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„Mapping media frames in international news“

**Characteristics of Chinese news coverage on Sino-German relations
over a decade (2007-2016)**

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Karoline Höltge, Bakk. BA

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Abstract

In recent years, communication research has produced numerous studies on international news coverage. However, comparatively little is known about Chinese print media's performance. The present study evaluates the depiction of Sino-German relations in Chinese news. A total of 400 articles, which were published between 2007 and 2016 by China's official press agency *Xinhua General News Service*, were analyzed using hierarchical cluster analysis to detect the underlying media frames. Findings are not in support of past research, which emphasized the negative alignment of international news coverage. Specifically, Chinese news does not reflect a conflict orientation towards Germany or Sino-German relations. Potential explanations are discussed in relation to the differences between the Chinese and German media systems and implications for future research are highlighted. This study provides insight into the specific role of news media coverage in shaping current geo-political and geo-economic transformations, with regard to Sino-German relations.

Key words: China, Germany, Sino-German relations, international news coverage, hierarchical cluster analysis

Zusammenfassung

In den vergangenen Jahren hat die kommunikationswissenschaftliche Forschung unzählige Studien mit dem Fokus auf internationaler Berichterstattung hervorgebracht. Ungeachtet der Fülle an Untersuchungen zu diesem Thema ist verhältnismäßig wenig über das Auftreten und die Beschaffenheit solcher Nachrichten in chinesischen Printmedien bekannt. Die vorliegende Studie untersucht die Darstellung chinesisch-deutscher Beziehungen in chinesischen Nachrichten. Mittels hierarchischer Clusteranalyse wurden 400 Artikel untersucht, welche die offizielle chinesische Nachrichtenagentur *Xinhua General News Service* zwischen 2007 und 2016 veröffentlichte. Das übergeordnete Ziel bestand darin, die zugrunde liegenden medialen Frames der entsprechenden Nachrichtenartikel zu extrahieren und zu analysieren. Die Ergebnisse dieser Studie stehen im Kontrast zum bisherigen Forschungskonsens, welcher überwiegend die negative Ausrichtung internationaler Berichterstattung diverser Länder über internationale Ereignisse oder andere Länder hervorhob. Im Gegensatz hierzu zeigten die untersuchten chinesischen Nachrichten der vorliegenden Untersuchung keinerlei Konfliktorientierung gegenüber Deutschland oder chinesisch-deutschen Beziehungen. Mögliche Erklärungen hierfür werden im Hinblick auf die Unterschiede zwischen dem chinesischen und dem deutschen Mediensystem diskutiert und davon ausgehend Hinweise für zukünftige Forschungsprojekte gegeben. Insgesamt gibt die vorliegende Studie einen Einblick in die spezifische Rolle, welche die heutige Nachrichtenberichterstattung in Bezug auf geopolitische und geo-ökonomische Transformationsprozesse chinesisch-deutscher Beziehungen hat.

Schlagworte: China, Deutschland, deutsch-chinesische Beziehungen, internationale Nachrichtenberichterstattung, hierarchische Clusteranalyse

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Mapping media frames in international news:
Characteristics of Chinese news coverage on Sino-German relations over a decade
(2007-2016)

1. Introduction

In recent years, communication research has produced numerous studies on international news coverage, i.e. how media outlets from individual nations frame certain events and issues of global significance, or even foreign countries in general (e.g., Curran, Esser, Hallin, Hayashi, & Lee, 2017; Feng, Brewer, & Ley, 2012; Tai, 2000; Wu, 2000). Media perception of international news can form a certain type of *nation image* and – depending on the potential bias of news content – an *enemy image* (Richter, Gebauer, Heberer, & Hafez, 2010). Hence, the perception of international news may even influence a country's external relations by potentially shaping the individual opinions of political decision-makers (Zhang, 2010). This is also seen in the specific case of Sino-German relations (Heiduk, 2014).

Much research has focused on the depiction of China in western newspapers (e.g., Peng, 2004; Richter et al., 2010; Wilke & Achatzi, 2011; Yang & Liu, 2012; Zhang, 2010). In contrast, comparatively little is known about the performance of Chinese print media in international news coverage (Dai, 2014). Previous research on the analysis of Chinese media has focused mainly on the coverage of single events or specific issues, either comparing different domestic newspapers (Fang, 2001; Wang, Lee, & Wang, 2013), or Chinese and US newspapers (Feng et al., 2012; Parsons & Xiaoge, 2001; Wang & Chen, 2015; Wu, 2006). While these latter studies may already provide some insight into global relations, their results lack further applicability, as they focus on the particular topic of investigation, rather than on the relations between the two countries.

However, there is a lack of studies investigating how such external relations with foreign countries are portrayed in Chinese news.

Furthermore, past research shows a strong bias in the selection of countries. Specifically, the majority of the studies used a Sino-American approach (e.g., Peng, 2004; Yang & Liu, 2012; Zhang, 2010), with only a few studies analyzing China's portrayal in a European country, such as Germany (Richter et al., 2010; Wilke & Achatzi, 2011). As Germany is one of China's key partners in terms of global relations on a political level, as well as the most important trading partner in the EU (Heiduk, 2014), the characteristics of Sino-German relations deserve further investigation. In 2004 Sino-German relations were first labeled a *strategic partnership in global responsibility* by Chinese and German government officials (Heiduk, 2015). Since then, the interdependence of China and Germany has been continually fostered, with more than 50 dialogue and consultation platforms existing at different levels of mutual interaction (ibid.). As China is constantly investing in international news coverage to engage in discourse with global partners (Zhang, 2010), an analysis of these news could further uncover China's stance on Germany and Sino-German relations in particular.

Framing theory is a promising approach to derive patterns in news coverage (de Vreese, 2005; Entman, 1993; Matthes, 2009). It is based on the assumption that news coverage is dependent on subjective selection processes and is therefore a constructed product rather than an objective mirror of social reality (Shoemaker & Reese, 1996). The individual influence on the production of news leads to certain characteristics in the news text, which are referred to as frames (Entman, 1993). Several studies have applied framing theory to reveal significant patterns related to China in international news (Feng et al., 2012; Parsons & Xiaoge, 2001; Peng, 2004; Wilke & Achatzi, 2011; Wu, 2006). The majority of these studies derived the whole frame at once using qualitative

content analysis. Although this is a common method used in communication research, studies have repeatedly acknowledged its lack of reliability and validity (e.g., Gandy, 2001; Miller, 1997; Scheufele, 1999). The present study therefore uses cluster analysis to derive frames by clustering single frame elements across several texts. A strong advantage of this approach is that “frames are empirically determined and not subjectively defined” (Matthes & Kohring, 2008, p. 265).

Given the gaps in current research, the present study aims to illustrate the portrayal of Sino-German relations in Chinese news. This study is the first to analyze Chinese news content related to a foreign nation as a whole, and may consequently yield more generalizable basic-frames, rather than constricted issue-specific frames. Cluster analysis is used to detect media frames in an objective manner, adding to the reliability and validity of results.

2. The Portrayal of China in German news

Generally, the empirical evidence suggests that traditional media’s news coverage is negatively biased in terms of reporting on foreign countries (Dai, 2014). More specifically, this has been shown for the depiction of China in various western countries, such as the USA (Liss, 2003; Peng, 2004; Yang & Liu, 2012), Germany (Becker, 2011; Richter et al., 2010; Wilke & Achatzi, 2011), and the United Kingdom (Zhang, 2010). Past research has identified two possible explanations for the unfavorable portrayal of China in international news. On an institutional level, media outlets are adversely effected by space and time constraints on a daily basis (Dai, 2014; Richter et al., 2010). These constraints effect the production of news in that they do not allow for a detailed examination of the respective topic and thus lead to an unreflected reproduction of commonly accepted stereotypes and socially inherent ideas about China (Richter et al., 2010). On

a broader socioeconomic level, international news production depends on national interests, as well as the culture and identity of the reporting country (Curran et al., 2017; Nossek & Kunelius, 2012).

The latter factors in particular determine the domestication of news, which may be the cause of the comparatively low frequency of German news about China. However, such news coverage increased over time (Wilke & Achatzi, 2011), and the quantity of news is higher in times of internationally relevant events (Richter et al., 2010). With regard to content, politics and economics were the main topics of coverage on China in German media (Richter et al., 2010; Wilke & Achatzi, 2011). Domestic interests also dominated the news agenda, as articles on economic relations were mostly slanted toward aspects concerning Sino-German joint ventures on the German market, whereas there was a lack of news reporting on the Chinese market itself (Richter et al., 2010). Research by Wu (2000) suggested that the economic relations between two countries was a significant determinant for the orientation of news reporting. This is in accordance with the political orientation under the German chancellor Merkel, which is associated with putting economic interests above ideological concerns and promoting a positive image of a cooperative partnership that needs to be strengthened in the future (Heiduk, 2014). These circumstances resulted in a decreased reporting of political topics and an increase in economic topics over time in German news about China (Wilke & Achatzi, 2011). Regarding the orientation of news content, economic topics and actors were mainly depicted positively, accompanied by a positive framing of economics in general, as well as a positive depiction of the economic cooperation between Germany and China. In contrast, Chinese politics and political actors, such as the government and the *Chinese Communist Party*, were mainly framed negatively as well as the Chinese society in general (Wilke & Achatzi, 2011). This is in line with the body of research on China's depiction in US media,

where political and ideological frames tended to be more negative and economic frames more positive (Peng, 2004).

As “frames work to make some ideas more salient in the text, others less so—and others entirely invisible” (Entman, 1993, p. 7), they determine not only if the message is noticed, but also how it is understood, remembered, and evaluated (*ibid.*). Although more exposure does not necessarily lead to a greater knowledge about the respective country (Willnat & Metzgar, 2012), prior findings indicate that the more negative coverage a nation receives, the more likely respondents are to think negatively about that nation (Wanta, Golan, & Lee, 2004). Responding to the negative depiction of China in German news, research has shown that the majority of the German public hold negative views about China (Fund, 2014; Huotari, 2015). However, according to a survey conducted by Huawei Technologies in 2016, 72 percent of business decision-makers and 91 percent of political decision-makers in Germany believe that China has a large or very large influence on Germany in terms of global relations. This reflects the internalization of the image of China as a key partner for Germany, despite an unfavorable depiction of China in German news.

3. Context of news production as a potential determinant of media frames

Previous research comparing the news coverage of Chinese media with the news coverage of US media has mainly investigated specific issues and events with a negative connotation, such as natural catastrophes (Wang & Chen, 2015), political and economic crises (Dai & Hyun, 2010; Feng et al., 2012; Hook & Pu, 2006; Parsons & Xiaoge, 2001), and public health issues (Beaudoin, 2007; Wu, 2006). The results of these studies not only stress the divergent nature of international news by identifying cross-national differences in constructing the meaning of the same event or issue, but also highlight differences in the portrayal of the national governments involved. More

specifically, the Chinese media depicted the Chinese government and their actions in a positive light, which was in direct opposition to the depiction in US media (Feng et al., 2012; Parsons & Xiaoge, 2001; Wang & Chen, 2015; Wu, 2006). This resulted in anti-Chinese government frames in the US media and pro-Chinese government frames in the Chinese media (Feng et al, 2012; Wu, 2006). The positive depiction of the Chinese government in Chinese media is in accordance with the desire to maintain political, social, and economic stability (Ma, 2005). In a particular way, the Chinese media system is characterized by a close relationship between the state and the press (Feng et al., 2012; Zhang & Fleming, 2005). On a domestic level, news media function as an instrument to navigate public perception in a pro-governmental direction (Zhang & Fleming, 2005), as well as to justify political decisions in accordance with the party orientation (Fang, 2001; Feng et al., 2012; Wu, 2006). These requirements do not allow for ideologically challenging stories that could harm the government's power monopoly or internal stability (Tai, 2000; Lee, 2010). Consequently, in their attempt to hide or minimize crises (Ma, 2005), the Chinese state-controlled media stress positive facts about the government's behavior, even in situations with negative connotations.

Nevertheless, as international news create an awareness of governmental actions and policies, they also function to hold the Chinese government accountable for their actions (Feng et al., 2012). To counter these challenges on a foreign level, Chinese international media are being promoted financially by the government. This has led to a certain level of exploitation in recent years for political reasons: to promote external goals in a non-threatening and non-confrontational way (Zhang, 2010). In previous research, this passive method of enhancing China's international prominence has been analyzed under the terminology of promoting *soft power* (Hong, 2011; Wang et al., 2013). Some studies suggested that with this transition in the Chinese press system, more western-style press routines and journalistic values also arose (Dai, 2014). In accordance with this,

Tai (2000) found that Chinese newspapers used similar newsworthiness criteria as western newspapers when reporting on international news. This included a self-centered geographic focus on the Asia-Pacific region, with a simultaneous preference for news related to the US, and an overrepresentation of political rather than ideological or human-interest topics.

However, these similarities to western press routines appear to apply mostly to the surface-level of formal characteristics of news reporting and are less evident on the deeper level of interpretive news content. Thus, the investment in international news coverage appears to be partly an act of strategic international communication in favor of governmental interests. In fact, Lee (2010) found that Chinese newspapers frame the term *globalization* “almost exclusively in terms of economic, military, and geopolitical considerations of China’s rise, virtually to the exclusion of political globalization of human rights and democracy or cultural globalization of diversity and tolerance” (p. 269). This supports the theory that the economic liberalization of the press system did not necessarily lead to more press freedom, as economic privileges were associated with certain presumed obligations of loyalty to the state (Zhao, 2000).

Overall, the coexistence of political institutionalization and economic commercialization, beginning with China’s *Reform and Open-Door policy* in 1979, resulted in profound changes in the Chinese media market. Specifically, Hong (2011) refers to a hybrid media model, which is “a combination of a neo-authoritarian media model and a developmental media model with Chinese characteristics” (p. 391). Despite the emerging similarities with western style news production, there are still striking differences between the Chinese media system and Western media systems. As new practices of news production can only be applied within the political boundaries of governmental applicability, different frames may occur in Chinese and Western media when reporting on international news (Dai, 2014).

4. The framing of Sino-German relations in *Xinhua General News Service*

In order to examine the characteristics of media frames in Chinese news with regard to Sino-German relations and the potential changes of these frames over time, the news output of *Xinhua General News Service* was analyzed for the period from 2007 to 2016. *Xinhua* is not only the biggest, but also the most influential media organization in China, as the majority of mainstream media in the print and TV sectors rely on its news (Feng et al., 2012). Furthermore, the news agency is reported to be one of the most important instruments to the Chinese government in terms of pursuing the global strategy of spreading *soft power* (Hong, 2011). Due to its close relationship to the *Chinese Communist Party*, it is expected that it would reflect the political stance of the government (Feng et al., 2012). Hence, it is practical to choose this agency's news coverage for analysis when investigating international relations to another country.

In order to discover if and how the depiction of Sino-German relations changed over time, two periods of media coverage were compared. The first period ranges from 2007 to 2011 and the second period is from 2012 to 2016. These two periods were chosen due to the change in relations between the two countries during these periods. While bilateral relations between China and Germany were in a good state in the first analysis phase (2007-2011), the communication framework was improved in the second phase (2012-2016) due to the official implementation of Sino-German intergovernmental consultations. With regard to mutual relations and concerning the main pillars of political dialogue, economic cooperation, and cultural exchange, these consultations are considered to “[serve] as a basis of and [provide] guidance for the medium and long-term prospects of German-Chinese cooperation” (Federal Foreign Office of Germany, 2016, p. 1). To date, consultations have been held in June 2011, August 2012, October 2014, and June 2016. As the effects of governmental decisions may require some time to become tangible, the second

analysis period begins in 2012. Furthermore, by analyzing two periods of equal length, the number of articles is balanced between the periods, adding to the statistical validity of the results.

In sum, the present study aims to address the following research questions: The first research question is concerned with the specific pattern of news coverage, i.e., what kind of media frames exist in Chinese news with regard to Sino-German relations. The second research question aims to investigate if and how these frames have changed over time.

5. Method

The online database *LexisNexis* was used to search for eligible articles by applying at least one of the keywords “Germany”, “German”, or “Berlin” and at least one of the keywords “China”, “Chinese”, or “Beijing” in the headline search of the English language output of *Xinhua General News Service*. Connecting these German and Chinese headline words was the essential pre-condition for analyzing the relations between the two countries, so that only articles with a joint reference to both Germany and China were included in the sample. To further align the research design with the specific aim of investigating international relations, only English language news was analyzed, as it is the most probable news source for non-Chinese international decision-makers. As another pre-condition, articles had to be at least 100 words in length, to exclude short news items, which can lack depth with regard to content. In the period from 1st of January 2007 to 31st of December 2016, 677 news articles fulfilled these criteria. For the analysis, 400 articles were randomly chosen. During the coding process, articles with only scant references to China, Germany, or their relations were excluded from the sample. For example, if the countries were only mentioned in an enumeration, comparison, or allegory without further declaration; or if there was only a reference to a Chinese or German person or place without the main topic being Sino-German

relations. Due to these criteria, 35 articles were excluded and replaced by redrawing from the original pool, so that the final sample consisted of 400 articles.

The unit of analysis was the article. The codebook was based on the following definition of frames by Entman (1993, p. 52, original emphasis): “To frame is to *select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation* for the item described.” This definition is distinguished from others by the division of a frame into single elements. As frames are always tied to certain actors, these single frame elements (i.e. *problem definition, causal interpretation, moral evaluation, and treatment recommendation*) were coded as specific perceptions of previously defined actors. Finally, the individual frame elements were grouped into superordinate frames using hierarchical cluster analysis (Matthes & Kohring, 2008). This approach implies that only the distinctive text patterns which occur across several texts are empirically determinable. As the present study compared two periods of news coverage, a separate cluster analysis (Ward method) was conducted for each of the two periods.

Table 1 shows the variables that were chosen for the cluster analysis according to the frame elements defined by Entman (1993): First, the content of a news article was determined by the most important actor and the central topic the actor referred to. These two variables denoted the frame element *problem definition*. 14 subtopics were recoded to four main topics: Politics, Economics, Society, and Cooperation. In the same manner, a list of 45 single actors was summarized to seven main actors: Chinese politics, German politics, Chinese economics, German economics, Chinese society, German society, and – provided they met the conditions of a main actor in the respective article, i.e. making judgements, etc. – the journalists of *Xinhua General News Service*. Second, the

frame element *causal attribution* was operationalized with variables measuring if a person or non-personal circumstances were deemed responsible for problems reported in the news, as well as with variables measuring if specific actors were named for having or not having the competence to solve the respective problem. Furthermore, one variable was included to gauge if measures were required for problem-solving as an indicator for the frame element *treatment recommendation*. Finally, *moral evaluation* was operationalized by the variables Past/present evaluation and Future evaluation, as they elicit a judgement on the state of Sino-German relations.

Binary variables were computed for all the variables included in the cluster analysis. To exclude codes that would not contribute to the formation of clusters due to their rare occurrences in news coverage, only binary variables with frequencies higher than 5% were included in the cluster analysis (Kohring & Matthes, 2002; Matthes & Kohring, 2008). As the investigation of Sino-German relations does not necessarily presuppose the reporting of negatively connoted topics, some codes related to problem-reporting showed frequencies lower than 5% and were therefore not included in the cluster analysis. More specifically, the codes stating which actors were named for Competence attribution and Competence depreciation, and which measures were required to solve a problem, had to be excluded. Furthermore, codes on neutral or negative judgements about the past, present, or future state of Sino-German relations were excluded from the analysis due to their rare occurrences. The material was coded in full by only one coder. Nevertheless, a reliability test was conducted with two independent coders to guarantee intercoder reliability. Ten articles were selected at random for the reliability test and coded by the independent coders, yielding reliability coefficients of over .80 for all variables (Krippendorffs Alpha; Hayes & Krippendorff, 2007).

Table 1 Variables for the Cluster Analysis

Frame element	Variable	Description
Problem definition	Politics	<i>Topic</i> , dealing with political occasions, judiciary, military, catastrophes
	Economics	<i>Topic</i> , dealing with economic development, joint ventures, technology projects
	Society	<i>Topic</i> , dealing with culture, education, sports, health issues
	Cooperation	<i>Topic</i> , dealing with cooperation between China & Germany, referring to more than one subtopic
	Chinese politics	<i>Actors</i> such as (member of:) Chinese government, Chinese state organization, Chinese president
	German politics	<i>Actors</i> such as (member of:) German government, German state organizations, German chancellor
	Chinese economics	<i>Actors</i> such as (member of:) Chinese company, Chinese economic commission/institution
	German economics	<i>Actors</i> such as (member of:) German company, German economic commission/institution
	Chinese society	<i>Actors</i> such as (member of:) Chinese social institution, Chinese private person, Chinese social expert
	German society	<i>Actors</i> such as (member of:) German social institution, German private person, German social expert
	Journalist	<i>Actor</i> from <i>Xinhua General News Service</i>
	Responsibility attribution: person	<i>Problem</i> is reported and a person is held responsible for it
	Responsibility attribution: situation	<i>Problem</i> is reported and a situation is held responsible for it
Causal attribution	Competence attribution: none	<i>Problem</i> is reported, but no actor is named for being able to solve it
	Competence depreciation: none	<i>Problem</i> is reported, but no actor is named for not being able to solve it
Treatment	Required measures: none	<i>Problem</i> is reported, but no measures are required to solve it
Moral evaluation	Past/present evaluation: positive	<i>Judgement</i> , Sino-German relations have been/are positive
	Future evaluation: positive	<i>Judgement</i> , Sino-German relations will be positive

6. Results

In the ten-year sample analyzed, the average article length was 302 words ($SD = 199.4$). The journalistic format Report accounted for most of the articles (89%), followed by smaller proportions of the other formats: Interview (6.3%), Feature (2.5%), and Commentary (2.3%). The majority of news was published in the section Political News (63.3%), followed by Economic News (20%), Science & Technology News (9.1%), and Cultural, Education & Health News (7.8%). In contrast, the division according to the topics referred to by the main actors was as follows: Cooperation (45.5%), Economics (28.4%), Society (14.1%), and Politics (12%). The small percentage of Politics can be explained by the fact that political news was often reported in broader terms of Sino-German cooperation in combination with other subtopics and was therefore coded under the topic Cooperation. The relevance of political issues is also shown by the distribution of main actors, as Chinese political actors (34.5%) and German political actors (19.2%) accounted for more than 50% of main actors, followed by Journalists (15.3%), German economic actors (9.8%), Chinese economic actors (6.0%), German social actors (5.9%), and Chinese social actors (4.2%). In the 400 articles analyzed, a total number of 666 individual actors referred to a subtopic regarding Sino-German relations. A maximum of two actors was coded per article. Personalization (i.e. the extent to which personal statements referring to the point of view or actions of the main actor are prevalent in news reporting), was dominant in most of the articles. Overall, 65.5% showed a strong, 19.3% a medium, and 6.8% a low degree of personalization, whereas only 8.5% of the articles showed no evidence of personalization. The number of actors was equally distributed over the two analyzed periods (47.9% from 2007 to 2011; 52.1% from 2012 to 2016). The following two paragraphs depict the extraction of frames for each period.

6.1 Framing Sino-German relations from 2007 to 2011

The hierarchical cluster analysis (Ward method) yielded a three-cluster solution for the first period from 2007 to 2011. The heterogeneity measures are as follows: 479 (seven clusters), 520 (six clusters), 561 (five clusters), 613 (four clusters), 689 (three clusters), 850 (two clusters), and 1,055 (one cluster). As merging the third and second cluster ($850 - 689 = 161$) would result in a too heterogeneous solution, three clusters can be clearly identified. Table 2 shows the mean values and standard deviations for each of the three clusters.

The articles in the largest cluster account for 50% of the news coverage of *Xinhua General News Service* from 2007 to 2011 and construct a frame entitled *Socio-Economic Cooperation*. It comprises articles in which journalists, as well as representatives of the German economy and the German society, refer to economics and society in terms of Sino-German cooperation. There are no indicators for reported problems within the news, but rather a tendency towards reporting the positive state and prospects of Sino-German relations. The articles in the second cluster account for 39% of news coverage. Within the frame, German and Chinese political actors place a clear emphasis on the positive nature of Sino-German cooperation. This is evident as both the evaluations of the past/present relations and future relations yield very high mean values. As in the first frame, there are no indicators for reported problems. As there are no references to any additional topics except cooperation with regard to Sino-German relations, the second frame is named *Beneficial General Cooperation*. The third cluster, termed the *Political Problem-Reporting* frame (11%), is the only frame in which negatively connoted topics significantly appear in news reporting. The majority of problems are seen to occur in the political field and are addressed by representatives from Chinese politics and Chinese economics, as well as journalists from the news agency. Comparable to the absence of Chinese actors in the *Socio-Economic Cooperation* frame,

German actors do not occur in the *Political Problem-Reporting* frame. While people are held responsible for the respective problem, no specific references are made to actors who may (i.e. competence attribution) or may not (i.e. competence depreciation) be able to solve it. Furthermore, no measures are required for problem-solving. Finally, Sino-German relations are not evaluated in cases of political problem-reporting.

Table 2 Mean Values and Standard Deviations per Frame/Cluster (2007-2011)

Variables	Socio-Economic Cooperation (<i>n</i> = 160), <i>M</i> (<i>SD</i>)	Beneficial General Cooperation (<i>n</i> = 124), <i>M</i> (<i>SD</i>)	Political Problem- Reporting (<i>n</i> = 35), <i>M</i> (<i>SD</i>)
Chinese politics	0.27 (0.44)	0.57 (0.50)	0.34 (0.48)
German politics	0.13 (0.34)	0.33 (0.47)	0.09 (0.28)
Chinese economics	0.06 (0.23)	0.00 (0.00)	0.11 (0.32)
German economics	0.11 (0.31)	0.00 (0.00)	0.06 (0.23)
German society	0.10 (0.30)	0.02 (0.13)	0.03 (0.17)
Journalist	0.24 (0.43)	0.03 (0.18)	0.20 (0.41)
Politics	0.11 (0.31)	0.07 (0.26)	0.66 (0.48)
Economics	0.31 (0.46)	0.05 (0.22)	0.11 (0.32)
Society	0.30 (0.46)	0.00 (0.00)	0.11 (0.32)
Cooperation	0.28 (0.45)	0.88 (0.33)	0.11 (0.32)
Causal attribution: person	0.04 (0.21)	0.02 (0.13)	0.40 (0.50)
Competence attribution: none	0.00 (0.00)	0.00 (0.00)	0.83 (0.38)
Competence depreciation: none	0.00 (0.00)	0.00 (0.00)	1.00 (0.00)
Required measures: none	0.00 (0.00)	0.00 (0.00)	0.63 (0.49)
Past/present evaluation: positive	0.33 (0.47)	1.00 (0.00)	0.03 (0.17)
Future evaluation: positive	0.29 (0.46)	0.81 (0.40)	0.06 (0.24)

6.2 Framing Sino-German relations from 2012 to 2016

A three-cluster solution was also obtained for the second period from 2012 to 2016. The heterogeneity measures revealed the following: 594 (seven clusters), 634 (six clusters), 688 (five clusters), 750 (four clusters), 818 (three clusters), 971 (two clusters), and 1,165 (one cluster). This shows that merging the third and second cluster ($971 - 818 = 153$) would yield a too heterogeneous solution. Table 3 depicts the mean values and standard deviations for each of the three clusters.

It is important to note that there were no changes in the naming of frames in this second period, as the essential cluster characteristics responsible for naming remained the same as in the first period. As in the first period, the frame *Socio-Economic Cooperation* (46%) outlines the cooperation between China and Germany in the fields of economy and society. However, differences occur in the selection of actors. In contrast to the absence of Chinese actors within this frame in the first period, from 2012 to 2016 the Chinese economic and social actors equally express their opinions alongside their German counterparts and the journalists of *Xinhua General News Service*. Furthermore, while the past and present state of Sino-German relations are still evaluated positively within this frame, future evaluations are absent in the second period. The same definition as in the first period was applied to the second frame, *Beneficial General Cooperation* (45%). Similar to the first period, Chinese and German political actors positively evaluate the past, present, and future state of Sino-German relations in terms of the general cooperation between the two countries. In addition, representatives from German economy are also among the actors highlighting the beneficial nature of Sino-German cooperation in the second period. Variations in the selection of actors also occur in the third frame, *Political Problem-Reporting* (9%). As in the first period, journalists and Chinese political actors are identified as actors in this frame. However, rather than Chinese economic actors, German political actors are identified in this second period. Problems

are not only reported in relation to politics, but also with regard to economics. The characteristics of problem-reporting remain the same as in the first period, except that non-personal situations are held responsible for the corresponding problem and not individual persons.

Table 3 Mean Values and Standard Deviations per Frame/Cluster (2012-2016)

Variables	Socio-Economic Cooperation (<i>n</i> = 158), <i>M</i> (<i>SD</i>)	Beneficial General Cooperation (<i>n</i> = 157), <i>M</i> (<i>SD</i>)	Political Problem- Reporting (<i>n</i> = 32), <i>M</i> (<i>SD</i>)
Chinese politics	0.20 (0.40)	0.39 (0.49)	0.34 (0,48)
German politics	0.09 (0.29)	0.26 (0.44)	0.25 (0,44)
Chinese economics	0.12 (0.33)	0.04 (0.21)	0.03 (0,18)
German economics	0.13 (0.34)	0.13 (0.33)	0.09 (0,30)
Chinese society	0.10 (0.30)	0.01 (0.11)	0.00 (0,00)
German society	0.11 (0.32)	0.01 (0.11)	0.00 (0,00)
Journalist	0.22 (0.41)	0.06 (0.23)	0.28 (0,46)
Politics	0.09 (0.29)	0.01 (0.11)	0.47 (0,51)
Economics	0.47 (0.50)	0.26 (0.44)	0.44 (0,50)
Society	0.25 (0.43)	0.02 (0.14)	0.00 (0,00)
Cooperation	0.20 (0.40)	0.71 (0.46)	0.09 (0,30)
Causal attribution: person	0.06 (0.23)	0.04 (0.19)	0.09 (0,30)
Causal attribution: situation	0.06 (0.23)	0.04 (0.19)	0.16 (0,37)
Competence attribution: none	0.00 (0.00)	0.00 (0.00)	0.88 (0,34)
Competence depreciation: none	0.00 (0.00)	0.00 (0.00)	1.00 (0,00)
Required measures: none	0.00 (0.00)	0.00 (0.00)	0.75 (0,44)
Past/present evaluation: positive	0.46 (0.50)	0.76 (0.43)	0.25 (0,44)
Future evaluation: positive	0.08 (0.27)	0.93 (0.26)	0.00 (0,00)

Overall, the statistical evidence identified only marginal changes in the news coverage from the period 2007 to 2011 in comparison to the period 2012 to 2016. As the similarities of the cluster

solutions outweighed the differences, no new frames emerged in the ten-year sample analyzed. More specifically, two frames focused on beneficial cooperation and one frame on problem-reporting in each period. Furthermore, frame sizes were constant over time. The positive bias of Chinese news with regard to Sino-German relations was shown in both periods. This was evident in the larger proportions of cooperation-frames in comparison to the smaller proportion of the problem related frame, as well as the absence of negative evaluations. However, a major difference was found in the division of actors over time. In the first period from 2007 to 2011, Chinese and German actors emerged in separate frames, i.e. German actors were prominent in the *Socio-Economic Cooperation* frame and Chinese actors in the *Political Problem-Reporting* frame. However, in the second period, Chinese and German actors co-occurred in every frame. Additionally, news coverage was more diversified in the second period, as certain codes (i.e. actors from Chinese society, and the causal attribution of situations being deemed responsible for reported problems) had frequencies higher than 5% in this period and were therefore included in the analysis. Finally, an increased relevance of the subtopic Economics was shown in the second period, as problems were not only reported with regard to politics, but also in relation to economics.

7. Discussion

Despite the fact that nowadays Sino-German relations shape the globalized world in many aspects, the existing body of scholarly work on the specific nature of the relations between the two countries is comparatively small (Heiduk, 2015). News media coverage plays an important role in shaping international relations. The present study therefore examined the depiction of Sino-German relations in Chinese news. To achieve this, media frames and their potential changes over time were analyzed using hierarchical cluster analysis.

First, it is important to highlight that the results of this study are not in line with past research, which emphasized the negative bias of international news coverage in many studies. The results of prior studies investigating the depiction of China in German news contrast with the depiction of Sino-German relations in Chinese news found in the present study. The present findings indicate that Chinese news did not reflect a conflict orientation towards Germany or Sino-German relations. More specifically, in the analyzed news articles only 10 percent of main actor statements referred to a problem, in comparison to the 90 percent where positive aspects were stressed. Furthermore, problems were only reported in relation to individual cases and never with regard to Sino-German relations in general. However, in German news, frames about China were negatively connoted in more than 50 percent of cases (Richter et al., 2010; Wilke & Achatzi, 2011).

To shed some light on potential reasons for this incongruence, Sino-German relations need to be assessed on a broader geo-economic and geo-political level. There is a general consensus that economic ties are the foundation of cooperation between China and Germany (Heiduk, 2014). Yet, these economic ties cannot be evaluated as distinct from political concerns. For China, economic growth rates are directly interwoven with the political aim to continuously preserve the internal stability of the country. By comparison, increasing diplomatic influence and improving the international image play secondary roles (Heiduk, 2014). Germany on the other hand, not only refers to China as a partner but also as a competitor in terms of economics. Germany's status as an export-driven nation drives a long-established fear that China's economic rise may not support, but potentially harm Germany's economic progress (Becker, 2011). This pressure is not expected to subside anytime soon, due to Germany's growing dependency on the Chinese market (Otero-Iglesias, Seaman, Huotari, & Ekman, 2015). From the German point of view, certain elements of western democracies, such as rule of law and transparency, need to be implemented in the Chinese

system in order to maintain reliable trade relations (Heiduk, 2015). However, this interference in internal affairs could be interpreted as an attempt to impose Germany's own wills onto others, which contradicts China's desire of maintaining political sovereignty. In this sense, the term of *new realism* (Heiduk, 2014) could be used to describe Germany's perception that economic cooperation does not automatically empower Germany to exert any political influence on China, which could potentially harm China's internal stability and thus the power monopoly of the *Chinese Communist Party*. For both countries, internal interests so far dominated the conditions of external relations, with limited potential to manage emerging challenges in fields other than economy despite a constant strengthening of economic ties. Consequently, the strategic partnership between China and Germany and its elevation through the establishment of intergovernmental consultations appears to have been downgraded to somewhat of a symbolic act (Heiduk, 2015).

In response to the above-mentioned economic and political conditions of Sino-German relations, the analyzed Chinese news of the present study shows a predominance of economic rather than political topics, which highlight positive synergetic effects of economic cooperation between the two countries. In contrast, politics were mainly negatively assessed as problems were mostly identified in relation to politics, reflected in the frame *Political Problem Reporting*. Although economics also occurred within this frame in the period from 2012 to 2016, it was also associated with positive aspects of Sino-German cooperation. Similarly, prior research found that in German news related to China, economic-related news content was reported with a positive bias and political statements were assessed negatively (Wilke & Achatzi, 2011). However, different proportions of these topics in previous studies –i.e. negative political statements outweighed positive economic statements – was associated with an unfavorable depiction of China in German news (Richter et al., 2010; Wilke & Achatzi, 2011).

On an institutional level, this incongruence is in accordance with the fundamentally different perceptions of Western journalists as critical observers and watch-dogs, which promoted trends such as negativity, scandalization and conflict orientation. Serving these needs of western-style journalism, German media point to the persisting incongruence in values. This incongruence results in political superficiality of Sino-German relations – a concern, which cannot be criticized by German official political authorities due to Germany's economic dependency on the Chinese market (Heiduk, 2014). In China however, media coverage mirrors the current political orientation, as news production is tied to governmental interests. In a media system under political influence, presentation elements such as negativity, scandalization, and conflict orientation could potentially contradict the harmonious image of national stability and are therefore rarely seen in Chinese news.

8. Limitations and implications for future research

One limitation is that this study only investigated two time periods over a decade, during a time when external relations between China and Germany were comparatively stable, i.e. except for the Dalai Lama affair in 2008, no further contentious issues of public interest arose. Consequently, the comparison of the two periods indicated the stability of frames in Chinese news coverage in the ten-year sample analyzed. A media frame analysis of Chinese news over several decades of Sino-German relations could provide further insight into potential changes of news reporting in times of differing political stances. Another shortcoming of the present study is that only English-language news was analyzed. One possibility is that criticism of Sino-German relations or Germany as a country may appear more in domestic news coverage, which is aimed at a domestic audience and not external recipients such as foreign decision makers. A comparison of English-language and Chinese-language news published in China could therefore provide more

insight. Furthermore, as the codebook was originally designed to analyze problem-oriented news reporting, some variables could not adequately capture the characteristics of the positively-biased Chinese news content. Future studies should adapt the codebook to include more codes that focus on neutral or positive news coverage. Nevertheless, the exclusion of codes does not decrease confidence in the results, as according to Entman (1993) frames do not necessarily need to include all frame elements to be valid. Finally, this study is one of very few research projects that explicitly examined the relationship between China and a European country and it provides unique insights that appear to contradict previous findings on international news coverage. As prior studies have not investigated news content in relation to the external relationship between China and another country, it is not possible to conduct a direct comparison with the results of the present study. To allow for direct comparisons of news content, future studies should examine Chinese and German news coverage simultaneously to assess external relations between the two countries. Nevertheless, the present study can serve as a steppingstone for future research which aims to address this gap in research.

9. Conclusion

The present study was able to derive media frames in Chinese news. The findings provide evidence that the orientation of Chinese news content, in relation to international affairs with Germany, contradicts the majority of past research, which states that international news coverage is predominantly negatively biased. Results of the present study suggest that the specific characteristics of a media system under political influence, as is established in China, may be responsible for the differences in Chinese and Western news reporting. News media act as channels to convey the alignment of external relations between China and Germany to the world. As biased

images may shape the opinions of economic and political decision makers – and therefore external relations in general – news media have a certain responsibility in shaping geo-political and geo-economic transformations with regard to Sino-German relations. In times of globalization and growing interdependency of nations, international news coverage should facilitate rather than impede mutual understanding. This study may help raise awareness of this important role that current news media hold.

10. References

- Beaudoin, C. E. (2007). SARS news coverage and its determinants in China and the US. *International Communication Gazette*, 69(6), 509-524. doi:10.1177/1748048507082839
- Becker, J. (2011). Coverage of the Tibet Crisis (March 2008) and the Olympic Games in China (August 2008) in the German-language mass media. *International Communication Gazette*, 73(6), 495-506. doi:10.1177/1748048511412284
- Federal Foreign Office of Germany (2016). Joint statement on the occasion of the 4th German-Chinese intergovernmental consultations. Retrieved from <http://www.china.diplo.de/contentblob/4842162/Daten/6688896/160704erklaerungdd.pdf>
- Curran, J., Esser, F., Hallin, D. C., Hayashi, K., & Lee, C. C. (2017). International News and Global Integration: A five-nation reappraisal. *Journalism Studies*, 18(2), 118-134. doi:10.1080/1461670X.2015.1050056
- Dai, J. (2014). Does the medium make a difference? *China Media Research*, 10(2), 35-47.
- Dai, J., & Hyun, K. (2010). Global risk, domestic framing: Coverage of the North Korean nuclear test by US, Chinese, and South Korean news agencies. *Asian Journal of Communication*, 20(3), 299-317. doi:10.1080/01292981003802184
- de Vreese, C. H. (2005). News framing: Theory and typology. *Information design journal+document design*, 13(1), 51-62. doi:10.1075/idjdd.13.1.06vre
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of communication*, 43(4), 51-58. doi:10.1111/j.1460-2466.1993.tb01304.x
- Fang, Y. J. (2001). Reporting the same events? A critical analysis of Chinese print news media texts. *Discourse & Society*, 12(5), 585-613. doi:10.1177/0957926501012005002

- Feng, M., Brewer, P. R., & Ley, B. L. (2012). Framing the Chinese baby formula scandal: a comparative analysis of US and Chinese news coverage. *Asian Journal of Communication*, 22(3), 253-269. doi:10.1080/01292986.2012.662517
- Fund, G. M. (2014). Transatlantic Trends: Topline Data 2013. Retrieved from <http://www.gmfus.org/publications/transatlantic-trends-2014>
- Gandy, O. H., Jr. (2001). Epilogue—Framing at the horizon: A retrospective assessment. In S. D. Reese, O. H. Gandy, & A. E. Grant (Eds.), *Framing public life: Perspectives of media and our understanding of the social world* (pp. 355–378). Mahwah, NJ: Erlbaum.
- Hayes, A. F., & Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication methods and measures*, 1(1), 77-89. doi:10.1080/19312450709336664
- Heiduk, F. (2014). Conflicting images? Germany and the rise of China. *German Politics*, 23(1-2), 118-133. doi: 10.1080/09644008.2014.916693
- Heiduk, F. (2015). What is in a name? Germany's strategic partnerships with Asia's rising powers. *Asia Europe Journal*, 13(2), 131-146. doi: 10.1007/s10308-014-0399-1
- Hong, J. (2011). From the world's largest propaganda machine to a multipurposed global news agency: Factors in and implications of Xinhua's transformation since 1978. *Political Communication*, 28(3), 377-393. doi: 10.1080/10584609.2011.572487
- Hook, S. W., & Pu, X. (2006). Framing Sino-American relations under stress: A reexamination of news coverage of the 2001 spy plane crisis. *Asian Affairs: An American Review*, 33(3), 167-183. doi: 10.3200/AAFS.33.3.167-183
- Huawei Technologies. (2016). Deutschland und China – Wahrnehmung und Realität. Retrieved from <http://www.huawei-studie.de/downloads/Huawei-Studie-2016-DE.pdf>

- Huotari, M. (2015). Germany's China policy: No honeymoon forever. In M. Huotari, M. Otero-Iglesias, J. Seaman & A. Ekman (Eds.), *Mapping Europe-China Relations: A Bottom-up Approach*. Retrieved from http://www.merics.org/fileadmin/user_upload/downloads/Allgemeine_PDF/Mapping_Europe-China_Relations.pdf
- Kohring, M., & Matthes, J. (2002). The face (t) s of biotech in the nineties: how the German press framed modern biotechnology. *Public understanding of Science*, 11(2), 143-154. doi:10.1088/0963-6625/11/2/304
- Lee, C.C. (2010). Bound to rise: Chinese media discourse on the new global order. In M. Curtin, & H. Shah (Eds.), *Reorienting global communication: Indian and Chinese media beyond borders* (pp. 260–283). Urbana, IL: University of Illinois Press.
- Liss, A. (2003). Images of China in the American Print Media: A survey from 2000 to 2002. *Journal of Contemporary China*, 12(35), 299-318. doi:10.1080/1067056022000054614
- Ma, R. (2005). Media, crisis, and SARS: An introduction. *Asian Journal of Communication*, 15(3), 241-246. doi:10.1080/01292980500260656
- Matthes, J. (2009). What's in a frame? A content analysis of media framing studies in the world's leading communication journals, 1990-2005. *Journalism & Mass Communication Quarterly*, 86(2), 349-367. doi:10.1177/107769900908600206
- Matthes, J., & Kohring, M. (2008). The content analysis of media frames: Toward improving reliability and validity. *Journal of communication*, 58(2), 258-279. doi:10.1111/j.1460-2466.2008.00384.x
- Miller, M. M. (1997). Frame mapping and analysis of news coverage of contentious issues. *Social Science Computer Review*, 15(4), 367-378. doi:10.1177/089443939701500403

- Nosseck, H., & Kunelius, R. (2012). News Flows, Global Journalism and Climate Summits. In E. Eide, & R. Kunelius (Eds.), *Media Meets Climate. The Global Challenge for Journalism* (pp. 67-86). Göteborg, Sweden: Nordicom.
- Otero-Iglesias, M., Seaman, J., Huotari, M., & Ekman, A. (2015). Introduction: Dissecting and re-assembling Europe-China relations. In M. Huotari, M. Otero-Iglesias, J. Seaman & A. Ekman (Eds.), *Mapping Europe-China Relations: A Bottom-up Approach*. Retrieved from http://www.merics.org/fileadmin/user_upload/downloads/Allgemeine_PDF/Mapping_Europe-China_Relations.pdf
- Parsons, P., & Xiaoge, X. (2001). News framing of the Chinese embassy bombing by the People's Daily and the New York Times. *Asian Journal of Communication*, 11(1), 51-67. doi:10.1080/01292980109364792
- Peng, Z. (2004). Representation of China: An across time analysis of coverage in the New York Times and Los Angeles Times. *Asian Journal of Communication*, 14(1), 53-67. doi:10.1080/0129298042000195170
- Richter, C., Gebauer, S., Heberer, T., & Hafez, K. (2010). *Die China-Berichterstattung in den deutschen Medien*. Berlin, Germany: Heinrich-Böll-Stiftung.
- Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of communication*, 49(1), 103-122. doi:10.1111/j.1460-2466.1999.tb02784.x
- Shoemaker, P. J., & Reese, S. D. (1996). *Mediating the message*. White Plains, NY: Longman.
- Tai, Z. (2000). Media of the World and World of the Media A Cross-National Study of the Rankings of the Top 10 World Events' from 1988 to 1998. *International Communication Gazette*, 62(5), 331-353. doi:10.1177/0016549200062005001

- Wanta, W., Golan, G., & Lee, C. (2004). Agenda setting and international news: Media influence on public perceptions of foreign nations. *Journalism & Mass Communication Quarterly*, 81(2), 364-377. doi:10.1177/107769900408100209
- Wang, L., & Chen, S. (2015). A Corpus-Based Critical Analysis of Lexical Choices in Sichuan Earthquake by Chinese and American News Media. *Canadian Social Science*, 11(7), 111-116. doi:10.3968/7339
- Wang, H., Lee, F. L., & Wang, B. Y. (2013). Foreign News as Marketable Power Display: Reporting Foreign Disasters by the Chinese Local Media. *International Journal of Communication*, 7(19), 884-902.
- Wilke, J., & Achatzi, J. (2011). From Tian'anmen Square to the global world stage: framing China in the German press, 1986–2006. *Chinese Journal of Communication*, 4(3), 348-364. doi:10.1080/17544750.2011.594563
- Willnat, L., & Metzgar, E. T. (2012). American perceptions of China and the Chinese: Do the media matter?. *65th annual meeting of the world association for public opinion research, Hong Kong*.
- 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. doi:10.1080/01292980600857781
- Wu, H. D. (2000). Systemic determinants of international news coverage: A comparison of 38 countries. *Journal of communication*, 50(2), 110-130. doi:10.1111/j.1460-2466.2000.tb02844.x
- Yang, Y. E., & Liu, X. (2012). The 'China Threat' through the lens of US print media: 1992–2006. *Journal of Contemporary China*, 21(76), 695-711. doi:10.1080/10670564.2012.666838

- Zhang, L. (2010). The rise of China: media perception and implications for international politics. *Journal of Contemporary China*, 19(64), 233-254. doi:10.1080/10670560903444199
- Zhang, E., & Fleming, K. (2005). Examination of characteristics of news media under censorship: A content analysis of selected Chinese newspapers' SARS coverage. *Asian Journal of Communication*, 15(3), 319-339. doi:10.1080/01292980500261639
- Zhao, Y. (2000). From commercialization to conglomeration: The transformation of the Chinese press within the orbit of the party state. *Journal of Communication*, 50(2), 3-26. doi:10.1111/j.1460-2466.2000.tb02839.x

11. Appendix: Codebook

The subject of this study is a frame-analysis of the coverage of sino-german-relations in the period from 01/01/2007 until 12/31/2016 in the news articles published by *Xinhua General News Service*, the official press agency in China. The online database *LexisNexis* was used to search for eligible articles by applying the keywords Germany* or German* or Berlin* and China* or Chinese* or Beijing* in the English language output of *Xinhua General News Service*. The unit of analysis (i.e. one case) is one article.

1	Nr. given to unit of analysis (consecutive)	1-
2	Date of coding	dd/mm
3	Publication date of article	dd/mm/yyyy
4	Title of article (full, string)	...
5	Article length (number of words)	1-
6	Journalistic form If it is not a report, the specific form of the article is often named in the headline of the article	1 Report 2 Commentary 3 Feature 4 Interview 5 Other (string): ...
7	Section	1 Political World News 2 Political Domestic News 3 Economic World News 4 Economic Domestic News 5 Science & Technology World News 6 Science & Technology Domestic News 7 Cultural, Education, Health World News 8 Cultural, Education, Health Domestic News
8	Main actor Central person who is expressing his point of view about a topic that has to be related	Political actor 1 Chinese political actor 2 German political actor 3 "The" Chinese government

	to Sino-German-relations; may be a single person or a group of people; a group of people is only coded, if no single member of the group is expressing his point of view; actors who are just named but do not express their point of view cannot be main actors; the main actor's point of view may be expressed through direct speech or paraphrased by the journalist The journalist can also be a main actor, if a topic is being analyzed, including causal attributions, etc. but other actors are a) not mentioned, b) mentioned in passing only but not expressing their point of view; since diffuse actors like "we" or the journalist itself are also possible main actors, every article has to have at least one main actor In an interview the person that is being interviewed is automatically the main actor; actor's the interviewee is referring to or criticizing are not main actors A total of two main actors is coded for each article; the first coded main actor is the most important one, i.e. the one expressing his point of view to the most extend, not necessarily the one first mentioned or the one whose point of view is standing at the end of the article as a conclusion! If two actors are expressing their point of views to the same extend, the one first mentioned is the first main actor	4 "The" German government 5 Chinese president 6 German chancellor 7 Chinese politics/politicians in general 8 German politics/politicians in general 9 Chinese state institution/commission 10 German state institution/commission 41 Single member of Chinese state institution/commission 42 Single member of German state institution/commission 11 Chinese political expert/scientist 12 German political expert/scientist Economic actor 13 Chinese economy in general 14 German economy in general 15 Chinese employer(s) 16 German employer(s) 17 Chinese employee(s) 18 German employee(s) 19 Chinese companie(s) 20 German companie(s) 21 Single member of Chinese company 22 Single member of German company 23 Chinese economic institution/commission 24 German economic institution/commission 25 Single member of Chinese economic institution/commission 26 Single member of German economic institution/commission 27 Chinese economic expert/scientist 28 German economic expert/scientist Social/societal actor 29 Chinese population in general 30 German population in general 31 Chinese private person 32 German private person 33 Chinese social institution/commission 34 German social institution/commission
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		43 Single member of Chinese social institution/commission 44 Single member of German social institution/commission 35 Chinese social expert/scientist 36 German social expert/scientist Other actor 37 Journalist 38 China & Germany in general 39 China in general 40 Germany in general 45 Other (string): ...
9	Do other statements contradict the actor's point of view? Either directly contradicting specific arguments or indirectly contradicting the whole position/point of view	1 Yes 2 No 0 Not definable 77 <i>No second main actor</i>
10	How much space (in percent) of the article is approximately taken by the main actor's point of view? (Measured by means of the ratio of the number of words of all paragraphs in which the main actor's point of view is expressed or paraphrased to the total number of words of the article)	1-
11	Topic Refers to the specific topic the main actor is making a statement about; does not necessarily have to be the topic of the headline or the main story; if the main actor makes a statement about two different topics, the one that is referred to most extensive is coded The topic needs to be separated from the occasion; the occasion is the event which has led to the reporting, i.e. a press	Sino-German relations regarding: 1 Politics 2 Economy 3 Sports 4 Science & Technology 5 Culture/ideology 6 Education 7 Health issues 8 Human interests 9 Catastrophes/accidents 10 Ecology/nature 11 Religion 12 Crime/judiciary

	conference; but the content of the conference is the topic, not the conference	13 Military/war 14 International cooperation/affairs in general 15 Other topics (string): ...
12	Causal interpretation: responsibility for situation: <u>person</u> (from the actor's point of view – who is (most) responsible for the situation?)	1 List of actors (variable 8; code 1-45) 0 No definable responsible actor
13	Causal interpretation: responsibility for situation: <u>non-personal circumstances</u> (from the actor's point of view – what non-personal circumstances are (most) responsible for the situation?)	1 Political circumstances 2 Economic circumstances 3 Social circumstances 0 No definable responsible non-personal circumstances
14	Moral evaluation: addressee of competence-attribution (from the actor's point of view – who has the solution? Only applicable, if there is a negative situation i.e. a problem to solve)	1 List of actors (variable 8; code 1-45) 0 No competence-attribution 77 <i>No problem to solve</i>
15	Moral evaluation: addressee of competence-depreciation (from the actor's point of view – who does not have the solution? Only applicable, if there is a negative situation i.e. a problem to solve)	1 List of actors (variable 8; code 1-45) 0 No competence-depreciation 77 <i>No problem to solve</i>
16	Operating instructions: required measures to solve the problem (from the actor's point of view – what should be done? Only applicable, if there is a negative situation i.e. a problem to solve) Measures have to be explicitly required, not only listed or mentioned; if multiple measures are required, give multiple codes and separate them by comma	0 No measures required 1 Political measures: China & Germany 2 Economic measures: China & Germany 3 Social measures: China & Germany 4 Political measures: China 5 Economic measures: China 6 Social measures: China 7 Political measures: Germany 8 Economic measures: Germany 9 Social measures: Germany 10 Not further defined general suggestions 11 Other (string): ...

		77 <i>No problem to solve</i>
17	Assessment/evaluation of Sino-German relation in matters of the respective topic (referring to the past or present situation; for evaluation of the future situation see variable 18)	0 No assessment/evaluation 5 Very positive 4 Mostly positive 3 Partly positive/partly negative 2 Mostly negative 1 Very negative
18	Assessment/evaluation of the future situation of Sino-German relations Code 5 resp. 1 if a positive resp. negative development is clearly estimated. Code 4 resp. 2 if there is a positive resp. negative tendency. Code 3 if development is tied to conditions whose incidence remain unclear	0 No assessment/evaluation 5 Very positive 4 Mostly positive 3 Partly positive/partly negative 2 Mostly negative 1 Very negative
19	Main actor 2 (If there is a 2 nd main actor, code variables 8-18 again for this actor)	0 No second main actor 1 List of actors (variable 8; code 1-45)
20	Personalization (pertaining to whole article) Code 3, if personal statements referring to the point of view or actions of the main actor are prevalent, rather than unpersonally depicted facts; if the journalist is main actor code 0	0 No personalization 1 Low personalization 2 Medium personalization 3 Strong personalization