MASTER THESIS

LEIDEN UNIVERSITY

Computer-Mediated Communication and the Formation of Collective Action in China: The Human Flesh Search Engine Phenomenon

Student: Maria Nefedova – S1830481

Supervisor: Dr. F.A. Schneider

MA Asian Studies

Specialisation: Politics, Society and Economy of Asia

Date: July 15, 2020

Word Count: 13720

Abstract

In the beginning of the 1990s, China witnessed the arrival of the internet. The internet allowed ordinary citizens to contribute to the production of media content by sharing news and opinions with each other. The computer-mediated communication (CMC) technology provided a new medium of interaction for citizens and allowed them to mobilise more quickly and more efficiently. Since then, the notion of collective action took on new dimensions. New forms and practices of collective action started to appear on the internet in China. One of such practices is the Human Flesh Search Engine (HFSE). It is a public search for people driven by a massive collaboration of internet users. The participants share a common goal of revealing the truth and punishing targets of the search accused or suspected of wrongdoing. This thesis analyses the role of the internet in relation to social activism and collective action in China by answering the following research question: How does the CMC, that the internet facilitates, reflect the formation of collective action in China? To answer this question, I examined the CMC in the context of the HFSE phenomenon. I analysed two notable cases of the HFSE, namely, the South China tiger scandal (2007) and the search for "Liaoning Girl" (2008). Both cases demonstrated similar patterns in terms of formation of collective action and the following search for the target. The collective action in the context of the HFSE had an actual impact on the outcomes of these cases. The CMC provides a new medium of communication, which in turn facilitates the formation of collective action.

Key Words*:* China, collective action, computer-mediated communication, Human Flesh Search Engine

Table of Contents

Note on Conventions

This thesis uses various Chinese terms throughout the text. When the term is mentioned for the first time, I present the English translation in the main text, followed by Pinyin in cursive script and simplified Chinese characters in brackets. For later references, I use the English version of the terms. I use Pinyin for short terms as transliteration for Putonghua (the Standard Chinese language) without tone marks. In the Findings and Discussion chapter, the translated material is cited in English, where the translations are my own unless specified otherwise. They are presented in quotation marks and are not followed by Pinyin or characters. In the Bibliography part of this thesis, the original titles of sources in Chinese are presented first, and then, followed by my English translation in square brackets.

1. Introduction

Shortly after the Tiananmen Square protests in 1989, China witnessed the arrival of the internet on a large scale (Roberts 2018, 104). Since then, the internet in China has undergone two major phases of development. During the first phase (1987-1993), the High-Energy Physics Laboratory of Chinese Academy of Sciences together with a number of scientific research institutes began to access the internet and established e-mail services between the institutes. In 1994, the second and present phase started. China Science and Technology Net (CSTNET) gained full access to the internet and obtained the highest-level domain name ("CN") for China. Furthermore, the country implemented Internet Protocol (IP) connections and started offering full internet services to citizens. During the second phase, the government of China authorised some of the most important networks (e.g. CSTNET, CHINANET, CERNET, etc.), which eventually became the nation's biggest internet service providers (Lu et al. 2002, 207).

Consequently, the Chinese Communist Party's (CCP) "one-to-many" approach to mass media (Schneider 2018, 218) was challenged by the introduction of new technology. The traditional channels of information started to take a new shape as they moved closer to the "many-to-many" model. The internet allowed ordinary citizens to contribute to the production of media content by sharing news and opinions with each other. This shift presented a significant complication for the government to effectively control the gatekeepers of information (Roberts 2018, 104). However, instead of slowing down the spread of the internet within the state, China actively pursued it. The government set out to accomplish greater connectivity by expanding internet access throughout the whole country (ibid., 104). In fact, China's rapid expansion of internet use is largely the result of the approach adopted by the leadership. The government saw

the computer information technology to be of great importance for the county's economic development and actively encouraged its use for commercial purposes (Liang and Lu 2010, 104-5). At the same time, China developed various methods to control the unlimited flow of information. Right after the internet was introduced, the government issued a list of regulations in 1994, stating that it could not be used to harm the interests of the state (Roberts 2018, 104). Around that time, the government initiated the development of laws and technology to establish an efficient regulatory framework over the online space. This includes an obligatory registration of the websites, filtering, and enhancing capabilities for government surveillance (ibid., 104).

While the internet was gradually gaining popularity in the country, the notion of collective action also underwent transformation and took on new dimensions. The increasing online population together with technological development have reduced the party's ability to affect people's attitudes toward some of its self-proclaimed core values, such as commitment, solidarity, and sacrifice (Gao 2016, 350). In the late 1990s, a new form of popular contention arose in China. Online activism, which often included online petitions, hosting of campaign websites, and verbal protests, became a common way to express public's stance on a particular issue and despite the CCP's strict political control of the internet space, it was only becoming more popular (Yang 2009, 33). Due to the limited distribution of the internet in the first years after the arrival of the web, the actual reports on how it was used in organising collective action are rather inconsistent. However, in 1995 a new space for collective action appeared, namely, the Bulletin Board System (BBS), where users were able to exchange ideas and communicate with each other. Consequently, it is on these forums where the earliest cases of online collective action were recorded. Some examples of such activism include the protests led by Chinese internet users in 1998 against the violence committed on a racial basis against ethnic Chinese in Indonesia, the 2005 online petition campaign against Japan's bid for a permanent seat on the United Nations Security Council, the 2008 online protests against the death of a citizen by a city inspector in Tiananmen, and the 2008 anti-CNN campaign after the insulting remarks about China by a CNN journalist (Gao 2016, 350).

This thesis analyses the role of the internet in relation to social activism and collective action in China by answering the following research question:

> How does the computer-mediated communication (CMC), that the internet facilitates, reflect the formation of collective action in China?

To answer this question, I will examine the CMC in the context of the Human Flesh Search Engine (*ren rou sousuo*人肉搜索) phenomenon on the internet in China.

In the literature review section of this thesis, I will present the current academic debate on social media, censorship, and online activism in digital China. This will allow me to position this research in the broader context of the academic field by reviewing relevant scholarly literature. The next part will elaborate on the research framework of this thesis. It will focus on two central elements of the research question, namely, the CMC and collective action. The theoretical grounding of the first concept will rely on the theories of interpersonal adaptation and exploitation of media with an emphasis on efficiency framework and ICT succession framework. I will present the second concept in the context of an integrative social model of collective action. Then, the methodology section will explain the method employed to carry out this research. I will adapt the concepts used by Yu Xiu (2012), including leadership, division of labour, and collaborative filtering to analyse two HFSE cases. In the Findings and Discussion part, I will apply these concepts to two notable HFSE cases, specifically, the South China tiger scandal (2007) and the search for "Liaoning Girl" (2008) and discuss my findings. This thesis argues that the CMC in the form of online public platforms (e.g. forums, blogs) provide an effective medium of communication for ordinary citizens and reflect the formation of collective action and social activism in China. The HFSE is an example of such collective action. It is fully facilitated by the internet and CMC technologies. The CMC allows people to engage in the debate and interact with each other and in case of the HFSE, launch massive public searches and initiatives online. The effectiveness of such collective action is reflected in the overall impacts and outcomes of each HFSE case.

2. The Debate on Social Media, Censorship, Online Activism, and Collective Action in Digital China

In order to answer the research question of this thesis, it is important to understand the current academic debate on the role of social media platforms that became a popular outlet for human expression after the introduction of the internet. After a brief overview of social media in China, this chapter will address the types of censorship and the methods of information control exercised by the government of China to explain the context for the formation of collective action. Then, it will discuss the notions of online activism and collective action in China. The review of the scholarly literature will allow me to position this research in a broader academic context.

2.1. A Brief Overview of Social Media in China

The People's Republic of China (PRC) has the largest Internet population in the world. In 2018, China's internet users constituted more than one-fifth of the four billion users worldwide (Statista 2020a). Even though China's digital spheres resemble the Western model in some respects, China managed to grow its own separate social media universe with its ostensibly unique "Chinese characteristics" (Wu and Alaimo 2018, 1). For instance, one of the crucial features that characterise China's social media landscape is the "Golden Shield Project". In the course of this project a number of popular foreign internet sites and social media platforms, such as Google, *New York Times*, Facebook, Twitter, and YouTube, were blocked by "The Great Firewall of China" (ibid., 1).

In the early 2000s, after Facebook was launched and gained world recognition, China's technology sector presented various alternatives for its domestic market, namely Renren (人人) and Kaixin *(kaixin wang* 开心网). From the 2000s onwards, microblogging (*weibo* 微博) became the most popular type of social media. This was largely due to the increasing influence of Twitter, which took off in 2006 (ibid., 3). Simultaneously, China offered another substitute for the Western platform – a Twitter-like site called Fanfou (饭否). However, it was in 2009 that the local microblogging services established their leading positions in the domestic market, and held on to their position ever since (ibid., 3). This was mostly the outcome of government regulation which had both economic and political dimensions. In general, the PRC aims for greater technological self-reliance in high-tech industries and the development of digital service sector is one of its core components. The PRC sought to establish itself as a global leader in the digital and technological sector by channelling large amounts of capital through state guidance funds into emerging technologies. The government deters market entry for foreign actors in order to protect its domestic market from the outside competition. Such regulatory approach greatly benefits local commercial actors and encourages them to innovate (Shi-Kupfer and Ohlberg 2019, 17).

In July 2009, the series of violent riots took place in Northwest China. This also resulted in central government blocking major foreign (social) media outlets, some of which (Facebook and Twitter) never returned to the Chinese market. Right after the protests settled down, the country saw a boom of microblogging services, specifically after a major internet corporation, Sina, launched its microblogging platform in August 2009. By 2010, another 20 major microblogging services had been launched (Wu and Alaimo 2018, 3). At that time, microblogs really established themselves as the central platforms for the most relevant and exciting debates in China. For instance, in 2012, the most popular social media platforms, Sina Weibo, Renren, and Kaixin, covered the top 20 public events recorded by the Public Opinion Monitoring Agency. There were 20 million posts mentioning these events together on Renren and Kaixin, and more than 230 million posts on Sina Weibo (Qin, Strömberg, and Wu 2017, 121).

Despite such popularity of microblogging platforms in the first decade of the 2000s, the general trend on social networking changed from 2013 onward. According to the China Internet Network Information Center (CNNIC), major internet companies, such as Sohu, Netease, and Tencent significantly decreased their investment in microblogging services (Wu and Alaimo 2018, 4). This allowed Sina to cement its leading position in the domestic market in the beginning of 2015. It is worth keeping in mind that Sina's or any other major company's success fundamentally derives from the lack of foreign players in the Chinese market and, hence, an overall lack of competition. However, the introduction of the new mobile-based application Weixin (微信) in 2011 stirred up local competition once again (ibid., 4). Weixin, developed by Tencent, combines within itself a social networking platform and a long list of various in-app options and features, such as money wiring, cab service, and in-store payment (ibid., 4-5). In 2012, Weixin was rebranded as WeChat for international audiences and by 2018 it surpassed one billion users worldwide (Statista 2020b). Today, Weixin ranks fifth on a most popular social networks list ranked by a number of active users (ibid.). The increasing popularity of Weixin together with other accompanying factors, such as China's online censorship of social media users' public communications and subsequent punishments for transgressive online behaviour significantly slowed down the growth of the microblogging services (Wu and Alaimo 2018, 4-5). With regards to social media in China, it is important to keep in mind the context and conditions of digital spheres imposed by the country's current regulatory framework, which will be addressed in the following part.

2.2. Internet Censorship in China

China irrefutably developed one of the world's most sophisticated mechanisms for censoring content on the internet. However, this does not mean that the system is designed to always prevent the discussions of various contradictory or sensitive topics online (Tai 2015, 122). The introduction of the internet and every development that followed in the digital realm facilitated the emergence of new networked communicative spaces, which allowed Chinese citizens access to the constantly expanding pool of unconventional information. Furthermore, it has been noted that the internet has become an empowering tool, a new space for self-expression, a platform to engage in various innovative and sometimes controversial and dissenting activities (ibid., 120).

The main governmental institution of information control in China is the CCP Propaganda Department (*zhonggong zhongyang xuanchuan bu* 中共中央宣传部), or CCPPD. It supervises and develops strategies for the type of content that should be censored and for the type of information that should be made available and disseminated across various forms of media,

including the internet, television, newspapers, radio, mobile phones, art, education materials, and vocational training (Roberts 2018, 105). The CCPPD can instruct gatekeepers of these media outlets to censor or spread any given information. While the CCPPD is the highest information control apparatus, there are also smaller institutions and ministries in the government to which the Propaganda Department delegates the state's tasks for censorship and propaganda (ibid., 105).

The State Council Information Office (*guowuyuan xinxi bangongshi* 国务院信息办公室) is responsible for "introducing China to the world". It holds press conferences regarding major national policies, oversees news and foreign journalists (The State Council Information Office). The National Radio and Television Administration (guojia guangbo dianshi zongju 国家广播电视总局) is mainly in charge of implementing the party's propaganda principles and drafting policies for radio and television management (National Radio and Television Administration). The Ministry of Culture (*wenhua bu* 文化部) and the Ministry of Education (*jiaoyu bu* 教育部) regulate arts and education (Roberts 2018, 106). The Ministry of Industry and Information Technology (*gongye he xinxi hua bu* 工业和信息化部) regulates the information technology industry (ibid., 106). The State Internet Information Office (*guojia hulianwang xinxi bangongshi* 国家互联网信息办公室) that was established in 2011 is responsible for monitoring content on the internet. Furthermore, there are institutions designed to punish those who violate information laws, namely, the Ministry of Public Security (*gong'an bu* 公安部) and the Ministry of State Security (*guojia anquan bu* 国家安全部; ibid., 106). Finally, there is a separate administration that regulates internet content and cyberspace, established and chaired by Xi Jinping in 2013, called the Cyberspace Administration of China (*zhongyang wangluo anquan he xinxi hua lingdao* xiaozu 中央网络安全和信息化领导小组; Roberts 2018, 106).

The overview of the regulatory institutions provided above demonstrates that in theory, the government of China has the power, the resources, and the tools to limit sensitive content online. In practice, however, the discussions of controversial topics can still be found on social media platforms. Nonetheless, it is wrong to assume that the government lacks sufficient tools to control this flow of information. Instead, we should see the government's willingness to allow this degree of freedom and leave this kind of content visible as something potentially beneficial (Qin, Strömberg, and Wu 2017, 121). There are two main tools that the PRC's regulatory framework employs to monitor and limit sensitive content on the Internet: policing and censoring. Policing is aimed at punishing people who engage in controversial discussions online. Apart from restricting sensitive content, policing also induces the process of self-censorship by making internet users feel accountable for their actions (ibid., 121). It has also been noted that the notion of self-censorship is a crucial component of the state's regulatory approach. Poell, De Kloet and Zeng

argue that online censorship in China revolves around this process (Poell, De Kloet and Zeng 2014, 3). In this context, censorship is not initiated by the government alone. Internet service and content providers also actively participate in self-censorship (Pang 2008, 57).

Policing is executed by an extensive group of information officers and internet monitors who are working at all levels of government. For example, local politicians can use the local police force at their own discretion to block certain negative information about the regions under their administration without consulting with the central government. Users whose posts are considered undesirable by the state may receive warnings, have their account blocked, or even be taken under arrest (Qin, Strömberg, and Wu 2017, 121). In order to enforce these regulations, the government needs to make sure that nothing can be posted anonymously. For this purpose, the government has issued a number of laws and administrative regulations regarding the account name management online. The Internet User Account Name Management Regulations document (February 4, 2015) states that internet information service providers shall adhere to the principle of "real name backstage, voluntary choice front stage". Furthermore, if the "Internet information service users register a fraudulent account name with false information […], the Internet information service provider shall impose punishments such as notification or rectification within a limited time provisional cessation of use and cancellation of registration" (China Copyright and Media 2015). Real-name registration rules imposed by the government have significant implications for the internet use in general. The elimination of online anonymity restricts the individuals' willingness to participate in the discussions on the internet as it may lead to serious repercussions in the physical world. Even though absolute anonymity on the internet may not exist, it has been argued that some degree of anonymity is still essential for the healthy civil society (Lee and Liu 2016, 4). These regulations pose a threat to the fundamentally democratic nature of the Internet (ibid., 4). The actual implementation and enforcement of the real-name registration policy, however, is proving to be extremely costly and difficult (ibid., 23).

2.3. The PRC's Approach to Regulating Information Online and the General Trends Among Chinese Internet Users

The human expression online is censored in three major ways. First, and the most fundamental one is the Great Firewall of China, which blocks certain websites from IP addresses and restricts them from operating inside the country (King, Pan, and Roberts 2013, 328). The Great Firewall does not only censor particular websites from being accessed in China but is also able to track requests from computers inside the country to foreign websites. Apart from outright censoring, it has other means of limiting access to the undesirable content on the internet, such as

tampering with the websites by making them slower (Roberts 2018, 109-10). Yet, for those citizens who know about censorship and seek to circumvent it, this is not an unsolvable problem. In this light, censorship is more an inconvenience than a serious constraint on people's freedom as the blocked websites can be accessed with a virtual private network (VPN; ibid., 110). However, the recent developments in China's cybersecurity law demonstrate that the government aims to establish a broader security apparatus which also includes restricting the use of VPNs (Descamps 2020, 4).

The second way in which the government exercises censorship is through "keyword blocking", which prevents internet users from posting texts that include banned words or phrases. However, this regulation has a rather limited influence on the freedom of speech, since the users constantly find smart ways to outmanoeuvre the automated programs. Chinese citizens find their way around such regulations by using various metaphors, satire, analogies, and other figures of speech (King, Pan, and Roberts 2013, 328). One of the most notable examples of such online phenomenon is egao. Egao is a type of humour and satire, which exploits the homophones in Mandarin Chinese. The internet users in China remix visual, audio, and gaming materials for comedy and satire (Yates and Hasmath 2017, 2). The emergence of egao is often seen as an alternative format for political expression (Meng 2011, 36). In Mandarin Chinese, there are many characters that sound alike despite having different meanings, so internet users learned to substitute the banned ones with the unrelated ones that sound or look alike (homophones and homographs). For instance, to bypass the ban on the word *ziyou* 自由 which means freedom, World of Warcraft players use the similarly shaped *mutian* 目田 (the literal translation is "eye field"; King, Pan, and Roberts 2013, 328). Another example of such evasion is substituting the characters for *hexie* 和谐 which refers to the official state policy of "harmonious society" with the similar-sounding *hexie* 河蟹, that is "river crab". The third type of censorship is manual. Once the post gets past the first two steps, the censors read and delete the ones they find undesirable. As these posts are monitored manually and not by the automated programs it is much less likely that they would be deceived by smart phrasing (King, Pan, and Roberts 2013, 328).

However, despite having such an extensive administrative regulatory framework to control information, it may seem rather paradoxical that it is still relatively easy to find sensitive material available on the internet in China, especially on social media. Why does the party allow this and why does it not remove such content altogether? One of the possible explanations of why the government implements selective and limited censorship is because only a small fraction of sensitive content online is considered to be a threat to the country's political system. If the government chooses to pursue a total clean-up policy, it would lose the opportunity to learn the information from the bottom-up and to address the potential problem before it becomes an actual

threat (Qin, Strömberg, and Wu 2017, 137). Hence, the CCP has to deal with this notion of trade-off in information control even though it might not be completely pleased with particular topics that are being discussed online (ibid., 137). Roberts (2018, 4-5) calls this approach "the puzzle of porous censorship". She argues that it is strategically valuable for "authoritarian regimes" like China's, as it has a significant impact on how the average citizen accesses the information. Even though such censorship method is easy to circumvent, it requires people to spend more time or money to access the content that the government wishes to limit. Hence, among this easily accessible "cacophony of information", very few people actually make the effort to find alternative sources (ibid.).

Other scholars also argue that the primary goal of China's censorship is not to suppress any criticism of the state or the CCP but to silence collective action. According to the findings of the study conducted by King, Pan, and Roberts (2013), posts on social media with negative comments or criticism of the government, leadership or state policies are not more likely to be censored. The authors argue, that the censorship approach is aimed at removing any posts that call for social mobilisation, regardless of the context. The main reason behind the PRC's willingness to embrace such method is its desire to suppress any centralised collective action that take place or may take place in the future (King, Pan, and Roberts 2013, 326). On the other hand, it has also been suggested that "authoritarian countries" often tolerate or ever encourage citizens to protest as a way to release the pressure on the political system and reduce underlying social grievances (Huang, Boranbay-Akan, and Huang 2019, 25).

The following part will address the question of how does this kind of censorship shapes the behaviour of the internet users.

2.4. The HFSE and Collective Action in China

It might be relevant to position Chinese digital activism in the wider context of social activism and mass protests in the country. In Mao's era, popular mass protests were uncommon, unless coordinated by the state. However, since the early 1990s, after the introduction and the deepening of the economic reforms, social activism and protests have become more frequent (Tai 2015, 123). The government adapted its polity into something Chen calls "contentious authoritarianism, wherein a strong authoritarian regime accommodates widespread and routinized collective protests, is a very rare phenomenon" (Chen 2012, 189). However, Chen argues that collective action under this "authoritarianism" is a logical product of the PRC's political system. The government has a highly centralised power structure but, at the same time, it values nonbinding political consultation by inviting ordinary people to communicate their complaints and submit

petitions to the local officials. This, however, creates tension between the two when the state fails to react on this "feedback" in a satisfactory way and drives people to engage in collective action. He also attributes the surge of collective action to the country's transition to the market economy, which fundamentally changes the way people are bound to the state (no more "organised dependence"). Furthermore, Chinese petitioners developed a "strategic pattern of protest opportunism", by applying the pressure on local officials through organised collective actions and mass protests (ibid., 189-192). Tai adds another two factors to the list that facilitated this surge of collective action. The first is the rising awareness among the general public about their rights and options. Second, the PRC needs to resort to a rather subtle handling of popular protests because of its increasing global political and economical integration in order to avoid bad press in the international media (Tai 2015, 124).

Protest is an essential part of any collective action. However, people's protest activities are no longer limited to the demonstrations or marches on the streets, now, they moved to the online environment. Individuals interact and collaborate in blogs, chat rooms, leave comments, and petition in online forums. Even though the concept of collective action is not new, its practice assumes a new appearance and presents new dimensions since it started to be facilitated by the internet. The internet provides a new medium of communication and allows citizens to mobilise more quickly, more cheaply, and more efficiently (Gao 2016, 351). In this context, the HFSE phenomenon appeared on the internet in China. This term was originally used by the Chinese media to explain the practice of searching for people online, or "human hunting". The phenomenon is not only limited to Chinese internet, but is also widely discussed abroad (Gao and Stanyer 2014, 814).

The HFSE is driven by massive collaboration of the internet users, it is a "form of online collective action in which more than one internet user contributed collectively to a certain goal but in different ways" (Gao 2016, 353). For instance, there are users who perform the role of the "initial exposer", there are those who initiate the discussion online, some join the discussion through commenting or replicating relevant information to a broader audience, others take the role of the detective, they conduct an online or offline search for the "target" and share their findings with the rest (ibid., 353). Gao describes the HFSE as a "goal-oriented collective activity", meaning that the primary goal of its participants is to achieve a common objective, such as revealing the truth and punishing targets accused or suspected of wrongdoing. The participants engage in the "human search" with a particular goal in mind, they do not simply collaborate for the purposes of entertainment or socialising. These searches often strive to track down corrupt officials and "norm transgressors", whose actions are considered to be unacceptable by the public (ibid., 353-4).

However, the HFSE is often accused of "crossing the line" as the search often "gets out of control" (Zhang and Gao 2016, 603). The HFSE puts the individuals' personal privacy at risk as the participants share their targets' private information on the Internet. Almost all of the searches begin in the context of upholding justice as the law cannot always penalise the violators of moral principles. During the search, the targets' identities and other personal information (e.g. home and email addresses, bank statements, family status) are often revealed to the public for "justice and harassment," which has serious consequences in the physical world. As a result, the immense psychological pressure forces the victims to change their jobs, move to another city, or even create a new identity (ibid., 602-3).

The following chapter will introduce the theoretical framework of this thesis and indicate the central theoretical concepts that will guide the analysis of CMC and the formation of collective action in the form of the HFSE.

3. Research Framework

In this part, I will introduce the theoretical framework of this research. I will address two central elements of the research question of this thesis, specifically, the CMC and collective action. I will analyse the first concept in the context of theories of interpersonal adaptation and exploitation of media with an emphasis on efficiency framework and ICT succession theory. The underlying ideas behind these two theories will provide a theoretical base for this research and will guide the analysis of CMC in relation to the formation of collective action in China. I will present the second concept of this thesis in the context of an integrative social model of collective action proposed by Van Zomeren, Postmes and Spears (2008). Then, two types of collective action facilitated by the CMC will be identified. This will allow me to classify the HFSE phenomenon on the Chinese internet in terms of CMC.

Charles Ess, a professor in media studies at the University of Oslo, defined the CMC and its attendant cyberspace as "the peculiar space/time created by literally millions of human beings around the globe communicating with one another via computer networks […]" (Ess 1996, 1). There are two underlying assumptions that reflect the general inquiry into the design and use of CMC systems. The first assumption is that these "new" CMC technologies are indeed new in comparison to the earlier forms of communication. The second assumption states that CMC technologies shape communication, and by extension, have an influence on people's social behaviour (Herring 2004, 26). The CMC systems come in a variety of forms and have become essential to the initiation, development, and maintenance of interpersonal relations (Walther 2011,

443). Even though CMC is a relatively young field of study, many theoretical approaches have been developed in relation to CMC. Joseph B. Walther classified the existing thirteen theories and hypotheses in three major categories: cues-filtered-out theories, experiential and perceptual theories, and interpersonal adaptation and exploitation of media theories (ibid.). For the purposes of this research, I have chosen to focus on the third category, specifically on the efficiency framework and the ICT succession framework. The CMC will be presented in the context of these two frameworks.

The developers of the efficiency framework, Nowak, Watt, and Walther, argue that people use various mediums to accomplish their interaction goals, however, some mediums are more effective than others. The degree of media efficiency varies in terms of its ability to facilitate communication, some require less time and effort than others. According to the authors, "the efficiency framework predicts that the application of greater effort will lead to more successful collaborative outcomes even if it reduces satisfaction" (Nowak, Watt and Walther 2009, 1108). They tested this prediction by comparing group projects facilitated by four differing CMC systems to face-to-face communication, namely, synchronous high-cue (video conference), synchronous low-cue (WebBoard Chat), asynchronous low-cue (WebBoard text based conference), and asynchronous high cue. They analysed them in terms of partner copresence, satisfaction with the medium, and outcome success. The results of the analysis indicated that there were no effects on groups' success that used synchronous high-cue communication. The groups that used synchronous text and face-to-face interactions had greater perceived effectiveness. The examination showed that partner copresence increases the groups' effectiveness and its overall success. The idea that people adapt their communication behaviour to the medium they are using, which is the central premise of the efficiency framework, was also supported (ibid., 1108). The findings of the research contradict some traditional approaches to media assessments, which suggest that people who use synchronous high-cue systems are more likely to be satisfied and, hence, are more effective. Nowak, Watt, and Walther, on the other hand, argue that while it is true for some parts, media satisfaction only indirectly predicts success (ibid., 1117).

The ICT succession framework developed by Keri K. Stephens (2007) is among the most recent theories about CMC (Walther 2011, 469). Stephens rejects the common assumption of past research on ICT, which states that people use only one type of ICT per task. Instead, she suggests that people tend to use a mix of ICTs over time depending on their task. Just like the efficiency framework, the ICT succession theory also focuses on communication efficiency. The theory argues that we can predict how to use successive (or follow-up) ICTs to complete tasks efficiently and effectively by examining various modalities of modern ICTs, for instance, auditory, visual, and textual modalities (Stephens 2007, 486). There are two central theoretical terms of the

framework, namely, successive message transition and complementary channel usage. Stephens identified six main propositions for successive ICT use. The key proposition of the model states that the greatest communication efficiency for certain types of tasks is achieved by message repetition through two different kinds of communication channels. For instance, instead of using a single medium for sending a message, a communicator can complement it by sending a follow-up message via a different medium (cited in Walther 2011, 469). Joseph B. Walther described the ICT succession framework as "a modest digital-age update and elaboration to conventional suggestions" (ibid., 470). However, he also noted that the theory lacks sufficient explanation of the complementary successive ICT use, specifically, what combinations among ICT groups would be optimally complementary (ibid., 469).

This thesis analyses the CMC on Chinese internet forums in the context of the HFSE phenomenon. Online public platforms and forums, such as *Tianya*, serve as a communication medium where information is transmitted among individuals in the form of a coherent dialogue or separate messages. This medium can be described as an asynchronous low-cue communication system, which does not allow the transmission of nonverbal cues. The communications among Chinese internet users selected for the purposes of this research were triggered by a significant (and often scandalous) case or event that attracted broad public attention. Online forums facilitated these interactions and allowed individuals to share their opinions and ideas with each other, which eventually transformed into a wide public initiative called the HFSE. In the context of this thesis, the effectiveness of such communication medium is viewed in terms of the overall outcomes and results of these interactions (whether the users managed to achieve the common goals of a given HFSE).

The second central element of this research is collective action. The concept has been widely used in various academic fields and has been a subject of interest to different disciplines, including sociology, economics, history, political science, and psychology. Many of these approaches share a common assumption in studying the notion. It suggests that collective action is a response to an "objective" state of disadvantage, meaning that the underlying conditions and causes of such action can be identified (Van Zomeren, Postmes and Spears 2008, 505). According to Mancur Olson, an American economist and political scientist, collective action refers to a coordinated group of individuals who act together in order to achieve their common goals and interests. His analysis is drawn from economic theory, however, it is not limited to one discipline and is also relevant for other academic fields (Olson 1971, 1-3).

An integrative social model of collective action (SIMCA) proposed by Van Zomeren, Postmes and Spears provides an integrative psychological perspective on collective action. The model explores the key predictors of collective action and their interrelationships in order to

explain what drives people to mobilise and participate in social protest. The scholars incorporated three major theoretical perspectives on collective action, namely, perceived injustice, perceived efficacy, and a sense of social identity in the model. According to the authors, the past attempts at theoretical integration failed to consider all the relationships between the three perspectives and their predictive effects, therefore, none of them is truly integrative. With this in mind, the SIMCA model explores the relationships between the three predictors and suggests that social identity is vital for collective action for two reasons. First, social identity is a principal motivator for collective action and second, it links the injustice and efficacy components of collective action (Van Zomeren, Postmes and Spears 2008, 504-5). In the context of the HFSE, social identity is usually determined by the participants' shared values. The searches are often initiated in response to individuals' contradictory or immoral behaviour. The participants of the HFSE tend to have a common understanding of what constitutes such behaviour and, hence, it motivates them to act in the form of the collective action.

CMC plays a major role in the facilitation of collective action. Priante et al. identified two main forms of collective action within the framework of CMC: "CMC-based" and "CMC-supported". The "CMC-based" collective action is facilitated only by CMC and takes place online. The examples of such action include online petitions, cyberactivism, and hacktivism. The "CMC-supported" collective action, on the other hand, takes place offline and uses CMC technologies as a medium for organisational purposes. It can be characterised as a more traditional form of collective action, which includes street rallies, occupations, and fundraising (Priante et al. 2018, 2650). The HFSE phenomenon, analysed in the context of this thesis, falls under the "CMC-based" category of collective action. Internet users conduct their own investigation of a particular case and share their discoveries with other users on the internet. The search largely takes place online and would not be feasible if not for the CMC. This research is built on the theoretical perspectives and approaches to CMC and collective action presented above. The following section will discuss the method employed for the analysis of the role of CMC in the formation of collective action in China in the context of the HFSE phenomenon.

4. Methodology

This part will delve into some practical aspects of the thesis. It will explain the research methods that I employed to conduct the analysis of the CMC and the formation of collective action in China in the context of the HFS engine phenomenon. First, it is important to establish a clear time frame of the research. It will focus on the period of the last nineteen years since the HFSE started to take

its shape. The year 2001 marked the first episode of the HFSE when a man posted a photo of a young woman (minor celebrity) claiming her to be his girlfriend on a Chinese online forum and entertainment website *Mop.com*. Shortly after, a number of internet users performed an extensive online search to reveal her identity. One of them managed to identify her and posted her personal information online, thus discrediting the man's claim (Wang et al. 2010, 46). For the purposes of this research, I have selected two notable cases that attracted national (and international) attention and caused a major public outcry in China in the form of the HFSE. Specifically, the South China tiger scandal (2007) and the search for "Liaoning Girl" (2008). These cases were broadly discussed on the online forums, as well as in the official news reports. There was a massive public involvement in the debate on each case, which makes them relevant in the context of this research. These cases represent a situation where the collective action of internet users in the form of the HFSE had an actual impact on the cases' outcomes. I will collect qualitative research data by reviewing online postings and media reports regarding the aforementioned cases. Then, I will analyse the gathered data in the context of the formation of collective action through the CMC. I will examine the relevant posts and discussion threads published on the popular Chinese internet forum *Tianya*, where the discussions of the cases took place. I will also compliment them with the news reports from the Chinese official media outlets.

Following the example of Yu Xiu (2012), I will analyse these cases using the concepts of leadership, division of labour, and collaborative filtering. In her work, Yu conducted a textual analysis of the HFSEs by examining the postings on the Chinese online discussion boards. She studied the group formations, dynamics, communication, and behaviour in the context of the HFSE by focusing on these three concepts. Yu argued that textual communication among the users of online forums may create group norms and operating procedures. Furthermore, it may help to maintain them once these norms are established (Yu 2012, 15). Yu applied the concepts of leadership, division of labour, and collaborative filtering to three cases of the HFSE in China.

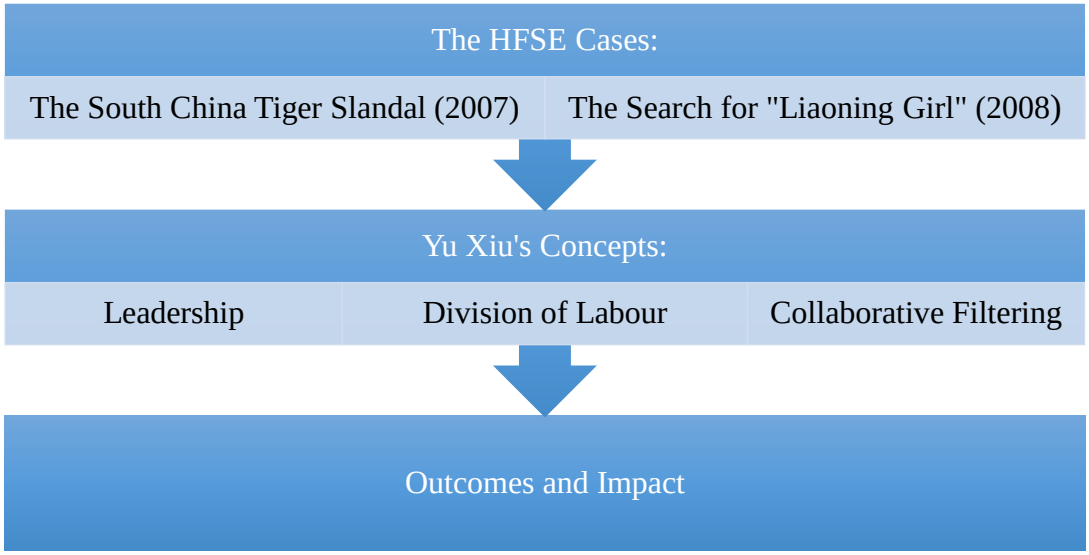
In each case, she identified the division of labour among internet users by classifying their posts in terms of "Initiator, Convener, and Important Contributor". The Initiator is the starter of the case, the first person who initiates the discussion by presenting new ideas in order to attract people's attention and start the searching process. In response to the Initiator's posts, a Convener usually calls for help or justice and urges others to join the process. Sometimes, a Convener is the one who offers some kind of reward for useful information regarding the case. Then, there is an Important Contributor who provides this key information, which often changes the direction of the case (ibid., 11). In her study, Yu also considered the Initiators, Conveners, and Important Contributors to be the leaders of the HFSE cases as they perform task roles in the group and have a greater influence on other participants (ibid., 11). Then, Yu applied the central characteristics of

the three major styles of leadership, namely Authoritarian, Democratic, and Laissez-Faire to the group leaders of the HFSE. She identified the Initiator's style to fall under the category of Democratic, the Convener's style to be a mix of Democratic and Authoritarian, and the Important Contributor's style to be closer to the Laissez-Faire leadership (ibid., 52-3). The third concept Yu used to analyse the cases was collaborative filtering. It refers to the users' filtering and collection of data, which is mainly based on a collection of similar users' preferences and reactions. Hence, collaborative filtering allows the HFSE members to base their thinking and decision-making on the opinions of others. Yu suggests that as communication process develops over time, the group members may get access to only one kind of information (ibid., 14).

In the context of this thesis, I will apply Yu Xiu's concepts to analyse two cases of the HFSE. However, instead of focusing solely on a communication-based textual analysis of group behaviour (ibid., 62), I will employ these concepts to analyse the CMC in order to demonstrate how it reflects the formation of collective action and social activism in China. The examination of the dimensions of leadership, division of labour, and collaborative filtering in each case will allow me to analyse the nature of the formation process of collective action, that the internet facilitates. I will also evaluate the impact of such collective action on the development of the selected HFSE engine cases, by discussing the accomplishments of these searches. Figure 1 shows the layout and the key focus points of this research.

Even though this research methodology is applicable to this type of analysis, there are various limitations that ought to be discussed as they might influence the overall results. Considering the extensive nature of the HFSE phenomenon, this research includes only two cases, which limits the scope of the analysis. Therefore, the reader should keep this in mind to avoid the issue of overgeneralisation. The choice of these two cases is explained by their vast popularity and major public involvement in China. However, in order to prevent the selection bias, more cases should be included in the analysis. For instance, one major case from each year since the beginning of the HFSE might provide a deeper understanding of the group dynamics in terms of the formation of collective action. Furthermore, as Yu has mentioned, there is a problem of lost information. Some of the information regarding the cases (e.g. original videos, comments) are no longer available online due to the privacy issues or the morality reasons (as such content is often too graphic or violent; ibid., 27). If this is the case, it will be addressed in the Findings and Discussion part. For the future research, more cases of the HFSE should be included in the analysis in order to provide a broader and more in-depth discussion of the role of the CMC in the formation of collective action in China.

Figure 1. Layout of the research



5. Findings and Discussion

5.1. Case 1: The South China Tiger Scandal (2007)

The South China tiger is a critically endangered subspecies of tiger native to the environment of southern China. In 2007, a hunter in Shaanxi Province Zhou Zhenglong claimed to have encountered a live wild animal in the forest. His photographs of the tiger were published in various Chinese and international media outlets and posted online. They were even published in the American *Science* academic journal under the title "Rare-Tiger Photo Flap Makes Fur Fly in China" (Science 2007). The photographs stirred heated debates as the species was considered extinct in the natural environment. They were widely discussed the internet users around the world who sought to prove or disprove the authenticity of the photos. People were offering their expertise in the domains of zoology, botany, photography, and even geometry to determine whether the pictures were real or fake. Finally, one of the HFSE participants managed to discredit the hunter's claim. The photograph of the "South China tiger" turned out to be a calendar cover painting that Zhou copied and edited to look like the original photograph (Wang et al. 2010, 46). Before it has been proven to be forged, Zhou was backed up by certain officials in the Shaanxi local government. In October 2007, the Shaanxi Forestry Bureau held a press conference, during which the "discovery" was presented and the hunter's photographs released to the press. Despite the immediate speculations about their credibility, the officials saw this as a big political achievement

as well as a potential source of financial funding, which explains why they neglected to properly investigate. Consequently, what could have been a minor issue turned into a national scandal due to the massive public involvement in the form of the HFSE. In 2008, Zhou Zhenglong was sentenced to two and a half years in prison for fraud and many Shaanxi officials were dismissed (Lei and Zhou 2016, 109).

In order to analyse the formation of collective action sparked by this case, I chose to review the online postings published by the internet users within the period of one year, since Zhou's photographs were released to the press in October 2007 until the government officially acknowledged that they have been forged and Zhou's further conviction in 2008. The postings within this period reflect the development of the case and help to establish the connection between the collective action in the form of the HFSE and the outcomes of the case. For this analysis, the online posts are retrieved from the Chinese popular internet forum *Tianya*, where a lot of heated discussions about the case took place. Therefore, in the context of this research, the debates on the *Tianya* forum reflect the development of this case as well as the formation of the HFSE collective action.

The discussion of the case on *Tianya* forum started right after Chinese official media outlets reported on the discovery and published Zhou's photographs of the tiger. The user under the name of "First Impression" (*di yi yinxiang1* 第一印象1) can be identified as the Initiator of the discussion, who first raised doubts about the South China tiger claims and questioned the authenticity of Zhou's photographs. The Initiator's post titled "The wild South China tiger made of cardboard can pass the expert examination, but it can't fool the netizens" was published on October 17, 2007. He quoted the CCTV's news broadcast (October 13, 2007) on the discovery and then, questioned the reliability of these claims. The Initiator wrote: "It seems fake from the first sight. The light, expression, colour, environment… Has it really passed the examination of the South China tiger experts and the photography experts? Have they checked it with their eyes closed?". Then, the Initiators proceeded to explain how such pictures can be created with the help of image editing software programs, such as Photoshop. The author of the post stated: "At this point, the truth is clear, the so-called newly discovered South China tiger photos were just taken with a flat tiger image in the grass. We see fakes everyday, but such fakes are rare". Finally, the Initiator personally called out Zhou Zhenglong by calling him a fraud. He added: "If you can't rent a real tiger, rent a tiger specimen. If you don't want to spend money on a specimen, make a cloth tiger. If you can't make a cloth tiger, draw several tiger paintings from different angles. If you use only a flat tiger statue, it is clear that it is fake. You guessed the experts' IQ, but you failed to take into account the IQ of the netizens" (Tianya 2007a).

The discussion thread started by the Initiator received 309055 "clicks" and 11079 replies. After his main post, the Initiator actively participated in the discussion by commenting on the posts of other users, providing new updates and additional information on the case to support his initial argument. Throughout the whole thread, he left around 400 replies. "First Impression's" behaviour on the online forum demonstrates the example of leadership in the HFSE. He did not only initiate the discussion by attracting people's attention to the case but also kept his leading role throughout the thread. The Initiator supported his leadership by leaving encouraging replies to the users' attempts to disprove the photographs and posing provocative and rhetoric questions to stimulate the discussion. The first couple of replies to the Initiator's post have not expressed any real concern or the desire to pursue the truth further. Then, the Initiator reposted the media report on the official stance of the Shaanxi Provincial Forestry Department regarding the photographs, which refuted the netizens' "hypothesis' of the photo fraud (China Internet Information Center 2007). This encouraged other users to share their opinion on the matter. The majority of responses agreed with the Initiator: "It's nothing more than a way to trick the country to give away money" (comment 13), or "I don't think it's true. This tiger is not as vigilant as the real wild tiger" (comment 14). Others expressed some doubts: "The refutation of the Shaanxi Provincial Forestry Department is quite powerful. I wonder if the author has anything more convincing?" (comment 15).

As the case developed and more users engaged in the discussion, the doubts about the Initiator's claims have not disappeared entirely. However, when someone was questioning the Initiator's reasoning more people would argue on his behalf by presenting new evidence and taking apart the photographs even further. Over time, the number of such comments decreased as the majority of users operated under the assumption that the photographs have been forged. This process is explained by collaborative filtering. Eventually, the focus of discussion shifted from the criticism of Zhou Zhenglong and the Shaanxi Forestry Department to the broader criticism of China's political regime, the government control over media and law, and the difficulty to obtain the truth (Lei and Zhou 2016, 115). The users began to question the government's credibility more often starting from the third page of the threat. The following claims appeared in the discussion: "Unexpectedly, in China, the credibility of the government has actually reached its point" (comment 201). Lei and Zhou's visual representation of how *Tianya* users conceptualised problems related to the tiger scandal reflects this shift (ibid., 115; see Figure 2). What started as the discussion of the photographs transformed into a wider political debate.

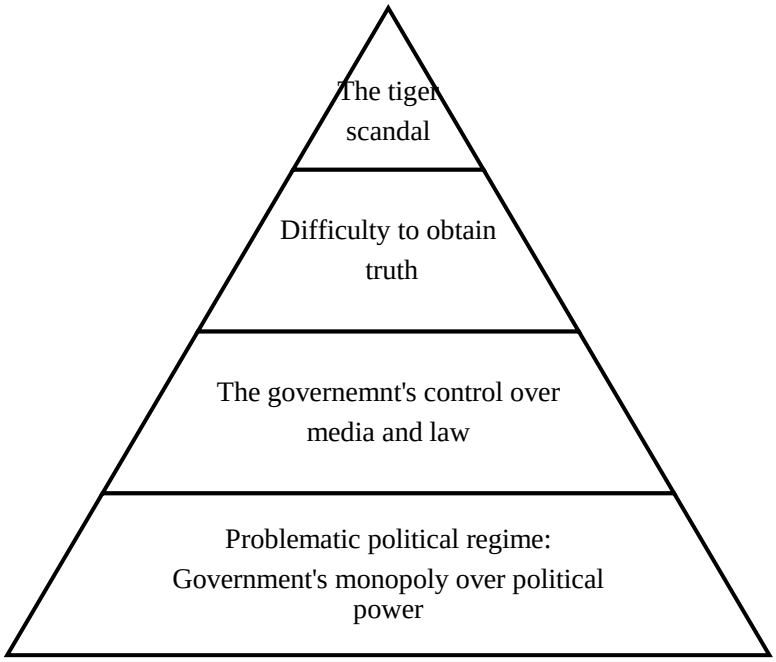
Regarding the division of labour in this HFSE, many users demonstrated their full support of the Initiator's claims by posting short messages of approval and encouragement, such as "The author is great! Saluting to you first… The post is here, and the truth is revealed!". Some can be classified as the opinion givers, their posts included a strong statement (e.g. "The tiger must be

fake!!!"; comment 347) without any supporting argument, while others offered their own analysis of the situation, usually followed by the examination of the media report on the case. The Conveners were mostly the last group, they urged other people to investigate in order to provide conclusive evidence on the nature of the photographs and the government's "cover-up".

The Important Contributors of this HFSE were the users under the names of "Little Fish" (*xiao yu bo bo bo* 小鱼啵啵啵) and "Panzhihua xydz" (*panzhihua xydz* 攀枝花xydz; hereinafter referred to as IC1 and IC2). On November 9, 2007, IC1 published a post followed by a discussion thread of 553 replies titled "The original picture of the tiger's head has been found. Zhenping tiger is not a South China tiger, but an Indochinese tiger" (Tianya 2007b). IC1 posted a picture of a tiger claiming that his friend found the original source of the tiger photographs. IC1 rejected the idea of the "cardboard tiger" by claiming that Shaanxi experts identified the tiger on the photographs to be real because it was indeed real, just not a South China tiger. He argued that it was an Indochinese tiger and the frauds used this official examination to distort the truth. IC2 supported IC1's claims by stating: "The tiger is fake. Today I took a closer look at a tiger painting hanging on the wall in my house. It's the same except for the ears. Even the lines are the same". He asked to add him on *Tencent QQ* (instant messaging software), so he can send the picture of the painting. These posts caused a big reaction among *Tianya* users. People started to refer to their findings as evidence of the forgery. In the discussion thread started by the "First Impression", one user wrote: "Little Fish and Panzhihua xydz's discovery puts an end to the paper tiger myth. Let's go and worship" (comment 4789). The 'netizens' considered it to be a great win of the HFSE investigation.

On February 4, 2008, the Shaanxi Provincial Forestry Department issued an official public apology for "sloppy release of important information on the discovery of the South China tiger" during the press conference on October 12, 2007. The letter of apology said: "We did not perform the approval procedures in accordance with the stipulated procedures for this press conference, nor did we conduct an on-site investigation of the photo shoot of the South China Tiger. In the absence of physical evidence, we hurriedly discovered the significance of the South China Tiger. Such action reflects the problems of floating work style and loose work discipline in our office" (Sina 2008). On September 27, 2008, Zhou was sentenced to two and a half years in prison for fraud and illegal possession of firearms. The collective action of internet users in the form of the HFSE led to the discovery of the original source of the photograph. Furthermore, it drew international attention to the case and pressured the government to officially acknowledge the forgery and apologize for its "sloppy" actions. The CMC among individuals on the internet public forums stimulated the formation of collective action for the purposes of obtaining the truth.

Figure 2. How the public in Tianya conceptualised problems related to the tiger scandal (Lei and Zhou 2016, 115).



5.2. Case 2: The Search for "Liaoning Girl" (2008)

The 2008 Sichuan earthquake occurred on May 12 in southwestern China killing over 69000 people and leaving thousands injured or missing. On May 19, the government announced three days of national mourning for the victims of the earthquake. Following the incident, numerous rallies were held across the country. The participants chanted "China, you can do it!" (*Zhōngguó jiāyóu* 中国加油) to express their sadness and demonstrate their solidarity and unity. The earthquake sparked nationalist sentiment, which was encouraged by government and nationalists (Gorman 2017, 193). In the midst of these events, a video of a young woman cursing earthquake victims appeared on *YouTube*, a video-sharing online platform. A nearly 5-minute video was published on May 20 and caused a massive public outrage on the Internet. Millions of Chinese Internet users posted furious messages accusing the girl of "no humanity", "insulting the victims", and calling her names (China Internet Information Center 2008).

Shortly after, the Chinese internet users managed to identify the person on the video as a 21-year-old woman from Shenyang, Liaoning Province named Gao Qianhui (alias name Zhang Ya). In the video, she complained that the national mourning announced by the government prevents her from playing her favourite game. Her anger was not only directed at the government but mostly at the earthquake victims. Gao blamed them for the Net shut-down and decided to express her feelings by uploading her hate speech on the Internet (Poerksen and Detel 2014, 105-6). She said: "I turn on the TV and what do I see? Dead bodies, injured people, corpses, rotten

bodies, all the crazy acts you guys are putting up. It's not that I want to watch these things. I have no choice". According to Gao, the earthquake "was not strong enough". She added: "Don't you think you guys deserve it?". Finally, Gao stated: "F*ck. The earthquake might as well rock all you guys to death. All you have given us are catastrophes. All your children are jinxes" (Shanghaiist 2018). Right after the video was published, it was quickly reposted on all important Chinese discussion forums and duplicated on *YouTube*. Furthermore, several variants of the video were uploaded and even translated for the international audience. Some users also produced video replies to express their anger with Gao Qianhui. At least a dozen of such videos appeared on *YouTube* during the first night after the publication (Poerksen and Detel 2014, 108).

In the context of this thesis, I chose to analyse a discussion thread started on *Tianya* internet forum on May 21, 2008, titled "[Proposal] All Netizens Criticise Liaoning Girl Who Insulted Victim of Sichuan Disaster in 4 Minutes and 40 Seconds" (Tianya 2008). The Initiator of this thread also happens to be the Initiator of the HFSE for the "Liaoning Girl" (*Liáoníng nǚ* 辽宁女) from the video. The internet user under the name of "neoaniko" attracted people's attention to the video and initiated the search for "Liaoning Girl". He wrote: "I accidentally found this video on the internet today and watched it for a few seconds. I am extremely angry. While the people of Sichuan in China are suffering from a devastating disaster, such cold-blooded and unpatriotic people appear on the Internet. How can we teach her and her parents a lesson? In the past few days, I have been watching TV reports about the victims. As a man, I burst into tears, and this woman is so indifferent. So, I propose the following initiative to all my friends on Tianya: try to find out the information about this woman and ask her parents to take her to apologise to the people of this country! If there are any violations of the law in her actions, friends in the legal profession can follow their responsibility and punish her through legal channels. Hereby I propose this search! I hope my friends will support it!" (Tianya 2008).

The discussion thread started by the Initiator received 109255 "clicks" and 1291 replies. Generally, people were outraged and expressed their anger in the comments section below the post. Throughout the thread, the Initiator continued to be the leader of the discussion by directing the conversation and providing additional follow-up information on the case. He also encouraged people to not stop with the investigation and to do whatever it takes to find this "Liaoning Girl": "I think our netizens can no longer be silent and angry while watching this alone… It's time to do it… For those who suffer…" (comment 6); "For those fellow citizens, brothers and sisters in Sichuan, please let's find this ignorant woman together… I beg you here!!!" (comment 306). As the tension kept rising and more users demanded Gao's blood, the Initiator urged participants to "calm down" and carry on with the search. Furthermore, the Initiator also actively participated in this HFSE investigation. He repeatedly has been in contact with the police to report the video and

asked others to do the same: “I am calling to report the crime. I hope netizens can work together to do it as well. Do something other than donating money to Sichuan people…” (comment 78); “024-89872288… call to report… never stop until you find this person!!!” (comment 104). The Initiator’s behaviour also reflects the key characteristics of the Convener. Not only he brought people’s attention to the case, but he also actively encouraged other people to join the search and called for help and justice. Even though “neoaniko” managed to maintain his leading position as an Initiator and a Convener throughout the discussion, there were also so-called secondary Conveners that expressed their solidarity with “neoaniko” and urged others to follow his example in the posts such as the following: “Don’t give up, everybody keep pushing until you find this little b*tch” (comment 178); “Never let this thing go, and let this woman get the lesson she deserves, and at the same time educate other brain-dead people who are similar to her!” (comment 506); “Everyone put this post up, this woman lacks education, she must apologise in front of the people of this country!!!!” (comment 91).

The majority of responses reflect the division of labour in this discussion thread. First, there were posts that supported the Initiator’s proposal, their responses were usually very emotional. Such comments were short and often included strong and profane language: “F*cking die”, “really inhuman”, “scum”, “humanity is destroyed”. Then, there were those who called for justice, retribution and urged others to join the search. However, their understanding of justice and punishment differed. While some people claimed that “Liaoning girl” and her family must be executed or expelled from the country, others urged to not pull her family into this and suggested that she needs to be educated rather than simply punished. Some users also argued that they do not want to punish “Liaoning Girl”, they want her to apologise. Second, there were internet users who took action and provided their analysis of the media reports or relevant criminal laws applicable to this case. They shared the results of their investigation with everyone else: “[…] I have already called the police. They said that they are already investigating the case. If it’s true, they must take it very seriously” (comment 87); “[…] analytical suggestions: 1. Insulting people on the internet should bear legal responsibility; 2. Depending on the severity of the damage, consult the lawyer and decide whether to file for a civil or criminal complaint; 3. Pay attention to collecting and retaining the evidence; 4. In addition, you can also file a complaint for psychological damage” (comment 110); “Just now I called the Yangwang police detachment […]. The man who answered the phone was very kind and had good attitude. […] He said that this matter was not under his jurisdiction, but according to him, this scumbag had already been arrested […]” (comment 304). Finally, there were internet users who offered the most valuable information that often changed the direction of the case, they can be characterised as Important Contributors.

The general tone of the discussion indicated people's deep dissatisfaction with the actions of one individual. This tone was set and maintained throughout the thread by the leaders of the discussion, first by the Initiator, then by the Conveners and the Important Contributors. The process of collaborative filtering reflects the overall direction of the debate. A few users tried to find a reasonable explanation for Gao's behaviour, they did not seek to justify it, rather they focused on the underlying causes that provoked this young woman to express her feeling in this way. These users tended to identify violent online games as the source of the problem. They assumed that Gao's outburst was triggered by her inability to play her favourite game during the national mourning and proposed to block this game to stop its harmful influence. However, these sentiments were largely overwhelmed by the users' desire to find and punish her.

The Important Contributors of this case were the users who first identified the girl in the video. They found and posted online her name, ID number, age, address, occupation, family status and other personal information. Then, this information was quickly disseminated among the major internet forums and reported to the police. Some participants of the HFSE claimed that it was their actions that lead to the arrest of Gao (Gorman 2017, 194). At this point in the analysis, it is difficult to say who exactly revealed Gao's identity first as some of the original posts were deleted due to the privacy concerns. Therefore, the Important Contributors of this case are presented in the context of this discussion thread. As the search for the "Liaoning Girl" began, the internet users first identified her as Zhang Ya. Subsequently, a number of messages and declarations of remorse appeared on the internet posted by people claiming to be Zhang Ya's family. These messages were still using the wrong presumed name and therefore, identifiable as fakes (Poerksen and Detel 2014, 109-10). For instance, an apology letter from her father stated: "Zhang Ya is my daughter, and as parents, we have failed in educating her. […] I can only say to the people of Sichuan, the people of China: I'm sorry! Zhang Ya is almost in emotional collapse… please, please don't push her any more." The person who claimed to be her brother wrote: "Hello to all netizens, I am Zhang Ya's brother. […] After watching this video, to tell you the truth, I'm also disgusted… but she really didn't mean it in a malicious way, it was just an impulsive moment of frustration that led her to say what she said: the world's most disgusting, poisonous words" (Shanghaiist 2018). Before it was clear that these messages were fake, the letters of apology were widely discussed online.

The first Important Contributor (IC1) in the discussion thread started by "neoaniko" was the user, who first claimed that Zhang Ya was not her name. The user "lilyan118" shared this information on *Tianya* after she called the police: "The policeman said her surname isn't Zhang. I want to thank this policeman for his hard work […]" (comment 421). After "lilyan118" announced her discovery, the Initiator asked her to elaborate: "Excuse me, what's her surname? Do you have any specific information? Did the police say how are they going to deal with that?" (comment

443). Other users also began to act on the IC1's information: "Just now my colleague called the internet police. Their reply was similar to the information provided above" (comment 444); "Contacted the Sujiatun Public Security Branch of Shenyang City by phone. Zhang Ya is an alias, but the QQ number previously announced by the netizens is true" (comment 565).

Then, another HFSE participant, who can be identified as the second Important Contributor (IC2) of this case shared the real name of the "Liaoning Girl". "Yhh_0521" wrote: "Previously, Zhang Yaba (removed by Baidu) saw that someone had shared her QQ account in Baidu Post Bar. It showed that her real name is Gao Qianhui, not Zhang Ya. I just saw that someone posted her description in the QQ friend space, and also called her Qianhui." Then, the IC2 shared two links. The first one was the picture of Gao's QQ number and the second link showed the comment posted by her friend, which confirmed her identity. He urged other users to see for themselves: "The above link comes from 'Gao Qianhui' in Baidu Bar, you can check it out" (comment 862). The IC2 complimented the IC1's finding. The information that the IC2 provided led to the discovery of more detailed information about Gao, which can be seen later in the discussion thread.

The third Important Contributor (IC3) in this discussion thread was the user "xiaoxie456852", he provided the evidence of Gao's arrest, thus confirming the rumours: "This b*tch has indeed been arrested, here is the evidence. Everyone can calm down now, the police know about it. Check the following network security link […]. Use this login […] and this password […] to access the arrest report" (comment 864). Following this post, several users shared various media reports about Gao's arrest.

On May 21, only after one day since the publication of the video, Gao was arrested. The police apprehended her in Shenyang, allegedly in the internet café where she recorded the video. However, her fate remains unclear. According to some sources, the police did not specify what laws had been broken. There are media reports that state that Gao was accused of "malicious gossip", while others claim that she was arrested "on charges of endangering public stability" (Poerksen and Detel 2014, 111-12). Despite the lack of clarity regarding Gao's arrest, this case demonstrates the power of the HFSE. The fact that the police acted on the information gathered by internet users demonstrates a certain willingness of the government to allow ordinary citizens to address some problems on their own. In this case, the support of the government empowers citizens to collectively judge other citizens and even to propose ways to punish them (Herold and Marolt 2011, 135). The HFS of the "Liaoning Girl" demonstrates the formation of collective action and social activism in China. The CMC, that the internet facilitates, allows citizens to engage in the discussion, share their opinions and concerns, and in this case, launch a massive public search for one person in order to achieve something they refer to as "justice".

6. Conclusion

In conclusion, this thesis examined how does the CMC, that the internet facilitates, reflect the formation of collective action in China. In order to answer this research question, I analysed two cases of the HFSE that caused a major public outcry on the Internet in China, namely, the South China tiger scandal (2007) and the search for "Liaoning Girl" (2008). Following the example of Yu Xiu (2012), I analysed each case by applying the concepts of Leadership, Division of Labour, and Collaborative Filtering to demonstrate the formation of collective action in the context of the HFSE. Both searches were launched by Chinese Internet users who sought to track down the targets in order to achieve "justice". The first case was triggered by the controversy around the claims about the South China tiger photographs. The participants suspected them to be falsified and initiated the search for the original source of the pictures. Finally, one of the internet users found the source of the photographs to be a calendar poster and shared his finding online, thus proving that the photographs were fake. The second case was triggered by the video posted on YouTube where a young woman curses and insults the victims of the Sichuan earthquake. Within a day after the release of the video, she became the target of the HFSE. The users launched a massive public search for "Liaoning Girl" on the Internet and eventually managed to identify her and share the woman's personal information online (e.g. name, address, ID number, family status).

In the context of this research, I analysed various discussion threads on Chinese online forum *Tianya* and complemented them with relevant media reports. Both cases demonstrated similar patterns in terms of formation of collective action and the following search for the targets. The HFSEs started when the Initiator attracted publish attention to the case and began the discussion by launching the online search. Some users took the role of the Convener, they called for justice and urged everyone to join the search. Others conducted their own investigation and shared the results of their findings with the rest. These users were classified as the Important Contributors, their findings often changed the direction of the case and had a significant impact on its results. The participants who assumed these three roles established themselves as the leaders of the HFSE and maintained their position throughout the investigation. The process of collaborative filtering was reflected in the general shifts in the direction of the discussions.

Both of the HFSEs had a major influence on the cases' overall outcomes. The collective action of the internet users regarding the case of the South China tiger claims pressured the local government to officially acknowledge its mistake and apologise for its "sloppy" release of information about the discovery without checking the photographs' authenticity. Furthermore, this HFSE drew international attention to the incident. The debate on this case highlighted the general difficulty of obtaining the truth in China. The HFSE for the "Liaoning Girl" also had an impact on

the case's outcomes. The participants of the search informed the police about the video and provided them with information which led to the eventual detention of the woman.

Based on the results of this analysis, it can be concluded that the CMC, that the internet facilitates, plays a significant role in the formation of collective action in China. Through the use of CMC technologies, such as online forums, citizens were able to mobilise in the form of the HFSE. Moreover, their collective action and social activism in the context of the HFSE had an actual impact on the cases' outcomes. The CMC provides a new medium of communication, which in turn facilitates the formation of collective action.

Bibliography

Chen, Xi. 2012. *Social Protest and Contentious Authoritarianism in China*. New York: Cambridge University Press.

China Copyright and Media. 2015. "Internet User Account Name Management Regulations." Accessed May 1, 2020. https://chinacopyrightandmedia.wordpress.com/2015/02/04/internet-user-account-name-management-regulations/.

China Internet Information Center. 2007. "网友质疑华南虎照片有假 陕西省林业厅驳斥(图) [Netizens' Concerns Regarding the South China Tiger Photo Refuted by the Shaanxi Provincial Forestry Department (Figure)]." Accessed June 11, 2020. http://www.china.com.cn/city/txt/2007-10/17/content_9068643.htm.

China Internet Information Center. 2008. "Where Angels and Devils Meet – China's Internet in Quake Aftermath." Accessed June 13, 2020. http://www.china.org.cn/china/wenchuan_earthquake/2008-05/23/content_15443260_3.htm.

Descamps, Maud. 2020. "China's Cybersecurity Legislation: A Paper Tiger or an Institutionalized Theft?" *Institute for Security & Development Policy*: 1-8.

Ess, Charles. 1996. *Philosophical Perspectives on Computer-mediated Communication*. Albany: State University of New York Press.

Gao, Li, and James Stanyer. 2014. "Hunting Corrupt Officials Online: The Human Flesh Search Engine and the Search for Justice in China." *Information, Communication & Society* 17, no. 7: 814-29.

Gao, Li. 2016. "The Emergence of the Human Flesh Search Engine and Political Protest in China: Exploring the Internet and Online Collective Action." *Media, Culture & Society* 38, no. 3: 349-364.

Gorman, Patrick. 2017. "Red Guard 2.0: Nationalist Flesh Search in China." *Journal of Contemporary China* 26, no. 104: 183-98.

Herold, David Kurt, and Peter Marolt. 2011. *Online Society in China: Creating, Celebrating, and Instrumentalising the Online Carnival*. London: Routledge.

Herring, Susan C. 2004. "Slouching Toward the Ordinary: Current Trends in Computer-Mediated Communication." *New Media & Society* 6, no. 1: 26-36.

Huang, Haifeng, Boranbay-Akan, Serra, and Ling Huang. 2019. "Media, Protest Diffusion, and Authoritarian Resilience." *Political Science Research and Methods* 7, no. 1: 23-42.

King, Gary, Pan, Jennifer, and Roberts, Margaret E. 2013. “How Censorship in China Allows Government Criticism but Silences Collective Expression.” *American Political Science Review* 107, no. 2: 326-343.

Lee, Jyh-An, and Ching-Yi Liu. 2016. “Real-Name Registration Rules and the Fading Digital Anonymity in China.” *Washington International Law Journal* 25, no. 1: 1-34.

Lei, Ya-Wen, and Daniel Xiaodan Zhou. 2016. “Embedding Law into Politics in China’s Networked Public Sphere.” In *The Internet, Social Media, and a Changing China*, edited by Jacques deLisle, Avery Goldstein, and Guobin Yang, 106-128. University of Pennsylvania Press.

Liang, Bin, and Hong Lu. 2010. “Internet Development, Censorship, and Cyber Crimes in China.” *Journal of Contemporary Criminal Justice* 26, no. 1: 103-20.

Lu, Wei, Du, Jia, Zhang, Jin, Ma, Feicheng, and Taowen Le. 2002. “Internet Development in China.” *Journal of Information Science* 28, no. 3: 207-23.

Meng, Bingchun. 2011. “From Steamed Bun to Grass Mud Horse: E Gao as Alternative Political Discourse on the Chinese Internet.” *Global Media and Communication* 7, no. 1: 33-51.

National Radio and Television Administration. “总局职责 [Duties of the General Administration].” Accessed June 10, 2020. http://www.nrta.gov.cn/col/col2013/index.html.

Nowak, Kristine L, Watt, James, and Joseph B. Walther. 2009. “Computer Mediated Teamwork and the Efficiency Framework: Exploring the Influence of Synchrony and Cues on Media Satisfaction and Outcome Success.” *Computers in Human Behavior* 25, no. 5: 1108-1119.

Olson, Mancur. 1971. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard University Press.

Pang, Cuiming. 2008. “Self-censorship and the Rise of Cyber Collectives: An Anthropological Study of a Chinese Online Community.” *Intercultural Communication Studies* 17, no. 3: 57-76.

Poell, Thomas, De Kloet, Jeroen, and Guohua Zeng. 2014. “Will the Real Weibo Please Stand Up? Chinese Online Contention and Actor-Network Theory.” *Chinese Journal of Communication* 7, no. 1: 1-18.

Poerksen, Bernhard, and Hanne Detel. 2014. *The Unleashed Scandal: The End of Control in the Digital Age*. Andrews UK Limited.

Priante, Anna, Ehrenhard, Michel L., Van Den Broek, Tijs, and Ariana Need. 2018. “Identity and Collective Action via Computer-mediated Communication: A Review and Agenda for Future Research.” *New Media & Society* 20, no. 7: 2647-669.

Qin, Ben, Strömberg, David, and Yanhui Wu. 2017. “Why Does China Allow Freer Social Media? Protests versus Surveillance and Propaganda.” *Journal of Economic Perspectives* 31, no. 1: 117-140.

Roberts, Margaret E. 2018. *Censored: Distraction and Diversion Inside China's Great Firewall.* Princeton University Press.

Schneider, Florian. 2018. *China's Digital Nationalism*. Oxford Studies in Digital Politics.

Science. 2007. ““Rare-Tiger Photo Flap Makes Fur Fly in China.” Accessed June 14, 2020. https://science.sciencemag.org/content/318/5852/893.1.

Shanghaiist. 2018. “Online Lynch Mobs Find Second Post-Quake Target; Liaoning Girl Detained by the Police.” Accessed June 13, 2020. https://shanghaiist.com/2008/05/22/online_lynch_mo/.

Shi-Kupfer, Kristin, and Mareike Ohlberg. 2019. “China’s Digital Rise: Challenges for Europe.” *Mercator Institute for China Studies*, no.7: 1-55.

Sina. 2008. “陕西省政府通报批评草率发布华南虎信息事件 [Shaanxi Provincial Government Addressed the Hasty Release of the Information Regarding the South China Tiger Discovery].” Accessed June 12, 2020. http://news.sina.com.cn/c/2008-02-05/000014903191.shtml.

Statista. 2020a. “Number of Internet Users in China from December 2008 to March 2020.” Accessed May 2, 2020. https://www.statista.com/statistics/265140/number-of-internet-users-in-china/.

Statista. 2020b. “Number of a Monthly Active WeChat Users from 2nd Quarter 2011 to 1st Quarter 2020.” Accessed May 21, 2020. https://www.statista.com/statistics/255778/number-of-active-wechat-messenger-accounts/.

Stephens, Keri K. 2007. “The Successive Use of Information and Communication Technologies at Work.” *Communication Theory* 17, no. 4: 486-507.

Tai, Zixue. 2015. “Networked Resistance: Digital Populism, Online Activism, and Mass Dissent in China.” *Popular Communication* 13, no. 2: 120-131.

The State Council Information Office. “About SCIO.” Accessed June 10, 2020. http://english.scio.gov.cn/aboutscio/index.htm#:~:text=The%20major%20function%20of%20the,%2C%20technology%2C%20education%20and%20culture.

Tianya. 2007a. “纸板做的野生华南虎,能通过专家法眼鉴定,却过不了网友慧目置疑 [The Wild South China Tiger Made of Cardboard Can Pass the Expert Examination, But It Can’t Fool the Netizens].” Accessed June 11, 2020. http://bbs.tianya.cn/post-free-1030532-1.shtml.

Tianya. 2007b. “老虎头原始图已找到,镇坪老虎原形不是华南虎,而是印支虎 [The Original Picture of the Tiger’s Head Has Been Found. Zhenping Tiger is Not a South China Tiger, But an Indochinese Tiger].” Accessed June 12, 2020. http://bbs.tianya.cn/post-free-1044130-1.shtml.

Tianya. 2008. “[网络互助][倡议书]全线网民狙杀＂辽宁女4分40秒狂骂四川灾区人民＂ [Proposal. All Netizens Criticise Liaoning Girl Who Insulted the Victims of Sichuan Disaster in a 4 Minutes and 40 Seconds Video].” Accessed June 13, 2020. http://bbs.tianya.cn/post-help-170436-1.shtml.

Van Zomeren, Martijn, Postmes, Tom, and Russell Spears. 2008. “Toward an Integrative Social Identity Model of Collective Action: A Quantitative Research Synthesis of Three Socio-Psychological Perspectives.” *Psychological Bulletin* 134, no. 4: 504-35.

Walther, Joseph B. 2011. “Theories of Computer-Mediated Communication and Interpersonal Relations.” In *The Handbook of Interpersonal Communication*, edited by Mark L. Knapp and John A. Daly, 443-479. SAGE Publications.

Wang, Fei-Yue, Zeng, Daniel, Hendler, James A., Zhang, Qingpeng, Feng, Zhuo, Gao, Yanqing, Wang, Hui, and Guanpi Lai. 2010. “A Study of the Human Flesh Search Engine: Crowd-Powered Expansion of Online Knowledge.” *Computer* 43, no. 8: 45-53.

Wu, Jingsi Christina, and Kara S. Alaimo 2018. “Social Media in Mainland China: Weak Democracy, Emergent Civil Society.” *Oxford Research Encyclopedia of Communication*: 1-27.

Yang, Guobin. 2009. “China Since Tiananmen: Online Activism." *Journal of Democracy* 20, no. 3: 33-36.

Yates, Mathew, and Reza Hasmath. 2017. “When a Joke Is More than a Joke: Humor as a Form of Networked Practice in the Chinese Cyber Public Sphere.” *The Journal of Chinese Sociology* 4, no. 1: 1-14.

Yu, Xiu. 2012. “Textual Analsysis of the Human Flesh Search Engine: A Special Case of Online Groups.” Master Thesis, The Florida State University College of Communication and Information.

Zhang, Yang, and Hong Gao. 2016. “Human Flesh Search Engine and Online Privacy.” *Science and Engineering Ethics* 22, no. 2: 601-04.