English-language newspapers: A corpus-assisted discourse study. *Discourse & Communication*, 11(4): 386-403.
- Ma, L. (2015). The Beijing smog: Between media frames and public perceptions. *China Media Research*, 11(4): 6–15.
- MacBean, A. (2007). China's environment: Problems and policies. *The World Economy*, 30(2): 292-307.
- Martin, J. R. (2000). Beyond exchange: Appraisal systems in English. In: Hunston, S. and Thompson, G. (eds.) *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press, 142–75.
- Martin, J. R. & D. Rose. (2003). *Working with discourse: Meaning beyond the clause* (2nd edition). London: Continuum.
- Martin, J. R. and White, P. R. R. (2005). *The Language of Evaluation: Appraisal in English*. New York: Palgrave Macmillan.
- Meng, B. and Rantanen, T. (2015). A change of lens: A call to compare the media in China and Russia. *Critical Studies in Media Communication*, 32(1): 1–15.
- Pan, Y. (2015, March 6). Special report: the government and politics behind Chaijing's smog Investigation [Tegao: Chaijing wumai diaocha beihou de zhengfu yu zhengzhi].BBCChinese. Beijing. Retrieved from

http://www.bbc.co.uk/zhongwen/simp/china/2015/03/150306_view_chaijing_politics

- Partington, (2015). A. Corpus-assisted comparative case studies of representations of the Arab world. In: Baker P and McEnery T (eds.) Corpora and Discourse Studies: Integrating Discourse and Corpora. New York: Palgrave Macmillan, 220–243.
- Powers, D. S. (2016). 'Under the Dome' on Chinese air pollution, a documentary by Chai Jing. *Journal of Public Health Policy*, 37: 98-106.

Rachel, C. (1962). Silent Spring. Boston: Houghton Mifflin Company.

- Shi, X. 施旭 (2010). Cultural Discourse Analysis: Theory, Approach and Problems of Chinese Discourse. Beijing: Beijing Press.
- Shi, X. 施旭 (2013). Discourse and Culture: From discourse analysis to cultural discourse studies. Shanghai: Shanghai Foreign Languages Press.
- Shi, X. 施旭 (2014). Chinese Discourse Studies. Basingstoke, England: Palgrave Macmillan.
- Stalley, P., & Yang, D. (2006). An emerging environmental movement in China? *The China Quarterly*, 186, 333-356.
- Tilt, B. & Xiao, Q. (2010). Media coverage of environmental pollution in the People'sRepublic of China: Responsibility, cover-up and state control. *Media, Culture &Society*, 32(2): 225-245.
- Tong, J. (2014). Environmental risks in newspaper coverage: A framing analysis of Investigative reports on environmental problems in 10 Chinese newspapers. *Environmental Communication*, 8 (3): 345-367.
- Tong. J. (2017). Environmental communication in and about China: a review of the Chinese-language literature. *Chinese Journal of Communication*, 10 (2): 192-208.
- Yang, F. (2016) Under the Dome: "Chinese" Smog as a viral media event. *Critical Studies in Media Communication*, 33 (3): 232-244.
- Van Dijk, T. A. (1988). News as Discourse. Hillsdale, NJ: Lawrence Erlbaum.
- Van Dijk, T. A. (1998). Ideology: A Multidisciplinary Approach. London: SAGE.
- Van Dijk. T. A. (2006). Ideology and discourse analysis. *Journal of Political Ideologies*, 11 (2): 115-140.
- Wang, G. F. (2018). A corpus-assisted critical discourse analysis of news reporting on China's air pollution in the official Chinese English language press. *Discourse &Communication*, 1-18.
- Wu, M. (2006). Framing AIDS in China: A comparative analysis of US and Chinese wire News coverage of HIV/AIDS in China. Asian Journal of Communication 16(3): 251-272.
- Xie, L. (2015). The story of two big chimneys: A frame analysis of climate change in US andChinese newspapers. *Journal of Intercultural Communication Research*, 44(2): 151–177.
- Xu, J. H. (2012). Online news reports of air quality issues in Beijing. *Telematics and Informatics*, 29 (4): 409–417.
- Xu, J. J & Y. L. Jia. (2011). *BFSU Qualitative Coder 1.1*. National Research Center for Foreign Language Education, Beijing: Beijing Foreign Studies University.