

Internet Mediated NGO Activity: How Environmental NGOs use Weibo in China



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Abstract

This thesis uses an interdisciplinary approach that draws on both the political science and media and communication fields to analyse how Chinese environmental NGOs use the microblogging site, Sina Weibo, in their online activism. The study of NGOs and how they use the internet in China is widespread. However, in many cases, the way that NGOs in China work, both online and offline, has been analysed through the lens of traditional civil society and internet studies literature, which has mostly focused on the ability of NGOs, and the internet, to give rise to significant political change, and even democratisation.

Through a mixture of thematic, network, and organisational analysis, this thesis investigates the communicative functions, themes, and use of interactive features in posts on Weibo, including the use of hashtags, retweets and @mentions. At the organisational level, the ways that NGOs engage with different actors, both online and offline, including fellow NGOs, government departments, their followers, and potential donors are interrogated using four case studies. These analyses found that although the political space afforded to environmental NGOs in China is severely constrained, and the operations of the NGOs could not be seen as overtly activist or confrontational in the traditional sense, the NGOs do in fact retain a certain amount of autonomy and are able to carve out some political space for themselves. The findings of this thesis therefore challenge the notion that NGOs in China are co-opted organisations without autonomy from the state and suggests that there is scope for digital activism by NGOs in an authoritarian context, even though the online and offline political space they inhabit may be tightly regulated and controlled.

Declaration and Statements

DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed (candidate)

Date: 28/09/2022

STATEMENT 1

This thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

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STATEMENT 2

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ALZ	Alzheimer
API	Application Programming Interface
APP	Application
AQI	Air Quality Index
CCP	Chinese Communist Party
CCTV	China Central Television
CDB	China Development Brief
COP	Conference of the Parties
COVID	Coronavirus Disease
CSAR	Conservation Society of Amphibians and Reptiles
DAU	Daily Active Users
ENGO	Environmental Non-Governmental Organisation
EPB	Environmental Protection Bureau
GAC	Guangzhou Automobile Group Co., Ltd.
GDP	Gross Domestic Product
GONGO	Government Organised Non-Governmental Organisation
GRI	Global Reporting Initiative
HBIS	Hesteel Group
HTML	Hypertext Markup Language
ICT	Information Communication Technology
ID	Identification
INGO	International Non-Governmental Organisation
IP	Internet Protocol
IPE	Institute of Public and Environmental Affairs
KFC	Kentucky Fried Chicken
MAU	Monthly Active Users
MEE	Ministry of Ecology and Environment

MEP	Ministry of Environmental Protection
MIT	Massachusetts Institute of Technology
MOCA	Ministry of Civil Affairs
NGO	Non-Governmental Organisation
NIMBY	Not in My Back Yard
NPO	Non-Profit Organisation
NRDC	Natural Resources Defense Council
PITI	Pollution Information Transparency Index
PRC	People's Republic of China
RMB	Renminbi
SEE	Society of Entrepreneurs and Ecology
SQL	Structured Query Language
UFWD	United Front Work Department
UN	United Nations
URL	Uniform Resource Locator
USA	United States of America
USSR	Union of Soviet Socialist Republics
UTC	Universal Time Coordinated
VPN	Virtual Private Network
WTO	World Trade Organisation
WWF	World Wide Fund for Nature

Chapter 1: Introduction

Introduction

Environmental NGOs in China make widespread use of social media sites, including microblogs like Sina Weibo. How Chinese NGOs do this and incorporate social media into their operations more widely has been the focus of significant academic inquiry. However, in many cases the operations of NGOs in China have been viewed through the prism of traditional civil society and internet studies literature, which is largely concerned with the ability of NGOs, and the internet, to bring about large-scale political change. This approach fails to capture the nuance and detail of the work that many NGOs in China are involved in. This thesis therefore looks at the work that NGOs do, not from the perspective of wholesale political change, but instead argues that although the political space afforded to environmental NGOs in China is severely constrained, they are not merely co-opted organisations, cowed into submission by the state, but do in fact retain a certain amount of autonomy, which enables them to carve out some political space for themselves. The thesis also contributes to the study of digital activism more widely by indicating ways that NGOs can use digital media to expand public discourse on environmental issues within an authoritarian context. This chapter first provides some background to the research, followed by an interrogation of the research problem in broad terms, the justifications for the research, the significance, and finally a summary of the structure of the thesis.

Background

The microblogging site, Sina Weibo, currently has over 500 million monthly active users (MAU) (Azoya Group, 2022). The site attracts people posting about everything from cars to current affairs, but is mostly used for entertainment and celebrity gossip, with Chinese film and music stars topping the league tables of most followed users, often posting gossip and news to their mostly domestic audience. Part of the reason for this domestic focus amongst many Chinese internet sites is that applications that are commonly used around the world such as Facebook, Google, Twitter, and YouTube are blocked within China and are inaccessible without using a virtual private network (VPN). This has resulted in Chinese companies developing domestic alternatives, such as the messaging app WeChat and the microblogging site Sina Weibo, often with China specific innovations built in. Although much of what's posted on Weibo is frivolous entertainment, there are serious political topics

discussed and debated, and many government departments, international institutions, and NGOs, both domestic and foreign, have accounts on the platform.

Happening concurrently with this proliferation of internet users, and the expansion of internet technologies into so many facets of daily life, has been the increasing numbers of civil society organisations in China. Tai (2006) has even argued that the development of the internet and civil society in China are inextricably linked, and Yang (2003) has suggested that environmental NGOs in the country have made particularly good use of online technologies, which “has enabled Web-based green groups to practice new ways of voluntary organizing and collective action (p. 92)”. The wider fields of digital activism and civil society have long been concerned with the relative ability of the internet, and the NGOs that use it, to affect significant political change. During the Arab Spring, social media sites like Twitter and Facebook were often presented as transformative technologies that had enabled people to organise and overthrow repressive regimes (Arafa & Armstrong, 2016). In China too, there were optimistic predictions about the ability of the internet to foster greater political participation and societal change (Tai, 2006). However, as governments have found ways to crack down on online dissent, the scope for the internet to be used to check the power of authoritarian regimes has been increasingly questioned (e.g. Gladwell, 2010; Morozov, 2011). In China too, the government is now able to censor and control much of the flow of information online, so many of the overly optimistic pronouncements about the transformative powers of social media have not come to be and the narrative has shifted from information communication technologies (ICT) being a form of ‘liberation technology’ (e.g. L. Diamond & Plattner, 2012), to one of them being used by governments as a propaganda tool and a way of curtailing collective action (King, Pan, & Roberts, 2013). The legitimacy of digital activism, and the role of social media more specifically, have also been questioned (Morozov, 2009a).

Research Problem

Debates about the internet, at least in older academic literature, have tended to focus on the likelihood of the internet bringing about significant political change in the form of democratisation or the ousting of ruling elites (e.g. Larry Diamond, 2010). Debates about civil society and NGOs have tended to fall into the same patterns, with studies often focusing on politically contentious digital activism at one end of the spectrum and cyber censorship at the other, something which Leibold (2011, p. 1025) has termed the control/resistance

paradigm. Questioning and openly opposing the actions that the government takes is the norm for NGOs in democratic systems, so these approaches are not unexpected. This does, however, create a thinking amongst many who live in such systems that oppositional and confrontational activism are the only valuable hallmarks of a functioning civil society. Such an approach may not be as useful when analysing state-NGO relations in an authoritarian system such as China, where politics is often wrongly seen through the prism of two extreme positions.

More recently, several studies have tried to reframe the debate around state-NGO relations in China by investigating the relationships between NGOs and the state in different terms. The studies try to account for the more nuanced relationships that exist between government departments and NGOs in China with new appraisals of the authoritarian nature of the state. J. C. Teets (2013) has coined the term ‘consultative authoritarianism’, Spires (2011) talks of ‘contingent symbiosis’, and P. Ho and R. Edmonds (2007) use the term ‘negotiated symbiosis’. Although their approaches are quite different, they all describe a more nuanced picture of interactions between the Chinese state and society, rather than merely a top-down dictation from the state. This thesis also looks at the role that Chinese NGOs play very much within the context of the Chinese system, in which open oppositional and confrontational politics are at the fringes of what is socially acceptable in terms of questioning the legitimacy of the government, but there are other meaningful interactions that take place.

What was striking about the work of J. C. Teets (2013, 2014), Spires (2011), P. Ho and R. Edmonds (2007), and more recently, J. Wang (2015, 2019), was how their analysis of the relationships between different NGOs and the state resonated with my own experiences of working for a Chinese environmental NGO. From 2010 to 2015, I worked in Beijing for the Institute of Public and Environmental Affairs, a local Chinese environmental NGO headed by the environmentalist Ma Jun. During this period, I was able to see first-hand the kind of work that NGOs in China carry out and the kind of political constraints that they face. Having spent just over five years working in Beijing it was clear that some of the academic literature failed to capture or accurately represent the reality of the work that was being done and the relationships between NGOs and different actors, such as other NGOs, NGO supporters, government departments, and government officials. It is true that ultimate control of the NGO sector resides with the state, and in many cases a constantly shifting political landscape creates many obstacles for NGOs. However, what was less clearly articulated in the literature

was how NGOs navigated these difficulties, and overcame, or at least mitigated, some of the limitations they faced through the effective use of digital technologies and social media.

Even though many NGOs are constrained by the political and regulatory systems in which they operate, particularly online, they do carve out some political space for themselves in which they can build public awareness around environmental issues, engage with local government, businesses, and their followers. The thing that they have in common is that the activism that they undertake is nonconfrontational. Change is difficult to measure in terms of policy direction because what many organisations are advocating for is incremental. The role that social media plays in this type of nonconfrontational activism is less well understood but can provide insight into how Chinese NGOs position themselves in relation to the state, other NGOs, and their followers, and can provide valuable insight into the role of digital activism within an authoritarian context.

Significance

The significance of the research presented within this thesis arises from its contribution to the body of literature that examines the position of Chinese NGOs and their use of the internet within the greater Chinese political landscape. More specifically, the research questions the dominant paradigm that presents studies of NGOs in a binary or black and white struggle between the control meted out by the state and the resistance or pushback from NGOs to that control. As J. C. Teets (2014), Spires (2011) and P. Ho and R. Edmonds (2007) have added more nuanced voices to the more general debate around state-NGO relationships in China, a number of other studies have begun to do the same for the more specific digital world that NGOs inhabit (e.g. J. Wang, 2015, 2019). J. Wang (2019), for example, has delved more deeply into the use of the internet, and more specifically social media, by NGOs in China and has developed a framework for interrogating the role of nonconfrontational activism in the work that the NGOs carry out. What marks Wang's (2019) work out is the overt attempt to question many of the existing conceptual ideas used to interrogate how NGOs operate, especially within authoritarian contexts. This leads her to conclude that nonconfrontational activism can play a role in influencing the political landscape within China, even though that landscape is tightly controlled and managed.

J. Wang (2019) has also lamented the lack of empirical studies looking at exactly how NGOs in China use the internet and digital online technologies in their work, highlighting the need for greater research into the area and the gaps in our understanding. This thesis builds on the

ideas espoused by J. Wang (2019) and combines several methodological approaches in an innovative way to interrogate empirical data and question the conceptual underpinnings of the more traditional writing on China, the internet, and NGOs, by also suggesting that a different approach to the study of NGOs, their work, and their relationships with others is necessary. It does this by moving away from a constrained conceptual framework that is overly concerned with what Leibold (2011) has termed the control/resistance paradigm, and instead offers a more nuanced analysis of the role that Chinese NGOs play in the digital space in China, in much the same way that J. Wang (2015, 2019) has done in her analyses of Chinese NGOs across different sectors. The thesis also argues, therefore, that a more traditional, binary, reading of the politics of the internet in China is insufficient to capture the nuances and relationships that exist in the work that NGOs in China are carrying out. As J. Wang (2019) has suggested, applying specifically western conceptual frameworks where politics, and society more generally, is seen through binary or confrontational positions is less useful in the study of NGOs within an authoritarian context like China. Whilst J. Wang (2015, 2019) has provided a useful underlying framework for understanding Chinese NGO's use of social media there is still a lack of empirical evidence to back up her position, especially relating to NGOs within the environmental sector in China. This thesis helps to bridge this gap and provides empirical evidence to test many of her assertions.

Fresh insight into the networking capabilities and political ramifications of social media use is also gained by using an interdisciplinary approach to the study of Chinese environmental NGOs, drawing on concepts and ideas from both the political science and media and communications fields to analyse the position of environmental NGOs within the Chinese online environment. By using a mixture of different analyses, including thematic, network, and organisational analysis of empirical data collected during the data collection period, the thesis investigates the communicative functions, themes, and use of interactive features in posts on Weibo, including the use of hashtags, retweets and @mentions. The use of these innovative data collection methods and analytical techniques provides a novel and updated way of understanding how the NGOs engage with different actors, both online and offline, including fellow NGOs, government departments, their followers, and potential donors. These analyses found that although the political space afforded to environmental NGOs in China is severely constrained, and the operations of the NGOs could not be seen as overtly activist or confrontational in the traditional sense, the NGOs do in fact retain a certain amount

of autonomy and are able to carve out some political space for themselves. The findings of this thesis therefore challenge the notion that NGOs in China are co-opted organisations without autonomy from the state and suggests that, in agreement with, and building on the work of J. Wang (2019), it shows that there is scope for digital activism, especially nonconfrontational activism, by NGOs in an authoritarian context.

More widely, since the start of this PhD in 2016, there have been significant geopolitical changes that have had an impact on how China is viewed around the world. The election of Donald Trump as U.S President, the vote for Brexit, and the global Covid pandemic have all contributed to a sense of flux and uncertainty. One constant through all these events and processes, however, has been the steady deterioration of relations between China and many Western countries, especially the U.S.A. At a time when relations are at such a low ebb and suspicion of China is rising, understanding how China's political and social systems work is more important than ever, and interpreting Chinese language sources for an English-speaking audience plays a part in this. The contribution that research on China makes, especially that which takes Chinese language sources and translates and interprets them for an English-speaking reader, can therefore be particularly valuable.

As China's economy has grown, so has China's influence on countries with which it has close relationships. This has resulted in several countries adopting greater internet controls in the same way as China has. While the regulatory and online environments in China are unique, understanding how NGOs in authoritarian contexts use social media to carve out some political space for themselves could have implications for NGOs in other countries where similar restrictions on civil society exist, and helps to inform the debates about digital activism more widely.

Structure

After this introduction, Chapter 2 provides a review of the existing literature, looking specifically at the internet in China, the role of social media and civil society, and environmental governance and how these topics relate to the operation of environmental NGOs in the country. Chapter 3 provides details of how NGOs were selected to be included in the study and the methodology used to scrape data from Weibo and store it locally. Chapter 4 is an analysis of Weibo posts to determine the motivations behind the posting as well as a thematic analysis of the posts by the NGOs to identify common themes that run throughout the dataset. Chapter 5 provides an analysis of the interactive or 'social' features of

social media and how they are used by the NGOs. The networking capabilities of the NGOs through retweets and mentions are analysed using social network analysis to identify patterns within the data and relationships of interest. Chapter 6 draws on some of the findings from the previous chapters to present a set of case studies that help to illustrate some of the tactics employed by Chinese environmental NGOs to navigate complex relationships between different parties online and offline, including fellow NGOs, government departments, their followers, and potential donors. Finally, Chapter 7 is the conclusion which draws together the findings and arguments presented throughout the thesis.

Chapter 2: Literature Review

Introduction

The purpose of this thesis is to analyse the social media output, in the form of Sina Weibo posts, from environmental NGOs in China, to understand what they post, their motivations for posting, what their social media use tells us about their relationship with the state and society more widely, and how their use of social media has contributed and shaped their activism. Several academic debates help to provide context to these issues. The first centres on the role of the internet in China and its potential for bringing about widespread social change. Within this debate are important questions about how NGOs have made use of internet technologies, and more specifically social media, and to what extent these have been used in their activism. The second is the debate around NGOs and their relationship with the state and wider society, and the third is the way that China's environmental governance policies have affected the way in which NGOs operate, with reference to how this is manifested online. These three debates do not happen in isolation from one another, and all show some level of interconnection. The way that NGOs interact with the state is affected by the technologies available to them, and environmental policies enacted by the government help to shape the way that relationships between the state and NGOs have developed. The emergence of internet technologies in China has occurred on a similar timeframe to the re-emergence of societal groups, such as NGOs, in China since the 1980s, and so their development is closely linked. Both Yang (2009) and Tai (2006) have made the case that the development of the internet and civil society organisations in China are *inextricably* linked and their coevolution has shaped the ways that NGOs work, interact, and network together. Many other factors, such as the laws and regulations governing NGOs, the internet, and environmental protection, have also played an important role.

The Internet and Opportunities for Political Activism

Larry Diamond (2010) has suggested that the decentralized nature of the internet, coupled with the ability to connect such a large number of people, plus the two way communication power of the internet over more traditional information communication technologies (ICTs), provides new opportunities to empower people and challenge authoritarian rule (Larry Diamond, 2010, p. 71). He goes as far as saying that these new technologies can help bring about regime change and even democratisation, describing these technologies as a form of "liberation technology", which he defines as:

Any form of information and communication technology (ICT) that can expand political, social, and economic freedom. In the contemporary era, it means essentially the modern, interrelated forms of digital ICT—the computer, the Internet, the mobile phone, and countless innovative applications for them, including “new social media” such as Facebook and Twitter. (Larry Diamond, 2010, p. 70)

This view is shared by Taubman (1998), who has also claimed that the internet has the ability to bring down non-democratic states and highlights some of the aspects of the internet which could pose problems for non-democratic rulers, including the ease of obtaining information, ease of communication, and the decentralized nature of the internet. The decentralised nature of the internet is again cited by Hachigian (2001) as a reason why it has so much potential for change, saying that, “control over information will slowly shift from the state to networked citizens” (p. 129).

Shirky (2011) also argues that ICTs, and more specifically social media, connects vast numbers of people, who can as a result, access information, organise protests, and coordinate opposition far more easily. It was the so called “Twitter Revolution” in Iran and the Arab Spring, which really brought the idea of social media as facilitator of widespread organisation against repressive regimes into the public consciousness (Wolfsfeld, Segev, & Sheaffer, 2013). A Tweet from a protestor which stated, “We use Facebook to schedule the protests, Twitter to coordinate, and YouTube to tell the world” was widely circulated in the media at the time and came to encapsulate a widespread view of social media’s role in the protests (Howard, 2011, para. 2). Arafa and Armstrong (2016) have further expanded on this, suggesting that although social media did not necessarily make young protestors during the Arab Spring more inclined to democracy, the technologies did, “provide these young revolutionaries with channels for “cognitive liberation” from the state controlled media” (Arafa & Armstrong, 2016, p. 97), which still places social media as an integral part of the protest movement. It is not only in Iran and the Arab world where the internet has been hailed as bringing in transformative political change. It has been feted as playing a major role in the democratisation of Indonesia (Hill & Sen, 2000), and also as a force for organising political movements against neoliberal consensus in the occupy movement in the U.S (Kahn & Kellner, 2004).

These more optimistic pronouncements, especially the extent to which social media played a role in protest in authoritarian countries such as Iran, and later in the Arab Spring, have since come in for greater scrutiny. In Iran for example, Twitter had fewer than ten thousand subscribers, yet was lauded as integral to organising the protest movement (Wolfsfeld et al.,

2013). Wolfsfeld et al. (2013) have also made the point that it is impossible to understand the role that social media play in a particular movement without understanding the political environment of the country in which it is taking place, and they tend to play down the role of social media versus the role of old-fashioned face to face organising. Further to this, Barrons (2012, p.55) suggests that concentrating on the use of social media obscures the high level of risk which ordinary Egyptian protestors took on, and the physical violence which they had to endure. Morozov (2009b) also pours scorn on the idea of Twitter playing a large role in the protests in Iran, suggesting that western commentators, while adept at analysing the role that the internet plays in national politics, are less good at doing so when it comes to global politics, especially in countries where they have a limited understanding of the language, culture and politics of the region, and have to rely on information filtered through third parties. Other criticisms focus on the ease with which action can be taken on the internet and the lack of risk it poses. For example, Gladwell (2010) argues that change comes about through meaningful activism that is by its nature high risk, and so he dismisses internet activism as a form of ‘slacktivism’, and the act of liking a post or retweeting as giving people a false sense that they are making a difference. Closer to home, Fuchs (2012) has provided a critique of the way that social media was framed as playing a major role in the riots in the UK in 2012, starting in London and spreading to other major urban centres. His main criticism being that the focus on social media obscured the real reasons for the riots, which he suggests was entrenched inequality (Fuchs, 2012). The way that the internet in China has developed has also been the focus of significant academic enquiry and has come to be seen as a testbed for how an authoritarian government can encourage the use and development of the internet, whilst still maintaining tight control of how it is used.

The Internet and Civil Society in China

The online environment in China has developed significantly since the country’s first permanent connection to the internet in 1994 (China Power, 2019), both in terms of the content and sites available, but also in the way that the Chinese government has grown far more adept at controlling the flow of information and the content posted online. It’s important therefore to place academic literature written since the 1990s in the wider political and societal context of the time it was written. One aspect of the internet in China which helps to highlight these changes is the previous involvement of foreign technology firms, in both supplying hardware and providing or managing content. The late 1990s saw a far greater involvement of foreign content providers in China, especially after China’s acceptance into

the World Trade Organisation (WTO). Even into the early 2000s, access to foreign sites was widely available, and many of the most popular sites were foreign, such as Yahoo! and Microsoft (Harwit & Clark, 2006, p. 27). Another example of the role that foreign companies played in the management of the Chinese internet of the early 2000s is the way that rules requiring all web companies that used encryption software, both foreign and domestic, to register all users, were withdrawn because of pressure from U.S. companies, who argued that the rules were too restrictive (Shanker, 2000, as cited in Harwit & Clark, 2006, p. 27). It's impossible to imagine a U.S. company now having that kind of influence on Chinese government policy, and those foreign tech companies that do still have a large presence in China, Apple Inc. for example, often bow to pressure from the Chinese state to remove content or apps from their online stores which is deemed problematic by the Chinese government (Hern, 2020). It's also worth noting that none of the biggest global internet companies were Chinese in the 1990s and early 2000s, whereas today Tencent (腾讯), Alibaba (阿里巴巴), Meituan (美团), and Jingdong Mall (京东) all make it into the top-ten internet companies by market capitalisation (Companies Market Cap, 2022). The financial heft that these companies have might suggest that they, and their billionaire founders, could be immune from government interference, but as their size and importance has grown, so has the scrutiny and pressure that they have come under, especially since Xi Jinping came to power in 2012, and more recently in a widespread crackdown on the tech sector (McGregor, 2021). These examples help to illustrate just how much the online environment has changed since the 1990s in China, both in terms of the shift to domestically led internet companies, and the level of control that the government exerts over them.

Tai (2006), writing in 2006, suggested that the internet in China would create new methods of public communication, essentially breaking down the monopoly that the Chinese Communist Party (CCP) had on the media environment. No longer would officially sanctioned media be the only way for people to access information (Tai, 2006, p. 163). These new forms of communication, free from the shackles of the official media narrative, would also provide civil society with the space to expand (Tai, 2006, p. xx). Guobin Yang also suggests that the revolution in communications would have a significant impact and could expand "citizens' unofficial democracy" (Yang, 2009, p. 213). He goes on to suggest that even in places where there are strong oppositional forces, the new technologies will provide the opportunities and resources to achieve "organisational and social change" (Yang, 2009, p. 154). Esarey and

Qiang (2008) have suggested that blogging gives the Chinese public a means to provide “sophisticated critiques” of the state, and Chase and Mulvenon (2002) make the claim that dissidents have been provided with a new opportunity to organise online. It has also been suggested that the internet has had an affect by increasing levels of accountability and transparency (Y. Zheng, 2007, p. 167), and that collective actions taking place online are helping to promote “political openness, transparency, and accountability to a great degree” (Y. Zheng, 2007, p. 186). Lagerkvist (2010, p. 27) has also suggested that because of this openness, and the public nature of the internet, it has “pluralized Chinese society and changed its media landscape in a remarkable way”.

MacKinnon (2008, p. 45) provides a slightly less optimistic take on the power of the internet, but nevertheless still believes that even with a degree of government censorship and control, blogging and online spaces will bring about significant change, even if it is evolutionary, rather than revolutionary. She goes on to suggest that “powerful socio-political change can be expected to emerge as a result of the millions of online conversations taking place daily on the Chinese Internet: conversations that manage to stay comfortably within the confines of censorship” (MacKinnon, 2008, p. 45). These more measured views have been echoed by Chase and Mulvenon (2002, p. 90), who also suggest that the internet is more likely to usher in slower, evolutionary, rather than revolutionary, change, although they do propose that this could eventually lead to nascent democratisation. W. Chen and Reese (2015, p. 5) don’t go as far as to mention democratisation and have also cautioned that even though the internet will provide new opportunities for engagement, these will be accompanied by extensive monitoring, including in the form of censorship.

Although the issue of Chinese censorship is not central to this thesis, it is impossible to understand China’s online environment without discussing the role that censorship plays, how and why it takes place, and also to what extent it poses a problem for those using internet services. Harwit and Clark (2001) have looked at internet control in China in terms of the infrastructure of the internet, the control of content, the role of private companies, and the demographics of users. They concluded that self-censorship played a significant role in how people posted online, as well as the demographic of mostly young males, who were more likely to be supportive of government actions anyway (Harwit & Clark, 2001). Other analyses of Chinese internet censorship have suggested that dissent online, far from being completely stamped out, is only censored in certain conditions, for example when it looks to

spill out into offline collective action (King et al., 2013). King et al. (2013) also showed that dissenting voices online can play an important role for the government in highlighting problems that need to be dealt with before they spiral out of control, so the internet is essentially used to gauge levels and areas of discontent amongst the public. It has been suggested that Chinese people are more relaxed, and even supportive, of government measures to control the internet, because of their “general attitude toward a greater role of the government in governing the society” (Liang & Lu, 2010, p. 109). The number of Chinese people lamenting their government’s efforts to control content online, and the sometimes sophisticated methods of evading censorship, for example through the use of satire (Esarey & Qiang, 2008), and humour (B. Zhang, Gearhart, & Perlmutter, 2022), suggests that this is too great a generalisation.

There is a danger that the debate around the internet in China is reduced to a rigid dichotomy between digital activism and cyber censorship, something which (Leibold, 2011, p. 1025) has called the control/resistance paradigm. The danger of taking one of these two positions is that they tend to obscure the nuance and multifaceted nature of online debate in China. The control/resistance paradigm suggests that there are only a binary set of values with which to analyse internet use and every use that falls outside these is unworthy of enquiry. J. Wang (2019) has suggested that Chinese internet users, especially NGOs, apply a form of nonconfrontational activism to their work, which sees them taking calculated risks by probing and questioning government actions and policy, without exposing themselves to existential threats. She expands on her criticism of the control/resistance paradigm by suggesting that in Western democratic societies, people “are deeply convinced of the validity of dichotomy as a universal mode of knowing the world” and that this is the reason that Western scholars are “less ready to reckon, *unapologetically*, with analytical tools underlying non-confrontational ethos” (J. Wang, 2019, p. 38). She goes on to suggest that in a country like China, where confrontational approaches are uncommon, it is necessary to go beyond this dichotomous thinking to answer the question of why “the exploited in these countries accept their situation as a normal, or even justifiable, part of the social order?” (J. Wang, 2019, p. 38). She is particularly critical of the strand of thinking that positions Chinese people as having been easily muted by the censorship efforts of the Chinese government and suggests that this, “neat formulation relegates the entire population of China into the category of the brainwashed” (J. Wang, 2019, p. 38). She further argues that this is clearly not the case as,

“NGO activists, academics and public intellectuals, the millennials, and other commoners” do debate political issues and even take calculated risks in posting and discussing politically sensitive issues publicly (J. Wang, 2019, p. 38).

There are, however, plenty of dissenting voices willing to question the more optimistic positions that propose that the internet will help to usher in a more democratic, transparent, or accountable form of politics in China. For example, there are those who argue that just like the internet in other parts of the world, Chinese cyberspace is equally populated by vacuous, non-political entertainment news and gossip, and so does not provide a meaningful platform for activism (Leibold, 2011). Leibold (2011, p. 1026) argues that this type of content could co-exist on the internet, but the sheer volume of mindless celebrity gossip and infotainment compared to activist or political content suggests that there is only a very minor role for it. He goes on to say that this is especially true for micro-blogs, which are often highlighted in the literature as having the most dissenting voices, but in fact the percentage of traffic related to political activism is tiny compared to all the other competing voices online. This mass of content has been described as “digital opium”, in which “critical voices can easily get lost within this echo chamber of banality” (Leibold, 2011, p. 1028). Although Leibold (2011) was writing in 2011, there has been no great change to Weibo in the intervening years to suggest that the percentage of content dedicated to celebrity gossip has decreased, and that the majority of users are looking for this content over more political posts (J. Wang, 2019). Although this depressingly nihilistic view has some truth to it, it is unfair to suggest that it negates entirely the importance of more politically conscious offerings that Weibo also provides, if users are willing to search it out.

There is also the view that although the internet and civil society have grown together, the internet has also facilitated the development of what Jiang (2014) calls “uncivil” society. This has resulted in rude, nationalistic pronouncements, and very public and ill-natured spats between public intellectuals or public figures, which have served to diminish the regard in which intellectual and political debate is held. For example:

Kong Qingdong, a professor of Chinese at Peking University and a descendant of Confucius, is a highly controversial weibo celebrity. On January 24, 2012, during an interview on Chinese news site v1.cn, he openly cursed Hong Kong residents as dogs of the British empire: “As far as I know, many Hong Kong people don’t regard themselves as Chinese. Those kinds of people are used to being the dogs of British colonialists — they are dogs, not humans. (Jiang, 2014, p. 39)

This type of uncivil, nationalistic posturing helps to illustrate that just like its western counterpart Twitter, Weibo can also be a forum for abusive behaviour where a myriad of often irreconcilable views are exchanged.

It is not just the uncivil nature of discourse online which detracts from the transformative nature of the internet, online activism has also been referred to as clicktivism, or slacktivism, implying that it is a lesser, or lazy, form of activism (Morozov, 2009a). Slacktivism and clicktivism are ways of describing the type of actions taken online that require very little effort, such as signing an online petition, content sharing, or mass emails. Drumbl (2012) suggests that even though these types of campaigns can bring attention to a subject, users' attention spans are generally very short and so they quickly move on to some other issue. Morozov (2009a) goes on to argue that many forms of internet activism also require very little effort, so the amount of capital invested by these activists is far smaller than taking part in a street protest, or meeting with politicians to voice an opinion, which means it's very easy to turn on and off from a particular cause, resulting in a very fickle group of supporters, happy to voice an opinion or click a few 'likes' but unwilling to invest substantial time and effort into something more concrete (Morozov, 2009a, 2011). Activism which takes place on social media can also be carried out for a number of reasons which are not actually related to the cause in question and have more to do with impressing one's peers, something which Morozov (2011) proposes is the result of the narcissistic, egotistical nature of some online actions.

Social media does, however, help people to form groups easily; this can be done in a couple of clicks on Facebook for example. However, the cohesion in these groups may be very limited and so they form and fall apart very easily. The internet has also helped to fragment society, meaning that even though the cost of communication has been reduced, the value of linkages to concrete political action has also diminished. Morozov (2011, p. 183) also argues that the effect of online action is less participation in offline activities. It could also be the case that organizations and governments become adept at dealing with online campaigns, such as mass emails, so their effects are quickly nullified (Shulman, 2009). Proponents of clicktivism, however, argue that it is "a legitimate political act" and an action which through its lower participation costs, allows those who may not have participated previously to play a political role (Halupka, 2014, p. 116). The suggestion that participation online leads to less involvement of offline activities is also contested. Online activism can be a precursor or

entryway for some activists to get involved in a particular cause so dismissing their actions as slacktivism is problematic (Kavada, 2012).

The concept of social capital is also sometimes invoked to help describe the role that social media can play in online activism. The concept came about in the 1980s with the work of Coleman (1988), who stated that “social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors—whether persons or corporate actors—within the structure” (p. S98). Bourdieu (1986) also used the concept and defined it as, “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition—or in other words, to membership in a group (p. 21)”. More recently, the concept has been applied to the study of civil society, largely because of the work of Robert D. Putnam (1993), who argued that governmental reform that led to strong and representative institutions in northern Italy in the 1970s, succeeded because it was underpinned by widespread involvement in a civic community, consisting of people who had mutual trust in one another. Robert D. Putnam (1993) looked specifically at voluntary associations and sports clubs and concluded that they were sources of community cohesion and trust, all of which were necessary in the development of modern democratic societies. Robert D Putnam (2000, p. 170) later lamented the collapse of community in the U.S. and therefore the decline in social capital and suggested that the internet could either be the solution to such a decline or it could exacerbate the problem.

Numerous studies have since tried to evaluate whether or not the internet helps or hinders the formation of social capital. N. Lin (1999) came to the conclusion that as cyber networks emerged, they would help to build social capital, and Bauernschuster, Falck, and Woessmann (2014), in a study of the rollout of German broadband, found no negative effects of the internet on its formation. Quan-Haase and Wellman (2002), likewise, have argued that the internet helps connect people and therefore adds to social capital, rather than changing it or diminishing it, and Sajuria, vanHeerde-Hudson, Hudson, Dasandi, and Theocharis (2014) suggest that there is evidence that online interactions can help to form social capital, although connections between members of a group are more easily formed than connections between different groups, something which Robert D Putnam (2000) refers to as bonding and bridging social capital.

In terms of NGOs and social capital, W. Xu and Saxton (2018) discuss stakeholder engagement on social media used by NGOs in terms of social capital and conclude that social media helps in stakeholder engagement and therefore can help to build social capital. Franceschini (2014), while critical of some of the uses of social capital as a concept because of a lack of clarity, in a study of labour NGOs in China, has suggested that the organisations have limited power and ability to campaign for better labour rights because of they are lacking in social capital. This is because they are dependent on foreign sources of funding, they are scattered and unconnected and their uneven relationship with the state means that they cannot represent those who they aim to, the workers.

Online Environmental Activism in China

Environmental activists, and environmental NGOs in particular, have been singled out as having made particularly good use of the internet in their work in China, with websites, email, and bulletin boards all used to create connections between green civil society groups and like-minded people, even with little financial backing as a result of the political climate (Yang, 2003, p. 91). Yang (2009, pp. 153-154) does caveat this by noting that for Chinese NGOs, the internet is more useful as a tool for networking with peers, both in China and abroad, but that it is not a tool that is regularly used to communicate with government departments. In contrast to previous arguments suggesting that online activism limits offline participation, the internet has also provided opportunities for green groups to help facilitate offline activities such as organizing volunteers to meet up in person. This idea has been expanded to suggest that it has helped environmental NGOs foster a green public sphere (Sima, 2011). Sima (2011) argues that:

The Internet effectively assists Chinese environmental activists in constructing self-representation, increasing organisational visibility, circulating environmental information or “greenspeak”, building discourse communities, launching online and offline campaigns, and strengthening connections with activists at home and abroad. (p. 478)

It is important to note that her study of Global Village Beijing, a grassroots environmental NGO, once again shows that NGOs in China are using the internet to organize off-line activities, as well as on-line campaigns. This is backed up by Sullivan and Xie (2009) who also point out the networking capabilities of social networks for environmental activism.

Social Media and Sina Weibo's Place on the Chinese Internet

Since its inception, the internet has always been a place for social interaction, whether that is through email, bulletin boards, and instant messaging. However, the capacity for social interaction and user generated content has increased substantially since the advent of social media. Built on Web 2.0 functionalities, which can be thought of as the second phase of the internet's development, where web pages make use of dynamic properties and user generated content plays a much greater role (Murugesan, 2007), social media really takes advantage of these attributes. Obar and Wildman (2015) have defined social media as being Web 2.0 applications that have user generated content at their core, where users create profiles for a site that is maintained by a social media company or service, and that service facilitates the creation of a network of users whose profiles are all interconnected (Obar & Wildman, 2015, pp. 746-747).

In China, several social media platforms dominate the online landscape: WeChat (微信, Weixin), the Swiss army knife of an app which acts as an instant messaging service, social network, and banking and e-commerce, all rolled into one (1.2 billion monthly active users (MAU)); Sina Weibo (新浪微博, Xinlang Weibo), China's most popular microblogging site (520 million MAU); Little Red Book (小红书, Xiao Hong Shu), a content sharing and e-commerce platform (100 million MAU); Douyin (抖音, Douyin), the short video sharing platform otherwise known as Tiktok outside China (600 million daily active users (DAU)¹); Kuaishou (快手, Kuaishou), another short video sharing platform (300 million DAU); Zhihu (知乎, Zhihu), the Chinese version of Quora, a question and answer platform (420 million registered users); Bilibili (哔哩哔哩, Bilibili), another video sharing site (272 million MAU); and Douban (豆瓣, Douban), a social networking site mostly used for sharing cultural insights and discussing books, music and movies etc. (11 million MAU) (Azoya Group, 2022). No foreign companies feature in the most popular social media sites in China. This is likely because they are mostly blocked by the Great Firewall and so can only be accessed with a VPN, but could also be because Chinese companies have other added advantages such as having a better idea of what Chinese users want from a site, and a better understanding of

¹ Where no MAU data was available, DAU or registered users has been cited instead.

the cultural and regulatory environment in China meaning that they are less likely to offend the authorities.

Two of the most popular social media platforms are WeChat and Weibo. Sina Weibo was founded in 2009 by the Sina Corporation and within 14 months of going online had already amassed 100 million registered users, and had attracted 60,000 verified accounts, made up of famous singers, actors and media celebrities, which turned out to be an important driver of new users (Negro, 2017, pp. 161-162). This reliance on celebrity and popular culture to drive content on the platform is something that has persisted (Negro, 2017). WeChat was released a year later, in 2011, and also grew quickly, providing instant messaging, but also a more personal and social experience than Weibo in the sense that users could share photos and updates just amongst their friends (Negro, 2017, pp. 193-194). As WeChat's popularity ballooned in 2013 there was a sense that it would usurp Weibo in popularity and lead to Weibo's terminal decline. This has not been the case though for several reasons. As J. Wang (2019, p. 60) has pointed out when discussing the merits of Weibo and WeChat, "The former [Weibo] is media, therefore open to the public, while the latter [WeChat] constitutes a closed ecosystem of private communications that is inimical to the building of open communities", which suggests that there is a strong demand for open communities online. Stockmann and Luo (2017), in a study of how different social media are used in China came to the similar conclusion that Sina Weibo was the platform most likely to encourage publicly voiced opinions on political topics. However, they were not completely dismissive of WeChat, suggesting that the social nature of the platform helped to foster social bonds amongst people already known to each other, and could act as an incubator of political opinions (Stockmann & Luo, 2017, p. 198). DeLuca, Brunner, and Sun (2016, p. 333), in their study of the use of WeChat and Weibo by environmental NGOs, highlight that the use of the two platforms is not mutually exclusive and that many people have both a WeChat and a Weibo account and that there is a considerable amount of cross posting going on, with articles and stories appearing on the official accounts of the NGOs on both platforms.

Whilst there are criticisms of Weibo as being a site full of celebrity gossip and mindless postings, the site is used as a place for discussion of politically and socially important topics. In a study of Weibo use amongst college students, H. Wang and Shi (2018) argue that Weibo acts as an "online school of political participation" (p. 528), especially where students follow a number of opinion leaders. In a study of rural education NGOs in China, Zhou and Pan

(2016) found that Weibo was widely used amongst NGOs, although it was still largely used as a way of broadcasting news in a one way flow of information, suggesting that many of the NGOs did not have the expertise or capacity to utilize all of the new functions that social media brings, something which J. Wang (2019) corroborates when discussing her time working with environmental NGOs in China. Political constraints could also be playing a role in this form of communication, resulting in NGOs posting information which they know to be safe. N. Zhang and Skoric (2020) have highlighted the ways in which environmental NGOs use the platform, suggesting that the posts that attracted the most attention and reposting were those that tried to engage with a dialogue with their followers. They also suggest that the posts that garnered the most attention were those that elicited certain emotions such as anger and anxiety, especially when referring to pollution issues or companies that had been found to have violated environmental regulations (N. Zhang & Skoric, 2020, p. 854). Climate change is another environmental issue discussed on Weibo, although this is largely done by accounts operated by large, national media organisations and international bodies such as the U.N. (J. C. Liu & Zhao, 2017).

There are certain aspects of social media which make it distinct from more traditional forms of communication, these can be thought of as social, or interactive functions, that help to create networks of interaction between users, such as hashtags and mentions. Of all the new ways of interacting that social media has ushered in, the hashtag (#), first introduced on Twitter in 2007 (Bernard, 2019, p. 1) but used on other platforms like Flickr as a way for users to tag photos prior to that, is the one of the one that has garnered the most attention. Hashtags are essentially a way of organising, or indexing, information online within certain social media platforms to allow people to find information, or topics, more easily. Since their introduction, this way of referencing has taken on both commercial, cultural, and political significance (Bernard, 2019). Widely used by companies in digital marketing campaigns, the hashtag has become an integral part of content marketing where companies attempt to create a shared community around a product or brand, for example Kentucky Fried Chicken (KFC) encouraging customers to tweet using the hashtag #howdoyouKFC (Bernard, 2019, pp. 57-61). Hashtags have also been used in a similar way in political activism, where a community of like-minded people are drawn together to the same information and groups by using the same hashtag. It has been suggested that hashtags can help incite protests (Rambukkana, 2015b, p. 10), be used as a sign of identity or community (Summerville, 2018), and as a way

of coordinating publics and political discussions (A. Bruns & J. Burgess, 2011). It has also been suggested that the power of the hashtag is derived from its participatory nature, something which Saxton, Niyirora, Guo, and Waters (2015) highlight in their study of hashtag use in social media advocacy by NGOs. In its use in the #BlackLivesMatter movement, Yang (2016) argues that it is the narrative agency of the hashtag which makes it such a powerful tool. While hashtags have been highly praised for the role that they can play in activism, their limitations have also been highlighted. Gerbaudo (2012), in a study of how hashtags were used during the occupy movement, dispels the myth of the Twitter hashtag starting the occupy movement, and instead traces the start of the movement back to more old-fashioned face to face organising that went on at the time. Media portrayals of hashtag activism have also been unfavourable at times, relating hashtag activism with slacktivism more generally (Moscato, 2016), and suggesting it is often oversimplifies complex issues (Keating, 2015). Hashtag activism, therefore, should be thought of as a good way of getting people involved in activism, but should not be seen as the end point (Aalai, 2018).

The use of hashtags is not confined to Western social media platforms as their use on Weibo is widespread, although they are used less so than by Twitter users (Gao, Abel, Houben, & Yu, 2012). Studies into the use of hashtags on Weibo are also fewer in number, but do include a thematic analysis of hashtags on Weibo around old people and the pandemic (Xi, Xu, Zhang, & Ayalon, 2020), as well as study measuring social emotions using hashtags, emoticons and comments on Weibo (K. Ding, Li, & Zhang, 2020). However, hashtag use in environmental campaigns in China are less well understood, and their use by NGOs even less so still.

The role that social media has played more widely in drawing attention to China's most notable environmental problems is still contested. These range from Fedorenko and Sun (2015) who argue that social media, and specifically micro-blogging, played a crucial role in mobilizing citizens, which later resulted in policy change. G. Huang (2015) also argues that internet technologies played a role in pressuring the Chinese government to set up network of monitoring stations, and Y. Zhang (2017) provides a discourse analysis of digital environmentalism in China, which looked at Weibo posts related to air pollution during a period in 2014. Although social media and other internet technologies played a part in prompting the Chinese government to act on the country's terrible air quality, the role that

traditional print media played should not be discounted. The way that NGOs are regulated, and therefore interact with the state, also plays a role in the way that social media is used.

Chinese NGOs and their Relationship with the State and Society

To understand the role that the internet plays in the work that NGOs carry out in China, it's also necessary to understand the political context in which they operate and exactly how much political space there is for them to operate within. Informing this is their relationship with the state, formed of their interactions with government departments and the constraints and opportunities that laws and regulations afford them in their operations. There are several different strands to the debate surrounding Chinese NGOs and their relationship with the state. Broadly speaking there are those who suggest that Chinese NGOs provide an effective counter to the power of the Chinese state and are an important factor in paving the way for more democratic space within the country (e.g. Q. Ma, 2005; Saich, 2000; White, 1993; Yang, 2005), and there are those who argue that NGOs in China have little autonomy from the state and so are unable to apply much pressure to government actors to change or affect government policy (e.g. Alagappa, 2004; J. Y. J. Hsu & Hasmath, 2014; Unger & Chan, 1995). These different positions will be interrogated further in this section.

Some of the more recent literature on the subject is less preoccupied with whether or not social organizations can affect large scale political change but instead focusses on the details of the relationship between state actors and NGOs (e.g. Hildebrandt, 2013; Peter Ho, 2007; Spires, 2011; J. C. Teets, 2013, 2014). Within these main positions are a myriad of complex and interrelated arguments which draw on traditional civil society literature, state-corporatist ideas, and models of co-dependency. The historical context in which social organisations have formed in China is also contested and is important for understanding some of the shortcomings of using the wider civil society literature to understand the current situation in China.

Civil Society Literature and its Usefulness in Studying Chinese NGOs

The wider academic literature on civil society is regularly used to frame discussions on the relationship between the state and social organisations and often starts from a liberal viewpoint in which an active and substantial civil society is placed in opposition to the state (Larry Diamond, 1994). This is largely based on a Tocquevillian understanding of civil society, “which emphasizes the importance of associational life to the robustness of democracy” (Wilson, 2012, p. 552). Diamond (1994) does acknowledge that there are a

number of caveats to civil society playing a leading role in the consolidation of democracy, but his overall outlook is that an active civil society can help to bring about democratisation and consolidate democracy.

The civil society literature has regularly drawn on the experience of individual countries and their transition to democracy to inform the debate, including cases in Eastern Europe (Wilson, 2012) and the Philippines (G. Clarke, 1998; Silliman & Noble, 1998). In the case of the revolutions in the USSR and Poland, burgeoning civil society organizations, such as Solidarity in Poland, were seen to have played an important role in the democratisation process and the overthrow of the authoritarian regime (Wilson, 2012, p. 552). In the case of the Philippines, it has been argued that the proliferation of NGOs helped to facilitate popular political participation (Silliman & Noble, 1998) and to help ensure that the power of the state was kept in check (G. Clarke, 1998).

However, applying the same concepts and arguments to the case of China is problematic. Béja (2006) has argued that civil society in China, formed of informal groups of NGOs, takes on a less oppositional role than those taken by NGOs such as those in Poland before the revolution. He maintains that the, “development of a ‘civil society’ does not mean that the regime is democratising, nor does it mean that the evolution of China will follow a similar pattern to that seen in Eastern Europe” (Béja, 2006, p. 54). It is also recognised that when applying the concept of civil society to China it needs to be done with a degree of caution. The cultural and historical differences between Europe and China are sometimes invoked to explain the limits of civil society in the country (Madsen, 1993). It has also been contended that the formation of social organizations that took place in the 1980s was not an entirely new phenomenon but was in fact a re-emergence of associational life which had been suppressed during the Maoist period (J. Y. J. Hsu, 2014, p. 100), and that there was in fact a long tradition of protest against political injustice in China (Keane, 1998, p. 38). However, making a direct comparison between the associations formed in China and in Europe is still problematic due to the fact that the lines between private, public and state affairs were more blurred in China (P. Huang, C. C. , 1993; Strand, 1990). It has also been suggested that NGOs can actually reinforce the state’s power by helping to solve issues which may have been a threat to the regime’s existence (Y. Ding, 2001), or civil society can be co-opted by the state (Buttigieg, 1995; Gramsci, 1992). In some contexts NGOs may limit their work so that they are not so critical of the state for fear of reprisals (Gershman & Allen, 2006). These

contrasting forms of civil society are sometimes explained by putting forward a dual meaning, in which one type of civil society actually helps to keep autocratic regimes in power, and another which acts in opposition to the state to help keep its power in check (Foley & Edwards, 1996).

A valid and significant criticism of the civil society literature is that it contains many “ideological biases and normative assumptions” (Mercer, 2002, p. 19). Mercer is particularly critical of the liberal democratic view of NGOs and civil society and their democratising role, because it actually reduces the scope for a more nuanced and realistic discussion about the roles that NGOs play in different political contexts (Mercer, 2002). Mercer’s criticisms are particularly relevant in a Chinese context as they show the shortcomings of using the civil society literature to explain the realities of NGOs existence in China. The civil society literature can provide a useful framework for understanding the state-society relations in countries that are democratising or are going through a process of democratic consolidation, but unfortunately the literature can be less useful for understanding the situation in countries such as China, where NGOs exist within an authoritarian system. Several scholars have therefore moved away from the civil society approach to understanding the relationship between NGOs and the state in China and instead employ a state corporatist model as a framework (Unger, 2008; Unger & Chan, 1995; F. Wu, 2003). To understand how the state-corporatism model is used in the literature it is worth defining the term as:

(...) a system of interest representation in which the constituent units are organized into a limited number of singular, compulsory, non-competitive, hierarchically ordered and functionally differentiated categories, recognized or licensed (if not created) by the state and granted a deliberate monopoly within their respective categories in exchange for observing certain controls on their selection of leaders and articulation of demands and support.
(Schmitter, quoted in: Busgen, 2006, p. 11)

It would be wrong, however, to think of the civil society literature and the state corporatist literature as being dichotomous as they actually seek to explain different things (Gallagher, 2004). The civil society literature is not badly suited to exploring state-society relations but is most suited to understanding how society affects political change (Hildebrandt, 2013), whereas the state corporatist model “is a descriptive model of state-society relations in nations where the state plays a central role in controlling the growth and development of societal actors” (Gallagher, 2004, p. 421). Gallagher goes on to argue that neither a neo-Tocquevillian nor a neo-Gramscian analysis is useful for understanding the situation in China

as even though these approaches avoid associating civil society too closely with democratisation, they do still evaluate civil society according to its relative autonomy and distance from the state, which in the Chinese context would always result in criticism (Gallagher, 2004, pp. 421-422). This means that the more nuanced relationship with the state and how the state is changed and transformed by NGOs would be missed.

Questions of autonomy are often at the centre of arguments for using a state corporatist framework to understand the relationship between Chinese NGOs and the state. There is an acknowledgement in the literature that there has been a significant expansion in the scope and number of associations in China but the criticism is that these organizations are set-up by government departments and policed extensively by the state (Howell, 1998; Shue, 1994). For example, of the approximately 400,000 registered NGOs in China in 2007 it is widely thought that the majority were in fact GONGOs (Spires, 2011). However, as Y. Lu (2007) has pointed out, there are ways for NGOs, and even government-organised non-governmental organisations (GONGO), to operate that afford them greater levels of autonomy than the previous literature would credit them with. She argues that the belief that Chinese NGOs lack autonomy is based on two false equations, “First, policy is equated with actual practice. Second, government support and commitment of its resources are equated with control” (Y. Lu, 2007, p. 176). In essence, the Chinese state appears on the surface at least to wield large amounts of power and control, but this is often not the case when the state tries to enforce or realize that control, although with the introduction of the Charity Law introduced in 2016 and the Foreign NGO Law in 2017, levels of control have increased (Holbig & Lang, 2021). The idea of co-opted organisations also proves problematic because it neglects to take into account benefits that these organizations see from their relationship with the state (Saich, 2000). Saich (2000, p. 125) also describes these relationships as being “symbiotic, because social organizations have devised strategies to negotiate with the state a relationship that maximizes their members' interests or that circumvents or deflects state intrusion”. In short then, to dismiss NGOs in China as being entirely co-opted by the state misses an opportunity to understand the more nuanced and complex relationship that they might have with the state. There is significant empirical evidence to suggest that NGOs in China are able to influence government policy, particularly on local issues or at a local government level (J. C. Teets & Hurst, 2014), so adopting an analytical model which discounts these groups' full abilities to affect political change (although this might be on a relatively small scale) would not be useful.

The state corporatist literature also fails to take into account the fact that there are unregistered NGOs in China that operate to varying degrees of effectiveness outside of the officially sanctioned system (Spires, 2011).

It is clear then that both the civil society and the state-corporatist literature have their shortcomings when used to analyse the relationship between NGOs and the state in China. Civil society literature can be thought of as being overly teleological in that is largely preoccupied with the idea of democratisation, democratic consolidation, regime change and large-scale policy changes, whereas the state corporatist literature can be too restrictive in its inability to recognise that even without full autonomy NGOs in China can play a role in social change and policy decisions.

Chinese NGOs and their Co-dependency with the State

There are inherent problems with using the wider civil society literature and state corporatist models to study NGOs in China and so other conceptual and analytical frameworks have also been used. Hildebrandt (2013, p. 13) uses a model in which he distinguishes between “self-limiting”, “co-opted” and “oppositional” groups. Co-opted groups are defined as those, such as GONGOs, which aren’t necessarily autonomous from the state and so don’t suffer from serious repression. An oppositional group is defined as one which operates illegally in China and is often subject to forceful repression. The framework is useful in that it recognises that a group which is self-limiting could become co-opted and vice versa, and so does not have a static relationship with the state. It also allows for differences in group relationships within an issue area, so some environmental NGOs may be co-opted and others may be self-limiting (Hildebrandt, 2013). It is also worth noting that this type of conceptual framework allows for the situation, in opposition to much of the traditional social movement literature, in which social organisations and the state can enter mutually beneficial relationships. For example, “the success of environmental organisations may actually serve to embolden the state rather than undermine it” (Hildebrandt, 2013, p. 15). This idea of a mutually beneficial relationship between NGOs (not necessarily co-opted ones but those with a certain degree of independence) and the state has been expanded on by J. C. Teets (2014) where she has coined the phrase ‘consultative authoritarianism’ to better describe the relationships which exist.

J. C. Teets (2014) provides good empirical evidence as well as a substantive theoretical framework for understanding state-NGO relations within an authoritarian context. She has argued that NGOs are ultimately afforded this space to operate because it is good for local

officials to have them operating within their jurisdiction, filling in where local government lacks capacity. Like Spires (2011), J. C. Teets (2013) looks at the situation in terms of what the state lacks in its ability to provide public services to society. She puts this down to the fiscal decentralisation of the state in which, “the central government transferred to local governments the primary responsibility for the provision of public goods such as education, health care, infrastructure and social security programmes like unemployment insurance” (J. C. Teets, 2013, p. 23). She argues that local government is not sufficiently fiscally autonomous and so cannot fund important social provisions, so as the central government reduces allocated funding, this leads local authorities to look to NGOs to provide services which they no longer have the funds or ability to provide (J. C. Teets, 2013).

Teets is careful to point out that this model of consultative authoritarianism, on the one hand means that an autonomous civil society can develop, but on the other provides the state with more “indirect measures of control” (J. C. Teets, 2014, p. 2). Like Hildebrandt she also notes that the relationship between state and NGOs can in fact have the effect of strengthening the hand of the state, in part by improving governance through, “increasing transparency and policy making” (J. C. Teets, 2014, p. 2). The fact that NGOs are required to register with a relevant department has also given them opportunities to access policymakers which they would otherwise not have had (J. Teets, 2018). She does admit, however, that the outlook for democratisation in this context is bleak and so those hoping that an active civil society can lead to democratisation in China may be left disappointed by her analysis.

Spires (2011) has also created a different analytical framework for understanding state-NGO relations in China and uses the term ‘contingent symbiosis’ to describe the relationship between grassroots NGOs and the state. He also recognizes that local government institutions in China have realised that NGOs can be useful in helping the government provide services which it no longer has the capacity to provide, either because of funding constraints or a lack of expertise. Spires’s analysis helps to deal with the apparent paradox of unregistered NGOs being tolerated and operating within an authoritarian system. Several problems are thrown up by the fact that these groups continue to operate outside of the official system but with tacit acknowledgement from within the government. For example, there is an inherent power imbalance between the government and these grassroots organizations:

The symbiosis which characterizes these relationships, however, remains contingent on the political calculations of government officials. Suppression

always remains an option (and an official obligation) for officials who deem it prudent. (Spires, 2011, p. 36)

His argument is that under the current system, in which the government always has ultimate control over the conditions in which these NGOs operate, NGOs are not be able to fully challenge the government on many issues, and so even though they may be independent from the state they still require the tacit approval of the government. There are times, however, especially in the environmental sector, where both grassroots NGOs and those that are formally registered have been able to questions state policy. A good example of this is NGOs questioning government policy on hydroelectric dams in which some projects have actually been scrapped, in part due to pressure from NGOs and environmental groups (Busgen, 2006), although this type of opposition tends to be directed towards specific policies rather than a criticism of the system overall. What these approaches also help to highlight is that the Chinese state is not monolithic and in different geographic locations and at different levels of the bureaucracy, the responses from the authorities can be very different.

Criticism of the contingent symbiosis and consultative authoritarianism take on state-NGO relations in China is that they fail to provide a good overall analysis of the political direction or the power of NGOs to affect serious political change. However, following this reasoning would make it very difficult to explain how NGOs exist and function within an authoritarian context. For this reason, they still provide a useful model and conceptual framework for the study of social organizations in authoritarian contexts.

Environmental NGOs in China and their Relationship with the State

Some of the oldest and most successful NGOs in China are those that work in the field of the environment and for this reason they are often the subjects of academic inquiry (e.g. Economy, 2004; Hildebrandt, 2013; Peter Ho, 2001; P. Ho & R. L. Edmonds, 2007; H. Lu, 2003; Ru & Ortolano, 2009; Schwartz, 2004; J. Shapiro, 2012; Tan, 2014; Tang & Zhan, 2008; Wilson, 2012, 2016; F. Wu, 2003; Zhan & Tang, 2013). The reason for the relative success of environmental NGOs in China is that they often have the political space to question and probe the state's policies with more freedom than NGOs in other issue areas (Yang, 2009). However, environmental NGOs have also been criticized as being ineffective because they take a less oppositional stance with the government (Tang & Zhan, 2008). J. Shapiro (2012), however, suggests that even environmental NGOs that do not show high levels of autonomy still play an important role in formulating progressive environmental

policies and can be forceful advocates for environmental protection from within the government.

It is also worth noting that while the experience of NGOs working in different issue areas can be variable, geographic location can also play an important role in whether an NGO is given the space to operate (F. Wu, 2013). This may not be entirely governed by the idea that the further away from the centre of power in Beijing the more autonomy an organization might have but is more governed by complex conditions in that locale. Central government policy can disproportionately impact a local region and as the local government is the one implementing policy, they often must look for an effective response. This could in some instances include working with an NGO that has the necessary expertise to deal with the problem they are facing but conversely it could also mean that the local government cracks down on an NGO working in a field which has now become more sensitive due to central government policy (J. C. Teets, 2014). These regional disparities in NGO development in China have been highlighted by F. Wu (2013) who compared environmental activism by NGOs in Guangzhou and Guangxi. She came to the conclusion that the networking abilities of NGOs and whether they can form coalitions with other like-minded organizations helps to determine whether or not they will be successful (F. Wu, 2013, p. 105). The ability to build and create coalitions between different like-minded NGOs has also been linked to new developments in ICTs.

More broadly, the literature on Chinese NGOs and their relationship with the state was for a long time preoccupied with western liberal concepts of civil society and the connections between civil society and democratisation. The state-corporatist models of analysing state-society relations in China have also fallen short of providing an effective framework for looking at the work carried out by Chinese environmental NGOs. Studying the relationship between NGOs and the state within an authoritarian context requires a new or modified set of conceptual frameworks, which are often not catered for in the traditional civil society and state corporatist literature. Many NGOs shy away from more contentious and directly confrontational approaches, as shown in a quote from Ma Jun, the founder and Director of one of China's largest and better funded environmental NGOs, the Institute of Public and Environmental Affairs (IPE):

IPE maintains a cordial relationship with the government at different levels. Its agenda is one of nonactivism. Its data come from governmental and

accredited media sources, helping it maintain its neutrality and nonactivist position. In some ways, IPE is an ally of the central government to achieve its goal of harmonious and sustainable development. (J. Ma & Zhao, 2009, p. 60)

There is a recognition in this quote that confrontational activism can cause problems for an NGO and by reminding the audience of IPE's 'nonactivism', it sends a reassuring message to government departments that IPE interacts with, and is reliant on, for the data which is at the heart of its operations (Tarantino & Zimmermann, 2017). The term activism here has negative connotations within a Chinese context, implying confrontation and opposition. Whether IPE's operations can be thought of as completely 'nonactivist' is debatable though, as their reports and investigations, like the one conducted jointly with Lüse Jiangnan into the pollution problems at the Shagang Group steel works on the Yangtze in Jiangsu, have taken on powerful business interests (Lüse Jiangnan & The Institute of Public and Environmental Affairs, 2021). Asking only questions about democratisation or framing the only relevant NGOs as those that act confrontationally in opposition to the state, would disregard organisations like IPE, that clearly do not position themselves in that way, yet nevertheless have a role to play. An important factor in determining the conceptual framework most appropriate is the research questions that will be asked during the study. Asking questions about democratisation or even the increase in democratic space when studying Chinese NGOs may not be the most fruitful way of exploring the subject. Chinese NGOs are capable of carving out political space in which they can take meaningful action. Of particular interest are those NGOs that have been able to push for greater accountability from government by using ideas around transparency and public participation. This method of navigating the space afforded to them shows an ability to work within an authoritarian regime. Understanding how authoritarian regimes can become more accountable, while not democratising, can provide a useful model which could be extended to other authoritarian regimes across the globe. There are gaps within the literature on NGO-state relations in China. Studies such as those done by J. C. Teets (2014), Hildebrandt (2013), and (J. Wang, 2019), have gone a long way in rectifying what was lacking in the literature, but as they also explain, more work in this field of inquiry is required.

Environmental Governance in China

Writing about the use of social media during the Arab Spring, Wolfsfeld et al. (2013) make the point that 'politics comes first'. What they mean by this is that ICTs may play a role in organising protests or activism more generally, but the wider political context will inform

whether that activism takes place and how effective it is. They may have been writing about a very different place and different political systems, but their observation stands true in China too. It is impossible to understand how activism online is shaped without understanding the wider political context in which it takes place, and this extends to the regulatory environment of the sector that the NGOs are operating in. The work that environmental NGOs carry out, both online and offline, could therefore be shaped by the environmental laws and regulations enacted by the Chinese government and through the framework of Chinese environmental governance.

The importance that the Chinese government places on environmental protection can be traced through the evolution of the organs of state set up to monitor and oversee environmental issues. Mol and Carter (2006) have argued that, recognizing that environmental problems in China are a threat to social stability, the Chinese government has strengthened environmental protection institutions and created a raft of laws and regulations to try and deal with the problems, with varying degrees of success. There are a number of different theories of environmental governance covered in the literature, such as traditional command-and-control methods (Case, 2001), public participation and transparency (Beierle, 1998; M. Chen, Qian, & Zhang, 2015; Grano, 2016; Gupta, 2008; Gupta & Mason, 2014; T. Johnson, 2010), and governance by disclosure, or informational governance as it's otherwise known (Mol, 2006, 2009). Of special interest is the role that NGOs play in environmental governance structures in China and whether their use of social media takes advantage of these. An understanding of the debates around public participation in environmental decision-making processes, transparency, and pollution information disclosure are all useful for this purpose.

China is often referred to as an authoritarian or semi-authoritarian country, although in more recent years this description has often been prefixed with different adjectives to try and give a more nuanced description: 'consultative authoritarianism' (J. C. Teets, 2013), 'fragmented authoritarianism' (Mertha, 2009), 'networked authoritarianism' (MacKinnon, 2011) etc. The fact that so many different prefixes are used with the term authoritarianism suggests that there are a wide range of views on exactly what form of governance structures are in place in China. There are even those who are moving away from the orthodox view of China as an authoritarian polity to describe it as being meritocratic (Bell, 2015), or even possessing democratic qualities (Keane, 2017), although these are by no means widespread views and

seem particularly unrealistic since Xi's various crackdowns on the mainland and in Hong Kong. One thing that this myriad of different attempts to analyse China's political system does illuminate is that it is incredibly difficult to categorize and distil Chinese politics down to a simple, recognizable framework. These distinctions are important because many of the more recently developed forms of environmental governance, such as citizen participation, are often thought of as entry points to democratisation (Wilson, 2016, p. 212).

There has been a distinct evolution in the form of environmental governance implemented in China. Analysis of this evolution helps to frame the role that environmental NGOs play and how technological advancements such as the internet have created new opportunities for dealing with environmental concerns. Strategies for dealing with environmental pollution problems have been broken down into several different phases or approaches. Tietenberg (1998, p. 587) describes these as three phases of pollution control. The first is described as a command-and-control approach, in which laws and regulations, as well as the institutions for carrying environmental protection, are created, and strengthened. The second is through market-based solutions and can include things such as pollution charges and tradable emissions permits. The enforcement gap, where laws are promulgated but enforcement remains weak, is a problem that China continues to grapple with in ensuring that command and control approaches and market-based schemes are adhered to. Faced with these issues, which are not unique to China, the Chinese government has been experimenting with other forms of pollution control and environmental governance. One of these methods is what Tietenberg calls the third phase of pollution control, which he describes as "investment in the provision of information" (Tietenberg, 1998, p. 588) and Graham describes as the third wave of risk regulation (Graham, 2002, p. 4). This third phase of pollution control is based on ideas of transparency, and more specifically, environmental information disclosure, not merely as a way of providing information but critically using the disclosure of information as a form of regulation, or 'regulation by disclosure' (Stephan, 2002). The process of information disclosure by governments, and the creation of a legal framework to force private entities to release information, has also been held up as being 'good governance' (T. Johnson, 2014). The World Bank (1992) and the Asian Development Bank (1995) have both suggested that transparency is a necessary component of good governance and have actively encouraged transparency measures. In some cases, loans provided by these organizations have transparency measure requirements as components of the loan agreements. Transparency has

also become linked with more democratic forms of governance and the ability to threaten the power of regimes in authoritarian contexts (Lipson, 2013).

The basic theory behind this form of transparency – i.e. informational governance (Mol, 2006), or information as regulation - is built on theories put forward by Ronald Coase (2013) and to a certain degree Mancur Olson (1965). Both Coase and Olson highlight the fact that external costs are not internalised by those responsible for the environmental damage being caused. The way that transparency counters this is by breaking the monopoly of power that is held by those in possession of information or creating an incentive for private actors such as businesses to comply with regulations for fear of negative consequences, such as divestment or consumer pressure (Tietenberg, 1998).

Information Disclosure and Transparency as a Form of Environmental Governance

Of particular interest is the use of transparency measures, like environmental information disclosure, as a policy tool as used by governments to change and manipulate the behaviour of relevant actors in society (Case, 2001; Gupta & Mason, 2014). Both Esty (2004) and Mol (2006) argue that the use of information disclosure as a policy tool has come about in part due to advances in technology, especially ICTs, which make it possible to collect and release information on a large scale and at a lower cost than was previously possible. The failures of previous environmental protection policies, such as standard command-and-control measures, have also played a part in governments seeking out other methods of ensuring environmental protection. In some cases, such as that of the 1998 Aarhus Convention, information disclosure and transparency measures have been coded into the rights afforded to citizens (Mason, 2010). Gunningham and Holley (2016, pp. 14-16) also highlight the role that technology can play in environmental governance, including the way that citizens now have access to cheaper forms of monitoring, or access to data which helps them pressure regulatory authorities into action. New developments such as the advent of social media also provide new opportunities for citizen participation (Bertot, Jaeger, Munson, & Glaisyer, 2010). A. Hsu, Yeo, and Weinfurter (2020) have argued that ICTs and citizen participation in environmental campaigns can help to implement top-down environmental policies and foster greater participation (A. Hsu et al., 2020).

There has been a tendency in some of the earlier literature on transparency and information disclosure to see the measures in a solely positive light without providing a critical analysis of exactly what can and cannot be achieved. For example, Stephan (2002, p. 196) argues that

information disclosure works as a policy tool but he fails to acknowledge that there are serious limitations to the approach. His central premise is that the release of information can help to redress the inherent power imbalance between polluters and those affected by pollution. He argues that information costs are brought down by advances in technology, which encourages citizens to take positive action to change the behaviour of those responsible for pollution. He also argues that armed with shocking information, i.e. information that shows that the situation is far worse than previously thought, then citizens will take action to pressure for positive change, and private actors can also be shamed into taking action for fear of negative media coverage or pressure from investors (Stephan, 2002).

The line of thinking that Stephan (2002) takes assumes that access to information can empower the public, but this is not always the case. By analysing the effectiveness of the Global Reporting Initiative, Dingwerth and Eichinger (2010) have provided a good critical analysis of transparency measures in environmental governance. They counter the argument that transparency measures always empower people by referring to the Global Reporting Initiative's (GRI) inability to do just that. Citing a lack of good data, little use of technology to make the data they do report easily comparable, and a distinct lack of intermediaries taking and using the data that the GRI reports. These criticisms are more of a critique of the GRI than transparency measures, but they do identify issues that can arise when an organization promotes transparency as a catch-all solution. Information disclosure is no panacea then for dealing with environmental pollution, but it does have a place in effective environmental governance mechanisms. The method in which information is disclosed is also extremely important in terms of its effectiveness. Disclosure needs to be embedded in order for it to work (Weil, Fung, Graham, & Fagotto, 2006) and "the way that information is communicated is just as important as its substance" (Graham, 2002, p. 3).

Transparency measures are often mentioned in relation to theories of good governance, particularly in terms of how they are used in an authoritarian or semi-authoritarian context (Rongbing Huang & Chen, 2015; T. Johnson, 2014; Lollar, 2006), and it has been argued that the driver of transparency is the desire for greater democratic accountability (Graham, 2002; Mason, 2008). T. Johnson (2014) has tackled the case of environmental information disclosure in China by looking at it in terms of good governance and asking why a semi-authoritarian regime would adopt transparency measures. To do this he suggests that a number of laws promulgated in China to encourage public participation provide, "greater

accountability, transparency, predictability and participation in environmental governance” (T. Johnson, 2014, p. 242). He argues that one aim of these policies is to “channel growing popular unrest within the system, depoliticise civil society and maintain social stability in response to the growing societal diversification of the reform era” (T. Johnson, 2014, p. 244). This approach contrasts with the idea that greater transparency measures will foster democratisation or weaken authoritarian states. In this case the opposite could be true as transparency measures help to reinforce the power of the regime by allowing them to tackle problems that could cause social unrest. T. Johnson (2011), Lei Zhang, Mol, and He (2016), A. Hsu et al. (2020), and Tu, Hu, and Shen (2019) have shown that NGOs in China play a role in overseeing and encouraging greater participation in environmental information disclosure. However, there are fewer studies into the role that social media plays in this process.

Conclusion

The purpose of this literature review is to understand the debate around the use of ICTs, and more specifically social media, by environmental NGOs in China, how this affects and moulds their relationship with the state and wider society, and what environmental governance mechanisms are exploited by the NGOs in their work and how this is manifested online. One of the issues with the literature, both that which covers internet use in China and the relationships between NGOs and the state, is that it often presents the situation in China as a simple dichotomy. When referring to internet use it is often presented as a dichotomy of control versus resistance, and when referring to the relationship between NGOs and the state it is often presented as a case of autonomy versus dependence. These dichotomous positions do not really help to explain and analyse the grey areas that NGOs in China are often working in, neither completely dependent and coerced, nor completely autonomous from every part of the state. It is unfair to suggest that because an environmental NGO in China does not question the legitimacy, or provide overt criticism, of the central government that the work that they carry out is dismissed as unimportant or unworthy of greater academic enquiry. It also does a great disservice to the many people who work in, and support, environmental NGOs in China and suggests that they are merely agents of the state without agency or independent thinking.

The literature that attempts to paint a far more nuanced picture of the relationship between NGOs and the state provides a far more convincing picture of the relationships that exist. J. C.

Teets (2013), Spires (2011) and Hildebrandt (2013) provide these more nuanced approaches and their research and findings are so much more compelling for it. No longer is a confrontational approach to activism the best way with which to gauge and assess the effectiveness with which an NGO can operate, as J. Wang (2019) has demonstrated. These studies also help to highlight the fact that the state in China is not monolithic and is very different in different locations and levels of the bureaucracy.

The literature on environmental governance in China is well developed and provides a strong theoretical framework on which to assess the way in which NGOs position themselves and their work in relation to environmental laws and regulations. Of particular interest is the use of transparency measures and informational governance as part of environmental protection measures so how these measures are used or promoted by NGOs on social media is worth further enquiry.

The role of social media more widely, and in particular, Sina Weibo, is interrogated in the literature but there is a lack of research looking into the social functions of social media as used by NGOs in China. How things like hashtags, mentions, comments and retweeting are used can help to shed light on the relationships between NGOs, their followers, their peers, and government departments and so would be worth exploring and analysing in greater detail. Likewise, the content of, and motivations for posting on social media by environmental NGOs is an area worth greater investigation and analysis.

This thesis aims to build on the body of work that positions Chinese environmental NGOs within the wider Chinese political context and hopes to avoid placing them as merely extensions of the state, or radical and confrontational activists, and instead provide a more nuanced analysis of their position in Chinese society. Their use of social media will also be looked at in these terms, neither as a lazy, slacktivist endeavour, nor a singularly powerful instrument, but rather a tool or strategy at their disposal. Whether their social media use can be described as contentious or confrontational will be a topic worth analysing during the research, but its use must be viewed in the wider political and social context in which the NGOs operate.

Chapter 3: Methodology

Introduction

This thesis aims to analyse the social media output of environmental NGOs in China, to understand what they posted, their motivations for posting, how their use of social media has contributed and shaped their activism, and what their social media use tells us about their relationship with the state and society. To do this a suitable body of data needs to be collected from the social media accounts of Chinese environmental NGOs. There are numerous environmental organisations operating in China so the first step in the process is identifying suitable organisations for inclusion in the study. Several databases of Chinese NGOs exist but they each contain slightly different data. There are also many different social media platforms in use in China so identifying the most suitable for collecting data from will form part of the process. This chapter will provide details on how the organisations were selected, the method of choosing a suitable social media platform, and how data was collected, stored, and prepared for analysis.

Identifying NGOs for Inclusion in the Research

To ensure a representative sample of social media posts were collected for analysis, a set of selection criteria were developed. There are several resources available that provide information on non-governmental organisations in China. One is the database of social organisations created and maintained by China's Ministry of Civil Affairs (Ministry of Civil Affairs Administration of Social Organizations, 2019), another is the China Development Brief (CDB) NGO directory (China Development Brief, 2019b), and a further is the NGO2.0 database of social organisations in China (NGO2.0, 2012). All the databases are searchable and available online. However, there are some distinct differences in the information that they contain. The Ministry of Civil Affairs database contains information on a far greater number of organisations, but many of them are either very small village groups, largely organised by the local government, or larger Government Organised Non-Governmental Organisations (GONGOs). All the organisations in the database are registered with either an official local organisation or the Ministry of Civil Affairs, so smaller organisations without the means to register are excluded. It can also be difficult for those organisations engaged with very politically sensitive work to register so these will also be excluded. The CDB database, although not as up to date, contains smaller grassroots organisations and those involved in more contentious issues, as well as larger, registered organisations. The NGO2.0

database, while providing a useful map showing NGO locations, does not appear to have been recently updated and the data is not as comprehensive as the CDB database (NGO2.0, 2012). It was therefore decided that the CDB database would provide a more representative sample of organisations to be included in the study.

CDB is a non-profit organisation based in mainland China with the express aim of “promoting the sustainable development of civil society through information exchange and the matching of resources, based on the principles of independence and professionalism” (China Development Brief, 2019a). CDB collects information on a wide range of NGOs in China and organises these into a searchable database available for public use. There is both an English and Chinese version of the database online whose content is similar but not identical. In some cases, the English database contains more details about particular NGOs, but it is also more out of date, with many of the entries dating to 2014 or before. The Chinese database is more up to date but in some cases contains less detailed information on specific NGOs.

One major issue of using the search function for the CDB database is that many of the NGOs are categorized under several different labels: ‘Environmental Protection’, ‘Animal Welfare’, ‘AIDS Prevention’, ‘Public Health’ etc. NGOs provide details about their organisation to be inputted into the database so an organisation can assign multiple labels to their organisation. This means that a proportion of the NGOs that appear in the search results using the ‘Environmental Protection’ search label may not in fact be totally related to the environment. It could also be the case that NGOs tick several of the category boxes so that they show up in more search fields, even if their work only vaguely touches on the category they have chosen. It was therefore necessary to form a more reliable typology for the NGOs under investigation. In some cases, the NGOs carried out several key functions and so it was necessary to give them a primary and secondary category. Problems did arise, however, when organisations didn’t have very specific aims, or those aims are not well articulated.

Having used the search function in the CDB database, using the terms to denote domestic NGOs labelled as ‘Environmental Protection’ organisations the number of NGOs returned was 371 out of a total of 5002 in the directory. Using a combination of the organisation’s mission statement and online material relating to the organisation it was possible to identify those that were predominantly concerned with environmental matters, which totalled 156.

Having identified the target organisations for inclusion in the study it was then necessary to identify what forms of digital media should be included in the analysis.

Identifying Digital Media for Inclusion in the Research

Digital media can be defined as digitized content that can be transmitted across the internet and so therefore encompasses a wide range of possible media sources. Of particular interest are those types of media used by NGOs that provide some sort of interactive functionality. Websites can be useful for identifying and gathering information about a particular organisation, but because they are a one-way form of communication, that don't necessarily tell us that much about the relationship between the NGO and other organisations or people. Websites can also be quite resource intensive to get up and running and maintained, with new content added regularly. To create a professional, unique looking website also requires programming expertise as well as a cost to host a site and domain name. If the website provides access to a large amount of information, then database management will also be necessary. This means that NGOs without a significant budget may not have a website and if they do it may not be particularly up to date. Of more interest are social media sites that allow some form of interaction between NGOs and other people and organisations, such as the public, companies in the private sector, and government departments.

Defining exactly what social media are can be problematic and the term itself is contested within the academic literature. Ellison and Boyd (2013) have argued this is because it is a new form of media which has changed and developed very rapidly since its inception. There has also been some confusion over the difference between 'social networking sites' and 'social media', with the term 'social networking site' predominantly referring to those sites that provide users with some way of networking with other users, whereas social media encompasses far more and includes not just social networking sites, but also other forms of media such as blogs and video sharing (McCay-Peet & Quan-Haase, 2017, p. 15). Bruns (2015, p. 1) argues that all media are social, but it is the fact that social media is defined by its sociality, which distinguishes it from more traditional forms of media such as print, radio, and television. Bruns (2015, p. 1) goes on to suggest that social media act as a form of communication, sometimes between many people, whereas radio and television broadcast in a one-way flow of information, so it is the networking and interactivity that makes social media 'social'. It is also worth noting that although social media interactions occur online,

they do not occur in a vacuum unaffected by the offline world and wider society, as McCay-Peet and Quan-Haase (2017) have pointed out:

The social contexts in which interactions and behaviours are occurring need to be taken into account, as these help explain topological features of networks of interaction and connection. Without taking cultural, political, and historical contexts into account, important aspects of social media use may be missed (p. 21)

And so, within this wider context, the study of social media encompasses several different forms of research and many different methodologies depending on the set of research questions that are to be answered. It is, however, useful to apply a definition to what social media is and a definition in the *Sage Handbook of Social Media Research Methods* provides a useful starting point:

Social media are web-based services that allow individuals, communities, and organizations to collaborate, connect, interact, and build a community by enabling them to create, co-create, modify, share, and engage with user-generated content that is easily accessible. (McCay-Peet & Quan-Haase, 2017, p. 23)

For the purposes of this study social media research refers to the collection and analysis of publicly available data from the Chinese social media site Sina Weibo. The choice of platform will be explained and analysed in greater detail later in the chapter but it's worth noting here that only publicly available data on Sina Weibo will be used. This is an important point to make as some social media research involves a researcher using social media platforms to gather information from closed groups.

Mayr and Weller (2016) provide a useful set of questions that can be used as a reference when designing a social media research study:

1. Which Social media platforms would be the most relevant for my research question? (Single platform vs. multi-platform approach)
2. What are my main criteria for selecting data from this platform? (Basic approaches for collecting data from social media)
3. How much data do I need? (Big vs. small data)
4. What is (unproportionally) excluded if I collect data in this way? (Collection bias) (p.110)

There are several challenges and constraints faced when trying to design a study of digital and social media. These can be problems of access to technology, funding issues, ethical

considerations, and time constraints (Stieglitz, Mirbabaie, Ross, & Neuberger, 2018). Another issue is the huge quantity of data available from social media, so obtaining a truly representative sample can be problematic due to the difficulties in collecting specific information (Bolsover, 2018). Many of these issues are not unique to social media research and can have a significant bearing on what can be realistically studied. The four questions posed by Mayr and Weller (2016, p. 110) above have been used as a framework with which to interrogate the complexities of designing a study using social media data as a core component.

It is also worth noting that there are certain ethical considerations that need to be considered when dealing with social media data. There is a difference in views as to exactly how much risk is posed to the participants in social media research when using information which is publicly available. Goel (2014) suggests that more oversight is required to protect people's privacy, but Grimmelmann (2015) argues that because the information is public, or anonymised, then less oversight is required. To mitigate these risks care will be taken during the research to use social media data that is publicly available and not to present it in a context that it was not originally intended.

Which Social Media Platforms are Most Relevant?

The choice of social media platform can have a significant effect on the results of the study as the way in which the platform operates can dramatically change the way it is used, as described by McCay-Peet and Quan-Haase (2017):

Platform characteristics are critical for understanding how users create, share, interact with, and mobilize content as well as for understanding how community is created and maintained in different platforms. For example Twitter allows individuals to follow a person, institution or account, without reciprocation. (p.21)

There are several dominant social media platforms in China as outlined in **Table 1** (DeGennaro, 2019).

Table 1*10 most popular social media platforms in China*

Platform	Users	Type
WeChat	1.132 billion (MAU) as of Q2 2019	Social media, instant messaging, financial etc.
Sina Weibo	446 million MAU as of Dec 2018	Micro-blogging platform
Tencent QQ	803.2 million MAU as of Aug 2018	Instant messaging app
Tencent Video	500 million MAU as of April 2018	Video sharing
Baidu Tieba	300 million MAU as of Feb 2017	Discussion forum
Douban	300 million MAU as of 2016	Social networking platform
Zhihu	160 million MAU as of June 2018	Question and answer site
Meituan	382 million registered users as of Nov 2018	Review site
Toutiao	120 million daily active users as of Nov 2018	News, information and entertainment platform
Douyin	400 million MAU as of Nov 2018	Short video APP

From a research perspective each of these platforms has merit but Tencent QQ is an instant messaging app and so gathering any kind of data would be problematic due to the closed nature of communications carried out on the platform. Tencent video is a site that allows users to watch videos, which are mostly entertainment or news based. Douyin is also a video sharing site, but content is more user generated and videos are usually very short. The company that owns Douyin also owns Tiktok, which is the same site created for an international audience. Discussion forums and question and answer sites such as Baidu Tieba and Zhihu are largely used by individual users and some basic searches looking for evidence of use by environmental NGOs returned limited results. Meituan is very much a commercial site where people can leave reviews for restaurants and order food for delivery. It's therefore not relevant for this study. Douban is a social networking site that has been likened to Facebook but has fallen out of favour with many Chinese internet users since mobile social media sites such as WeChat have become more popular. Using the Douban search function it's possible to see some use by Chinese environmental NGOs but it is limited to just a few organisations and the posts are mostly dated to before 2013, which shows that the site may

have been used at some point but is no longer popular. Finally, Sina Weibo and WeChat are the two most widely used platforms (DeGennaro, 2019) in China and in terms of research options they provide the greater choice for data collection and analysis.

WeChat was first released in 2011 and at the time of release was a mobile instant messaging app. It contained several features which made it popular in China including the ability to record short voice messages to be sent over the app instead of text. Chinese can be more time consuming than English to type, so this feature proved very popular amongst Chinese speakers. The app also has a social aspect to it called 'Moments' where users can post photos and updates of what they have been doing. It wasn't long, however, before WeChat started to branch out and add functionality to the app, which has now turned it into the most popular app in China with over a billion active monthly users. The app itself has expanded to include functions such as financial transactions, which are now accepted in market stalls and shops across China, meaning people can pay for goods or transfer money to people just by scanning a QR code. Developers can now also create mini-apps that work within the main WeChat app meaning that it's possible for many users to conduct almost all their online activities within the app (Negro, 2017, pp. 193-194).

One major constraint of using WeChat to conduct research is that one of the most widely used functions of the app is a private messaging service, which makes it difficult to access posts by individuals, whether made in group chats or from one individual to another. The private nature of WeChat has led some to describe it as creating more of a sense of community for the people who use it, especially if they are using it as a way of privately messaging whole groups (DeLuca et al., 2016, p. 311). J. Wang (2019, p. 60), however, has argued that the nature of WeChat and the fact that it is essentially a closed system for private communication, means that it is detrimental to the building of open communities, whereas Weibo is a form of media, and therefore open to the public. Stockmann and Luo (2017) also suggest that Weibo is the platform most likely to encourage people to voice their political opinions publicly.

Sina Weibo is the most popular micro-blogging service in China and although the platform did suffer a dip in popularity after real name registration was made compulsory in 2012 (Manya Koetse, 2015), predictions of its demise were premature. For example, Benney and Xu (2017) suggested that a combination of greater government control, political interference, and market forces, would push people towards private messaging such as WeChat, which

would compound the decline in people using Weibo. However, many people use both and Sina Weibo now has over 520 million MAU and 200 million DAU (Azoya Group, 2022) and its revenues are still increasing (Lubin, 2019). One big advantage of the platform from a research perspective is the accessibility of user generated data. For example, it is not necessary to sign into the platform to be able to view posts and even search for topics, hashtags, and specific users. The platform is far more open in terms of providing information on how people are interacting with other users. User generated data, such as hashtags, can provide added insight into the way that NGOs are using the site. Rambukkana (2015a, p. 29), for example, has described the hashtag as a “rebel punctuation mark” and has argued that hashtags can play an important role in online activism. Other user generated data such as reposts and mentions can also give an indication of how an NGO uses the site to better engage with their followers.

Due to the closed nature of WeChat, coupled with the ability to capture metadata about a post so much more easily from Weibo, it was decided that accounts of environmental Chinese NGOs on Sina Weibo would constitute the main source of data for the thesis. It may still be necessary, however, to refer to data from other sources throughout the research to confirm or add detail to a particular post or to gather information about a particular organisation.

How Much Data is Needed?

Manually collecting data from Weibo is incredibly time consuming, especially when taking into consideration all the metadata associated with individual posts, which is not necessarily available without inspecting the HTML (Hypertext Markup Language) script. Because of this and the volume of data required from Weibo, it was decided that collecting the data manually was not feasible and an automatic data collection technique was required, as detailed below.

Identifying and Collecting Data from Weibo

The first stage of collecting data from Weibo was to identify which environmental NGOs were actively using the platform. To do this their names, and derivatives of their names, were searched using Weibo’s search function. Organisation logos and descriptions were then used to verify the account did belong to the organisation in question. Out of the list of 156 organisations identified on the CDB database to be working specifically on environmental

issues, 81 were found to have some online presence², and 34 had active Weibo accounts, where active was one post in the previous month³. The relatively small number of organisations found to have an active Weibo account could be accounted for by the large amount of churn within the NGO sector in China. NGOs often appear and then disband relatively quickly and so databases that hold information about the sector risk being out of date quickly, unless very regularly updated. The NGOs that were left represented different types of organisations across the sector and so still gave a representative sample with which to work with.

To fully understand the motivations and uses of Sina Weibo by the NGOs it would be ideal to collect all available data from their Weibo accounts, such as posts, retweets, comments, number of followers, number following etc. However, collecting data from Sina Weibo and other social media can be problematic. As Fuchs (2016) has made clear, Sina Weibo is a commercial entity that makes money from both advertising and the sale of analytics data both directly and through third parties. For this reason, they put restrictions on what data they make publicly available and create systems that restrict efforts to scrape information from their sites. The number of NGOs under investigation in the study was relatively small so it was possible to combine big data collection methods with smaller scale collection and analysis techniques. Using a mixed methods approach encompassing big data techniques and small scale, granular qualitative methods can prove beneficial (Quan-Haase, Martin, & McCay-Peet, 2015).

Social media data can be collected in several different ways depending on the data required to answer the research questions. It is sometimes possible to use an application programming interface (API), use a web scraper or crawler, purchase data from third party re-sellers, manually copy-paste information from web-pages, or by taking screenshots (Mayr & Weller, 2016, p. 108). There are advantages and disadvantages to all these approaches to data collection so it is important to explore some of their limitations and some of the biases that a particular approach may result in.

² This could be a website, WeChat account or Weibo account. In some instances, it was difficult to tell if an organisation was still active as it may have had a website but not updated it recently.

³ At the time of assessing whether they should be included in the study. During the data collection period five of these NGOs did not post anything and were not included in the research either.

To understand how these different approaches work it's useful to explain the way in which we usually access information online. Most users access and consume information through a user interface, which is typically a graphically rich web page including pictures, text etc. As human users this interface makes it easier and more intuitive to engage with the content of a web page. However, other programs, i.e. software, also need to interact with the content of a web page. For example, they can be used to create search results and to aggregate information from many different sources. To do this an API is used so that these different pieces of software can communicate in the most efficient way possible. Essentially, an API is used to communicate programmatically with a web application. It is also possible to use these APIs as a research tool to collect data from different sites. However, because of the Cambridge Analytica scandal, in which the personal information of millions of Facebook users was used without their consent to target advertisements at them during the 2016 U.S. Presidential election campaign (Venturini & Rogers, 2019), access to APIs has become increasingly restricted. There is also a reluctance to allow researchers to gather data which could result in critical research, so easy access to social media site APIs has been steadily decreasing over the past few years (Bruns, 2019, pp. 1544-1545). All open access APIs for the major social media sites like Facebook, Twitter and Sina Weibo now restrict the frequency with which new calls can be made to the API, as well as which calls can be made, thus reducing the total amount of data that is available. These restrictions on using APIs to access information have had serious repercussions for academic researchers who have been unable to easily gather large datasets (Bruns, 2019).

Accessing the Weibo API can be even more challenging than accessing Twitter's and comes with an even more complex set of issues that have resulted in, "increasingly high technical and economic barriers of access" (Zeng, Burgess, & Bruns, 2015, Conclusion). Even so Zeng et al. (2015) still argue that Weibo is more open and easily accessible than many other forms of Chinese media. The Sina Weibo API has several different accessibility levels including a public API that is open for anyone to use after applying for an access token, and a more restricted access API for developers who can show that they need to interact with the site at a more complex level (Sina Weibo). Gaining access to the developer API has become increasingly difficult and the type and number of different calls that can be made from the public API has been seriously reduced, making use of the Weibo API increasingly difficult. Using APIs to collect data can also be complex as unwanted information needs to be parsed

from returned queries and restrictions placed on the frequency of calls to the API also need to be taken into consideration (Janetzko, 2017). Relying on APIs to collect data can also cause bias as researchers are restricted in what information is accessible and sites do not always make clear how they filter information that they do provide (Driscoll & Walker, 2014; Gonzalez-Bailon, Wang, Rivero, & Borge-Holthoefer, 2014; Morstatter, Pfeffer, & Liu, 2014). Platforms also restrict access because they are commercial sites that must generate revenue to continue to exist and so one source of revenue is the sale of data to all kinds of different clients, such as advertisers or large brands. In the case of Sina Weibo, the functionality of the API has also become more restricted. It is unclear exactly why this was the case but could be because of pressure from the Chinese government or merely a commercial decision. Considering these issues, using an API to collect data from the site was deemed problematic and so a different approach was needed.

Another way of collecting data is through web scraping. Web scraping or web crawling as it is sometimes referred to, is the act of copying data from a web page or set of pages and storing that information locally in one form or another. It is basically the automated process of copying and pasting information from a web page or the HTML of that page. Web scraping is used when the amount of data to be collected cannot reasonably be manually copy/pasted because it would just be too time consuming (Mitchell, 2015). One major advantage of web scraping is that it can be conducted without having to apply for access to the website's API, or even an account on the website. This means that there may still be restrictions put in place by websites to limit access to data, by limiting the number of times the scraper can visit the site for example, but these can be overcome to a certain extent. Weibo does limit the amount of data that can be scraped by temporarily blocking or restricting access to the site from the internet protocol (IP) address that the scraper is using if it detects too high a frequency of requests from the scraper. One way to overcome this problem is to reduce the number of requests made by the scraper per minute.

For the purposes of this study a bespoke scraper was created by a third-party using the programming language Python. The scraper and data storage method were refined over several test periods in which data on a small subset of users was scraped to identify the limitations of the scrapers. Storing data in excel spreadsheets proved problematic because of the amount of information and the difficulty of adding data directly into an existing sheet. To allow far more flexibility and ease of data storage Microsoft SQL Server was used to store

the scraped information. Using SQL also allows for greater freedom when automatically inputting data from the scraper and selecting certain data for analysis. Finally, to automate the whole process a .bat file was created to run the scraper and Microsoft windows task scheduler programmed to start the file at certain times.

Data collected by automated scraping was checked by manually scrolling through the timeline of a user to confirm that no posts were missed out and the comments and re-post figures were correct. This process was time consuming but far less so than manually copying and pasting all the data, including the content of the post, into a spreadsheet or database. During the scraping and subsequent checking of the data several issues were identified. The scraper, in some instances, was not able to scrape data for a particular user for the entire data collection period. This may have been because there were too many posts, so they exceeded the 50 pages that are available to view in the mobile site, which was the version of the site most easily accessible during the scraping. It did also appear as if the website was intentionally disrupting the scraper by blocking access to the site. Even with some of these technical difficulties a complete set of data was collected for a period of 68 days from December 19th, 2018, to February 25th, 2019. There was only one NGO with an active Weibo account that no data was automatically collected for: Shan Shui Conservation Center. It was not possible to identify the reason for this issue and so the issue remained unresolved. It was therefore decided that for this one NGO the data would be collected manually.

What is (unproportionally) excluded if I collect data in this way?

Using the China Development Brief NGO directory as a source of NGOs to be studied could introduce some bias into the process as some organisations may not be recorded in their directory. It is, however, the most comprehensive source of information on Chinese domestic NGOs available and provides a more representative sample than merely using the official Ministry of Civil Affairs database. The method of collecting data, may also introduce bias into the study as some information is not available. For example, comments under posts on Weibo provide a good indication of other users' reactions to information posted but it is not possible using the scraper developed to collect this data. This limitation could be overcome however, by manually copying comments for a post that was of particular interest.

What data can be collected by the scraper?

Table 2 and Table 3 show what data was collected by the scraping software.

Table 2*Data collected for each post*

Data label	Description
Tweet_id ⁴	A unique 16-digit numerical identifier for that particular post. This makes it possible to input the tweet ID into a URL in a browser to see the original post, if it hasn't been deleted by the user who posted it or by the Weibo censors.
Created_at	Shows the time and date that the post was created at, down to the nearest second. The data and time are saved as Universal Time Coordinated (UTC) to make handling easier so to work out the time in Beijing eight hours must be added.
Retweet_count	The number of times that post has been retweeted at the time that the data was scraped.
Comment_count	The number of comments written by users under the post.
User_id	A unique 10-digit numerical identifier for the user who posted the post.
Screen_name	The username of the user who posted the post.
Title	The title of the post which is also the first part of the text of the post.
Text	The main body of text for that post with all the html tags and data removed.
Followers	The number of followers the user who posted the post has.
Html	The main body of the post including all html tags and data.

⁴ Although not strictly a 'Tweet' because it's not on Twitter, the term Tweet is used throughout to refer to a Weibo post.

Table 3*Data collected for each re-post*

Data label	Description
Id	A unique 16-digit identifier for the re-post. This can be inputted into a URL in a browser to see the re-post on Weibo.
Tweet_id	A unique 16-digit identifier for the original post. This can be inputted into a URL in a browser to see the original tweet on Weibo.
User_id	A unique 10-digit numerical identifier for the user who retweeted the post.
Screen_name	The username of the user who posted the re-post.
Created_at	The date that the re-post was posted. Differs slightly from the post data as only contains the date and not the time. Re-posts that are posted within 24 hours of the scraping taking place will not be labelled with the date but will say 13 minutes ago or 1 hour ago etc.
Followers	Number of followers the person who posted the re-post has.

By collecting this set of data into a database it was then possible to make calls on the data to extract, for example, all the posts from a particular user across a certain date range or extract all the hashtags or mentions over a particular date range. Using this methodology, a total of 724 posts were collected from the accounts of the 34⁵ NGOs selected to be included in the study over the 68 days of the data collection period.

Conclusion

This chapter outlined the ways that NGOs were selected for inclusion in the study, first by identifying a suitable database, then using the search functions to collate a list of organisations listed as being environmental protection NGOs. Discovering that many of the NGOs classified as environmental protection organisations were more focussed on other sectors, such as education, the organisations were narrowed down further by looking at their mission statements. Considering its relatively open nature compared to other forms of

⁵ Five of these organisations did not post anything during the data collection period.

Chinese digital media, its continued popularity, and the ability for two-way communication and interaction, it was decided that data from Sina Weibo would be used as the main source of data for the research but supplemented by other primary sources as necessary. By using the web scraper tool to collect information it was possible to organise the data in a way to make access easy and the collection methodology could be replicable for future projects.

Chapter 4: Microblogging for What? Chinese ENGOs and their Motivations for Posting on Weibo

Introduction

For NGOs to be able to survive, flourish, and be effective they need to be able to foster good relations with their supporters (Balser & McClusky, 2005). Public support, in the form of donations, volunteering, attending events, or any other way that can help to implement some of the goals of the NGO is an important part of this (Smith, 2018, p. 294). To maintain support, NGOs must continue to convince their supporters that the work that they are doing is worthwhile, proper, and fits in with the social norms and values that are expected of them (J. Xu & Zhang, 2022, p. 3). This last point could be especially true in China where support of organisations that do not conform to social or political norms can be risky. As J. Wang (2019) has noted, there is also a trust deficit that the NGOs have to contend with in China, largely caused by corruption and sexual misconduct scandals within the sector. Addressing this trust deficit and reassuring their followers that their organisations are legitimate actors within the societal and political norms in China could therefore make up a crucial part of their communication strategies. Identifying and analysing the communication strategies that the NGOs employ on Weibo can therefore inform a greater understanding of how they position themselves more widely politically and socially.

A large part of many NGOs' communications strategies is now carried out online and Weibo has become a useful tool for Chinese NGOs to engage with, and provide information to, their followers and supporters. The decentralised nature, relative affordability, and potential reach of social media can play a role in mobilising supporters (Smith, 2018). The information that the NGOs release on their social media platforms is also controllable, in the sense that the information can be directly posted to followers, rather than being filtered through a journalist or editor as it would be in traditional media. This affords the NGOs with greater control over the narrative that they wish to present to their supporters (Smith, 2018), and also offers the researcher a greater access, through the analysis of social media posts, to the thought processes and communication strategies of the NGOs.

The purpose of this chapter is to understand the context in which the NGOs post to Weibo, and what their communication strategies on Weibo involve. The first part of the chapter introduces the NGOs selected for inclusion in the study to provide some context to the

analysis of posts that follows. The second part of the chapter looks at the data from a communications perspective to understand why and how effectively the NGOs are using Weibo, by analysing what function posts serve for the NGO and the rationale and motivations behind the posts. For example, does the post make use of the ‘social’ aspects of Weibo, rather than treating the technology as an extension of more traditional forms of media, and if so, how does it do this? An important part of this analysis will be to understand how these functions are used to create a sense of legitimacy around the organisations. The third part of the chapter uses an inductive form of thematic analysis, in which environmental themes are identified and analysed, to understand what environmental issues the NGOs are posting about and how these relate to their wider missions.

NGOs in Context

Posts from 29 NGOs were collected from Weibo for the period from December 19th, 2018, to February 25th, 2019, providing a set of data for analysis. To provide some context, the NGOs are listed in **Table 4**, with their registration status, location, and city tier information. The city tier system was devised by the financial services firm Yicai Global (第一财经) and is updated annually. The system assesses cities in China according to their business attractiveness using several metrics: commercial resources, how much of a commercial hub the city is, vitality of urban residents, diversity of lifestyle, and future prospects (Sina Finance, 2022). Although not an official ranking, as the Chinese government does not release this kind of data, they are widely used as a way of forming Chinese cities into a useful hierarchy to understand their relative level of development, with 1st tier cities such as Beijing, Shanghai, Guangzhou, and Shenzhen being the largest and most advanced. The rankings are ordered from Tier 1, New Tier 1, Tier 2, Tier 3, Tier 4 etc. Most of the NGOs included in the study are in Tier 1 and New Tier 1 cities, suggesting that there is a concentration of NGOs in larger urban areas. This is likely because large urban areas afford the organisations with opportunities that they would not otherwise be able to tap into in smaller cities or rural locations, such as access to qualified staff, government departments and officials, and funding organisations such as foundations (Spires, Tao, & Chan, 2014).

Table 4*List of NGOs included in the study with registration status and location*

NGO	Weibo Name	Verified Weibo account?	Registration Status	Location	City Tier
Shan Shui Conservation Center	山水自然保护中心	Yes (org)	Private sponsored non-enterprise entity	Beijing	1
SEE Foundation	阿拉善 SEE 公益机构	Yes (org)	Foundation	Beijing	1
Institute of Public and Environmental Affairs	蔚蓝地图	Yes (org)	Private sponsored non-enterprise entity	Beijing	1
Green-river	绿色江河 NGO	Yes (org)	Social group	Chengdu	New Tier 1
Friends of Nature	自然之友	Yes (org)	Private sponsored non-enterprise entity	Beijing	1
SIP Lvse Jiangnan Public Environment Concerned Center	绿色江南公众环境关注中心	Yes (org)	Private sponsored non-enterprise entity	Suzhou	New Tier 1
Green Earth Volunteer	绿家园江河信息	Yes (org)	Private sponsored non-enterprise entity	Beijing	1
Conservation Society of Amphibians and Reptiles	两栖爬行动物保护协会 CSAR	Yes (org)	Not Registered	Chengdu	New Tier 1

NGO	Weibo Name	Verified Weibo account?	Registration Status	Location	City Tier
Green Anhui	绿满江淮	Yes (org)	Private sponsored non-enterprise entity	Huangshan	4
China Mangrove Conservation Network	红树林保育中心	Yes (org)	Private sponsored non-enterprise entity	Putian	3
Fujian Environmental Protection Volunteer Association	福建省环保志愿者协会	Yes (org)	Not Registered	Fuzhou	2
Jiangxi Environment Communication Centre	青赣环境交流中心	Yes (org)	Private sponsored non-enterprise entity	Nanchang	2
Biodiversity Image Survey to Tibet	西藏生物影像保护	Yes (org)	Social group	Lhasa	4
Shenzhen Spring environmental protection volunteer association	深圳市绿源环保志愿者协会	Yes (org)	Social group	Shenzhen	1
Ankang Green Qinba Public Service Center	绿色秦巴	Yes (org)	Private sponsored non-enterprise entity	Ankang	5
Green Central Plains	河南绿色中原	No	Not Registered	Zhengzhou	New Tier 1
Green Qilu	绿行齐鲁	Yes (org)	Private sponsored non-enterprise entity	Jinan	2

NGO	Weibo Name	Verified Weibo account?	Registration Status	Location	City Tier
Green City of Rivers	武汉绿色江城	Yes (org)	Private sponsored non-enterprise entity	Wuhan	New Tier 1
Cengjing Grassland	曾经草原	No	Not Registered	Hohot	3
Ecocanton	宜居广州生态环境保护中心	Yes (org)	Private sponsored non-enterprise entity	Guangzhou	1
Aifen Environmental Protection	爱芬环保	Yes (org)	Private sponsored non-enterprise entity	Shanghai	1
Shanghai Qingyue	上海青悦环保	Yes (org)	Private sponsored non-enterprise entity	Shanghai	1
Green Henan	绿中原	Yes (org)	Not Registered	Zhengzhou	New Tier 1
Friends of Green, Tianjin	环保-绿色之友	Yes (Per)	Social group	Tianjin	New Tier 1
Li Weidong Natural Ecological Protection Studio	李维东自然生态保护服务工作室	No	Not Registered	Urumqi	3
Lvyang Ecology and Environment center	绿氧生态环保中心	Yes (org)	Private sponsored non-enterprise entity	Chengdu	New Tier 1
Jinhua Green Ecology Culture	金华绿色之友	No	Private sponsored non-	Jinhua	2

NGO	Weibo Name	Verified Weibo account?	Registration Status	Location	City Tier
Service Center			enterprise entity		
Dive for Love	潜爱大鹏	Yes (org)	Social group	Shenzhen	1
Dong Ying Bird Watching Society	东营观鸟	Yes (org)	Social group	Dongguan	4

The registration status and type of organisation of each NGO was checked against the China Social Organization Credit Information Publication Platform (Administration of Social Organizations, 2022), hosted by the Social Organization Administration of the Ministry of Civil Affairs. The organisations are registered under three different categories: private sponsored non-enterprise entities, social groups, and foundations. The types of organisations are specific legal entities in China, so it is worth noting some of their characteristics.

Foundations

Foundations exist specifically to distribute funding to other NGOs and are governed by a set of rules in which they are characterised as “a non-profit legal person incorporated under the Administrative Rules on Foundation, using property [includes money] donated by a natural person, legal person or other organisation for social welfare purposes” (D. Qian, 2020, Legal Bodies - Foundation). There is a minimum amount of funds that a foundation must have on establishment: for national public donation raised foundations it’s at least RMB8 million, for local public donation raised foundations it’s RMB4 million, and for non-public donation raised foundations it’s RMB2 million. There are also rules governing how much of their expenditure can be on the administrative running costs of the organisation which equates to “the aggregate working staff salaries, welfare expenses, and administrative expenses of a foundation must not exceed 10% of the foundation's aggregate expenditure for the year”(D. Qian, 2020, Legal Bodies - Foundation). Another interesting point to note is that foundations, unlike private sponsored non-enterprise entities, can have branch or representative offices in different parts of the country.

Social Groups

A social group is “a non-profit social organisation established by PRC [People’s Republic of China] citizens on a voluntary basis, to realise the common will of its members and implement activities in accordance with its articles of associations (Administrative Rules on Social Group Registration)” (D. Qian, 2020, Legal Bodies - Social Group). Social groups are not necessarily charities and can be for-profit ventures and so they are only classified as charities if they meet certain charitable organisation criteria. Social groups must have a set number of members and operating funds to exist. They must have at least 50 members and national groups must have

operating funds of more than RMB100,000. A social group, like foundations, can establish branches after registration (D. Qian, 2020).

Private Sponsored Non-Enterprise Entity

A private sponsored non-enterprise entity, “Is a non-profit social organisation engaging in social service activities, which is sponsored by enterprises, public institutions, social groups, other social entities or individual citizens with non-state-owned assets” (D. Qian, 2020, Legal Bodies - Private Sponsored). There are fewer restrictions to setting up a private sponsored non-enterprise entity in that there are no thresholds for membership numbers, or the amount of funds required, and the organisation can be registered as a person, a partnership, or a private business. One important factor that limits how this type of organisation operates is that they cannot set up branch offices in other locations (D. Qian, 2020, Legal Bodies - Private Sponsored). Table 5 shows the number of NGOs under each registration status.

Table 5

Registration status of the NGOs

Registration Status	No. of NGOs
Foundation	1
Not registered	6
Private sponsored non-enterprise entity	16
Social group	6
Total	29

Private sponsored non-enterprise entities make up most of the NGOs. There could be several reasons why they are the most popular form of registration for the NGOs in the study. This type of registration provides the most flexibility when it comes to running an organisation in that there are no restrictions on operating funds or membership. However, a major restriction is the inability to establish branch offices in other parts of the country. Six of the organisations were not registered with the authorities at all. Reasons for not registering with the authorities could be that the organisation is so small, maybe just one person, that the bureaucratic hurdles necessary to register are not deemed worthwhile. There could also be a lack of funds making it difficult to register as a social group. Another important factor in the registration process is the

need to find a sponsoring party, called a Professional Supervisory Unit, or colloquially known as the organisation's "mother-in-law" (pópó 婆婆), which is a state-run organisation, such as a research unit attached to a university, which are usually "part of larger vertical government chains of authority, known as xitong (系统), or functional hierarchies (central-to-local government structures that often include a ministry and its subordinate governments units at the provincial and local levels). For example, IPE's Professional Supervisory Unit is the Beijing Chaoyang District Science and Technology Committee, which is the district government work department responsible for the coordination of science and technology, as well as intellectual property protection organizations and patent work in the district. At first glance this might not seem particularly related to IPE's work as an environmental NGO, but it could be a legacy of the need to register the organisation, which could have been the result of personal connections at the time, as well as the need to position IPE as a science and technology organisation dealing with environmental data, rather than an advocacy organisation which could have more overt political connotations. Spires et al. (2014, pp. 76-77) also found that registering as a private sponsored non-enterprise entity was a popular choice for NGOs registering in Beijing and suggested that the reason for this was a more politically cautious set of bureaucrats in the capital plus a stricter mode of regulation. Another example is the NGO, Green River, which is registered as a social group in Chengdu, with the Department of Ecology and Environment of Sichuan Province as their Professional Supervisory Unit, which makes more sense as the NGO is largely concerned with nature conservation.

For those organisations that are unregistered several problems can arise. Without official registration status it is impossible to conduct public fundraising, which can seriously limit the ability to raise money for projects. Administration of the organisation can also be impacted by lack of registration status. Lack of access to bank accounts and the inability to register employees with the necessary government departments means employing staff can become harder (J. Teets, 2018). One notable example of an unregistered NGO in the study was Green Central Plains, as it was very active online during the data collection period but there was no record of its registration.

Also shown in Table 4 is the verification status of the organisations' Weibo accounts. There are two main types of verified accounts, personal and organisational, shown on Weibo as an orange V or blue V respectively, with the method of obtaining verification for each type differing. To obtain a personal verified account a user needs to bind their mobile number to the account, be followed and follow a certain number of users, and be followed by and follow two other verified accounts. For a company or organisation to verify their account they need to provide their Chinese business license. If it is a foreign business or organisation, and has a trademark registered in China, the business can provide its Chinese dealership's business license plus a certificate of dealership, which shows it is authorised to act on behalf of the company applying for verification. If the foreign company has no trademark or dealership in China it can apply for foreign verification, which will be carried out by Weibo and carries a fee. The verification process was brought in ostensibly to avoid the proliferation of imitation accounts, but it is now a status symbol with very influential users on Weibo being referred to as big 'Vs' (大 V) (Kawo, 2018). Most of the NGOs have verified organisational Weibo accounts, even some of the unregistered ones, although several unregistered organisations do not. How an unregistered NGO has managed to obtain a verified Weibo account is unclear, but they may be set up as a business and so have a business license which they can use to register a verified account. An unregistered NGO could be at a disadvantage if they have no business license as they would not be able to set up a verified account, which could result in potential followers avoiding engaging with the organisation because of its lack of verification.

NGO Weibo Usage

Table 6 shows the number of followers each NGO had on Weibo as of March 2019, just after the data for the analysis in this chapter was collected, and in June 2022, to see if there had been any changes in the intervening period. Some significant changes can be seen in the number of followers that the NGOs have, with some increasing the number of their followers by as much as 559,858. The number of followers for those NGOs that already had a sizeable following have increased markedly. For example, Shan Shui Conservation Center has seen its number of followers increase from 289,142 in 2019, to 849,000 in 2022, a 194% increase. The same is largely true for the other ten most followed NGOs, although the increases were not always so great. In terms of gaining followers the communication strategies of these NGOs seem to be

working well. However, the same cannot be said for those NGOs that were starting from a lower base whose number of followers has not increased to such a great extent. The exception to this was the NGO Dive for Love, which managed to increase its followers from 357 to 4263, which in percentage terms of 1024%, made it the biggest increase amongst the NGOs. On the whole though, the leading NGOs have managed to consolidate their position and status, whereas those with relatively few followers have found it very difficult to attract more followers. Saxton and Waters (2014) have argued that one of the most important measures of public engagement with an organisation is how many followers they attract and how often their posts are retweeted. It is perhaps not surprising that as their number of followers grow and these followers retweet posts, that the NGO is exposed to more people and so their total number of followers grows more quickly than those with a relatively small following. Attracting initial followers then could be the most challenging aspect of growing a base of online supporters. Many of the organisations are still using Weibo regularly and follower numbers have generally increased, suggesting that the prediction from Benney and Xu (2017) that Weibo's decline was terminal and would become an irrelevance because of the shift to other social media platforms such as WeChat, has not been entirely realised.

Table 6*Weibo names, followers, and number of posts for each NGO included in the study*

NGO	Weibo Name	Followers as of March 2019	Followers as of June 2022	Percent change	No. of Posts During RP
Shan Shui Conservation Center	山水自然保护中心	289142	849000	194%	63
SEE Foundation	阿拉善 SEE 公益机构	136674	268000	96%	28
Institute of Public and Environmental Affairs	蔚蓝地图	131744	436000	231%	104
Green-river	绿色江河 NGO	130688	549000	320%	63
Friends of Nature	自然之友	130149	562000	332%	27
SIP Lvse Jiangnan Public Environment Concerned Center	绿色江南公众环境关注中心	23152	39000	68%	74
Green Earth Volunteer	绿家园江河信息	15368	21000	37%	44
Conservation Society of Amphibians and Reptiles	两栖爬行动物保护协会 CSAR	15017	14000	-7%	9
Green Anhui	绿满江淮	12707	13000	2%	2
China Mangrove Conservation Network	红树林保育中心	7780	8121	4%	2
Fujian Environmental Protection Volunteer Association	福建省环保志愿者协会	7739	7842	1%	2
Jiangxi Environment Communication Centre	青赣环境交流中心	7622	7721	1%	47

NGO	Weibo Name	Followers as of March 2019	Followers as of June 2022	Percent change	No. of Posts During RP
Biodiversity Image Survey to Tibet	西藏生物影像保护	7285	8579	18%	1
Shenzhen Spring Environmental Protection Volunteer Association	深圳市绿源环保志愿者协会	7188	7584	6%	9
Green Qinba	绿色秦巴	6579	6193	-6%	3
Green Central Plains	河南绿色中原	5897	5754	-2%	84
Green Qilu	绿行齐鲁	4656	4842	4%	5
Green City of Rivers	武汉绿色江城	3198	3399	6%	24
Cengjing Grassland (Echoing Steppe)	曾经草原	2472	2459	-1%	6
Ecocanton	宜居广州生态环境保护中心	1930	1942	1%	1
Aifen Environmental Protection	爱芬环保	1397	1637	17%	2
Shanghai Qingyue	上海青悦环保	1337	1606	20%	5
Green Henan	绿中原	1083	1198	11%	12
Friends of Green, Tianjin	环保-绿色之友	1007	1042	3%	6
Li Weidong Natural Ecological Protection Studio	李维东自然生态保护服务工作室	551	681	24%	1
Lvyang Ecology and Environment Center	绿氧生态环保中心	547	689	26%	34
Jinhua Green Ecology Culture Service Center	金华绿色之友	412	578	40%	4

NGO	Weibo Name	Followers as of March 2019	Followers as of June 2022	Percent change	No. of Posts During RP
Dive for Love	潜爱大鹏	357	4263	1024%	27
Dong Ying Bird Watching Society	东营观鸟	71	84	18%	31

Analysis of Communicative Functions of Posts on Weibo

Environmental NGOs operate within a network of different actors. For example, they have supporters, often members of the public, who are interested to know what the organisation is doing, how they can help, and how the organisation is spending money which they may have contributed. NGOs also need to communicate with other likeminded organisations as a way of coordinating their work and objectives. The fact that they are using social media suggests that they see some advantages to it compared with more traditional websites. As Lovejoy and Saxton (2012) have suggested,

Overall, social media appears to have created opportunities for interpersonal engagement, interactivity, and dialogue that are qualitatively different from those offered by traditional websites. It would thus be reasonable to infer that social media would similarly carry considerable potential as an organizational communication and stakeholder relations tool. (p. 339)

This could be especially true in the case of NGOs operating in China as many of them are relatively young, having mostly been established post 1990 (J. Wang, 2019, p.81). This means that for some of them, social media, instead of supplementing a more traditional website, as was the case with organisations in the Lovejoy and Saxton (2012) study, could be used as a substitute. For many Chinese NGOs on a small budget, social media platforms provide a cheaper alternative to a website as there is no developer costs and updating can be done easily by a member of staff with no specialised IT training. Another advantage of social media is that it is interactive, so communication can flow in two directions. Social media also allows NGOs to communicate with a large audience without having to go through the traditional media, which means that they can publish content very specific to their aims and do not have to be subject to the editorial practices of a traditional media platform. As Zhou and Pan (2016) have noted, “The advancement in information technology is providing organizations with fast and affordable ways to disclose information, maintain stakeholder relationships, and mobilize resources” (p. 2346). However, the NGOs do still have to remain within the terms and conditions of the social media platform and due to the strict censorship and monitoring that takes place on the Chinese internet their scope for confrontational activism and overt criticism of the authorities is limited.

By looking at the communicative function of social media and analysing the way in which organisations provide information to their followers, build community around the organisations, and call on followers to act, thus mobilising resources (Zhou & Pan, 2016, p. 2346), it's possible to build up a picture of how well the organisations are using Weibo, and whether the full 'social' aspects of the technology are being utilised, rather than there merely being a one-way flow of information from the NGO to their supporters. To analyse the extent to which NGOs use social media for these purposes, Lovejoy and Saxton (2012) developed a classification system to measure what proportion of messages posted to Twitter by educational NGOs in the U.S. fitted into different communicative function categories. The posts were identified and sorted into three categories: Information, for posts that merely conveyed some sort of information in a one-way flow from NGO to follower; community, for posts that helped to build a community of followers around the organisation; and finally, action for posts that called on followers to mobilise resources. These three types of post were recorded in a hierarchical system of information-community-action with the suggestion from Lovejoy and Saxton (2012) being that the informational posts are used to first attract followers; then posts that try to build a community around the organization are used to bond with followers; and finally those followers are encouraged, through action-orientated posts, to mobilise resources for the organisation.

Zhou and Pan (2016) used this information-community-action hierarchy and applied it to educational NGOs in China, although they adapted the methodology slightly to increase the categorisations under some of the main functions, to capture more details within the data and make the methodology more applicable to Chinese social media platforms. N. Zhang and Skoric (2020) have also used the same coding system to conduct a quantitative analysis of the posts on Weibo from environmental GONGOs and grassroots NGOs, to identify differences in the postings between GONGOs and NGOs. Findings from Zhou and Pan (2016) were largely in line with those of Lovejoy and Saxton (2012) and have demonstrated that this methodology can be applied to NGOs using Chinese social media platforms.

Environmental NGOs were some of the first to be established in China and they are often seen as some of the most active and advanced in their use of social media. By applying this methodology to analyse social media posts from Chinese environmental NGOs it will be

possible to see if their use of social media differs from those of other NGOs and whether environmental NGOs are better at utilising social media to foster a community and encourage action from their followers rather than merely treating it as a way of broadcasting information. The methodology has again been adapted slightly, with new categories added for environmental information and unrelated information, to make a distinction in the type of information being posted. These changes are documented below.

Information-Community-Action Hierarchy

Information

The main function of posts in the information category is to inform the follower in a one-way flow of information. This flow of reliable and trustworthy information helps to create organisational legitimacy, which in the information function used in the model is made up of five subcategories. This differs to the information function first devised by Lovejoy and Saxton (2012, p. 343) which is just a single category in which any post containing information about the organisation's work, bits of news, or reports relevant to the organisation were included. Zhou and Pan (2016), however, felt that this single category did not sufficiently capture the nuances in the data and so expanded the category further to include several sub-categories. For the purposes of this thesis the categories were again adapted slightly to reflect the posts by the NGOs. The categories and subcategories used in each study can be seen in Table 7.

Table 7*Comparison of Information, Community, Action categories in different studies*

	Lovejoy and Saxton (2012)	Zhou and Pan (2016)	This Study
Information	Information	Organization performance Praising the volunteers & setting an example Public education Unrelated information	Organizational performance Praising volunteers & setting an example Environmental Information Unrelated information Food Safety Information
Community	Giving recognition and thanks Acknowledgement of current & local events Responses to reply messages Response solicitation	Giving recognition and thanks Acknowledgement of current & local events Response to reply messages Response solicitation Communicating with other organizations	Giving recognition and thanks Response solicitation Response to user or follower
Action	Promoting an event Donation appeal Selling a product Call for volunteers & employees Lobbying and advocacy Join another site or vote for organization Learn how to help	Call for volunteers & employees Learn how to help Donation appeal Selling a product Promoting an event Join another site or vote for organization Lobby and advocacy	Call for volunteers & employees Learn how to help Set an online task or competition Donation appeal Selling a product Promoting an event Click on link or vote-like organisation Lobby and advocacy

While the information category has been expanded to add context to the posts that were being posted, the overall function of the category is still faithful to the original in that,

The main difference between this category and the others is that the tweet's primary purpose is solely to inform; there is no explicit secondary agenda, that is, the tweet does not chiefly serve to promote an event, mobilize supporters to take some type of action, foster dialogue, or build a community. What binds these tweets in common is the simple one-way information exchange. (Lovejoy & Saxton, 2012, p. 343)

Their function may not be to foster dialogue between users and the NGOs, but they have an important role to play in creating a sense amongst users that the organisation posting the information is a trustworthy source, and therefore a legitimate actor within the community.

Community

The purpose of posts in this category are to build on the trust and platform built up by the posting of trusted information. Kent, Taylor and White (2003), in their study of website interactions, suggest that, "organizations that want to build lasting relationships based on trust with their publics need to actually pay attention to them—or care about them. Those organizations that see publics as merely means to ends, that is, simply as "customers," will have difficulty building lasting relationships with their publics" (p. 75). Although they were writing in a pre-social media age, their analysis still holds true, and could be even more relevant when discussing social media that has built in functions for dialogic communication. The posts that involve direct communication between the organisation and the follower could therefore be regarded as a form of dialogue as outlined by Kent et al. (2003). The posts in this category also function to build networks between different organisations and between organisation and follower. These can help create social capital for the organisation, which they can then exploit to seek followers to mobilise and carry out some form of action that will benefit the NGO (Lovejoy & Saxton, 2012).

Action

The third function is concerned with mobilising resources that have been built up through the posting of informational and community-building posts. The purpose of these posts is to get followers to carry out some form of action which is useful for the organisation or furthers their mission. This could include volunteering or seeking employment by the organisation, donating money, buying goods, voting in online polls, liking and sharing posts, and lobbying and advocating for a cause that the NGO is concerned with (Lovejoy & Saxton, 2012). These types of posts and the actions that followers carry out can be seen as a form of resource mobilisation

(Lovejoy & Saxton, 2012, p. 345). The actions that the organisations encourage followers to take will also be building social capital in the wider sense, in that followers will take part in offline activities that help to build a community of people all with the same interest in conserving the environment.

Example Posts

The following posts are all examples taken from the dataset to show how each one was coded. It is notable how much information can be included in a single post, far more than a Twitter post for example. This is down to two factors, the first being that there is no 280-character limit to the posts⁶. The second is that Chinese is a far more concise language and there are no spaces between characters. For example, post number 1 in Table 8 is 154 characters in length in the original Chinese version, but after being translated into English is 596 characters long. In some of the posts, mentions are used to alert another user to the post, perhaps in the hope that they will retweet it and increase the number of people who might see it. The use of mentions and their significance will be discussed in further detail in Chapter 5.

A single code was applied to each post and in the case where a post could have been coded in two different categories it was coded in the higher level of the information-community-action hierarchy. For example, a post that both thanked a user but also called for them to act would have been coded under the action category. Some posts appeared ambiguous when reading the text of the post stripped of its context. This extra context usually took the form of an image or video included in the post. In the case of this sort of ambiguity the original post was also referred to.

⁶ Both Twitter and Weibo originally had a 140-character limit for posts. Weibo increased the character limit to 2000 in 2016, although only the first 140 characters are visible in a user's timeline. Twitter increased the character limit to 280 in 2017.

Table 8*Example of posts by communicative function category*

No.	Category	Example Post in Chinese	Translation of post in English	Posted by	Date
Information					
1.	Organisational Performance	1月18日，以“新时代、新责任、新担当”为主题的澎湃·公益湃栏目上线仪式暨2018责任践行者年会在上海举办。阿拉善SEE第六任会长钱晓华在演讲中介绍说，阿拉善SEE现在拥有超过九百个会员，在全国成立了24个环保项目中心，2.8亿人次支持我们的项目。 “碧水蓝天，我们一起努力！[加油]” #责任践行榜# @澎湃新闻	On January 18th, the launch ceremony of the Paper's charity section with the theme of "New Era, New Responsibilities, New Accountabilities" and the 2018 Annual Meeting of Responsibility Practitioners were held in Shanghai. Qian Xiaohua, the sixth President of SEE Foundation, explained in his speech that SEE Foundation now has more than 900 members, has established 24 environmental protection project centres across the country, and projects have been supported over 280 million times. "Clear water and blue sky, let's work hard together! Come on!" #ListofResponsibilityPractitioners# @ThePaper	SEE	18/01/2019
2.	Praising	#2019清源-青水行动# 1月12日，青	#2019 Qingyuan-Qingshui Action# On	Jiangxi	16/01/2019

	Volunteers and Setting an Example	赣九江志愿者走访九江市柴桑区自来水厂取水点走访观察，发现岸边有部分不可降解垃圾，志愿者捡拾垃圾12包。保护美好家园，我们在行动！	January 12, volunteers from Qinggan Jiujiang visited the water intake point of the water plant in Chaisang District, Jiujiang City, and observed that there was some non-degradable rubbish on the shoreline. The volunteers picked up 12 bags of rubbish. We are taking action to protect our beautiful homeland!	Environment Communicati on Centre	
3.	Environmental Information	#蔚蓝地图# 【非法拆解废铅蓄电池“劣币驱良币”，每年16万吨铅变污染源】来源:科技日报 我国每年产生的废铅蓄电池数量超过330万吨，其使用量与废弃量仍在逐年增加。由于不规范的回收行为，没有使用完善的环保设施，大量废铅蓄电池被随意拆解处置，致使大气、土壤和水源污染。据统计，我国部分采用先进装备和工艺的优势企业，铅回收率高达99%以上，超过发达国家铅回收98%的水平。但非法冶炼的“三无企业”却综合利	#Blue Map# [Illegal disassembly and disposal of lead acid batteries leads to “bad money driving out good money”, every year 160,000 tons of lead becomes a pollution source] Source: Science and Technology Daily. Every year China produces over 3.3 million tons of waste lead-acid batteries, and the volume being used and discarded is increasing year on year. Due to illegal recycling being carried out by companies without good, environmentally friendly facilities, a large volume of lead batteries is casually disassembled and processed, leading to air,	IPE	12/02/2019

		<p>用率低，一般仅有80%—85%，最高不超过90%，致使全国每年约有近16万吨铅在非法冶炼过程中流失，成为污染源以及人们健康的严重风险源。而非法回收、冶炼的蓄电池利益链，还造成每年税收损失近150亿元。</p> <p>网页链接 @公众环境马军</p>	<p>water and soil pollution. Some of China's leading processors utilize advanced processing equipment and techniques, so lead recycling rates are over 99%, which is higher than the 98% lead recycling rates in developed countries. However, rates of reuse amongst the illegal smelters that don't have permits to operate etc., are generally only 80-85% and not more than 90%. This means that on average, every year, close to 160,000 tons of lead is lost during illegal smelting processes and thus becomes a source of pollution and a serious hazard to human health.</p>		
4.	Unrelated Information	<p>【小年将至，大年不远】“二十三，糖瓜粘；二十四，扫房子；二十五，做豆腐...”你知道吗？小年代表年节准备正式开始，从这一天起，家家户户开始忙碌起来，采买年货、打扫房屋全都提上日程。 #还有7天就过年#</p>	<p>The 23rd day of the 12th lunar month is fast approaching, and the new year is not far away "Twenty-third day of the 12th lunar month, eat sugar melon sticks; Twenty-fourth day, sweep the house; Twenty-fifth, make tofu..." Did you know? The 23rd day of the 12th lunar month represents the official start of</p>	IPE	28/01/2019

preparations for the New Year. From this day on, every household starts to get busy, buying things for the New Year and cleaning the house. #Only seven days to go until New Year#

5.	Food Safety Information	#蔚蓝地图# 【三全灌汤水饺检测出猪瘟病毒 湘西：正在处置中】来源：经济观察网 有投资者提问 “有消息称三全食品的三全灌汤水饺有三份样品被检测出非洲猪瘟病毒核酸阳性，请问是否属实？” 时，三全食品2月15日上午在深交所互动易平台回应称，该事件公司已关注，截至目前，公司没有收到相关权威部门的通知，公司将进一步核查此事件。 网页链接 @公众环境马军	#BlueMap# [Swine fever virus detected in Sanquan soup dumplings. Xiangxi Prefecture currently dealing with the issue] Source: The Economic Observer. Investors have asked: “It is reported that three samples of Sanquan Foods’ Sanquan soup dumplings have tested positive for African swine fever virus nucleic acid, Is this true?” Sanquan Foods responded on the interactive platform of the Shenzhen Stock Exchange on the morning of February 15th, saying that the company has noted the incident. The company has yet to receive any notification from the relevant authorities but will investigate the incident. Links to the webpage @IPEMaJun	IPE	15/02/2019
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6.	Communicating with other organizations	网页链接 生态环境部排污许可平台网站无法访问，打开极慢，影响广大企业和公众参考，希望 @生态环境部 查一下原因并尽快解决，谢谢。	It is not possible to access the Ministry of Ecology and Environment's (MEE) Pollution Permit website because it is very slow to load, which is preventing many businesses and the public from using the site. We hope that the @MEE look into the reason for this and quickly resolve the problem, thank you.	Shanghai Qingyue	24/01/2019
7.	Giving recognition and thanks	感谢 @ANDY_2018_ @魔法少女方老奔 @Ling-lan_47374 @怪蜀蜀还在豫 @_LJQ是女神经 对阿拉善SEE 劲草生物多样性嘉年华 广州站的支持。几位小伙伴的微博已被选中啦，已经私信您请尽快回复，小编将安排寄送礼物	Many thanks to @ANDY_2018_, @MofaShaunvFanglaoBen, @Ling-lan_47374 and @_LJQshiNvShenjing for supporting the SEE Foundation Guangzhou Branch's Jingcao Biodiversity Carnival. The Weibo accounts of several supporters have already been chosen and private messages sent, so please reply as soon as you can, and I will send some gifts!	SEE Foundation	02/01/2019
8.	Response solicitation	又到周末了，蔚蓝日历完成了吗？看大家晒出的各地 #蔚蓝地图# 周历，你觉得这周哪里天气好呢 @公众环境马军	It's the weekend again! Have you finished your BlueMap [the IPE's Blue Map App] calendar yet? See what everyone has posted on the #BlueMap# calendar. Where do you	IPE	27/01/2019

think had the best weather this week?

@IPEMaJun

9.	Response to user or follower	您好，请关注绿色江河微信公众号（greenriverngo），在公众号菜单中查看志愿者招募信息，只要年满18周岁即可报名，期待您的加入！ 请问，如何加入你们呢？	Hello, please follow Green River's public WeChat account (greenriverngo) and in the official account menu you can find information on volunteer recruitment. Only over 18s can register. Look forward to you joining us! Excuse me, how do I join your organisation?	Green River	21/02/2019
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Action

10.	Call for volunteers & employees	净水清源，我是水源保护者】了保护淮河流域的水源地，这个冬天绿满江淮启动了“净水清远，我是水源保护者”行动。我们现面向社会招募水源保护志愿团体，我们会向你提供相应的支持，包括调研行动资金、培训等。期待你的加入，一起保护水源地！点击链接可查看详情 网页链接	Clear Water Sources, I'm a protector of water sources and I protect the Huai River basin water source. This winter, Green Anhui launched the 'Clean Water and Clear Source, I am a Water Source Protector' action. We are now recruiting volunteer groups for water source protection, and we will provide you with corresponding support, including research funds, training, etc. We look forward to you joining us so that we can protect water sources together! Click on the link to view	Green Anhui	20/12/2018
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			details.		
11.	Learn how to help	人人3小时公益 阿里提倡每人每年用3小时做公益，为世界带来微小而美好的改变 #蔚蓝地图# 第二期“晒出我的蔚蓝日历”公益3小时活动报名已经开始，目前有4千人报名！赶快来参加吧，让你的公益账户充实起来吧 发布了头条文章：《快来报名：晒出我的“蔚蓝日历”公益3小时活动开始啦！》 快来报名：晒出我的“蔚蓝日历”公益3小时活动开始啦！	Everyone should do three hours of charity work. Ali have suggested that every year, everybody should do three hours of charity work to bring about small but beautiful changes to the world. Registration for the second phase of the #Blue Map# ‘share my blue calendar’ three hours of charity work has begun. Register now: The three-hour charity work campaign that you can share on the ‘Blue Map Calendar’ has now started!	IPE	22/01/2019
12.	Set an online task or competition	【粉丝福利时间】 #蔚蓝地图# APP小蓝同学即将上线啦 猜猜小蓝会有哪些好玩的功能呢？ 转发并评论本微博，聊聊你的idea，我们将通过 @微博抽奖平台 抽取3名幸运粉丝送出【蔚蓝地图定制黑砂釉旅行茶具套装】一份！ 12月24日小蓝上线	[Fan Competition Time] The #Blue Map# APP’s online assistant, Little Blue, will soon go live online. Can you guess what cool things she’ll be able to do? Retweet and comment on this post and chat about your ideas below. Using @weibosprizgenerator, we will draw three lucky winners and send them each a Blue Map APP branded, custom	IPE	20/12/2018

	当日，为你揭晓！	made, black porcelain travel tea set! The winners will be announced on the same day that Little Blue goes live: December 24 th !		
13. Donation appeal	<p>【付出爱，收获爱！阿拉善SEE 圣诞爱的感恩回馈】即刻起，前50位加入阿拉善SEE月捐的爱心伙伴，将回赠圣诞大礼包一份！（包括：任小米5斤粮票一张+阿拉善SEE定制笔记本一个+阿拉善SEE定制收纳包一个+探路者水杯一个）聚沙成塔，汇流成河，再小的坚持都有意义，我们一起，做碧水蓝天的守护者！参与戳这里：网页链接</p>	<p>Give Love, Receive Love! SEE Foundation giving back some Christmas love. From now on, the first 50 charity partners who join the SEE Foundation's monthly donation scheme will receive a gift package for Christmas! (Including: A Ren Xiaomi five Jin food stamp, one SEE Foundation customized notebook, one SEE Foundation customized bag, one Tread water bottle). Just like grains of sand can accumulate to make a tower, small streams converge into a river, no matter how small the action, together they become meaningful. Together, we can act as protectors of our clear waters and blue skies. Participate here: web link</p>	SEE Foundation	23/12/2018
14. Selling a product	<p>#绿色江河，高原四宝环保棉卫衣# 我们的卫衣，首先保证了它作为一件</p>	<p>#Green Rivers, Four Treasures of the Plateau environmentally friendly sweatshirt# First of</p>	Green-River	17/01/2019

卫衣的本份：好穿又好看。一个月中我们试了改了好几次版，确保它穿上【有型】【显瘦】【显脸小】！环保棉面料又软又暖，内包边工艺，非常严谨细致。还记得去年的卫衣100件推出仅一天就被抢光了，今天预售开始，动手吧！同时，你购买的每一件卫衣都将帮助到长江源生态环境和野生动物的保护。慷慨义举，长江铭记！👉 班德湖四宝 升级版环保有机棉加绒保暖卫衣

all, our sweaters do what sweaters are meant to: they're comfortable and they look good. Over a one-month period, we tested and changed the design several times to ensure that the sweater is stylish and slimming. The eco-friendly cotton fabric is both soft and warm, and the detailing is exceptional. Remember, last year's 100 sweaters sold out in just a day, so get yours now! And remember, each sweater you buy helps to protect the ecosystems at the source of the Yangtze and wild animals. The Yangtze River will remember your generosity! Four Treasures of Lake Bander top-quality eco-friendly organic cotton warm sweatshirt.

15. Promoting an event

这几天在广州乘坐地铁的小伙伴，是否看到了这些画面？没错，阿拉善SEE劲草生物多样性嘉年华要来广州啦！
[大型生物多样性图片展] 12. 30-1. 13在海珠湖公园南广场展览 [生态保护讲座] 12. 31下午14:00-17:30在

Have any of our supporters seen these posters while traveling on the metro in Guangzhou over the past few days? That's right, the SEE Foundation's Jincao Carnival is coming to Guangzhou! Large scale biodiversity photography exhibition December 30th-

SEE Foundation

26/12/2018

	海珠湿地公园北门科普宣教中心举行 带你走进自然山川，邂逅奇妙物种！ 报名戳： 网页链接	January 13 th at the Haizhu Lake Park South Square Exhibition Space. Ecological protection lecture December 31 st 14:00-17:00 at the North Gate Science Education Centre of Haizhu Wetland Park, taking you into the natural mountains and rivers and encountering wonderful species! Please register here:		
16. Click on link or vote-like organisation	绿色金融最新动态：河钢股份 (000709)，华电国际(600027)被 证监部门要求加强自身信息披露工 作。求助求助：推动绿色金融 环境信息披露，离不开大家的支持。 为上海青悦在ME项目中助力。助力 方法：保存二维码，微信识别打开， 为我们点赞吧。强烈欢迎大家转发点 赞链接至个人朋友圈	Latest developments in green finance: HBIS (Hesteel Group) (000709) and Huadian International (600027) were required by the securities regulatory authorities to strengthen their own information disclosure work. Asking for help: Promoting the disclosure of green financial environmental information is impossible without everyone's support. Help shanghai Qingyue with the ME project. How to help: Scan the QR code, open with WeChat, and like our profile. We'd really welcome everyone forwarding the link to all their friends!	Shanghai Qingyue	04/01/2019
17. Lobby and	#周日巡河# (这个整治目标好像没有	#Sunday River Patrol# (None of the standards	Ankang Green Qinba	24/02/2019

advocacy	<p>一个是达标的)安康城东屈家河,一条名副其实的黒臭河流,前几年绿色秦巴发文投诉过,后台还持续跟踪调查基本没有污染了。今年又反复了,这条河最终流到汉江一级支流黄洋河。</p> <p>请 @安康环境 @安康发布 关注。</p> <p>@陕西生态环境</p>	<p>in the rectification targets have been met). In the east of Ankang, the aptly named Qujia River [in Chinese the character 屈 (Qu) means bent, or to feel wronged], really is a black and stinky river. Over the past few years Ankang Green Qinba has filed several complaints about the state of the river, but follow-up investigations had found that the pollution had basically gone. However, this year the pollution returned. The river eventually flows to the Huangyang River, a tributary of the Han River. Please could @AnkangHuanjing [Ankang Environmental Protection Bureau] and @AnkangFabu take note of this. @ShaanxiShengtaiHuanjing [Shaanxi Environmental Protection Bureau]</p>	Public Service Center
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A total of 729 posts were coded using the information-community-action hierarchy outlined previously. The results of the coding are shown in Table 9 and provide a breakdown of each category, the number of posts coded into each category, and the percentage that this makes up.

Table 9

Number and percentage of posts by communicative function

Communicative Function	No. of Posts	Percentage
Information (73%)		
Organizational performance	88	12.1%
Praising the volunteers & setting an example	8	1.1%
Environmental Information	398	55%
Unrelated information	33	4.5%
Food Safety Information	3	0.4%
Community (13%)		
Giving recognition and thanks	86	11.8%
Response solicitation	7	1.0%
Response to user or follower	2	0.3%
Action (14%)		
Call for volunteers & employees	15	2.1%
Learn how to help	6	0.8%
Set an online task or competition	13	1.8%
Donation appeal	9	1.2%
Selling a product	4	0.5%
Promoting an event	28	3.8%
Click on link or vote-like organisation	11	1.5%
Lobby and advocacy	18	2.5%
Total	729	100%

By far the most common type of post were the ones that conveyed some sort of environmental information. These ranged from posts about lead-acid batteries becoming pollution sources, as in post number three in the examples in Table 8, to posts about air and water pollution. Many of the posts within this category were examples of information being directly copied from another source and re-posted within a post from the NGO. The practice of copying information from a trusted source, such as a newspaper, occurs frequently. The sources are usually clearly acknowledged, and the text is taken verbatim from the original article. It's notable that the text from the original article is often copied into the body of the post, rather than just a link, or a repost of the article from the originators Weibo page. This could be done to pick out the most relevant part of the article which the NGO wants to highlight, rather than just directing followers to a longer article which they may be less likely to read or where the information that the NGO deems most pertinent to the point they are making is not immediately obvious.

The second most common type of post in the information category were posts that informed followers about the performance of the organisation. For example, post number one in Table 8, posted by the SEE Foundation, which shows followers how successful the foundation has been at growing the organisation. It also helps to demonstrate that they are associated with trusted news sources such as thepaper.cn, a well-respected digital only news platform run by Shanghai United Media Group. There are several notable parts to this post. Its main function is to convey a message of success, growth, and stability, but within this message there are other important elements. The use of the phrase “New Era, New Responsibilities, New Accountabilities,” and the fact that the post is reporting on a speech made by the President of the organisation at an official function organised by thepaper.cn point to a mainstream acceptance of the organisation, something that is useful to convey to their followers.

Another of the categories in the information section is food safety. It could be argued that posts about food safety should be included in the unrelated information category, but in China food safety is closely linked with environmental concerns. There have been numerous food safety scandals in the country and there is a high degree of mistrust amongst consumers about where their food comes from and how it is produced. Large amounts of chemical pesticide and fertilizers have been used to increase yields and as people have moved away from the countryside and areas of food production, they have become detached from the processes

involved (Lam, Remais, Fung, Xu, & Sun, 2013). The crossover between environmental concerns and food safety standards is apparent and so these posts were included.

There were some posts that were completely unrelated to the environment or the organisations' work. In many cases the posts that were completely unrelated to the environment included information about current events, such as the Spring Festival, as was the case with post number four in Table 8. The research period coincided with Chinese New Year, so several posts mention the festivities. These posts contain no information about the environment, or the organisation itself, but they do serve a purpose in that they build up a relatable image of the organisation. Zhou and Pan (2016) also found that a considerable number of posts in their study were unrelated to the main function of the organisation posting them, which differed to the results in the original study by Lovejoy and Saxton (2012), which looked at posts on Twitter in the United States. Zhou and Pan (2016) have suggested several reasons for this including an attempt to get people's attention, a blurring between personal and work accounts, and just reflecting the nature of the internet in China as a place full of entertainment and gossip (Zhou & Pan, 2016, p. 2450). It's possible though that these posts play more of a role and are more deliberate than Zhou and Pan (2016) give the organisations credit for. The relative newness and unfamiliarity of NGOs in China poses a problem for the organisations in generating trust between the organisations and followers and potential followers. These posts about unrelated topics can help to foster a sense of familiarity and an understanding that people working at these organisations are the same as their followers in that they're interested in the same things. By highlighting Chinese cultural festivals like Chinese New Year, they could also be reassuring their followers of the fact that they are Chinese, to distance themselves from international NGOs operating in the country which have come under increasing scrutiny since the Overseas NGO Management Law was enacted in 2017 and restricted many of the ways that foreign NGOs could operate in the country (Holbig & Lang, 2021).

Creating a sense of legitimacy can therefore be seen as driving factors in many of the posts made by the NGOs. Howell, Fisher and Shang (2020), in their study of children's service NGOs in China referenced the role that websites can play in helping organisations build up stocks of accountability capital, and social media, because of its interactive nature, allows them greater opportunities to do this than a website does. There are several factors that make it

harder for organisations in China to create accountability capital, compared to their counterparts operating in more liberal political systems. They must perform a balancing act in which to maintain the organisation they have to appear legitimate in the eyes of their supporters *and* in the eyes of the authorities. Because it is so hard to operate without the express permission of the authorities, the very existence of many organisations is determined by whether they can formally register, and therefore access the services that they require to function, such as basic banking and the ability to employ people. At the same time, the organisation must appear legitimate and trustworthy in the eyes of the people the purport to serve, which is usually the general population. There are times when social problems are exacerbated by government policy or corruption and there is an expectation on NGOs to push back against the authorities or at least lobby for a change in policy, which can equally put them in a difficult position of resisting those who grant them their registration status.

This conundrum facing NGOs in China has become more apparent since Xi Jinping came to power in 2012. Several new laws have come into force which have changed how NGOs operate, particularly where funding can come from. For example, the Law on Administration of Activities of Overseas NGOs in Mainland China, which was enacted in January 2017, has seriously curtailed opportunities for collaboration and funding from international NGOs and foundations (Holbig & Lang, 2021, p. 2). Another law which has had an impact on the sector is the Charity Law of the People's Republic of China, which was enacted in March 2016, and aimed to professionalise the sector. In contrast to the Foreign NGO Law, the Charity Law has been received more warmly by NGOs in China and has created some opportunities for domestic fundraising from the general public which were not available before (J. Wang, 2019, pp. 80-81). This shift has made NGOs more accountable to the Chinese public as they are more reliant on them for funding and are also under greater scrutiny.

It is also true that in the past NGOs in China have suffered from a trust deficit, largely fuelled by stories of impropriety amongst the charitable sector (Long, 2016). One infamous example was that of the internet celebrity Guo Meimei, who claimed to be a general manager at the Red Cross, while at the same time posting multiple photos of her expensive jewellery, clothing, and cars on Weibo. Thousands of angry posts followed asking how someone working for a charity could have become so rich. It turned out that she in fact had no connection to the Red Cross but

her exploits did a huge amount of damage to the charitable sector and levels of trust between the public and NGOs fell to an all-time low (J. Wang, 2019, pp. 96-97). The Me Too movement also encouraged people to speak out about inappropriate sexual behaviour by several leading philanthropists and NGO leaders. This included NGOs in the environmental sector with allegations of inappropriate behaviour being made against the environmentalist and head of the NGO Green Beagle, Feng Yongfeng, who later admitted to sexually harassing several women (Yuchen Zhang, 2018). All these incidents added to the feeling of mistrust in the sector, which extended to those people who work within it, resulting in a certain stigma for many who work in NGOs (J. Wang, 2019, p. 27).

The criticism that not just the Red Cross, but many other NGOs, received online in the aftermath of the Guo Meimei scandal has, however, been a catalyst for greater transparency and accountability in the sector as J. Wang (2019) has noted,

By dragging the reputation of the philanthropy sector through the mud, the incident did a huge favor to non-profits by alerting them to the importance of building credibility online. It seems as if overnight, Chinese philanthropy in its entirety underwent a transformation, with grassroots organizations and foundations alike flocking in unison to Weibo and other digital platforms to post their missions and activities, thus providing easy access for the public to check the details of their operations and financial accountability. (p. 97)

The work done by NGOs to be more accountable, as well as the newly enacted laws have resulted in NGOs improving their levels of trust amongst the public (Edelman, 2022). The legacy of mistrust still exists though and the unfamiliarity of NGOs as a type of organisation, means that the NGOs employ certain practices to help build levels of trust and legitimacy in the eyes of the public. One of these strategies is working with government departments, which can in fact help to create a sense of legitimacy around an organisation (Heurlin, 2015). Examples of these kinds of collaboration can be seen in the data. For example, the Beijing based environmental NGO focussed on nature conservation, Shan Shui Conservation Center, were keen to promote their collaboration with government departments as can be seen in this post:

#Sanjiangyuan Film Studio# With our partner organisation, Sanjiangyuan Ecological Protection Foundation, Shan Shui Conservation Center worked in cooperation with the Makehe [town in Qinghai Province] Forestry Bureau. A total

of 50 monitoring personnel have been trained and 50 infrared cameras have been deployed in seven management and protection stations in the Makehe forest area at the source of the Dadu River. It is hoped that by establishing a long-term biodiversity monitoring network it will increase our knowledge and understanding of the Sanjiangyuan Forest ecosystems. @ZhaoYingjunisanoldherder

Shan Shui Conservation Center is happy to advertise that they are working with the Forestry Bureau in this area and they are actively helping to train personnel from the government. Their supporters can see from this post that they are not only helping to protect the environment in this area, but they are also helping to boost state capacity by training government personnel. It is apparent from some of the posts on social media that organisations want to be seen to be working with government departments on certain projects. The link with government helps to increase their credibility within the eyes of the public and also other government departments. This relationship between the NGOs and government departments can also be seen in the post below from IPE:

2017-2018 Pollution Information Transparency Index (PITI) official evaluation results released. The evaluation covers 120 key cities across the whole country. In the end, Wenzhou @WenzhouHuanbao ranked first with 81 points. Beijing @BeijingZhisheng, Tai'an @TaianHuanbao, and Qingdao @QingdaoHuanbao ranked from second to fourth respectively. Their scores all set a new high for the nine years that the PITI has been running. Ningbo @NingHuanbao, Dongguan @DongguanHuanbao, Zibo @ZiboHuanbao, Jinan @JinanHuanbao, Hangzhou @HangzhouHuanbao, Yantai @YantaiHuanjing made up the rest of the top ten. 🏆🏆🏆 Award Ceremony: Alibaba Foundation Chairman, Sun Lijun, and the SEE Foundation North China Project Center Chairman, Zhu Ning, presented awards to the top ten cities.

The post provides details of a new report released by the organisation looking at levels of government transparency. On the release of the report, and in collaboration with the SEE Foundation and the Alibaba Foundation, IPE gave awards to those government departments that scored the highest in their transparency index showing again that these NGOs are happy to

be seen collaborating and rewarding government departments. Another example of NGOs taking part in a government sanctioned symposium is the post below from Green Central Plains:

#Hubei Environmental Protection NGO# #Wuhan Non-Party Intellectuals and New Social Classes Welcome Spring Forum# On January 28th, 2019, Ke Zhiqiang and Huang Binbin represented Wuhan Green River at the 2019 Spring Festival Symposium for Non-Party Intellectuals and People from New Social Classes. The theme of the symposium was: Jiangcheng's new power, building a new era of dreams.

In the post above, the NGO Green Central Plains, which is based in Zhengzhou, a city of just over 10 million in Henan Province in central China, has a relatively small online presence with fewer than 6000 followers on Weibo, are posting about their involvement in a symposium for non-party intellectuals. The term non-party intellectuals is one used specifically by China's United Front Work Department (UFWD), which is the department within the CCP tasked with co-opting and ensuring that non-CCP members are politically aligned with those of the CCP, both within China and abroad. Under Xi Jinping the UFWD has been given extra responsibilities and funding to carry out its work, part of which is to ensure that intellectuals who are not members of the CCP do not stray politically (Suzuki, 2019). While some of the work carried out by the UFWD is shrouded in secrecy and has alarmed some foreign governments, because of purported attempts to ensure that overseas Chinese are also kept in line (Suzuki, 2019), the work that they carry out in China, particularly around facilitating non-party intellectuals providing feedback to government on policy is well documented (J. Liu, 2021). It's clear that Green Central Plains were not just happy to take part in the symposium but were also happy to broadcast this information to their followers on Weibo, which indicates that they are comfortable with the relationship that they have with the government, a relationship which allows them to feedback information to the UFWD, which could influence policy decisions, or at least open up avenues for further discussions with other government departments.

Another example of an uncritical post is that from the Lüyang Ecology and Environment Center, an NGO based in Chengdu in central China:

Weblink. The second quarter Non-governmental River Chief report for Shuangliu District in Chengdu is here! Over the last two quarters the Non-Governmental River Chiefs have spent 180 hours making 60 onsite inspections and patrolling 508.56km of river. In total 81 problems were identified. The previous response rate was 89.58% and in the second quarter the response rate increased to 93.93%. It's obvious then that communication between the Official River Chiefs and the Non-governmental River Chiefs is improving.

The River Chief's System is one that affords responsibilities to different government departments to look after and monitor certain rivers and catchment areas. There are also non-governmental river chiefs made up of the general public and NGOs (C. Wu, Ju, Wang, Gu, & Jiang, 2020). It is clear from this post that the organisation is happy to praise local government for improving communication between these different actors. Another way in which NGOs in China help to build trust and legitimacy is through taking part in, or leading training sessions to educate either other organisations within the field, government officials, or the general public (Howell et al., 2020). The post below shows Lüyang doing exactly that by leading a training session on China's chemical industry management.

Headline Article: "Lüyang Ecology Center participated in the 'Greenstone - First Green Neighbour Training and Exchange Conference'" held in Nanjing. On December 27th and 28th, 2018, representatives from Lüyang Ecology Center, Chen Zhenhui and Li Fan went to Nanjing to participate in the 'Greenstone - First Green Neighbour Training and Exchange Conference'. The training was hosted by Lüyang Ecology Center. The training was on China's Chemical Industry Industrial Park environmental management upgrade. Please click here to see all the interesting topics covered in the training. "Lüyang Ecology Center participated in the 'Greenstone - First Green Neighbour Training and Exchange Conference'" held in Nanjing.

These posts are all broadcasting information to their followers in a one-way flow of information, but they still perform an important function in creating a sense of legitimacy around the organisation. The importance of this was not highlighted as conspicuously in the

Lovejoy and Saxton (2012) and Zhou and Pan (2016) studies but does deserve this greater focus. The breakdown of the percentages of posts in each category was largely in line with previous studies by Zhou and Pan (2016), N. Zhang and Skoric (2020), and Smith (2018) and Lovejoy and Saxton (2012), in that the vast majority of posts were informational and those building community and asking followers to perform some sort of action were far fewer in number. J. Wang (2019) also came to a similar conclusion when discussing training she'd provided through her NGO, NGO2.0, in China to other NGOs, and lamented the fact that the social functions of social media were not being used as effectively as they could have been. It seems to be an issue that straddles geographical boundaries though, as Lovejoy and Saxton (2012) found the same result amongst U.S. NGOs.

Previous studies using this methodology (e.g. Lovejoy & Saxton, 2012; N. Zhang & Skoric, 2020; Zhou & Pan, 2016) showed what the NGOs motivations for posting were, for example, sharing information with followers, or building a community, or asking followers to carry out some sort of action, but understanding the information contained in the posts in relation to the topics or themes that the NGO is working on was beyond the scope of their analyses. Zhou and Pan (2016), did address this to some extent by expanding the information category to account for the high number of posts that were seemingly unrelated to the missions of the NGOs in China, but this exploration of the content of posts beyond the communicative function that they served was limited. Of equal interest in this thesis is what the contents of each post can tell us about the environmental issues that the NGOs are concentrating on, and why they might do this. Analysis of the environmental themes that a post is about, as well as the data on the communicative functions, provides an added dimension to the findings, and fills the gap in our understanding of what Chinese environmental NGOs post on Weibo and why. It is this analysis that this chapter turns to next.

Analysis of Environmental Themes in Posts

The following section provides a thematic analysis of the posts to identify the environmental issues that were most frequently posted about. In this section coding was created inductively using the six stage thematic analysis process set out by V. Clarke and Braun (2013, Six phases of thematic analysis). The first stage of this process involved reading the posts to become familiar with the data, the second was to code the data, the third was searching for themes, the

fourth was reviewing the themes, fifth was defining and naming the themes, and finally the sixth involved writing up the findings. The purpose of the thematic analysis was to search for common or shared meaning within the posts and organise these into distinct themes (Kiger & Varpio, 2020). The coding and subsequent identification of themes was specifically aimed at answering the research question for this section which was what environmental issues are the NGOs posting about? It's important to note that the initial coding was used to group similar posts together using keywords before consolidating them into the broader themes that are shown in Table 10, with example posts to illustrate what sort of posts were included in each theme.

Table 10*Example posts by theme*

No.	Category	Example Post in Chinese	Example post in English	Posted by	Date
1.	Air Pollution and Air Quality	<p>#蔚蓝地图# 【中国气象局把脉汾渭平原大气治理：陕晋豫三省协同治理待加强】来源：中国气象报 当京津冀地区空气质量显著提升、珠三角地区空气质量持续达标时，汾渭平原依旧是全国空气污染最严重的区域之一，引起政府和公众的广泛关注。由于山西、陕西能源结构以煤炭为主，而且汾渭平原地理因素不利于污染物扩散，使得这里成为大气污染治理的“硬骨头”。大气是没有边界的，区域联防十分必要。禹门口黄河大桥，是秦晋两省的连接地带，也是汾河平原和渭河平原污染的传输纽带。在西南风作用下，陕西韩城龙门工业区的污</p>	<p>#Blue Map# China Meteorological Administration management of the atmosphere of the Fenwei Plain. The coordinated governance of the three provinces of Shaanxi, Shanxi and Henan needs to be strengthened. Source: China Meteorological News. The air quality in the Beijing-Tianjin-Hebei region has improved significantly and the air quality in the Pearl River Delta continues to reach legal standards. However, the Fenwei Plain is still one of the most severely polluted areas of the country, which has attracted widespread attention from the government and the public. Because both Shanxi and Shaanxi's energy is mostly derived from burning coal, and the geography of the Fenwei Plain is not conducive to the diffusion of pollutants, it has become a very difficult task to control air pollution there.</p>	IPE	24/01/2019

染团会跨过黄河，与山西河津的污染团结合，直奔西安而去。因此，陕西、山西、河南三省协同治理亟待加强。 网页链接 @公众环境马军

The atmosphere has no borders, and so joint regional defence is very necessary. The bridge over the Yellow River at Yumenkou is the link between Shaanxi and Shanxi provinces, and the transmission point for pollution from the Fenhe Plain and the Weihe Plain. Under the influence of the southwest wind, pollution from Longmen Industrial Zone in Hancheng, Shaanxi will cross the Yellow River, combine with pollution from Hejin, Shanxi, and go straight to Xi'an. Therefore, the coordinated governance of the three provinces of Shaanxi, Shanxi and Henan urgently needs to be strengthened. Web Link. @IPEMaJun

2. Non-environmental

朋友们，2019年就这样到来了，首先祝福大家新年快乐，其次感谢大家在过去的一年里对山水自然保护中心的关注与支持，在此一并道谢！2018年是收获颇多的一年，2019年我们也将脚踏实地，继续前

Friends, 2019 is almost here, so first of all we'd like to wish you all a happy new year. We'd also like to say thank you to everyone who has followed and supported Shan Shui over the past year. 2018 brought many rewards and in 2019 we will continue to move steadily forwards.

Shan Shui Conservation Center

01/01/2019

		进。PS:考验真爱粉的时刻来了, 辨别出以下三个剪影, 并且评论+转发, 假期结束后通过@微博抽奖平台抽2位送【祝你2019年火力全开的山水定制笔记本】。	P.S. Time to test the true love of our fans. Can you identify the following three silhouettes? Answer in the comments and repost. After the holidays we will use the @WeiboPrizeGeneratorPlatform and choose two people to receive a happy 2019 custom Shan Shui notebook.		
3.	Conservation and Nature	山水自然保护中心将与年保玉则生态环境保护协会合作, 共同建立久治绿绒蒿的保护小区, 继续发动本地群众进行和监测。久治绿绒蒿社区保护地项目启动	Shan Shui will work together with the Nianbaoyuze Ecological Conservation Association to create a protected area in Jiuzhi County for the Himalayan poppy and mobilize local people to continue to monitor the area. The Jiuzhi Himalayan Poppy protected land project launch.	Shan Shui Conservation Center	11/01/2019
4.	Water Pollution and Water Quality	#清源行动# 12月18日, 九江水源地巡护工作正式开展, 定期观察、巡护, 对水源地污染问题建立快速反应机制, 立足推动更多的社会力量, 解决水源地污染问题。守护美好家园, 青赣在行动! 南	#Clear Source Action# On December 18 th , the patrol work of Jiujiang water source area was officially launched. Regular observation and patrols were carried out to establish a rapid response mechanism, and to promote more social forces to solve pollution problems in the water source area. Guarding the beautiful	Jiangxi Environment Communication Centre	09/01/2019

	昌 · 京东镇	homeland, Qinggan is taking action!			
		Nanchang · Jingdong Town			
5.	Transparency and Accountability	发布了头条文章：《企业污染榜单 中央环保督察组受理关注广安、宜宾与达州污染榜单播报》 点击查看！事件都知道！绿氧对于中央环保督察组受理关注广安市、宜宾市与达州市污染榜单企业进展播报出来啦！！后续我们将会对其他涉及的地市州持续播报，希望大家持续关注！！ @四川环保 @合一绿学院 @阿拉善SEE公益机构 @阿里巴巴公益基金会 @成都市锦江区社会组织发展基金会 企业污染榜单 中央环保督察组受理关注广安、宜宾与达州污染榜单播报	Article published: “List of Polluting Enterprises. List of polluters being supervised in Guang’an, Yibing and Dazhou by the central environmental protection supervision units has been released”, click here to have a look! Lvyang has published a progress report for polluting enterprises in Guang’an, Yibin, and Dazhou that are being supervised by the central environmental protection supervision units. To follow-up we will continue to publish reports for other cities and provinces involved. We hope everyone will continue to pay attention to this! @SichuanHuanbao [the Weibo account of the Sichuan Environmental Protection Bureau], @HeyiInstitute, @SEEFoundation, @AlibabaFoundation, @ChengduJinjiangDistrictSocialOrganizationDevelopmentFoundation. List of Polluting Enterprises. List of polluters being supervised in	Lvyang Ecology Center	23/01/2019

			Guang'an, Yibing and Dazhou by the central environmental protection supervision units has been released		
6.	Environmental Justice	#蔚蓝地图# 【“常州毒地”案二审焦点：政府收储污染地块后污企是否还担责】来源：澎湃新闻 今天上午9点半，两环保组织北京市朝阳区自然之友环境研究所（简称自然之友）、中国生物多样性保护与绿色发展基金会（简称中国绿发会）与江苏常隆化工有限公司（简称常隆公司）、常州市常宇化工有限公司（简称常宇公司）、江苏华达化工集团有限公司（简称华达公司）环境公益诉讼在江苏省高级人民法院进行公开开庭审理。合议庭由审判长陈迎，审判员臧静、赵黎组成，由于此前一天已进行过庭前会议，当日的庭审现场主要围绕三家	#Blue Map# Focus of the second instance of the "Changzhou Poisonous Land" case: whether the polluting company still bears responsibility after the government collects and stores contaminated land. Source: thepaper.cn. This morning at 9.30, environmental public interest litigation brought by two environmental NGOs, Beijing Chaoyang District Friends of Nature Environmental Research Institute (Friends of Nature for short) and the China Biodiversity Conservation and Green Development Foundation (China Green Development Foundation for short), against Jiangsu Changlong Chemical Co., Ltd. (Changlong Company for short), Changzhou Changyu Chemical Co., Ltd. (Changyu Company for short) and Jiangsu Huada Chemical Group Co., Ltd. (Huada Company for short) were heard in the Higher People's Court of	IPE	19/12/2018

公司是否应当承担环境污染侵权责任、是否应当承担赔礼道歉的责任两大争议焦点展开。上午的庭审持续了三个多小时，双方辩论结束后，审判长陈迎宣布休庭，拟在下周四（12月27日）上午9点半，在该庭对此案进行宣判。 网页链接 @公众环境马军

Jiangsu Province. The panel of judges was comprised of the presiding judge, Chen Ying, and two other judges, Zang Jing and Zhao Li. Since the pretrial meeting had been held the previous day, the court hearing on that day mainly focused on whether the three companies should bear responsibility for the environmental pollution and whether they should apologise for the pollution. The court hearing lasted for three hours in the morning and after the two parties argued their cases, the presiding judge, Chen Ying, announced an adjournment to the case until 9.30am next Thursday (December 27th), when the judgement in the case would be made. Weblink @IPEMaJun

7.	Waste and Recycling	#青赣日常# 12月23日，青赣受邀参加南昌晚报主办的“汇爱暖心，公益集市”爱心公益活动，现场青赣志愿者耐心给社区居民讲解垃圾分类的知识，如何做环保酵素，如何利用废油做肥皂，如何做环保洗	#Qinggan Daily Update# On December 23 rd , Qinggan received an invitation to attend the “Full of Love and Warm Hearted” charity event organised by the Nanchang Evening News. At the event, volunteers from Qinggan, to improve residents’ environmental knowledge and	Jiangxi Environment Communication Centre	23/12/2018
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		衣液等等，提高居民环保意识，共建美丽家园！	together create a beautiful homeland, patiently explained how to properly separate their rubbish, make environmentally friendly enzymes [digestive supplements?], use waste oil to make soap, and make environmentally friendly laundry liquid.		
8.	Weather	<p>#蔚蓝地图# 【北京节后降雪，京沪大羊坊、京津台湖高速出京方向已封闭】来源：北京青年报 今天，北京大部分地区出现降雪，北青报记者从交管部门获悉，为确保全市雪天交通运行安全平稳，交管部门已采取多项针对措施，全力做好雪天道路交通应急保障工作。受降雪影响，目前京沪高速大羊坊出京方向，京津高速台湖出京方向，已采取封闭措施，请注意绕行。 网页链接 @公众环境马军</p>	<p>#Blue Map# Snow hits Beijing after the holidays, and the Beijing-Shanghai Dayangfang and Beijing-Tianjin-Taihu Expressway exits from Beijing have been closed. Source: Beijing Youth Daily. It will snow in most areas of Beijing today. A reporter from Youth Daily learned from the traffic department, that to safeguard the smooth and safe running of transport across the whole city several measures have already been put in place and road traffic emergency snow response measures have been implemented. Affected by the snowfall, the Beijing-Shanghai Expressway from Dayangfang to Beijing and the Beijing-Tianjin Expressway from Taihu to Beijing have been closed. Please</p>	IPE	12/02/2019

			pay attention to detours. Weblinks. @IPEMaJun		
9.	Climate Change and Low Carbon	【珊瑚裸尾鼠灭绝，这是 #首个因 气候变化灭绝的哺乳动物# 】2月 18日，澳大利亚官方确认珊瑚裸尾 鼠灭绝，成首个因人为引起的气候 变化灭绝的哺乳动物。海平面上 升，栖息地出现极高水位和破坏性 风暴潮频发，这些人为引起的气候 变化是导致珊瑚裸尾鼠灭绝的根本 原因。 @时差视频 时差视频 的秒拍视频	The Bramble Cay mosaic-tailed rat is extinct. This is the #first mammal to go extinct because of climate change#. On February 18 th , Australia officially confirmed that the Bramble Cay mosaic-tailed rat had become extinct, becoming the first mammal to go extinct due to human- induced climate change. Rising sea levels causing extremely high water levels in their habitats and frequent destructive storm surges are the root causes of the extinction of the Bramble Cay mosaic-tailed rat.	SEE Foundation	21/02/2019

Table 11 shows the number of posts per theme and the percentage that these make up.

Table 11

Number and percentage of posts by theme

Theme	No. of Posts	Percentage
Air Pollution and Air Quality	191	26.2%
Non-environmental	187	25.7%
Conservation and Nature	151	20.7%
Water Pollution and Water Quality	66	9.1%
Transparency and Accountability	39	5.3%
Environmental Justice	38	5.2%
Waste and Recycling	35	4.8%
Weather	13	1.8%
Climate Change and Low Carbon	9	1.2%
Total	729	100%

Focus on Mainstream Issues

The environmental themes that emerged from analysing the data point to a set of issues that are very much in the Chinese mainstream and are regularly discussed in the wider press. Public discussion about China's air pollution and smog problems have been politically sensitive, especially around the time of the Beijing Olympics in 2008 and in the subsequent four years where discrepancies between government monitoring and U.S. Embassy air quality monitoring was apparent. However, they no longer maintain this level of sensitivity (Kay, Zhao, & Sui, 2015). Air pollution and air quality have become an accepted and safe topic of discussion since some of the worst smogs, especially those that blanketed Northern China in 2011 and 2012, brought the subject to national prominence, and the Chinese government installed air pollution monitoring devices in many large urban areas and released this data to the public (Y. Zhang, 2017). There has also been a marked improvement in air quality since 2013, especially in Beijing and other large urban areas (Aunan, Hansen, & Wang, 2017), which has no doubt reduced the sensitivities around the subject. Air pollution is still an issue that affects millions of people in China and this interest in air quality is reflected in posts like post number one in Table 10. It is an example of a post related to air pollution, posted by IPE,

and is a body of text taken verbatim from a newspaper article. It articulates one of the problems of air pollution in China in that it crosses provincial boundaries, meaning that measures to control air quality need to be coordinated so that the sources of pollution are not just moved. Posts related to air pollution and air quality make up 26.2% of the total. This is not surprising considering the amount of attention that air pollution in China has garnered over the past ten years. It has been well documented that Weibo played an important role in highlighting air pollution problems and has been used by activists in the past to draw attention to the issue so the NGOs posting about it is unsurprising (Y. Zhang, 2017). It is now also a relatively safe topic to discuss and unlikely to spur any government reprisals. It's also an opportunity to inform followers about the current measure of air quality, and in some cases, this is done daily by an NGO. Providing this sort of information to followers, which can be seen as a handy daily update that allows people to plan their day, could be a way of retaining and gaining followers.

The second most common posts were in the non-environmental category, with 25.7% of the total. It should be noted that the non-environmental category differs slightly from the unrelated information category in the communicative function analysis previously. Posts were coded here as non-environmental if there was no discernible environmental topic within the text. This doesn't mean that the post was unrelated to the organisation's mission as it may be about fundraising or promoting an event etc. The purpose of the analysis in this section was to identify environmental themes within the data so anything that was not obviously an environmental theme was deemed to be non-environmental. Reasons for posting non-environmental information mirror those in the unrelated category in the analysis in the previous section.

Even though some of the NGOs work closely with private sector businesses, including multi-nationals (The Institute of Public and Environmental Affairs & SIP Lüse Jiangnan Public Environment Concerned Centre, 2021), there is very little evidence of these relationships in their social media output. The data does contain posts related to Chinese companies, sometimes for violating emissions standards and coming under the supervision of the environmental authorities, as in post number five in Table 10. Post number six in Table 10 details one of the hearings in an appeal court case, initially brought by the NGOs, Friends of Nature and China Green Development Foundation, against the Changlong Chemical Company, Changyu Chemical Company, and Jiangsu Huada Chemical Group for their role in

polluting the soil at the site where a school had since been built and many children had become sick. The NGOs initially lost the hearing and were ordered to pay the costs of the case but decided to appeal. At the appeal hearing the judge ruled that the NGOs no longer had to pay costs and the chemical companies had to apologise for the pollution, but they did not have to pay for the remediation and removal of polluted soil from the site, which was the initial aim of the NGOs in bringing the case (Y. Li, 2021). The post was not posted by either of the NGOs involved in the case but by IPE, perhaps because it was of national interest and as a way of showing support.

Domestically Focussed

Several large international environmental NGOs such as Greenpeace, WWF etc. have Sina Weibo accounts with significant numbers of followers. In their study of Greenpeace's use of Weibo, Ji, Harlow, Cui, and Wang (2018), found that there was widespread interaction between Greenpeace's followers and the organisation on Weibo, so they have a significant presence on the platform. For example, they have over one million followers on Sina Weibo but there is very little, if no, interaction between these international organisations and the local Chinese ENGOS that form the sample in this study. There is also very little mention of topics that cross international boundaries such as climate change. The nature and conservation posts are directed at domestic issues or projects that fall within China's border, even though there is a growing recognition that the actions of Chinese consumers and companies can have a huge effect on endangered species in other countries, for example in the hunting and sale of sharks' fin for soup, or pangolins for the use of scales in Chinese traditional medicine. Chinese celebrities like the retired basketball player Yao Ming have worked with international NGOs on these issues (WildAid, 2022), but there is no mention within this dataset of these problems. Perhaps for fear of alienating a domestic audience or perhaps because the impacts are largely felt overseas, they see these issues as beyond the scope of their work. It is very much a domestic set of issues and a domestic network of actors. Perhaps this is another symptom of NGOs being viewed as some sort of foreign import so to advertise the fact that they work with foreign organisations, or are more concerned with international issues, may exacerbate levels of mistrust or misunderstanding in the sector. Since the adoption of the Foreign NGO Law in 2017 which limits the scope for collaboration between foreign organisations and Chinese NGOs, there has been greater scrutiny generally of foreign organisations which could have impacted the willingness of NGOs to address international issues.

Very Little Mention of Climate Change

One of the most pressing international environmental issues is climate change, but posts related to climate change and low carbon make up only 1.2% of the total number. There were more posts about the weather than there were about climate change. J. C. Liu and Zhao (2017), in a study of posts about climate change on Weibo also found that it was largely a topic covered by international organisations, state media, and government departments, with little input from Chinese organisations. A survey conducted in 2019 mirrored these findings and showed that the general public in China were largely unconcerned about the effects of climate change (X. Liu, Hao, Portney, & Liu, 2019), but more recent evidence points to a shift in the way the public perceives climate change as a threat with the fact that mentions of climate change and climate warming in the Chinese press rose rapidly between 2019 and 2021. Political events in 2021, which included the Conference of the Parties 26 (COP26) summit in Glasgow as well as extreme weather in China, which caused widespread flooding, have ignited public interest and directly linked people's lived experience with the effects of climate change (Yuan, 2021). The data used in this thesis was collected before this period and so may reflect the wider views in society about the threat, or perceived lack of a threat, from climate change. Future research could look at posts by the NGOs more recently to see if the situation has changed and they are now posting more on climate change.

Nonconfrontational Approach to Activism

There is very little overt and direct criticism of government at any level within the dataset. There is some degree of lobbying and advocacy but it's very much within the context of the Chinese political system, in that there are no radical calls for changes of policy or harsh criticism of government actions or officials. This politically restrained output by the organisations is largely reflected across Chinese social media, but the difficult position that NGOs are in because of their reliance on a registration status decided upon by the very authorities they may want to criticize adds to the pressure that they may be under. The fact that they are organisations, rather than individuals could also constrain them as Zhou and Pan (2016) have suggested that, "organisations are 'moral actors' in a more radical sense than human individuals. They are expected to take full responsibility for all actions they commit or omit" (Zhou & Pan, 2016, p. 2345). Zhou and Pan (2016) go on to argue that an "individual netizen, if caught by the authorities, may argue that he/she is ignorant of the regulations or is under bad influences of peers. An NGO, however, may not claim to be ignorant of the law or to be a victim of deviant socialization" (p. 2345). Whether or not an individual would get

away with such a defence is debatable but the chances of an NGO pleading ignorance and being excused are extremely unlikely.

The way that the production and spreading of online content is governed in China is also a factor limiting what NGOs can post online. For example, the judicial authorities released an interpretation of the crime of defamation to include online content. Titled, The Supreme People's Court and Supreme People's Procuratorate Interpretation on Several Issues Regarding the Applicable Law in Cases of Using Information Networks to Commit Defamation and Other Such Crimes (最高人民法院关于办理利用信息网络实施诽谤等刑事案件适用法律若干问题的解释) and released in 2013, it laid out several new interpretations of laws governing online content. The interpretations stipulated that anyone found to be using information online to defame others could be severely punished and sentenced to three years in prison, put under criminal detention or surveillance, or deprived of their political rights, under article 246 of China's Criminal Law. These punishments could be meted out if the defamatory material was viewed more than 5000 times, or reposted more than 500 times, or if the content, "(1) Causes a mass incident; (2) Causes public disorder; (3) Causes ethnic or religious conflicts; (4) defamation of multiple persons that creates a repugnant social impact; (5) Harms the national image, seriously endangering national interests; (6) Creates a repugnant international impact; (7) Other situations that seriously endanger social order or national interests" (China Law Translate, 2013, Articles 2 and 3). As with many Chinese laws the definitions are vague and the situations in which someone could be found to be posting defamatory material is equally open to interpretation and could be applied very easily to political speech if it was deemed endanger social order or national interests. There is a clear link between the number of followers and the number of retweets that a post might receive (Saxton & Wang, 2014), so the new interpretations are particularly concerning for individuals or organisations who have a sizeable following online, as 500 reposts of something deemed defamatory could result in serious punishment. This means that the NGOs must be extremely careful about what they post to Weibo so as not to be accused of defamation. This could help to explain some of the posts in which information is copied verbatim from another source such as official news media. Posting in this way about pollution or some other environmental issue affords the poster with a level of legal protection in that they did not create the original content.

Even though there are restrictions on what can be posted on Weibo and the threat of legal action against those who are overtly critical is very real, there is evidence in the data of the NGOs using the platform to highlight areas of environmental protection that they wish to see more focus on. Posts about environmental justice and transparency and accountability show that the NGOs are probing for ways to ensure that environmental regulations are enforced. Weibo is, therefore, not a barren desert of political thought, communications, or discussions, but does in fact play a role in political discourse around environmental issues online. It is true that there are no overtly politically contentious issues raised in the dataset and the type of activism that the NGOs carry out is nonconfrontational, but this does not mean that their activities on Weibo are without purpose.

Conclusion

The analysis of the communicative functions of the posts showed that the majority were informational in nature, which was similar to previous studies and observations (e.g. Lovejoy & Saxton, 2012; N. Zhang & Skoric, 2020; Zhou & Pan, 2016). In line with the findings from Zhou and Pan (2016), there were many posts that were found to be completely unrelated to the mission of the organisation and without any relation to environmental issues. There could be several reasons for this including the nature of posting information on Weibo, in that the site is largely made up of entertainment and gossipy celebrity posts and so people working in NGOs and posting online merely reflect this kind of culture. It is likely more deliberate than this though, with NGOs posting about familiar and popular topics to appeal to their followers as an unthreatening and relatable organisation staffed by people who share similar interests and adhere to the same social conventions. The largely informational nature of their social media posts does suggest that this group of Chinese NGOs are still not using social media to its full potential. The dialogic potential of social media, with its avenues for two-way communication between follower and followee, if harnessed properly could help NGOs build better relations with followers and tap into this resource to further the goals of the organisation. The reasons for this could be a lack of expertise or the lack of sufficient resources to expend on constant monitoring and replying to messages on social media, which can be considerable.

Most of the NGOs included in the study are registered with the authorities and are based in large urban centres. Even NGOs that work on projects based in remote parts of the country, such as Shan Shui Conservation Center, who work in parts of Tibet, are still based and

registered in large cities like Beijing. These findings are largely in line with those of Spires et al. (2014) even though they conducted their research in 2014, which suggests that in terms of the location of NGOs, many are still looking to the advantages of urban centres when establishing themselves. In terms of their use of Weibo, there is a wide variation in the number of followers that an NGO has and how active they were on the platform during the research period. Those, larger, better funded, and well-established NGOs based in higher tier cities had the most followers and tended to post the most content. There is evidence that a consolidation of followers has taken place for those NGOs that already had a significant following in 2018, with some gaining a significant number over the past four years. Smaller NGOs have not fared so well and many of them have not been able to grow their follower base at all, and in some cases have lost followers.

The environmental issues that the NGOs were posting about largely stuck to politically safe, mainstream issues in China. There's no mention of politically sensitive topics that would contravene government policy such as opposition to hydropower, which is something that NGOs have previously campaigned against (Yeophantong, 2020). Issues are framed in a nonconfrontational way and in some instances government departments are praised by the NGOs for the work that they have done, rather than the vociferous criticisms that NGOs often employ in the West. Violations of environmental standards are highlighted and court cases where polluters have been taken to court are discussed, but these too remain in the safe confines of what is politically and socially acceptable in China. Another aspect of the posts is that they are domestically focussed with little mention of international issues, and of note is the lack of posts about climate change. These findings are in line with what J. C. Liu and Zhao (2017) found when analysing posts about climate change on Weibo, although more recent events suggest that this could be changing, and would be worthwhile investigating in future research.

There has been a tendency in the literature to discuss the use of Weibo as a binary phenomenon whereby users are either the brainwashed masses, cowed by government censors into a world devoid of political content, or the other extreme of the dissident rebel, constantly trying to evade the censors, something which Leibold (2011) terms the control/resistance paradigm. The reality is that the NGOs do not fall into these binary categorisations and viewing their posting through this frame does not really shed light on why they post to Weibo. They are restricted by government controls on online content and by the

registration system under which they operate, but within this system they do question and probe around environmental issues. Their Weibo accounts, although to a lesser degree than they are used for broadcasting information, are also used to build a community of likeminded users around the organisation and call on followers to take some forms of concrete actions that help to further the aims of the organisation. A far more fruitful way to look at their online postings is that they adopt a nonconfrontational approach to their activism, in which environmental issues are framed in a socially acceptable manner with followers encouraged at times to take some form of action to further the aims of the organisation. This nonconfrontational approach is still meaningful, however, as their online activities help to bring people together as volunteers and concerned citizens, which in turn helps to play a role in building social capital. Government departments, when they are mentioned, are not necessarily viewed as the opposition but are instead looked at as potential allies with the resources and connections to be able to solve environmental issues.

Chapter 5: Interactivity on Chinese ENGO's Weibo Accounts: Hashtags, @Mentions, and Retweets

Introduction

A fundamental aspect of social media, and one that makes it distinct from other media, is the way that users can employ different functions within the software platforms to interact with each other. This chapter will look at some of the interactive functions available on Sina Weibo, specifically the use of hashtags and mentions by the NGOs and how other users interact with the NGOs by retweeting and commenting. Both qualitative analysis methods and quantitative network analysis will be used to provide insight into the NGOs use of social media and how they interact with different actors online, such as their followers, other organisations, and government departments. The chapter first analyses how hashtags are used by the NGOs in their posts, followed by an analysis of mentions, both in terms of how they are used in posts and the networks that are formed through their use. The chapter then moves on to look at which of the posts are retweeted the most, why they are retweeted, and by whom.

A number of studies have looked at the use of social media by NGOs in China (e.g. F. Chen, 2019; N. Zhang & Skoric, 2020; Zhou & Pan, 2016), but there is rarely a detailed analysis of the way in which NGOs have used elements specific to social media such as mentions and hashtags. It is this gap in our knowledge that this chapter of the thesis will help to fill so in this section the data on hashtags, mentions, and retweets will be analysed. Data presented in this chapter was extracted from posts that were scraped from the chosen NGO accounts between December 19th, 2018, and February 25th, 2019, using the methodology detailed in Chapter 3. Hashtag and mention data is contained within the body of the post itself and so to obtain the data, queries were made to the database containing all the relevant posts using Microsoft SQL Server, the use of which was detailed in the methodology chapter previously. Raw data on the number of retweets a post received was extracted in the same way. The method of obtaining and organising the data to make it possible to create a network graph of mentions will be covered further in the chapter as it was more complex. The first section of the chapter looks at the use of hashtags by the NGOs; the second looks at the use of mentions, both in terms of the way that their use can be used to analyse the networks that form around the NGOs, and as a qualitative way of understanding who they are alerting to their posts and why; the third section analyses which posts attracted the most retweets and why.

Hashtags

First used on photo sharing sites to help organise pictures and then later introduced on Twitter in 2007 as a way for people to follow discussion topics more easily (Bernard, 2019, p. 1), hashtags have gone on to become a major feature of most social media platforms. The hashtag essentially helps to index information, making it easier for people, and notably also search engines and algorithms, to find certain posts (Bernard, 2019). They allow people to follow or participate in a discussion around a particular topic and they've come to be used extensively, both in consumer marketing campaigns and in online political activism. On Twitter, hashtags often appear in the top trending articles, whereas on Weibo top-trending hashtags are listed to give an indication of what topics are currently popular. Some notable hashtag marketing includes the Coca-Cola marketing campaign #ShareACoke, which encouraged people to share pictures of themselves holding a can of coke, where the brand tag Coca-Cola text is replaced with personalised text instead, such as a name. It's gone on to be one of the most successful hashtag marketing campaigns in history and has helped to increase Coke's share of the market in several countries (Fulgoni, 2015). Many advocacy campaigns share similarities with marketing campaigns in that they aim to increase the reach of the campaign more widely and persuade people to carry out some form of action. Greenpeace, for example, has used the Instagram hashtag #TheLostCityInYourStyle to encourage illustrators and artists to draw depictions of the ocean in their own unique styles to raise awareness of the dangers of deep sea mining (Greenpeace International, 2019).

Hashtags can help to increase engagement with followers and the wider online community, build 'brand awareness', show support for a particular cause or topic, and make a post more visible to a target audience. Guo and Saxton (2014) have argued that it is the participatory, decentralised and community forming nature of hashtags that makes them so powerful,

First, the use of hashtags is powerful because it is participatory. Hashtags are not decided in advance by a pre-determined set of users. The hashtag system constitutes a decentralized, user-generated tagging, organizing, and classification system. The hashtag classifies messages, improves searchability, and allows the organization to link messages to existing knowledge and action communities. It is this community element that undergirds the power of hashtags. (p. 5)

Guo and Saxton (2014) were writing about the use of hashtags on Twitter, but their use on Weibo is similar in the way that they are also participatory and are user generated. However, hashtags on Weibo are not always as decentralised as their counterparts on Twitter, as

sometimes they are decided in advance by a pre-determined user, who is essentially a host of the hashtag. If, as Guo and Saxton (2014) argue, it is the decentralised nature of hashtags that give them their power then the way in which they are sometimes used on Sina Weibo, with a designated host, means that their function is altered somewhat. There are some similarities though, as A. Bruns and J. E. Burgess (2011) have pointed out, hashtags allow users to join a community of posts without the usual follower/following relationships, and this is also true on Weibo.

How are hashtags used on Weibo by Chinese Environmental NGOs?

Since their inception much has been written about hashtags and their various uses and implications. The academic literature tends to fall into two camps when discussing hashtags: their use in political activism, and their use as a communication marketing tool. These studies include an exploration of hashtags as a narrative form in online campaigns such as #BlackLivesMatter (Yang, 2016), the use of political hashtags on Twitter in Canada (Small, 2011), the way in which health NGOs in the U.S. use them in their social media output (Saxton et al., 2015), motivations for using hashtags on social media (Rauschnabel, Sheldon, & Herzfeldt, 2019), media portrayals of hashtag activism (Moscato, 2016), the negative aspects of using hashtags (Lorentzen & Nolin, 2017; Mayr & Weller, 2016), and how hashtags are used in sports marketing (McKelvey & Grady, 2017). There have been fewer studies of how hashtags are used on Chinese social media, but a limited number of publications have looked at topics ranging from how the use of hashtags changed over the course of the covid pandemic (H. Cui & Kertész, 2021), how hashtags can be used to measure social emotions to online topics (K. Ding et al., 2020), and an analysis of hashtags on Weibo relating to older people during the covid pandemic (Xi et al., 2020).

Gao et al. (2012) have also conducted a comparative study of the use of Twitter and Weibo and found significant differences in the way that the platforms were used. They found that hashtags were used less frequently on Weibo than they were on Twitter and suggest that the reason for this is that Twitter users are more eager for their posts to appear in public discussions (Gao et al., 2012, p. 100). Gao et al. (2012) based their research on a very large dataset of some 40 million posts, meaning that their findings are representative of general Weibo users. However, the way that a public facing organisation such as an environmental NGO uses Weibo could be quite different, with NGOs more likely to be happy for their posts

to appear in public discussions, which could affect the way that they use hashtags, doing so to increase their public exposure for example.

The term hashtag is derived from the symbol used to denote a hashtag: ‘#’. The ‘#’ symbol, sometimes referred to as the pound sign⁷, but now more commonly known as the hash sign, is placed either at the start of a word or phrase when writing in languages where there are spaces between words, or at the beginning *and* end of the word or phrase in languages, such as Chinese, that do not have spaces between words or characters. For example, a hashtag on Twitter could be #blacklivesmatter whereas on Weibo a hashtag would be written #专家建议农民在县城买房住#. Hashtags work in a similar way on most social media platforms like Twitter, Facebook and Instagram but differ slightly on Sina Weibo. The way that hashtags can be managed, or hosted, by a user on Sina Weibo means that the user hosting the hashtag can control some of the details present on the hashtag page. For example, when a user clicks on the hashtag, they are taken to a page with posts containing the hashtag, but if the hashtag is hosted, an explanation of the hashtag can be added as a banner at the top of the page next to the user’s picture, which links directly to their account. Figure 1 shows the hashtag page for the #SEE Foundation Let the Birds Fly# hashtag which includes a banner at the top introducing the Foundation’s Let the Bird’s Fly campaign. The SEE Foundation’s Weibo username and profile picture is also in a prominent position at the top right of the page making it very easy for anyone interested in the hashtag to follow the organisation too. Below the host’s username and profile picture are the most prolific users of the hashtag so people can see who else has been using it. Contrast this with Figure 2, which shows an unhosted hashtag and there is no explanation or picture banner at the top and it is just the most prolific users of the hashtag listed at the top right of the screen, rather than the host. Any user can set-up or claim a hashtag, but only one user can act as host per hashtag, although the host can nominate up to 20 other users to help manage the hashtag page. If the host fails to engage with the hashtag at least every two weeks, either by forwarding, commenting on, or liking a post containing the hashtag, then the hashtag will become available for others to host (Sina Weibo, 2022).

⁷ Called a pound sign because when scribes wrote the abbreviation for a pound (lb) in weight, it often looked like #.

Figure 1

Screenshot of the #SEE Foundation Let the Birds Fly# hashtag page on Weibo



Figure 2

Screenshot of #Beijing Snow# unhosted hashtag page



It is not only the ability to host a hashtag on Weibo that makes it different to hashtags on Twitter. The way that hashtags are written is also quite different. Whereas most hashtags on Twitter consist of one or two words, hashtags on Weibo, tend to contain more information. This is largely because two words in English may contain eight characters, whereas eight Chinese characters could be a whole sentence. For example, the Chinese hashtag #美国就是全球最大的人权赤字国# is only 14 characters long, but when translated into English it is,

#America is the country in the world most deficient in human rights#⁸, so 14 characters becomes 55, which makes a big difference when brevity is so important on microblogs.

The data on hashtags used in the following analysis was extracted from the posts scraped during the data collection period which ran for 68 days from December 19th, 2018, to February 25th, 2019, as detailed in Chapter 3. Accessing data on hashtags can be problematic as data of this nature can be very expensive to purchase (McCay-Peet & Quan-Haase, 2017), but due to the way that the posts were scraped and stored in a database it has been possible to extract the hashtags for further analysis. Hashtags were extracted from the database using a small piece of code which looked for any characters encased by two hash signs. In total, 82 unique hashtags were used 569 times during the research period by the NGOs. Table 12 contains the 82 hashtags and their English translations, plus the number of times the hashtags were used by the NGOs during the data collection period.

⁸ Spaces between words in translated hashtags have been included for ease of reading.

Table 12*Hashtags used during the research period by the NGOs*

No.	Hashtag (Chinese)	Hashtag (English Translation)	No. of times used by all NGOs during data collection period
1	#蔚蓝地图#	#Blue Map#	250
2	#郑州，一目了然#	#Zhengzhou, at a glance#	83
3	#早安沱沱河#	#Good Morning Tuotuo River#	49
4	#春节摄影大赛#	#Spring Festival Photo Contest#	15
5	#三江源摄影棚#	#Sanjiangyuan Studio#	18
6	#青赣日常#	#Qinggan Daily#	8
7	#新年愿望#	#New Year's Wishes#	8
8	#自然有你#	#Nature has you#	7
9	#两栖爬行动物#	#Amphibians and Reptiles#	7
10	#山水家园守护者#	#Shanshui Homeland Guardians#	7
11	#保护站这一刻#	#The Environmental Protection Station at This Moment#	6
12	#绿氧环保行动#	#Lvyang Environmental Actions#	6
13	#阿拉善 SEE 一亿棵梭梭#	#SEE Foundation 100 million Trees#	5
14	#自然阅读#	#Nature Reading#	5

15	#给兔狲藏狐建个家#	#Build a home for the rabbit, the Pallas's cat, and the fox#	5
16	#清源行动#	#Clean Source Action#	4
17	#山水时节#	#Shan Shui Season#	4
18	#湖北环保 NGO#	#Hubei Environmental Protection NGOs#	3
19	#山水人#	#Shan Shui People#	3
20	#情人节这样过#	#Celebrate Valentine's Day like this#	2
21	#阿拉善 SEE 诺亚方舟#	#SEE Foundation Noah's Ark#	2
22	#绿色江河志愿者招募#	#Green River Volunteer Recruitment#	2
23	#环境公益诉讼简报#	#Environmental Public Interest Litigation Briefing#	2
24	#你好 2019#	#Hello 2019#	2
25	#壹起分#	#Separate together#	2
26	#一目了然#	#At a glance#	2
27	#情人节#	#Valentine's Day#	2
28	#全民拜年#	#Happy New Year's Eve to Everybody#	2
29	#元宵节快乐#	#Happy Lantern Festival#	2
30	#环保热点聚焦#	#Environmental Hotspot Spotlight#	2
31	#郑州雾霾#	#Zhengzhou Smog#	2

32	#北京下雪#	#Snow in Beijing#	2
33	#绿眼观察#	#Green Eye Observer#	1
34	#珠峰无限期关闭#	#Everest Closed Indefinitely#	1
35	#知否#	#The Story of Minglan#	1
36	#森林驿站#	#Forest Station#	1
37	#绿色江河，高原四宝环保棉卫衣#	#Green River, Plateau Four Treasures Environmentally Friendly Cotton Sweatshirt #	1
38	#我的爱心影响力#	#The Impact of my Compassion#	1
39	#周日巡河#	#Sunday River Cruise#	1
40	#垃圾去哪儿#	#Where Does our Rubbish Go?#	1
41	#世界湿地日#	#World Wetlands Day#	1
42	#邀请函#	#Invitation#	1
43	#NGO 招聘#	#NGO Recruitment#	1
44	#志愿者手记#	#Volunteer Notes#	1
45	#世界上最贵的东西#	#The most expensive thing in the world#	1
46	#2018 嘉人中国风#	#2018 Marie Claire Style China Artistry#	1
47	#冬至#	#Winter Solstice#	1
48	#武汉党外知识分子和新的社会阶	#Wuhan Non-Party Intellectuals and New Social Strata Spring Forum#	1

	层人士迎春座谈会#		
49	#2018 山东政务 V 影响力峰会#	#2018 Shandong Government Affairs V Influential Summit#	1
50	#武汉环保公益行#	#Wuhan Environmental Protection Charity Walk#	1
51	#第一届湖北环境教育论坛#	#The 1st Hubei Environmental Education Forum#	1
52	#首个因气候变化灭绝的哺乳动物#	#First mammal to go extinct due to climate change#	1
53	#改革开放 40 周年#	#40th Anniversary of Reform and Opening Up#	1
54	#2019 新年好#	#2019 Happy New Year#	1
55	#美丽南昌·幸福家园#	#Beautiful Nanchang - Xingfu Jiayuan#	1
56	#河长制#	#River Chief System#	1
57	#责任践行榜#	#Responsibility Practice List#	1
58	#厦门招聘#	#Xiamen Recruitment#	1
59	#甜蜜情人节#	#Happy Valentine's Day#	1
60	#“与绿同行”微公益环保创新大赛#	#“Walking with Green” Micro Public Welfare Environmental Protection Innovation Competition#	1
61	#2019 清源-青水行动#	#2019 Clear Source - Operation Green Water#	1
62	#元宵节#	#Lantern Festival#	1
63	#黑臭水体治理#	#Treatment of black and odorous water bodies#	1
64	#微招聘#	#Weibo Recruitment#	1

65	#简报#	#Briefing#	1
66	#指尖上的环保#	#Eco at your fingertips#	1
67	#开工大吉#	#Good Luck for a New Job#	1
68	#阿拉善 SEE 任鸟飞#	#SEE Foundation Let the Birds Fly#	1
69	#黑臭水体#	#Black and odorous water body#	1
70	#熊猫守护者#	#Panda Guardians#	1
71	#还有 7 天就过年#	#7 days left until the New Year#	1
72	#新年会#	#New Year's Party#	1
73	#猜灯谜#	#Guess the Riddle#	1
74	#2019 北京世园会#	#2019 Beijing Expo#	1
75	#大寒#	#Great Cold# [24 th term of the Chinese lunisolar calendar]	1
76	#山水时节#	#Shan Shui Season#	1
77	#微公益#	#Weibo Charity#	1
78	#玉树雪灾#	#Yushu Snowstorm#	1
79	#看图猜动物#	#Look at the picture and guess the animal#	1
80	#立春#	#Beginning of Spring#	1
81	#草木卿缘 植语劲说#	# Program to talk about plants# [Opening speech at the Beijing Expo]	1
82	#雨水#	#Rain Water# [2 nd term of the Chinese lunisolar calendar]	1

The hashtags listed in Table 12 are used for different purposes and fall into several different categories. Table 13 provides a breakdown of the categories with an example hashtag and the number of times they were used by the NGOs during the research period.

Table 13

Hashtag codes with examples and number of times used by the NGOs

Hashtag Category with Definition	Example	No. of times used	%
1. Campaign	#SEE Foundation Noah's Ark#		
Hashtag related to specific organisational campaign. Could be a long-term awareness raising or short-lived project. Hashtag sometimes but not always hosted by NGO.		470	82.5%
2. Time and Place	#Happy Lantern Festival#		
Often refers to public holidays or dates in the calendar where people share some sort of experience, such as valentine's day		43	7.5%
3. Knowledge and Public Education	#Where Does our Rubbish Go?#		
Hashtag on environmental topic that provides some useful information or aims to educate the public		31	5.4%
4. Event	#The 1st Hubei Environmental Education Forum#		
Hashtag related to a specific event		9	1.6%
5. Organisational	#Volunteer Notes#		
Hashtag related to the everyday operations of the NGO		6	1.1%
6. Recruitment	#NGO Recruitment#		
Hashtag related to the recruitment of staff or volunteers		5	0.9%
7. News	#Yushu Snowstorm#		
Hashtag about current news story		3	0.5%
8. Dialogic	#Guess the Riddle#		
Hashtag aims to encourage dialogue between user and NGO		1	0.2%

9. Product	#Green River, Plateau Four Treasures Environmentally Friendly Cotton Sweatshirt#	1	0.2%
Hashtag relates to the marketing of a particular product			
Grand Total		569	100%

By far the most common type of hashtag was the campaign hashtag. This type of hashtag was used by the NGOs in posts related to a particular organisational campaign. Some of these were long running campaigns, like the IPEs #Blue Map# hashtag, which was used frequently, not just by IPE, but also by other NGOs. The banner on the #Blue Map# hashtag page encourages users to download the IPE's Blue Map app, which can be used to check and report on pollution sources and levels of pollution in the environment. Several conservation charities like Shan Shui Conservation Center also used hashtags for specific campaigns, for example, #Build a home for the rabbit, the Pallas's cat, and the fox#, was a campaign to raise money for the conservation of habitats of the three animals mentioned in the hashtag. Shan Shui also used the hashtag #Shanshui Homeland Guardians# in their campaign to sign up followers to give a regular monthly donation to the organisation, which will be analysed further in Chapter 6. Other uses of hashtags included marking a particular time or place, such as a public holiday or festival, like the Lantern Festival, which falls on the 15th day of the first month of the lunar calendar. Hashtags that looked to educate the public about a specific environmental issue also featured, for example the hashtag #Where Does our Rubbish Go?# was included in a post explaining where waste and recycling was sent to and encouraging people to separate their rubbish. Several event hashtags, including the #2019 Beijing Expo#, were used in posts to highlight the organisations' involvement in the event, or to highlight events that they had organised such as the #The 1st Hubei Environmental Education Forum#. Hashtags were seldom used to highlight news or current affairs and when they were, they were not used to highlight particularly contentious issues.

In their study of hashtag use amongst health NGOs in the U.S, Saxton et al. (2015, p. 13) found that the most frequently used hashtags were related to knowledge and public education, with the most popular being single words for common medical conditions, such as #psoriasis and #diabetes. The second most popular hashtags were those that related to health goals such as #endALZ (ALZ being short for Alzheimer's). Although looking at a different sector, the study is useful for understanding what kind of hashtags are used on Twitter by American NGOs. The use of hashtags by the NGOs in the study by Saxton et al. (2015, p. 13) differs

markedly from those used by the Chinese organisations in this thesis. By far the most used hashtags by the Chinese ENGOs are those that relate to a specific campaign that the NGO has running. This doesn't mean that it's always the NGO that initiated the campaign that uses the hashtag, for example IPE's Blue Map hashtag is widely used by several different organisations, but the hashtag is still related to the original campaign. Single word hashtags related to a sector-specific topic are not used at all by the Chinese NGOs on Weibo and the hashtags are far more specific and less generic, except for those that reference a public holiday or festival. The widescale use of campaign specific hashtags by the Chinese NGOs could be a product of the ability to host a hashtag and therefore drive traffic to the page explaining what the campaign is, with the hope of further publicising the campaign and attracting more followers to support it. It could also be a way of the NGOs indexing certain posts to specific topics to make it easier to find them in the future. There is a large variation in how many times a hashtag is used by the NGOs during the research period, although many of them are only used once. Table 14 shows the hashtags used most frequently by the NGOs, with details of how many times they were used.

Table 14*Ten most used hashtags by the NGOs during the data collection period*

No.	Hashtag (Chinese)	Hashtag (English Translation)	No. of times used by NGOs during RP	Hashtag Host (Chinese)	Hashtag Host (English)	No. of times read in total (as of 3/12/2021)	Comments in total (as of 3/12/2021)	Most prolific users (Chinese)	Most prolific users (English)
1.	#蔚蓝地图#	#Blue Map#	250	蔚蓝地图	IPE	1.03 billion	863,000	@公众环境马 军 @蔚蓝地图	@IPEMaJun @BlueMap @ZouyideZou
2.	#郑州，一 目了然#	#Zhengzhou at a glance#	83	None	None	6.66 million	4832	@河南绿色中 原 @菊浓	@GreenCentralPlains @Junong
3.	#早安沱沱 河#	#Good morning from the source of the Yangtze#	49	绿色江河 NGO	Green River	17.7 million	16,000	@绿色江河 NGO @赤焰 zhen 相	@Green River @ChiyanZhenxiang
4.	#春节摄影 大赛#	#Spring Festival Photography	15	央视新闻	CCTV	16.33 billion	1.23 billion	@央视新闻 CCTV @头条新闻	@CCTV @ToutiaoNews @Yaochen

No.	Hashtag (Chinese)	Hashtag (English Translation)	No. of times used by NGOs during RP	Hashtag Host (Chinese)	Hashtag Host (English)	No. of times read in total (as of 3/12/2021)	Comments in total (as of 3/12/2021)	Most prolific users (Chinese)	Most prolific users (English)
Competition#									
5.	#三江源摄影棚#	#Sanjiangyuan Films#	18	山水自然 保护中心	Shan Shui Conservation Center	130 million	408,000	@山水自然保 护中心 @赵英俊是个 老牧民	@Shan Shui @ZhaoYingjunshigela omumin
6.	#青赣日常#	#Qinggan Daily#	8	青赣环境 交流中心	Jiangxi Environment Communicati on Centre	224,000	237	@青赣环境交 流中心 @笑对人生 Rda	@JiangxiEnvironment @XiaoduirenshengRd a
7.	#新年愿望#	#New Year's Wishes#	8	None	None	300 million	1.27 million	@燕京啤酒 @中交上东湾	@YanjingBeer @CCCRestEstateCo
8.	#自然有你#	#Nature has you#	7	None	None	25,000	16	@绿中原	@GreenHenan
9.	#两栖爬行	#Amphibians and reptiles#	7	None	None	5.91 million	4843	@两栖爬行动	@AmphibiansandRep tiles

No.	Hashtag (Chinese)	Hashtag (English Translation)	No. of times used by NGOs during RP	Hashtag Host (Chinese)	Hashtag Host (English)	No. of times read in total (as of 3/12/2021)	Comments in total (as of 3/12/2021)	Most prolific users (Chinese)	Most prolific users (English)
	动物#							物保护协会	
10.	#山水家园 守护者#	#Shan Shui Homeland Guardians#	7	山水自然 保护中心	Shan Shui Conservation Center	2.33 million	1426	@山水自然保 护中心 @宗政铁柱	@Shan Shui @ZongzhengTiezu

Table 14 shows the ten most used hashtags by the NGOs during the research period together with information regarding the host of a particular hashtag (if there is one), as well as some basic data on the level of engagement with a certain hashtag in the form of the number of times a post containing that hashtag has been read, and the number of comments under posts containing that hashtag. Some of the hashtags are hosted by the NGOs, some hosted by other organisations, such as the Weibo account of China Central Television (CCTV), and some have no host at all. Most of the hashtags are hosted by one of the NGOs and the most prolific users of the hashtags tend to be the accounts of the NGOs hosting them. The two exceptions are the #Spring Festival Photography Competition# hosted by China Central Television (CCTV), and the #New Year's Wishes# hashtag which was not hosted by anybody. The most prolific users of the #Spring Festival Photography Competition# are CCTV, the main state-owned TV service in China, and Toutiao News, a news content aggregation and sharing service owned by the private company Bytedance. Unlike the #Spring Festival Photography Competition# hashtag, the most prolific users of the #New Year's Wishes# hashtag are corporate entities including a popular beer brand, a real-estate developer, and the Dutch household goods and electronics retailer Philips.

There are several different types of hashtags being used by the NGOs. One type is the environmental organisation's own hashtag, or at least a hashtag managed by another NGO, often used to promote a specific campaign. Another is a hashtag either hosted by a user completely unrelated to the NGO, such as a very large media organisation, or a hashtag not hosted by anyone but more generally used across Weibo. Using hashtags hosted by large media organisations such as CCTV that have billions of views and comments can expose the NGO to a greater audience but there is a danger that because there are so many people using the hashtag, the post will just get lost amongst all the others and will not be picked up on. Another reason why the NGOs use this type of generic hashtag could be that it acts as a cultural marker, signifying to their followers that the NGO is interested in a particular topic. As noted in Chapter 4, Chinese NGOs have had to deal with a sometimes sceptical and wary public, so identifying themselves with popular or traditional Chinese holidays helps to counter some of the more negative associations that NGOs attract.

Looking at the ten hashtags above gives a good indication as to what topics the NGOs were trying to engage with over the research period, but to provide context to how they are used in posts, examples have been translated and included in Table 15.

Table 15

Examples of posts containing the ten most used hashtags by the NGOs

No	Hashtag	Hashtag (English)	Example Post (Chinese)	Example Post (English)	Date Posted	Posted by
1.	#蔚蓝地图#	#Blue Map#	2018 年 12 月 26 日 05 点, 苏州当前站点空气质量优。 #蔚蓝地图# 48 小时空气质量变化详见: 网页链接	At 5 o'clock on December 26, 2018, the air quality at the current site in Suzhou was excellent. To see details of air quality over the past 48hours on the #Blue Map# please see: weblink	26/12/2018	Lüse Jiangnan
2.	#郑州, 一目了然#	#Zhengzhou at a glance#	#郑州, 一目了然# #蔚蓝地图# 2018 年 12 月 19 日郑州空气质量观察: 今日 21:00AQI 市均值 203; 空气质量轻度污染! @环保部发布 @菊浓 @鹏翔绿城 @绿色郑州 @郑州市城市管理局 @蔚蓝地图 @威威一笑看郑州 @公众环境马军 @中国环境新闻 @中国城市污染排行 @人民环保 @微言	#Zhengzhou at a glance# #Blue Map# Zhengzhou Air Quality Observation on December 19, 2018: At 21:00 today the AQI city average is 203; air quality is slightly polluted! @Junong, @PengxiangLvcheng, @LüseZhengzhou, @ZhengzhouChengshiGuanliju, @BlueMap, @WeiyixiaokanZhengzhou, @IPEMaJun, @ChinaEnvironmentNews, @ChinaCityPollutionRanking, @RenminHuanbao, @WeiyanHuanbao,	19/12/2018	Green Central Plains

			环保 @九穗禾 @邹毅的邹 @索 菲特国际饭店-郑州	@JiuSuihe, @ZouyideZou, @SofitelInternationalHotel-Zhengzhou		
3.	#早安沱 沱河#	#Good morning from the source of the Yangtze#	#早安沱沱河# 它往天空飞去 月 亮住在天空里 - by 志愿者 @尧小 小九	#Good morning from the source of the Yangtze# It flies to the sky, the moon lives in the sky-by volunteer @YaoXiaoxiaoJiu	19/12/2018	Green River
4.	#春节摄 影大赛#	#Spring Festival Photography Competition#	#新年会# 感谢有你, 新春大吉! 集“环保科普、生活整理、非遗年 俗+亲子”的轻奢“零”新年会, 你来了 吗? 一年一聚, 今年的娃最多了! 想科普一下厨余堆肥、雾霾和 净化器, 场面完全失控……小朋友 们却说: 不是开家长会吗? [捂脸] 我们倡导“零废弃”的生活方式, 从 源头整理生活, 资源再利用, 循环 可持续! 就在当下, 把绿色种子 播下, 静待春天、等你发芽! 2019, 开启你的“0”好生活”如	#New Year's Party# Thank goodness for you, the New Year! Did you come to the new year's party for parents and children that integrated popular environmental science, life organization, and intangible cultural heritage? Held every year, this year had the most babies! We learnt about kitchen waste composting, smog, and air purifiers, but the scene was completely out of control... The children said: Isn't this supposed to be a parent teacher meeting? [covering face emoji] We advocate a "zero waste" lifestyle, organize life from the source, reuse resources, and make recycling sustainable. Right now, sow the green seeds,	1/2/2019	Green Henan

			何? #春节摄影大赛# 郑 州·郑州市青少年宫	quietly wait for spring for you to sprout! How to start your 'good life' in 2019. #Spring Festival Photography Competition# Zhengzhou-Zhengzhou Youth Palace		
5.	#三江源 摄影棚#	#Sanjiangyuan Films#	Q: 鼠兔看到藏狐为什么不跑, 还 一副呆萌的样子? A: 可能傻吧。 Q:那藏狐叼个鼠兔, 岂不非常 容易? A: 嗯, 所以藏狐也没必要太聪 明。 #三江源摄影棚# #给兔獬藏狐建 个家# 数数视频中出现了多少只鼠 兔?拍摄@慢腾腾的山子 L 山水自 然保护中心的秒拍视频	Q: Why doesn't the pika run away when it sees the Tibetan fox? Instead, it just stands there looking cute. A: Probably because it's a bit silly. Q: Isn't it easy for the Tibetan fox to catch the pika? A: Yes, so the Tibetan fox doesn't need to be too clever either. #Sanjiangyuan Films# #Build a home for the Pallas's cat and the Tibetan fox# How many pikas appeared in the video? Video shot by @Mantangtangdeshanzi on Shan Shui Conservation Center's Miaopai Video	26/12/2019	Shan Shui Conservation Center
6.	#青赣日 常#	#Qinggan Daily#	#青赣日常# 12月25日, 青赣受 邀参加公众环境研究中心 (IPE)	#Qinggan Daily# On December 25th, Jiangxi Environment Communication Center was	25/12/2018	Jiangxi Environment

			举办的 2017-2018 年度 PITI 指数评价结果发布暨研讨会。会议公布了 120 城市 PITI 指数评价结果, 肯定了信息公开工作取得的进展, 共同研讨如何更好的推动信息公开工作。	invited to participate in the 2017-2018 PITI Index Evaluation Results Release and Seminar organized by the Institute of Public and Environmental Affairs (IPE). The results of the 120-city PITI index evaluation were announced at the meeting, progress made in information disclosure was confirmed, and it was jointly discussed how to better promote information disclosure.		Communication Centre
7.	#新年愿望#	#New Year's Wishes#	大年初五, 大熊猫的#新年愿望# 是希望自己继续做一个安静吃竹子的胖子, 以及不要再生病。成为#山水家园守护者#, 给大熊猫的邻居打个疫苗。	On the fifth day of the Lunar New Year, the giant panda's #New Year's wish# is to continue to be a fatty who eats bamboo quietly and does not get sick again. Become a #Shan Shui Homeland Guardian# and help vaccinate the giant panda's neighbours.	9/2/2019	Shan Shui
8.	#自然有你#	#Nature has you#	#自然有你# 郑州下雪了❄️ 天冷、穿暖! 还要拒绝皮毛! 今天一起了解萌哒哒的“水獭” (绘图/扎西桑俄) @绿色郑州 郑州	#Nature has you# It's snowing in Zhengzhou❄️ Cold weather, warm clothes! Also, refuse to wear fur! Let's all get to know the cute otter (photo: Sashi Tangye) @LüseZhengzhou	9/1/2019	Green Henan

9.	#两栖爬行动物#	#Amphibians and Reptiles#	发布了头条文章：《两栖爬行动物保护协会声明：未参与任何形式的两栖爬行动物贩卖活动》莫名其妙挨了骂，必须要来说说话…… #两栖爬行动物# 两栖爬行动物保护协会声明：未参与任何形式的两栖爬行动物贩卖活动	Posted a headline article: “Statement by the Conservation Society of Amphibians and Reptiles: We do not participate in any form of amphibious and reptile trafficking”. I was inexplicably blamed and had to speak out... #Amphibians and Reptiles# Statement by the Conservation Society of Amphibians and Reptiles: We do not participate in any form of amphibian or reptile trafficking.	5/1/2019	Conservation Society of Amphibians and Reptiles
10.	#山水家园守护者#	#Shan Shui Homeland Guardian#	大年初二，狮爷的#新年愿望# 是能有一片美好的家园安心带娃，以及自己辛苦叨来的鼠兔别再被半路劫持了。成为#山水家园守护者#，为兔狮藏狐建一个家	On the second day of the Lunar New Year, Sunye’s #New Year’s wish# is to have a beautiful home to take care of her baby, and not have the pika that she spent so much effort catching taken from her. Become a #Shan Shui Homeland Guardian# and help build a home for the Pallas’s cat and Tibetan fox.	6/2/2019	Shan Shui Conservation Center

The hashtags used in the posts in Table 15 can be split into several different categories: those used by the poster as a form of indexing for a current campaign, such as in example posts one, two and three, and those used as a way of generating interest by piggybacking on the popularity of topical hashtag being used more widely across the platform, such as example posts four and seven. The latter is a tried and tested method used by viral marketing agencies and big brands to boost the reach of a post. The most widely used hashtag, #Blue Map#, which is hosted by IPE, but often used by other organisational and personal accounts, is often used in automatically generated posts. For example, when used in example post one, the post contains the IPE's #Blue Map# hashtag but is not posted by IPE. It is posted by another NGO, Lüse Jiangnan, an organisation that has close links with IPE and has worked with them on various projects. Clicking on the hashtag takes you to the hashtag's unique page on Weibo with data about number of views, comments, who the hashtag is hosted by and who the most prolific users are. The introduction to the #Blue Map# hashtag on this page reads:

When the smog hits, have you ever felt helpless? Do you want to take your children out on the weekend and are really hoping for good weather? Did the big chimney beside you, or the stinking river, ever make you feel powerless and helpless? Then try the Blue Map. (The Institute of Public and Environmental Affairs, 2022)

The Blue Map referred to in this description is a mobile app created by IPE to track pollution levels and sources of pollution in real-time. The app also allows users to directly post a picture on Weibo with some text showing local weather and pollution conditions. Contained in these posts is the #Blue Map# hashtag which helps to drive traffic to all the other posts containing the hashtag as well as the description of the app above.

Example post seven, posted by Shan Shui Conservation Center, is one of the more sophisticated uses of hashtags seen by the NGOs in that it combines both a hashtag hosted by the organisation, #Shan Shui Homeland Guardians#, as well as a more general new year's hashtag, #New Year's wish#, that could boost its audience. The post also plays on the traditional sentiment of family and home that surrounds new year's celebrations, to try and attract more supporters to the NGO. This post was one of a series of posts by the organisation over the new year that followed the same format with the aim of signing up followers to regularly donate money to the NGO. Chinese New Year is often seen as a time of giving gifts, usually in the form of money in a red envelope, and this could be the

sentiment that the NGO is trying to tap into in the hope that people will donate some of this money to the organisation.

None of the posts that contain hashtags could be described as remotely politically contentious. These are not hashtags used in the same way as described by Yang (2016) when he talks about hashtag activism. If read with this context in mind they appear quite anodyne, but they still fulfil important functions for the NGOs, and these functions go beyond the online marketing tactics employed to piggyback on the popularity of another hashtag. It is more akin to that described by Summerville (2018) as creating a sense of community around a shared interest or theme which is socially and politically non-contentious. A good example of this is post three in Table 15, which was posted by Green River, and was one of a series of posts in which the NGO shared a photo, usually taken by a volunteer, with a text caption. W. Xu and Saxton (2018) have suggested that the most beneficial use of social media by non-profits is that it helps them to build relationships with various stakeholders and so increases their social capital. W. Xu and Saxton (2018) argue that the use of hashtags is one of the most beneficial ways of accumulating social capital online, and they suggest that these hashtags act as “community cues” and “extensive use of hashtags conveys the image that they are active conversants and conveners in various issue networks” (W. Xu & Saxton, 2018, p. 44). Because the data collection period fell over the Chinese New Year there are several posts referring to this festival and holiday, once again fostering a sense of shared cultural experiences and community.

Looking at hashtags in posts helps to understand the topics and motivations for posting, and there are occasions where one NGO will post using a hashtag hosted by another NGO. However, this does not give sufficient insight into the interconnectivity between the NGOs and other users on the site. To build up a picture of the interactivity and networks formed between users it’s necessary to look at some of the other data collected during the research including mentions, and retweets.

@Mentions

On Sina Weibo the @ symbol, often referred to as a mention, can be used to alert other users to a post and is placed before the username of the person to be alerted. This mention will then appear in that user's list of notifications and will also appear in searches for that person's mentions. It's not necessary to follow the user in question to be able to mention them in a post. The only pre-requisite is that the username of the account being mentioned is known.⁹ Collecting and extracting data on mentions makes it possible to build up a picture of how different NGOs interact with each other online, as well as their interactions with other users such as government departments, media organisation and members of the public. The data gathered from Sina Weibo during the research period included the text of each message posted on the platform by the NGOs in the study sample. From the text of a post, it was possible to extract each instance when a user mentioned another user.

Several studies have been conducted into the importance of linkages online, whether this is through connections on social media or hyperlinks in websites (e.g. De Maeyer, 2013; Himelboim & Golan, 2019). De Maeyer (2013), in a critical review of studies into the linkages created by hyperlinks in websites, suggests that some of the most successful studies were those that combined a set of research methodologies to mitigate some of the problems that arise from a purely quantitative approach to online linkages. Himelboim and Golan (2019), in their study of viral advertising, analysed the use of mentions in the context of viral adverts on Twitter, and suggested that the most regularly mentioned users in a network can play an important, if passive role, in the virality of content (Himelboim & Golan, 2019, p. 10). Although much of the academic literature on mentions is based around their use in viral advertising, there are some useful inferences to be gained from this literature when looking at the way they are used by NGOs, including the idea that some users act as bridges or hubs that play a more influential role in a network (X. Wang, Xing, Wei, Zheng, & Xing, 2020). In the same way that companies use mentions to push a message or product to different users and especially users who they feel will have a widespread influence on other users, NGOs may use the same tactics to push their message to a select audience or to encourage specific people to take some form of action. The act of mentioning another user shows that the user doing the mentioning believes that there is some merit in doing so. It is a more targeted attempt to impart some form of information to

⁹ <https://kefu.weibo.com/faqdetail?id=12861>

a particular user, rather than merely posting something and hoping that a follower will take notice. For this reason, it gives a much clearer idea of who a user is aiming a particular post at.

By extracting the mention data from posts by the NGOs it was possible to conduct a series of analyses to understand the attributes of the networks formed when one user mentioned another. The analysis of the networks formed was conducted using social network analysis and was visually illustrated by a network graph. A qualitative analysis of posts containing mentions was also conducted to understand the context in which they were used. This is presented further in the chapter as an analysis of a series of individual posts.

Network Analysis of Mentions in Posts

An analysis of the mentions in posts was carried out using data extracted from posts collected during the data collection period. All posts that contained an @ symbol were identified and this information was used to create a table of usernames being mentioned, the account doing the mentioning, and the connections between them. To understand the significance of these connections it is first necessary to understand some of the properties of networks and how these can be analysed using social network analysis.

What is social network analysis?

Social network analysis is the investigation of relationships within social groups using networks and graph theory (Scott, 2017d, pp. 2-3). It is used to understand and illustrate the relationships within a certain community with the relationships between different actors being of greatest interest. The purpose of using social network analysis in this thesis is to present the data in such a way that makes it more intuitive than if it was tabulated. Having a graphical representation of relationships between actors within a network can help to highlight those actors that are most well connected or those that play a particularly important role within the network regarding the flow of information through that network. Plotting the network can also help to show how well connected all the actors within a network are.

Social network analysis is not a new form of analysis, having been used since the early 1900's to map out the fabric of social life. The advent of the internet and more specifically, social networking sites and social media, have created new opportunities for studying social networks (Scott, 2017d). M. A. Shapiro, Brunner, and Li (2018), in a study of the networking capacity of Chinese environmental NGOs found that there was limited

interconnectedness between the NGOs, and those connections that did exist were relatively weak. In an analysis of the networks formed on Weibo around homeowner associations, Ronggui Huang and Sun (2014) showed that these networks have helped to foster collective action across geographical boundaries in China when homeowners have had to defend their rights against powerful real estate companies. Ronggui Huang, Gui, and Sun (2015), in a study of follower networks amongst environmental NGOs on Weibo, found that, in contrast to the study by M. A. Shapiro et al. (2018), there was a considerable level of interconnectedness amongst the group of NGOs that they were studying, although they did caveat this by suggesting there were several limiting factors to the research including the representativeness of the sample. They concluded that Weibo helped the NGOs to build relationships with one another, share information and even suggested that Weibo helped foster a green public sphere (Ronggui Huang et al., 2015, p. 272). The green public sphere is something which both Sima (2011) and Yang and Calhoun (2007), have suggested is being formed in China through the interconnectedness of environmental NGOs. Conducting the study in 2015, Ronggui Huang et al. (2015) were able to use Weibo's open application programming interface (API) to collect the data necessary for the study. Unfortunately, Weibo's open API is now less accessible and so it's no longer possible to easily download follower/followee data. Also using data from Weibo, Han and Wang (2015), conducted a study of the diffusion of health related information which suggested that verified users on Weibo play an important role in the transmission of information. As detailed in Chapter 4, most of the NGOs have verified organisational Weibo accounts and so could play a more influential role in the dissemination of information on Weibo. Many of the studies that employ social network analysis rely on complex mathematical analyses. However, even the more basic analytical tools available in social network analysis can be used to provide greater insight to a research problem (Scott, 2017d).

As with any methodological tool, there are limitations to using social network analysis. One of these is that the analysis can't provide insight into a network with no boundaries. The boundaries of the network, therefore, must be set by the researcher. It should be noted then that the network under investigation is not the only network of actors to which the individual or group being studied will belong to. There is a danger that other connections are ignored and an incomplete picture is formed, so this need to be taken into consideration

when inferring findings from the study (Scott, 2017a, p. 7). NGOs in this study may have other connections to each other outside the realm of the study, for example offline face to face contact which is not captured by online Weibo data. The approach used for this study was to define the boundaries of the network according to a set of values assigned to the group members, in this case that they are environmental NGOs that use Weibo as identified in the China Development Brief database, in what is usually described as a positional approach (Scott, 2017a, p. 8). The NGOs included in the study were chosen based on their position as local, Chinese environmental NGOs with a presence on Weibo, as outlined in Chapter 3 earlier. It is the decisions taken on what Weibo accounts to use in the original scraping of data that determined the size of the network created. The use of mentions and retweets as a marker of a connection between organisations is also a construct of the research, and so the network formed should be analysed in this context with the limitations that this brings in mind.

Why study social networks?

Environmental NGOs in China operate within a system of actors. They interact with all kinds of different organisations and individuals, from funders, media, other NGOs, local government departments, central government departments, government officials, environmentalists, and academics. The interactions that they have with these other actors are consciously built up over time, shift with their needs and requirements, and could have a meaningful impact on the organisations themselves. By studying the networks that form online it's possible to build up a picture of how these organisations operate. Several different theories have been put forward for inter-organisational relations including resource allocation, building of social capital (Jing Xu & Zhang, 2020), and the management and building of legitimacy (Castelló, Etter, & Årup Nielsen, 2016; Provan, 2008). The connections within a network “can provide help, support, opportunities, and even a sense of well-being that would not otherwise be possible” (Scott, 2017d, p. 2). Scott goes on to say that:

Social networks are relevant as sources of social capital, but they are more than this – they may, for example, be networks of economic transactions and political conflicts as well. Similarly, the ‘social networks’ built up through friendship and contact websites are simply one form of the myriad social connections in which individuals are engaged. (Scott, 2017d, p. 9)

It's for these reasons that studying the online connections that the NGOs have can provide fresh insight into the relationships that they are part of.

Social Network Theory

Underpinning social network analysis is social network theory, which contains several concepts that are important for deciphering the make-up of networks. Some of the concepts include:

Network Boundaries

As already mentioned, the boundary of a network is an important factor in determining the size and scale of the network under investigation. One of the foremost decisions that needs to be made when studying a network of actors is to determine the boundaries of that network. As Scott (2017a) suggests, even though there may be natural boundaries to the network under investigation, “the determination of boundaries in a research project is the outcome of a theoretically informed decision about what is significant in the situation under investigation” (p. 8).

The boundary of the mention network is limited to the organisations included in the original scraping of information and the accounts that they mention. For the retweet network it is limited to the NGOs included in the study and those users who retweet their posts. It does not include other individual or organisational accounts outside of these. It is a limitation to the analysis in that it's not possible to see which users outside of the group of NGOs selected for inclusion in the study was mentioning the NGOs, but it was not possible to collect this data. As the study is focussed on the relationships formed by the selected group of organisations and specifically their actions in creating relationships with others there is still merit in the analysis.

Directed and Undirected Networks

It is possible to plot a relationship on a graph in either a directed or undirected fashion. A directed line, or edge, as it's also referred to, “is particularly useful for representing the flow of information or resources from one agent to another and so a directed graph allows us to chart the diffusion of information and resources through a network” (Scott, 2017c, p. 11). It is this type of graph that will be used in this analysis as understanding who is mentioning who, or who is retweeting who, is an important factor in understanding the dynamics between different actors. For example, an NGO may mention a media organisation in a post, in which case the direction of the edge would be from the NGO to the media organisation, which shows that the NGO is trying to gain the attention of the

media for a particular purpose. Understanding the direction that information flows is also important when trying to understand which actors within a network are responsible for disseminating information across a network, as Scott has highlighted, explaining that, “When agents are regarded as either ‘sources’ or ‘sinks’ for the flow of resources or information through a network, for example, it is sensible to take serious account of this directionality in analysing the graph of the network” (Scott, 2017c, p. 11). The significance of the direction of links within a network is both methodologically and conceptually important. Conceptually it signifies the direction of the flow of information and methodologically it requires the capture of the type of data is directional, for example a retweet or mention, rather than a follower/followee relationship which would be undirected as both parties are connected to each other equally and statically (Himmelboim, 2017, p. 3).

Link Level Connections

There are different types of linkages that form on social media and static and dynamic are two ways of categorising them. A static link is one that once formed, rarely changes, for example following someone on Weibo. A dynamic link is one that is fleeting and changes over time. So, for example, mentioning someone, liking a post, or retweeting a post can be seen as dynamic. A static network provides an indication of the potential for information flow and attention, but it is not guaranteed, as following someone on Weibo does not guarantee that their posts will be read by the followee. Dynamic links and networks on the other hand shows the actual attention giving or information flow as they require the user to actively and continuously take some form of action to participate in the network. For example, mentioning someone on Weibo is a dynamic action which indicates that the user that is mentioning the other user places greater significance on that action. Static links once formed do not change, so once someone is following someone on Weibo the relationship stays the same, whereas dynamic links such as mentioning another user can happen multiple times, enabling the researcher to add a weighting to the link. For example, a user may mention another user ten times over a period of time suggesting that the relationship is more important than those that are only mentioned once (Himmelboim, 2017, pp. 7-8).

Network Size

Network size is a measure of how many actors, which in this case are Weibo accounts, there are in any given network. It's important to understand the total size of the network to calculate some of the other measures, such as network density.

Network Density

Density captures how well connected the nodes within a network are to each other. Any two nodes within a network could theoretically be connected. So, network density is a marker of how well connected a network could be, and how connected it *actually* is. A network of nodes could be highly interconnected and so form a very dense network, whereas a network with very little interconnectivity between nodes would have a low density. The distinction is important as variations in density can indicate how well information is able to travel between different nodes within the network, with information traveling better through dense, and therefore better connected networks (Himmelboim, Smith, Rainie, Shneiderman, & Espina, 2017, pp. 2-3).

Centrality

One of the most applied concepts in social network analysis is the idea that one user, or several users, are at the centre of a particular network. Different nodes within a network perform different functions and centrality is a way of determining how well connected a particular node is within the network. An early example of this was Moreno's study of pupils and his identification of the most popular pupil within a class by examining friendships amongst the group (Scott, 2017b, p. 2). This concept is now widely applied to networks to determine which nodes perform certain functions within a network. There are several measures of centrality, including degree centrality and betweenness centrality. Degree centrality is a measure of how important a node is as measured by the number of direct links that a node has. It can be used to find very well connected or popular individuals. Degree centrality can be measured both as in-degree and out-degree if the network is directional. In-degree in a retweet network would measure how many times a user's posts are retweeted, whereas out-degree would measure how many times that user retweets other people's posts. In this sense it is useful for understanding the direction of flow of information from a particular user. Betweenness centrality of a node on the other hand, is defined as the proportion of shortest paths between all pairs of nodes that go through

that node, and indicates which users act as a bridge in the network, which can suggest which users are most likely to influence the flow of information around a network.

Network Modularity

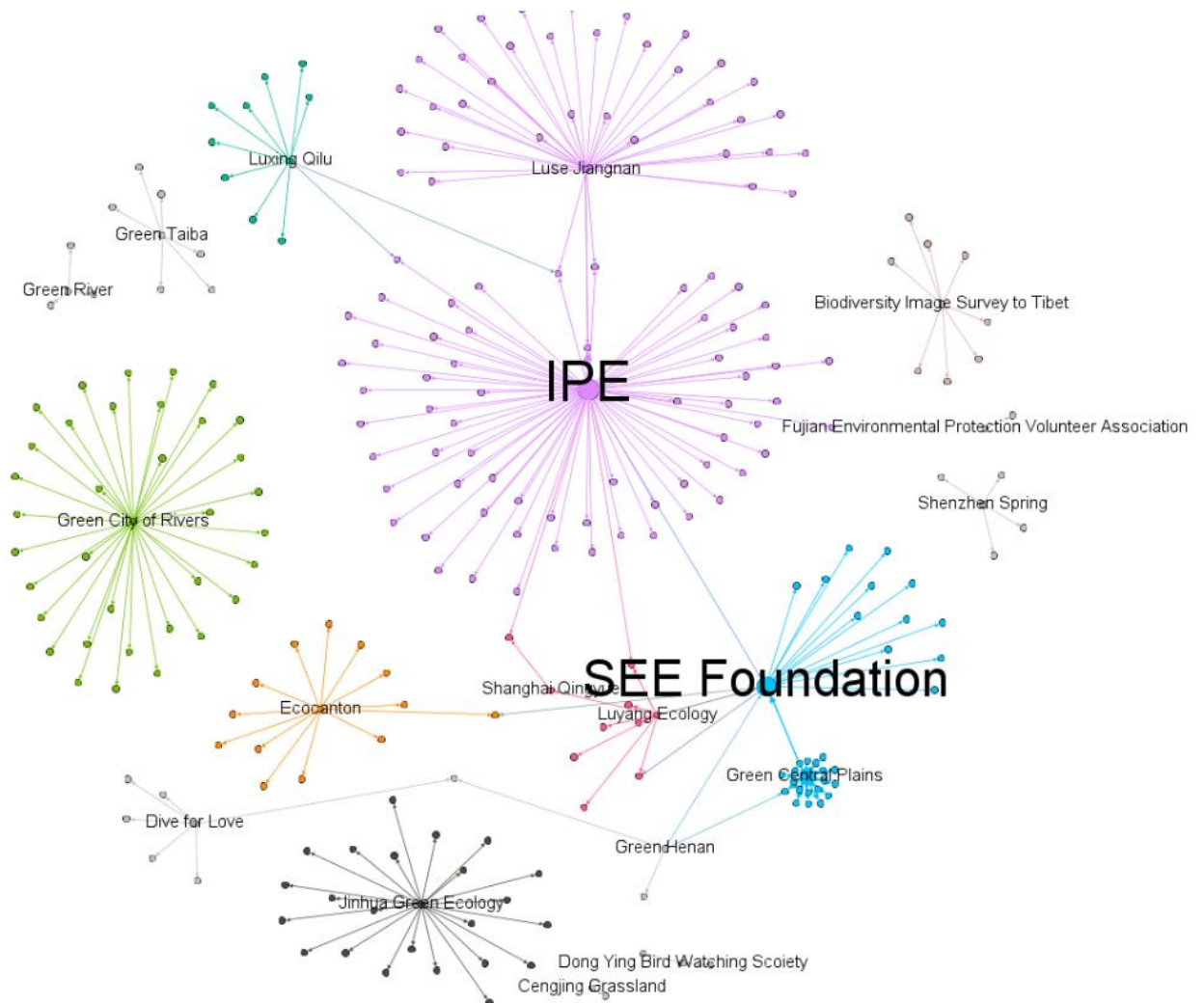
Network modularity measures how much a network is split into different sub-networks or communities. These clusters, as they are sometimes referred to, can be densely connected within the cluster but have limited connections to other clusters, in which case they would be considered to have high modularity. Modularity can be used as a way of identifying different communities within a network.

NGO Network Mention Graph

Figure 3 is a network mention graph which shows connections between different organisations that have been mentioned by the NGOs on Weibo during the data collection period. The network graph was created using Gephi, a software tool for analysing and plotting graphical representations of networks, and statistical calculations for betweenness centrality and modularity were calculated using Gephi's statistical analysis tools. The nodes (circles) each represent a Sina Weibo account and the edges (lines) represent a mention (@) in a post during the research period. The edges are directed to denote who was mentioning who.

Figure 3

NGO complete mention network



To understand better the roles that different users had within the network, several statistical analyses were conducted and the results represented on the network graph. The size of the nodes denotes the level of betweenness centrality which helps to illustrate those users who are more likely to act as a bridge within the network (Scott, 2012), and may play an important role in the flow of information around the network. The graph shows two accounts with a higher level of betweenness centrality and so are likely to play a bridging role within the network: IPE (Blue Map), which is IPE's main Weibo account, and the

SEE Foundation. Both IPE and the SEE Foundation play a role in distributing funds, expertise, and facilitating access for other smaller NGOs¹⁰ so their position as a bridge within the network is understandable. Overall, the density of the network is very low, suggesting there is a low level of interconnectedness within the network. This reflects the fact that most of the NGOs are mentioning different users other than their fellow NGOs, and the accounts they are mentioning have a specific importance to that particular NGO rather than the NGOs as a whole. This could be because many of the mentioned accounts are local environmental protection bureaus (EPBs) and so their importance is based in their locality, meaning NGOs outside of this region would not necessarily be engaging with them. This will be investigated further in the qualitative analysis of the mentions further in this chapter.

The colour of the nodes and edges denotes the modularity class of the account which groups the different nodes into distinct groupings based on their connections, creating sub-networks. The cluster of NGOs around IPE, with IPE in a central role and Lüse Jiangnan, Green Qilu, and Green Central Plains in more outer positions suggests a greater level of interconnectedness between these organisations, with a central role for IPE within this sub-network of organisations. This role and the relationship between IPE and these other organisations merit further investigation, which will be carried out in Chapter 6. The SEE Foundation also appears to play a central role within the network suggesting that it holds an important position within the network of these organisations. As a provider of funding across the sector, it would make sense that they have connections to many different NGOs and NGOs would want to maintain a connection with an organisation that is important in the allocation of resources.

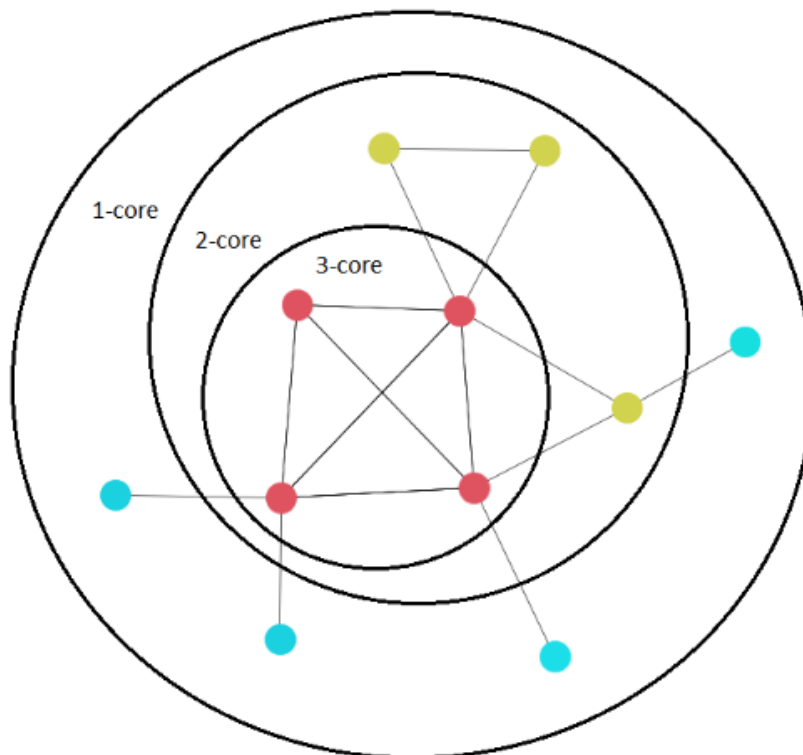
There is very little connectivity between the more conservation focussed NGOs, such as Friends of Nature, CSAR, and some of the other, more pollution focussed organisations such as IPE and Lüse Jiangnan. This apparent lack of connectivity online between organisations focussed on different sectors of environmental protection could also merit further investigation. It could be the case that NGOs cluster very much around a shared focus, rather than the broader goals of environmental protection.

¹⁰ Confirmed during interview with IPE's Vice Director, Wang Jingjing.

The full network as shown in Figure 3, has a low density and so a low level of interconnectedness between the actors within the network. However, some of the NGOs do appear to be better connected, but these connections are obscured somewhat when looking at the network as a whole. By stripping away some of the less well-connected nodes within the network using k-core analysis, or core decomposition of a network, it's possible to identify and highlight the better-connected nodes within that network. Kong, Shi, Wu, and Zhang (2019) explain that given a graph G and an integer K , “in order to be included in the k -core, a node must have at least k links to other nodes in the k -core, regardless of how many other nodes they are connected to outside the k -core.” Figure 4 (Alvarez-Hamelin, Dall'Asta, Barrat, & Vespignani, 2005, section 3) is an illustration of K -core network decomposition where blue nodes have a coreness of one, yellow nodes have a coreness of two, and red nodes have a coreness of three.

Figure 4

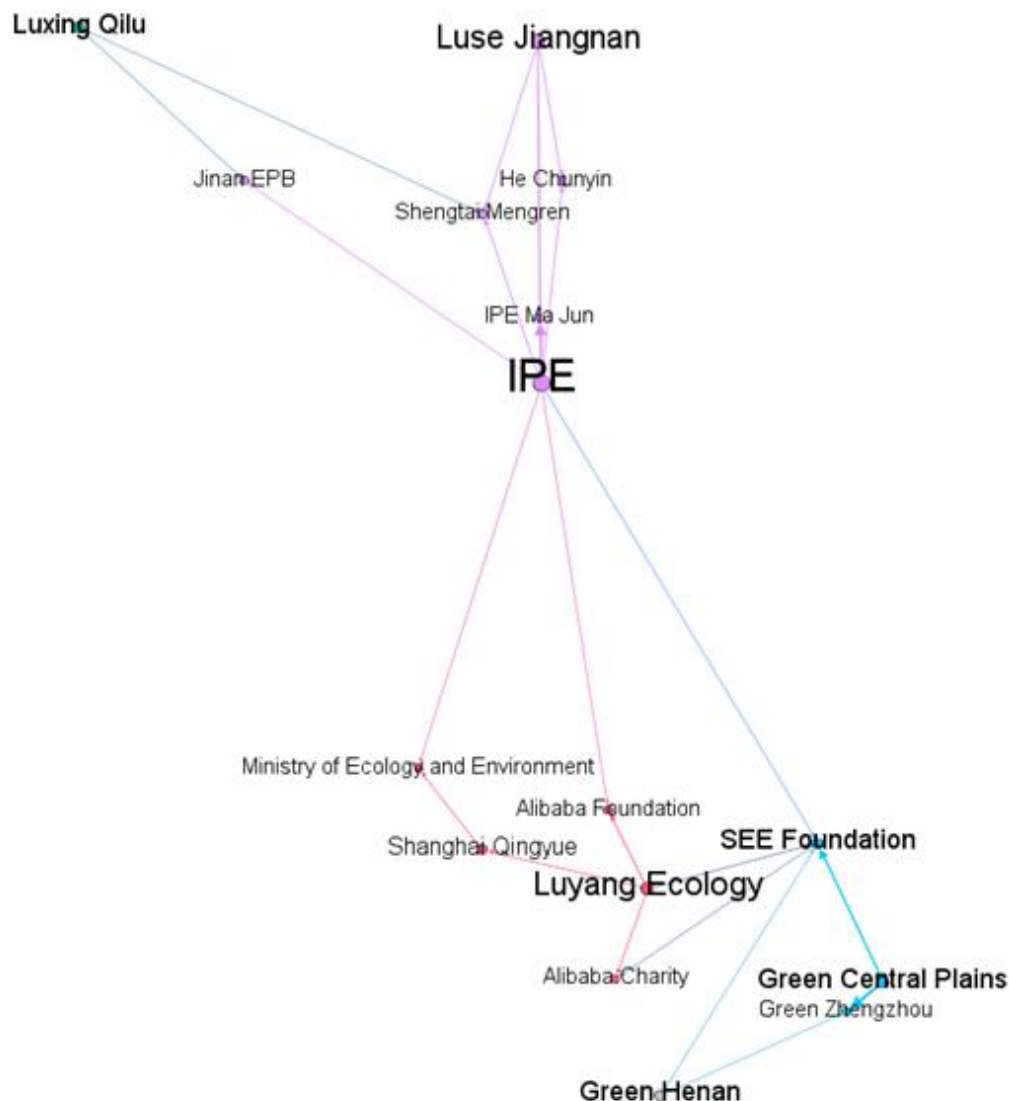
Illustration of K-core network decomposition



By stripping away the less well-connected nodes from the graph it's possible to see the better-connected NGOs, as shown in Figure 5, which shows the two-core mention network.

Figure 5

NGO two-core mention network



The network highlighted in Figure 5 shows IPE connected with Luse Jiangnan and Luse Qilu, as well as several other accounts, including the personal accounts of Ma Jun, IPE's director, Wang Bidou, secretary-general of Shandong Environmental Protection Foundation who was previously an official at the Shandong Environmental Protection Bureau, and He Chunyin who is a senior official in the Jiangsu Environmental Protection Bureau. This suggests that alerting environmental officials to the content of posts from

these NGOs plays a role in how they work. These connections were also confirmed as being important offline connections for IPE during an interview with Wang Jingjing, IPE's Deputy Director.

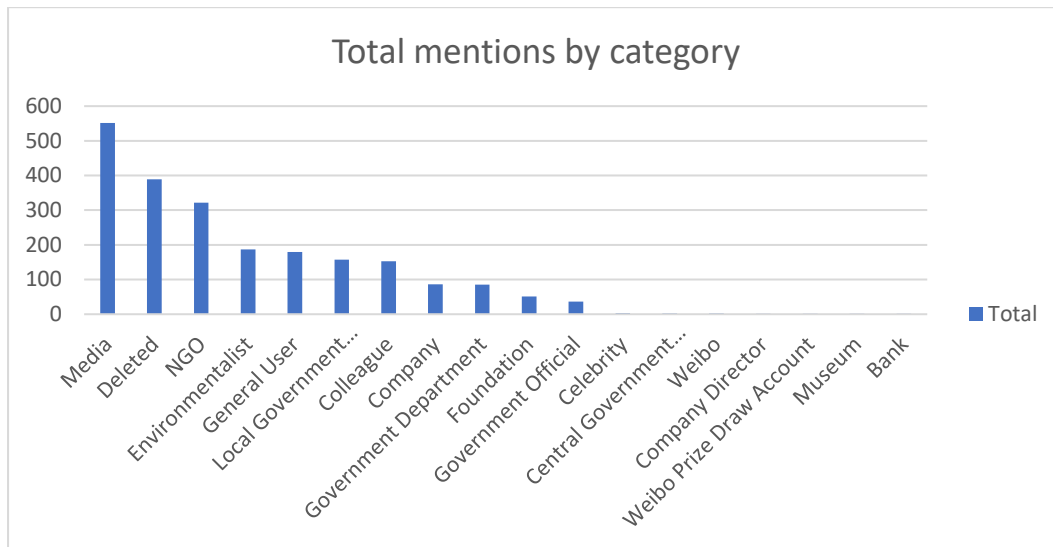
It should be noted that the measure of connection within the graph is limited to mentions within posts on Weibo. It was not possible to measure real-world connections such as face-to-face meetings, or even follower and followee connections on Weibo because of the limitations that Weibo has placed on accessing data through their open API. However, from the data it's clear to see that patterns of mentioning behaviour emerge and provide clues as to the relationships that exist between the different actors within the network. A greater understanding of how mentions are used can be gleaned from qualitative analysis of individual posts, which is what the next section of this chapter will look at.

Categorisation of Mentions in Posts

To understand who the NGOs were engaging with online, all the accounts mentioned in posts by the NGOs were extracted and then a systematic thematic analysis of each of these posts carried out to identify who the accounts mentioned were and in what context they were mentioned. The mentions were categorized according to the type of user and Figure 6 shows the total number of mentions included in posts by the NGOs during the research period, broken down into categories.

Figure 6

Total mentions in posts by category



During the process of extracting the data it became apparent that one NGO, Green Central Plains, included 1858 mentions within their posts. This was far more frequent than any of the other accounts and had the effect of obscuring some of the results from the other organisations.

Figure 7

Total mentions in posts by category (Green Central Plains data excluded)

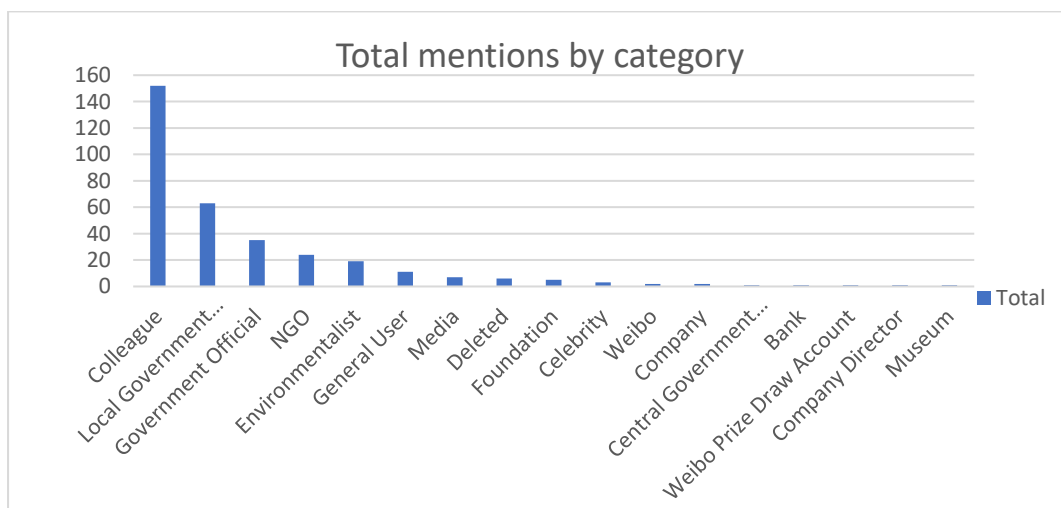


Figure 7 excludes posts from the NGO Green Central Plains. This was done because the sample of NGOs using mentions was relatively small and Green Central Plains was such a prolific user of mentions that it obscured the results from the other organisations. The account posted a message every day with the same, or very similar, list of mentions. Posts

were typically a short breakdown of the weather conditions and the pollution levels, which are automatically generated by the Blue Map app, with a different group of photos added every day. For example,

#Zhengzhou, at a glance# #Blue Map# February 22nd, 2019, Zhengzhou
Air Quality Observation: Today at 19:00 the average city-wide AQI
[Air Quality Index] was 266; The air is heavily polluted! @Ministry of
Environmental Protection Publications @Ju Nong @Pengxiang
Greentown @Green Zhengzhou @Zhengzhou City Administration
@Blue Map @Weiwei Smiles at Zhengzhou @IPE Ma Jun @China
Environmental News @China Urban Pollution Ranking @People's
Environmental Protection @Weiyang Environmental Protection
@JiusuiHe @Zou Yi Zou @Sofitel International Hotel-Zhengzhou
@World Environment Magazine @WWF @CCTV @Zhengzhou
People's Radio @People's Daily @Beijing News Our Video @ SEE
Foundation @Dahe Newspaper @Dahe Network @City Report
@Henan TV @Henan Radio and Television Station News Center
(Green Central Plains, 22/2/2019)

The user has a relatively small number of followers and very few of the posts were retweeted or commented on, showing that the information posted by the user does not reach a wide audience. The “Deleted” category in the results shows mentions of accounts that have either been deleted since the scraping of the data or it could be that they never existed in the first place and were incorrectly inputted in a post. Many of the accounts mentioned in posts by Green Central Plains were categorised as deleted.

Figure 7 shows that in many cases mentions are being used to alert colleagues within the same organisation to a post. Many of the NGOs have multiple Weibo accounts set up by colleagues, perhaps to try and increase the spread of information from the official organisational account. For example, the NGO Lüse Jiangnan regularly mentions staff members of the NGO, who all have a similar Weibo address, which is PECC followed by the staff members initials as can be seen in this post,

In the second week of January 2019, Lüse Jiangnan reported 24 companies. After continuously following-up we received responses from the local Environmental Protection Bureaus. Six companies were seriously dealt with, for details please see: Second week of January, only six companies were seriously dealt with!!! @Blue Map @He Chunyin @Ecological Dreamer @IPE Ma Jun @PECCNL @PECC-YWJ @PECC-LN @PECC-CB @PECC-LiJ @PECC-YCY @PECC_DD
(Lüse Jiangnan, 17/01/2019)

The second-most mentioned accounts were those of local government departments, which suggests that most interaction between the NGOs and government entities online happens at the local level. NGO leaders like Ma Jun are regularly quoted in the Chinese media (e.g. Sina Finance, 2021), but the mentioning of media accounts on Weibo was very limited, suggesting that contact with the media was made through other channels. The figures above show what type of accounts were being mentioned by the NGOs, but to provide details of how the posts were made and what the content of a post was, six posts have been translated and included in Table 16.

Table 16*Examples of posts containing mentions*

No.	Post in Chinese	Post in English	NGO	Date
1.	12 月 24 日，鄱阳湖水域发现 16 只白琵鹭尸体。死亡的白琵鹭嘴巴发黑，喉咙里有红色黏液，疑因遭投毒致死。白琵鹭系国家二级保护动物，目前死因暂不确定，当地森林公安已立案调查。 @一手 Video 一手 video 的秒拍视频	On December 24 th 16 Eurasian spoonbills were found dead at Poyang Lake. The beaks of the birds were black and there was red mucus in their throats leading to a suspicion that they had been poisoned. The Eurasian spoonbill is a grade two protected animal and at the current time the cause of death is not known. The local public security bureaus for forestry has started an investigation. @YishouVideo. Yishou Video's Maiopai film	SEE Foundation	28/12/2018
2.	【12 月第三周，4 家重控污染源企业被立案查处和责令整改！】在过去的一周，绿色江南持续对全国 13567 家重控污染源在线实时监测数据进行监督，并且对某污染物连续或间断性超标 3 天的企业进行举报。在绿色江南持续跟进下，收到各地环保局对绿色江南的积极回复，其中 4 家企业被严肃处理。我们希望企业都能加强自我管理力度，发现超标问题及时报备和	Over the past week, Lüse Jiangnan has been monitoring the online real-time monitoring data for the 13567 key pollution source enterprises across the country and have reported those enterprises that have breached regulation limits of pollutants continuously or over a period of three days. After continuously following-up on these cases, EPBs from various regions of the country replied to us and a total of four enterprises were dealt with seriously. We hope that all enterprises can strengthen self-monitoring efforts, detect breaches of discharge standards	Lüse Jiangnan	25/12/2018

解决，杜绝违法排放行为。具体情况点击链接：
 网页链接 @蔚蓝地图 @何春银微想 @生态梦人 @公众环境马军 @PECCNL
 @PECC-YWJ @PECC-LN @PECC-CB
 @PECC-LiJ @PECC-YCY @PECC_DD

in a timely fashion and resolve them, and put an end to illegal discharge. For details follow this link: LINK @BlueMap, @HeChunyinWeixiang, @ShengtaiMengren, @IPEMaJun, @PECCNL, @PECC-YWJ, @PECC-LN, @PECC-CB, @PECC-LiJ, @PECC-YCY, @PECC_DD.

3.	<p>【2018 年江苏省环保政务微博排名】绿色江南公众环境关注中心对江苏省 65 个经过新浪微博认证的环保政务官方微博，依据三个指标：传播力、服务力和互动力，综合运用内容分析和数据统计方法，为江苏省各市、县环保政务微博进行排名，究竟哪个排名稳坐如山，哪个又被转发、被评论、被赞数数以万亿？点进来看看吧： 2018 年江苏省环保政务微博排名 @蔚蓝地图 @何春银微想 @生态梦人 @公众环境马军 @南京生态环境 @江苏生态环境 @宜兴环保 @无锡环保 @苏州环保宣教 @宿迁-环保 @常州环保局 @扬州环保</p>	<p>Lüse Jiangnan carried out an analysis of the 65 official Sina Weibo accounts belonging to Environmental Protection Bureaus (EPBs) in Jiangsu Province. Each of the city and county level EPB Weibo accounts was ranked using comprehensive content and statistical analysis according to three metrics: level of dissemination, service, and interactivity. Which account ranks first? Which has been retweeted, commented on, and liked over a million times? Click here to find out: 2018 Jiangsu Province Government Environmental Protection Weibo Account Rankings. @BlueMap, @HechunyinWeixiang, @Shengtaimengren, @IPEMaJun, @Nanjing EPB, @JiangsuEPB, @YixingEPB, @WuxiEPB, @SuzhouEPB, @SuqianEPB, @ChangzhouEPB, @YangzhongEPB, @ZhenjiangEPB, @XuzhouEPB, @Huai'anEPB, @NanjingGulouEPB, @SuyuEPB,</p>	Lüse Jiangnan	23/1/2019
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@镇江环保局 @徐州环保 @淮安环保 @南京鼓楼环保 @宿豫区环保 @泰州环境保护局 @高淳环保 @盐城环保 @连云港环保 @秦淮环保 @昆山市环境保护局 @张家港环保 @扬中环保 @溧水环保 @江宁环保 @常熟环保 @南通环保微博 @浦口环保 @雨花 v 环保 @江阴环保 @宝应环保 @丰县环保 @美丽金太仓 @沐阳环保 @靖江环保 @六合环保 2012 @宿迁洋河环安局 @绿色新沂 @阜宁县环境保护局 @栖霞-环保 @建湖环保 @建邺环保 @邳州环保 @睢宁环保 @玄武区环境保护局 @PECCNL @PECC-YWJ @PECC-LN @PECC-CB @PECC-LiJ @PECC-YCY @PECC-DD

@TaizhouEPB, @GaochunEPB, @YanchengEPB, @LianyungangEPB, @QinhuaiEPB, @KunshanEPB, @ZhangjiagangEPB, @YangzhongEPB, @LishuiEPB, @JiangningEPB, @ChangshuEPB, @NantongEPB, @PukouEPB, @YuhuataiEPB, @JiangyinEPB, @BaoyingEPB, @FengxianEPB, @MeiliJinTaici, @ShuyangEPB, @JingjiangEPB, @LuheEPB, @SuqianYangheEPB, @XinyiEPB, @FuningxianEPB, @XixiaEPB, @JianhuEPB, @JianyeEPB, @PizhouEPB, @SuiningEPB, @XuanwuquEPB, @PECCNL @PECC-YWJ @PECC-LN @PECC-CB @PECC-LiJ @PECC-YCY @PECC-DD

4.	#2019 北京世园会# #草木卿缘 植语劲说# 今天上午, “2019 年中国北京世界园艺博览会第二批形象大使发布暨世园行动启动活动”在北京	#2019 Beijing Expo# #Program to talk about plants# This morning, “The release of the 2019 China Beijing International Horticultural Expo’s second batch of ambassadors and the launch of the Expo were successfully held in Beijing.	Shan Shui Conservation Center	21/12/2018
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顺利举行。@吕植 教授、著名演员刘劲@好学生刘劲 成为了北京世园会第二批形象大使。距离世园会开幕还有 129 天，明年暮春时节，长城脚下，让我们共同感受世园温度，聆听花开的声音～

@LvzhiJiaoshou, renowned performer Liujin @haoxueshengLiujin became the second batch of ambassadors for the Beijing horticultural Expo. There are still 129 days before the Expo opens. In the late spring of next year, at the foot of the Great Wall, let us collectively feel the temperature of the Expo and listen to the sound of flowers blooming.

5.	<p>【2017-2018 年度 120 城市污染源监管信息公开指数 (PITI) 评价结果正式发布啦!】本期评价覆盖全国 120 个重点城市，最终温州 @温州环保 以 81 分的成绩名列第一，北京 @京环之声、泰安 @泰安环保 和青岛 @青岛环保 分列二到四名，它们的得分都创下了 PITI 指数 9 年来的新高，宁波 @宁波环保、东莞 @东莞环保、淄博 @淄博环保、济南 @济南环保、杭州 @杭州环保、烟台 @烟台环境 进入了前十名。👏👏👏 颁奖仪式：由阿里巴巴公益基金会理事长孙利军和阿拉善 SEE 华北项</p>	<p>The results of the 2017-2018 Pollution Information Transparency Index for 120 key cities have been published! The evaluation covers all 120 key cities nationally. Overall, Wenzhou @wenzhouEPB came in first place with 81 points. Beijing @BeijingZhisheng, Tai'an @Tai'anEPB, and Qingdao @QingdaoEPB came in second to fourth. Their scores were the highest recorded in the PITI's nine-year history. Ningbo @NingboEPB, Dongguan @DongguanEPB, Zibo @ZiboEPB, Jinan @JinanEPB, Hangzhou @HangzhouEPB, Yantai @YantaiEPB all came in the top ten. Award ceremony: the Chairman of the Alibaba Foundation, Sun Lijun, and the Chairman of the SEE Foundation North China Project Office, Zhu Tong, presented the top ten cities with awards.</p>	IPE	25/12/2018
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目中心主席朱全为十佳城市颁奖。

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- | | | | | |
|----|--|--|-----|-----------|
| 6. | #蔚蓝地图# 今日，山东城市群多地空气质量优良。济宁、泰安、临沂出现污染。#一目了然[超话]# @公众环境马军 @生态梦人 #环保热点聚焦# @邹毅的邹 @红领巾 sl | #Blue Map# Most cities across Shandong province are showing good air quality today, but there is pollution in Jining, Tai'an, and Linyi. #At a glance [supertopic]# @MaJunIPE, @ShengtaiMengren, #Environmental Protection Hotspot Focus# @zouyidezou, @redneckscarf | IPE | 25/1/2019 |
|----|--|--|-----|-----------|
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Table 16 provides examples of mentions being used in posts, including mentions of media accounts, government officials, other NGOs, local government departments and individual environmentalists. Post number one for example, mentions the account of a popular video sharing media account with over eight million followers, as well as a link to the video about the dead Eurasian spoonbills, hosted by Yishou Video. The reason for doing this could be to make the video sharing site aware that they were sharing the original video. Perhaps the video sharing site had contacted them to ask them to share it and so mentioning them in the post was an easy way of showing that they had done so.

In example posts three and five in Table 16 the most common mentions are for government departments. In the case of post number three, Lüse Jiangnan mentions all the environmental protection bureau (EPB) accounts that they have included in an investigation into the EPB's online activities. The NGO released a short report measuring and ranking all the city and county level environmental protection bureaus in Jiangsu Province according to three metrics: level of dissemination, service, and interactivity. The post not only draws attention to the investigation that they conducted but also helps to hold the environmental protection bureaus to account by encouraging them to engage with the research. Hao, Zheng, Zeng, and Fan (2016) have shown that social media use amongst Chinese government departments is variable and lacks interactivity between government accounts and general users, which is in line with the findings of the investigation conducted by Lüse Jiangnan (Lüse Jiangnan 2019). The report into social media use by local government environmental protection departments conducted by Lüse Jiangnan will be analysed as a case study in Chapter 6.

The mentioning of government departments has also been adopted by IPE as can be seen in post number five, where they announce the results of the annual Pollution Information Transparency Index (PITI), which measures how much environmental information is made available to the public and how easy it is to get hold of that information for 120 key cities across China. The results of the index are shown as a ranking with those that disclose more environmental data ranking higher. It's notable that IPE lists those cities that have scored highest in the index, and so are deemed to be the most transparent, rather than listing those that have done badly. Like many of the posts analysed so far, the lack of any kind of criticism of the government is apparent, and in many cases government departments are more likely to be praised by the NGOs. The analysis of mentions within posts are useful to

highlight who the NGOs are trying to attract the attention of but for a better understanding of who is interacting with the NGOs, and to what extent their posts attract the attention of other users, it's possible to look at the other interactive features on Weibo such as retweets.

Retweets

Retweets are another interactive feature of Weibo that can provide insight into how much attention their posts receive online and who is paying attention to the posts. Often referred to when discussing Twitter data, retweets are very similar on Weibo and essentially take the original post from another user and copy it into the retweeter's feed, with the option of adding a comment underneath. Other users are now also able to add comments, like, and retweet the original retweet. Boyd, Golder, and Lotan (2010, Section 4.2.) have identified ten different reasons why people retweet messages on Twitter, including: to spread tweets to new audiences; to entertain and inform; to add a comment to someone's tweet thus starting a conversation about the original tweet; to indicate engagement with the tweet; to show agreement with someone; to validate the original poster's thoughts; as an act of friendship; to support underrecognized people, or content; for self-gain in terms of attracting more followers; and finally as a way of indexing information to make it easier to find in the future. Suh, Hong, Pirolli, and Chi (2010, p. 184) found that tweets that contain URLs and hashtags were more likely to be retweeted, and the number of followers and followees, plus the age of the account, all increased the likelihood of the tweet being retweeted.

In a comparison of retweeting behaviour on Twitter and Weibo during the extreme events of a winter storm in the U.S. and a widespread smog event in Eastern China, X. Lin, Lachlan, and Spence (2016) found that most of the posts on both platforms were informational rather than expressing some sort of emotion. They also found that there was a higher use of emoticons and a greater proportion of retweets from organisational accounts rather than personal ones on Weibo. Ronggui Huang and Sun (2014), in their study of the retweeting behaviour of people in housing associations, suggests that social media is an effective way of facilitating the exchange of information, which can lead to forms of collective actions across geographically dispersed locations. In a study of the retweeting behaviour of marketing microblogs, Z. Zhang, Li, Zhao, and Yang (2015) found that the most retweeted posts were those that involved some sort of competition as a

way of promoting a particular brand or product, with incentives to retweet being the most important factor driving retweet numbers.

Retweet data for the NGO accounts across the research period were extracted from the dataset, including the accounts of those doing the retweeting as well as those being retweeted, plus the number of times one user retweeted tweets from another to give a weighting to the relationship. Figure 8 shows the NGO retweet network in full with the NGOs labelled.

Figure 8

NGO retweet network

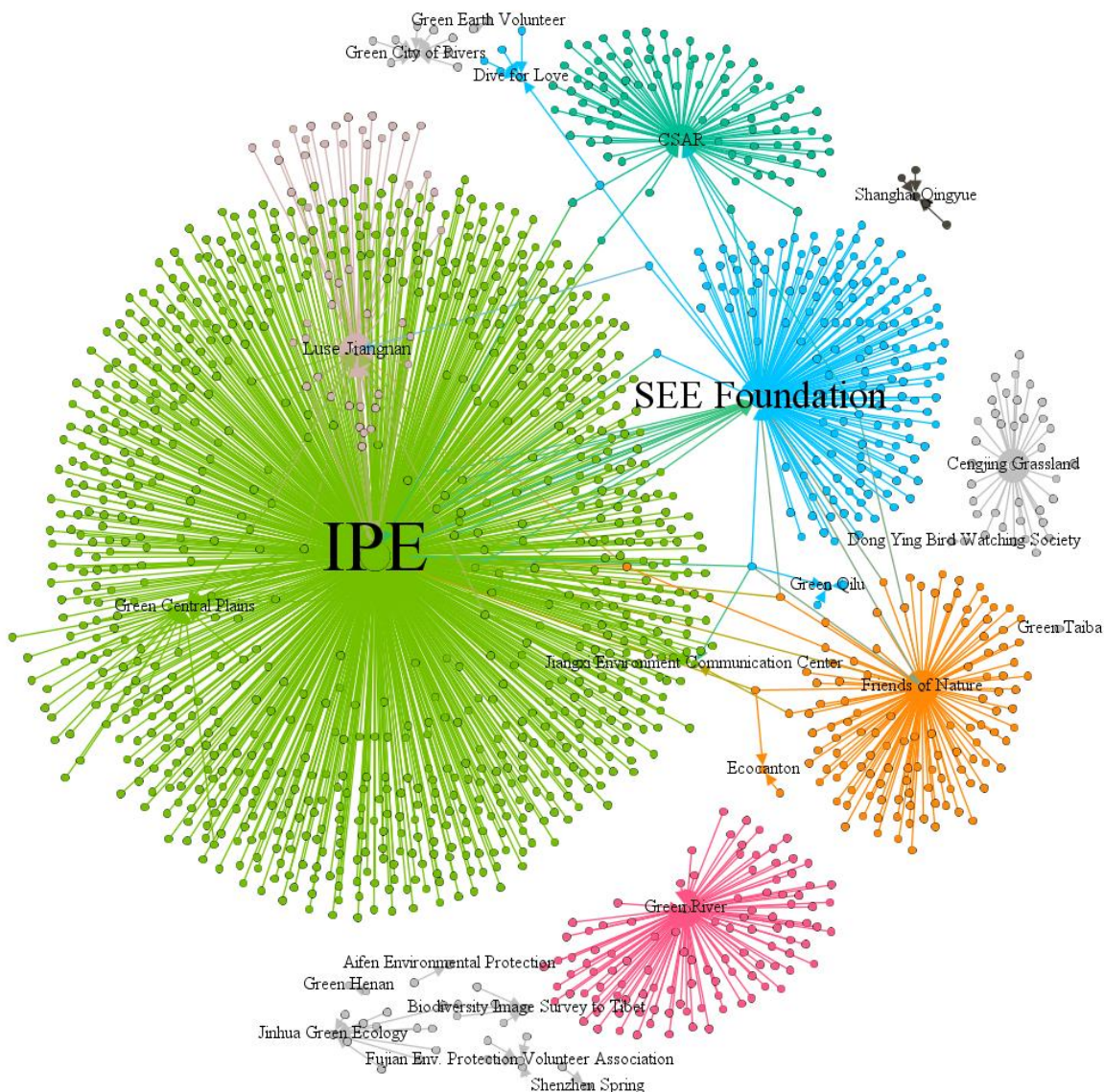


Figure 8 shows the retweet network for the NGOs included in the study.¹¹ It's clear that IPE's Blue Map account was the most retweeted during the research period. The size of the nodes shows the level of betweenness centrality of the nodes and suggests that both

¹¹ One of the limitations of the data collected was that it was not possible to collect the data showing who was retweeting posts from the NGO Shan Shui Conservation Center. It was not clear why the data scraper was not able to scrape the data for Shan Shui. The text contained in Shan Shui's posts, as well as total retweets and comments for a post, was collected manually for analysis, but it was not possible to do this for retweet network data. This means that Shan Shui has not been included in the retweet network graphs.

IPE and SEE Foundation played a bridging role within the network, in the same way that they did in the mentions network. Many of the retweeters are only retweeting posts from one of the NGOs so the density of the network is very low. To understand the more connected parts of the network the less connected nodes were stripped away using the K-core function as detailed previously, to reveal the more connected ones, as shown in Figure 9.

Figure 9

Two-core retweet network

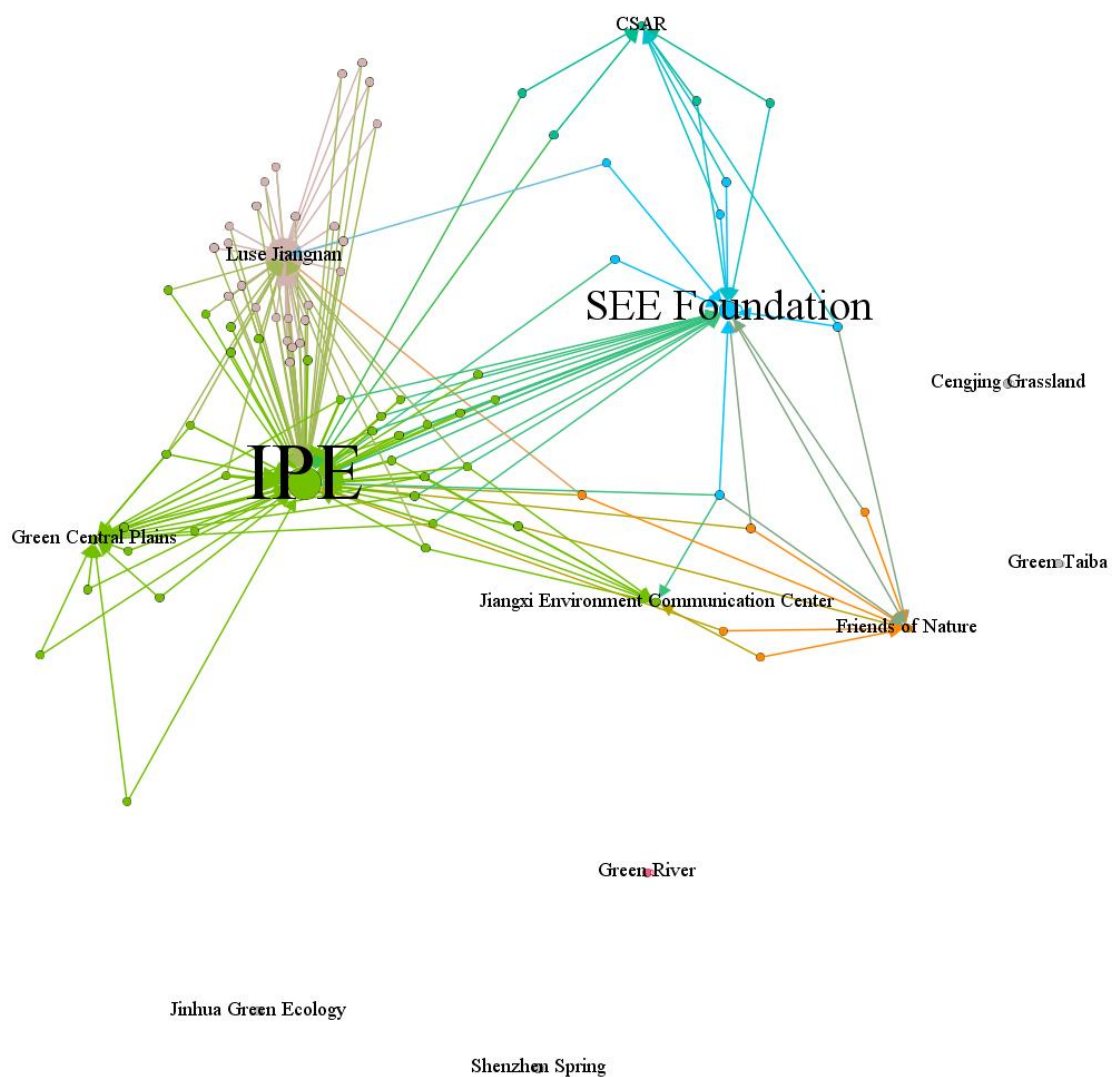
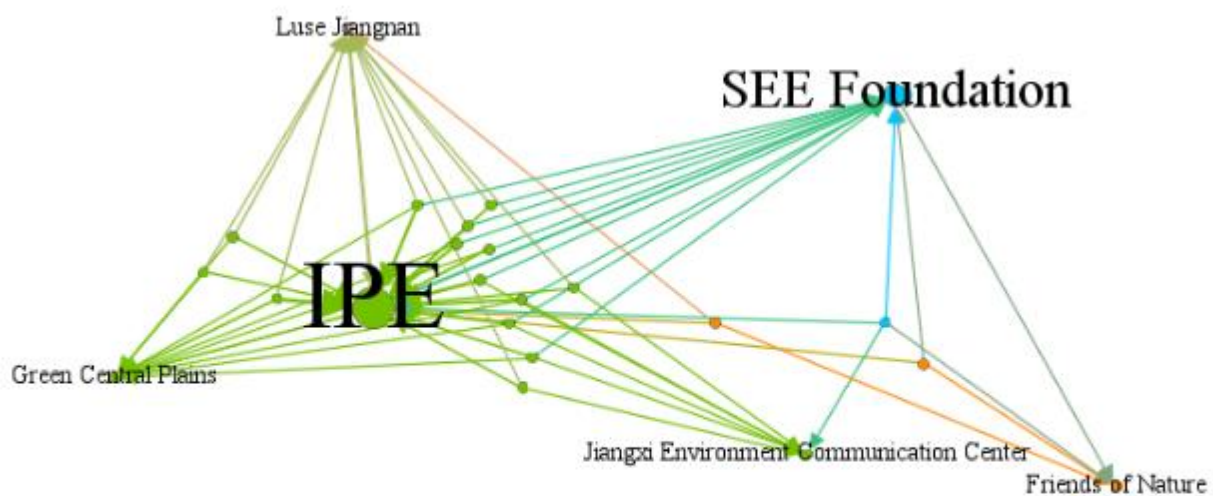


Figure 9 gives a better idea of which NGOs within the network are connected to each other by users retweeting posts from multiple organisations, suggesting that they have an interest

in more than one of the NGOs. IPE and SEE Foundation both play an important role within the network, but other NGOs, such as Lüse Jiangnan, Friends of Nature, Jiangxi Environment Communication Center and Green Central Plains are all interconnected. By stripping away the least well-connected nodes even further, as in Figure 10, it's again possible to see a more densely connected core of NGOs.

Figure 10

Three-core retweet network



The NGOs that appear in Figure 10 all work on a similar area of environmental protection and tend to advocate for greater environmental information disclosure and transparency as one of their core aims. It makes sense therefore that someone interested in the work of IPE, would also be interested in the work of an NGO in a similar sector, even though the NGOs are geographically dispersed.

To provide some context to what's included in some of the posts that attract retweets, a selection of the most retweeted posts has been included and translated in Table 17.

Table 17

Posts that attracted the most retweets during the research period

No.	Created at	Retweets	Text (Chinese)	Text (English)	Posted by
1.	13/02/2019	426	<p>【蔚蓝地图，记下最浓的年味……】春节七天，蔚蓝地图联合众环保大咖，邀请用户共同参加央视摄影大赛！通过 #蔚蓝地图# APP 上传图片，生成精美蔚蓝日历，让蓝天、美景、亲情一目了然！与此同时，【晒出我的“蔚蓝日历”】阿里公益 3 小时活动也在火热进行中，短短 7 天，蔚蓝日历上共发布了 4187 张照片，有旅途上的人山人海、餐桌上的美味佳肴、阖家团圆的温馨时刻、贴春联挂灯笼的红火、还有家乡的天地山水、庙会出游的阖家欢乐……尽显浓浓年味！ 蔚蓝地图，记下最浓的年味…… @公众环境马军 @生态梦人 @何春银微想 @邹毅的邹 @一目了然 @心灵环保 @心照明月 2019 @河南绿色中原 @寻梦自然 @豫鲁风骨 @南京大俭</p>	<p>Blue Map notes the most memorable scenes from the new year. During the seven days of the Spring Festival, Blue Map and other environmental protection experts invited users to participate in the CCTV Photography Contest! By uploading photos to the #Blue Map# APP to create a beautiful blue calendar, so that blue skies, and beautiful scenery, become obvious at a glance! At the same time as my blue calendar was being published, the Ali public welfare three-hour challenge was underway and very popular, so in just seven days, 4187 photos were posted to the blue calendar. There were vast crowds of people travelling, dinner tables laden</p>	IPE

					with delicious foods, warm moments of family reunions, people pasting spring festival couplets and hanging lanterns, the mountains and rivers of hometowns, and the family joy of visiting temple fairs... All showing the most memorable scenes from the new year! Blue Map App, recording the most memorable parts of the new year... @IPEMaJun, @ShengtaiMengren, @HechunyinWeixiang, @ZouyideZou, @Yimuliaoran, @XinlingEPB, @XinzhaoMingyue, @GreenCentralPlains, @XunMengZiran, @YuluFenggu, @NanjingDajian
2	22/02/2019	288	#三江源摄影棚# 云养雪豹超话 有些豹，表面上看起来凶神恶煞，背地里还不是只小猫咪？（提示:该内容可能引起极度舒适。） L 山水自然保护中心的秒拍视频	#Sanjiangyuan Film Studio# Yunyang Snow Leopards super topic. Some leopards appear incredibly fierce, but when we're not looking are they just like little kittens? (Warning: this content could induce extreme snugness.) Shan Shui Conservation Center's Miaopai Video	Shan Shui Conservation Center

3.	20/12/2018	255	<p>【粉丝福利时间】 #蔚蓝地图# APP 小蓝同学即将上线啦 猜猜小蓝会有哪些好玩的功能呢?</p> <p>转发并评论本微博, 聊聊你的 idea, 我们将通过 @微博抽奖平台 抽取 3 名幸运粉丝送出【蔚蓝地图定制黑砂釉旅行茶具套装】一份! 12 月 24 日小蓝上线当日, 为你揭晓!</p>	<p>(Fan Competition Time) The #Blue Map# APP's online assistant, Little Blue, will soon go live online. Can you guess what cool things she'll be able to do? Retweet and comment on this post and chat about your ideas below. Using @weibosprizgenerator, we will draw three lucky winners and send them each a Blue Map APP branded, custom made, black porcelain travel tea set! The winners will be announced on the same day that Little Blue goes live: December 24th!</p>	IPE
4.	14/01/2019	235	<p>【全国空气动态地图首次发布, 雾霾踪迹从此无处遁形!】基于超过 4000 个地面站点的逐小时监测数据, 覆盖全国所有 338 个地级以上城市, 全国空气动态地图可视化地展示出重污染高发地区和季节, 以及区域传输的路径。 #蔚蓝地图# APP 希望藉此让公众了解, 雾霾形成和传输并非神秘莫测, 协助认知规律, 识别重点, 优化治霾</p>	<p>The national dynamic air quality map has been released for the first time. Smog no longer has anywhere to hide! Based on hourly monitoring data from more than 4,000 ground stations, covering all 338 cities above the prefecture level in the country, the national dynamic air quality map visually shows the areas and seasons with high incidence of heavy pollution, as</p>	IPE

			<p>方略，助力更多市民关注并参与蓝天保卫战！</p> <p>#一目了然# （数据来自中国环境监测总站和各级环境监测部门） 全国空气动态地图首次发布，雾霾沙尘从此无处遁形！ 蔚蓝地图的微博视频</p>	<p>well as the routes of regional transmission.</p> <p>The Blue Map APP hopes to let the public understand that the formation and transmission of smog is not hidden, give people a greater understanding of the law, identify the key sources of pollution, optimize smog control strategies, and help more citizens pay attention to and participate in the war to defend our blue skies! #Clear at a glance# (data from the China National Environmental Monitoring Station and Environmental Monitoring Departments at all levels) The national dynamic air quality map is released for the first time, and there is nowhere for the smog and dust to hide! Blue Map Weibo Video.</p>	
5.	30/12/2018	202	<p>藏狐 VS 赤狐的颜值较量之：从各种角度输个明明白白。</p>	<p>Tibetan Fox vs. Red Fox in a competition of which is the most attractive: It's obvious that it loses out in many aspects. #Sanjiangyuan Film Studio# #Build a</p>	<p>Shan Shui Conservation Center</p>

		#三江源摄影棚# #给兔狲藏狐建个家# 摄影 @zeexs	home for the Pallas's Cat and the Tibetan Fox# Photography by @zeexs
6.	22/02/2019 201	#蔚蓝地图# 【广东去年 PM2.5 仅 31 微克，深圳 26 微克创 15 年来新低】来源:中国环境报 31 微克/立方米！2018 年广东省 PM2.5 年均浓度再创新低！在经济保持快速增长的同时，从 2015 年起广东全省大气 6 项污染物评价浓度连续 4 年达标。2018 年，深圳市 PM2.5 年均浓度仅为 26 微克/立方米，创 15 年来历史新低；广州连续两年达标，佛山也实现首次达标。至此，广东省 GDP 排名前三的城市全部实现 PM2.5 达标。 网页链接 @公众环境马军	#Blue Map App# Average PM2.5 levels in IPE Guangdong and Shenzhen last year were at a 15 year low of only 31 and 26 micrograms respectively. Source: China Environment News 31 $\mu\text{g}/\text{m}^3$! In 2018, the annual average concentration of PM2.5 in Guangdong Province hit a new low! While maintaining rapid economic growth, the concentrations of six air pollutants in Guangdong Province have reached the legal minimum standard for four consecutive years since 2015. In 2018 Shenzhen's annual average PM2.5 concentration was at a 15 year low of only 26 $\mu\text{g}/\text{m}^3$. Guangzhou has reached the legal standard for two consecutive years, and Foshan has also reached the legal standard for the first time. So far, the three top cities

				in Guangzhou Province by GDP have all reached the legal standard for PM2.5. Web Link. @IPEMaJun	
7.	11/01/2019	190	#三江源摄影棚# 辛苦工作了一周，给你们发点福利吧。这视频我也就看了几十遍，注意第 6 秒从后面冲出来的小肉球，和你小时候一样，它妈干嘛它就跟着干嘛。 L 山水自然保护中心的秒拍视频	#Sanjiangyuan Film Studio# We've been working hard this week and now we're going to bring you some of the benefits. I've watched this video dozens of times. Pay attention to the little meatball rushing out from behind in the sixth second. It's the same as when you're a kid. Whatever its mother does it just does the same. Shan Shui Conservation Center Miaopai Video.	Shan Shui Conservation Center
8.	17/01/2019	173	掐指一算，又到了年末制作各种年味儿物料的时间，本着经(yù)济(suàn)环(yǒu)保(xiàn)的宗旨，我们传播团队决定自己动手做红包！但是你可别小瞧这款红包，小小的身量里藏着各种硬核内容和我们煞费苦心凹出来的造型。所以，撒开手抢红包的时候到了，转发此微博，1 月 21 日通过@微博抽奖平台 抽 10 位送已亥年山水定制版红包！	In the end, it's time to make all kinds of materials for the new year. In line with the principle of economic and environmental protection, our communication team decided to make red envelopes themselves. But don't underestimate this red envelope, its small stature hides some hardcore content and an appearance that we	Shan Shui Conservation Center

(当然了我们的公号也有评论上墙的活动)，快来造作一番！

painstakingly created. So, now it's time to grab that red envelope. Retweet this Weibo post and on January 21st, using the @WeiboPrizeGenerator, we'll draw 10 people to send a red envelope made by Shan Shui in the year of the Boar! (Of course, our public account also has a competition ongoing in the comments). Quick, come and make one!

9.	22/02/2019	171	<p>#玉树雪灾# #三江源摄影棚# 离玉树遭遇严重雪灾已经过去了近半个月，为社会各方救援以及玉树人民从备灾到应对有方点赞。黑夜虽然漫长，太阳总会升起来，希望玉树一切安好，保佑那些可爱的生灵们早日度过难关！</p> <p>【图注：1.雪豹 2.狼 3.赤狐 4.藏狐 5.藏原羚 6.香鼬 7.马麝 8.荒漠猫 9.兔狲】</p>	<p>#Yushu Snowstorm# #Sanjiangyuan Film Studio# It has been nearly half a month since Yushu was hit by a severe snowstorm. Thumbs up to everyone who assisted, from people in disaster preparedness, to the response teams. Although the night is long, the sun will always rise. We hope everything is well in Yushu, and hope those lovely creatures get over these difficulties as soon as possible. Legend: 1. Snow leopard 2. Wolf 3. Red fox 4. Tibetan fox 5. Tibetan gazelle 6.</p>	Shan Shui Conservation Center
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				Corydalis 7. Alpine Musk Deer 8. Chinese Mountain Cat 9. Pallas's Cat	
10.	11/02/2019	122	朋友们，开工大吉！（毕竟没有一夜豹富的运气，还不如接受现实努力搬砖。） L 山水自然保护中心的秒拍视频	Friends, a good start! (After all, we weren't lucky enough to get rich overnight so may as well accept reality and do some hard physical labour.) Shan Shui Conservation Center Miaopai Video.	Shan Shui Conservation Center
11.	26/12/2018	69	Q: 鼠兔看到藏狐为什么不跑，还一副呆萌的样子？ A: 可能傻吧。 Q:那藏狐叼个鼠兔，岂不非常容易？ A: 嗯，所以藏狐也没必要太聪明。 #三江源摄影棚# #给兔獬藏狐建个家# 数数视频中出现了多少只鼠兔?拍摄@慢腾腾的山子 L 山水自然保护中心的秒拍视频	Q: Why doesn't the pika run away when it sees the Tibetan fox? Instead, it just stands there looking cute. A: Probably because it's a bit silly. Q: Isn't it easy for the Tibetan fox to catch the pika? A: Yes, so the Tibetan fox doesn't need to be too clever either. #Sanjiangyuan Films# #Build a home for the Pallas's cat and the Tibetan fox# How many pikas appeared in the video? Video shot by @Mantangtangdeshanzi on Shan	Shan Shui Conservation Center

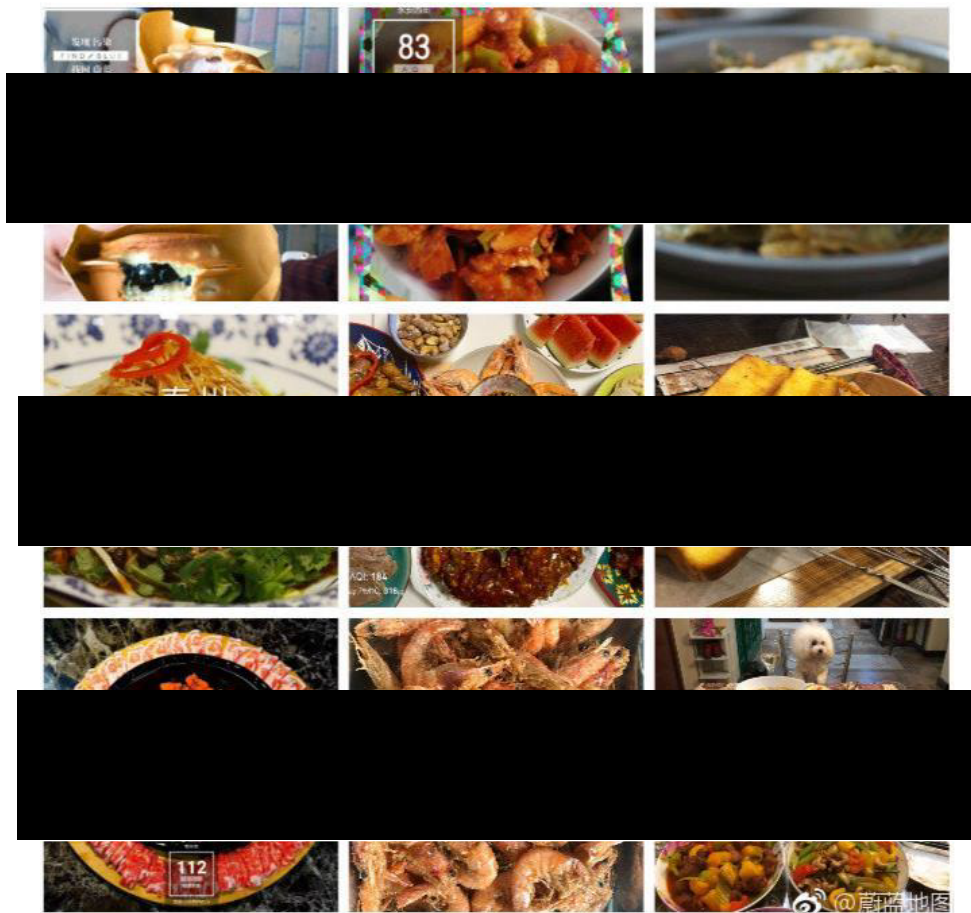
				Shui Conservation Center's Miaopai Video	
12.	31/12/2018	37	<p>黄羊是内蒙古野生动物的标志和判断草原生态系统健康和完整的标准，黄羊种群在内蒙古已经消失多年，网上传言是它们挂死在牧民网围栏上。</p> <p>我们 2018 年 12 月冒着零下 40 度严寒赴蒙古国东部草原，探查同一块草原上是否还有黄羊、草原健康吗？考察结果真有些出乎意料，请看这次考察的小视频（4 分钟） 曾经草原的微博视频</p>	<p>The Mongolian gazelle symbolises the wild animals of Inner Mongolia and is the standard for judging the health and integrity of the grassland ecosystem. The Mongolian Gazelle population has been reducing in Inner Mongolia for many years. Online rumours suggest that they've been dying on herdsman's net fences. In December 2018, we braved the severe cold of minus 40 degrees to go to the grasslands of eastern Mongolia to check whether there are still Mongolian gazelle and whether the grasslands are still healthy. The results of the investigation were unexpected, please watch the short video (4 minutes) detailing the investigation.</p>	Echoing Steppe

Table 17 contains some of the most retweeted and commented-on posts during the research period, which mainly came from two NGOs: Shan Shui Conservation Center and IPE. Both Shan Shui and IPE had some of the highest follower numbers amongst the NGOs which is a good indication as to why they have the most retweets. Post number one in Table 17 attracted the greatest number of retweets and was posted by IPE on their Blue Map account. It provides details of how users of the IPE's Blue Map app were able to upload photos around the theme of the Lunar New Year to the Blue Map calendar, which would be entered into the CCTV spring festival photo competition. Included in the post were collections of photos that had been uploaded through the Blue Map APP as shown in **Figure 11** and **Figure 12**.

Set of snow scene images included in IPE's most retweeted post

Figure 12

Images of food included in IPE's most retweeted post



The photos provide a glimpse of how users have been spending the spring festival with many pictures of snowy scenes and of new year banquets. Because the photos have been uploaded from the Blue Map APP, which was developed as a way of highlighting pollution issues, the air quality index, or concentration measure of a specific pollutant, and the location of the user, can be seen superimposed onto the photo. The superimposition of pollution data over photos celebrating the Chinese New Year, with images of fine foods and traditional snowy scenes, may seem a little incongruous, but they suggest that the sharing of pollution data has become normalised, at least for the users of IPE's Blue Map app.

Posts numbers two, five, seven, nine, 10, 11, and 12 in Table 17 also makes use of images and videos to engage followers. It has been shown that posts containing some sort of multi-media are retweeted more than posts that contain just text (Bruni, Francalanci, & Giacomazzi, 2012), so adding video and photo content can be a method employed to increase engagement with a particular post. Many of the posts from the conservation NGO, Shan Shui, employ the

use of animal images and video. The use of pictures of photogenic animals to engage audiences online is a recognized tactic employed by campaigning organisations and memes containing animals are often used in environmental campaigns (B. Zhang & Pinto, 2021), and have even been used by the Chinese government in a form of panda diplomacy (Z. A. Huang & Wang, 2020).

Posts one, three and eight in Table 17, feature competitions to engage users. Small prizes are handed out to randomly selected accounts that have retweeted and commented on a particular post. Using competitions as a way of encouraging followers to retweet posts is a method often employed by commercial brands to increase exposure of a product (Z. Zhang et al., 2015), but also employed here by the NGOs. Posts four and six in Table 17 are the only posts to focus on pollution issues, specifically air pollution and how it is being tackled. Post number four provides details of a new feature in IPE's Blue Map app, which is a dynamic map of levels of pollution across China. Illustrated in the post using an animation of the map scrolling through a year's worth of air quality data. Post number six gives details of how the air quality in Guangzhou has markedly improved, even though the province has continued to grow its GDP. Once again, these posts are all very much non-confrontational, and in many cases highlight the environmental work that the government is carrying out in a positive light.

Conclusion

Interactive functions on Weibo such as hashtags and mentions are widely used by the NGOs and in diverse ways. Followers of the NGOs also use retweets and comments to engage with the organisations online or to spread information that they post. The interactive functions used by the NGOs, namely hashtags and mentions, allow them to push content to their followers, with mentions providing a targeted means of alerting a specific user to a post and hashtags providing a broader context for a post. Hashtags are widely used as a way of pushing a certain campaign or NGO specific message to their followers. The particularities of how hashtags function on Weibo, in that they can be hosted, plays a role in the way that the NGOs are able to use them and is likely to be one of the reasons that there is a significant difference in the way they are used on Weibo compared to Twitter. It is also apparent that hashtags are used in an analogous way to those used in viral marketing campaigns as a way of piggybacking on the popularity of a particular topic. Some of the hashtags play a role in the long-term campaign goals of an NGO and they have also been used as a specific way of indexing posts related to campaigns to increase donations to the NGOs. Hashtags are not used

in a confrontational or aggressive sense, with hashtags rarely targeted with the aim of criticising specific government policies. Far more common are those hashtags that help to highlight the work that an NGO is doing and drive traffic to the NGO's Weibo page or to an external page.

More common is the way that hashtags are used to build trust or a sense of recognition of the work that others are doing around the NGO. For example, some hashtags are used as a way of giving recognition to volunteers, as was the case with Green River when they posted a photo from a volunteer, along with the name of the volunteer and a short thank you message. This act of recognising the contribution of the volunteer helps to build the idea of a community around the NGO and gives credence to the argument put forward by Scott (2017d) that networks on social media can contribute to an organisation's store of social capital. Hashtags are also used as a way of tying a post to a particular time or place, usually some sort of festival or public holiday. They are often used in this way to increase the exposure of the post to more readers but can also be seen as a cultural marker or pointer, signifying the NGO's inclusion in wider society and their willingness to participate in traditional Chinese events.

Although not used as widely as hashtags, mentions also play an important role in the way that some organisations try to attract the attention of different users online. There is a clear pattern of some NGOs mentioning government departments to hold them to account in some way, either to encourage them to investigate a pollution problem or to encourage them to improve their online activities. None of the NGOs were particularly critical of the government though, even when pointing out some of their shortcomings it was done in a way that was non-confrontational. At other times, mentions were used to attract the attention of colleagues as a form of intra-organisational communication, suggesting that there is a coordinated way of posting on Weibo by some of the NGOs which involves all staff members being made aware of certain posts, which they can then retweet.

Retweets and comments differ from hashtags and mentions in that they provide a good indicator of how well the followers of a particular organisation are engaging with that organisation on Weibo. The NGOs' posts are regularly retweeted, although the frequency varied between NGOs and those with the greatest number of followers found their posts retweeted more often than those with few followers. Crude metrics such as retweet counts do give some indication of how far a particular post reaches an audience and how motivated that audience is to engage with the topic. Further investigation into the networks of users

retweeting information also have merit. There is a trend in the data that those larger, better resourced NGOs, can dominate the online arena and reach a much wider audience than some of the smaller, less well-resourced ones. Employees of some of the NGOs retweeted posts from the NGOs they worked for, suggesting that the practice was encouraged.

The most retweeted posts tended to be those that encouraged some form of interaction, rather than merely contained information. Competitions, where followers were rewarded for engaging with a post, for example retweeting and commenting on it, attracted greater attention than those with environmental information. There were some posts about how much Guangzhou's air quality had improved that also attracted significant numbers of retweets, but pictures and videos of photogenic animals posted by the conservation NGOs were equally popular. The interactive functions employed by the NGOs differed depending on the goals of the organisation, with hashtags and mentions serving different purposes for different NGOs. Some of these uses will be analysed as case studies in more detail in the following Chapter 6.

Chapter 6: Carving out Space in a Contested Arena: Four Case Studies

Introduction

The previous two chapters highlighted some of the challenges that environmental NGOs face in operating in China and the tactics they employ to carve out space for themselves within a contested environment, both in terms of the political space they are afforded, and in accessing resources and maintaining public attention. While Chapters 4 and 5 looked at the Weibo dataset as a whole, it is worth looking more specifically at individual NGOs, and both the online and offline aspects of the projects they work on, to get a better idea of how they tackle some of the challenges they face. In a system where the government holds almost all the cards and official registration is key to an organisation's ability to operate successfully at scale, the NGOs must find ways of presenting themselves as legitimate actors, not only in the eyes of the authorities, who may be hostile to their presence and operation, but also in the eyes of those who they serve, which is usually the public.

M. A. Shapiro et al. (2018) have argued that in authoritarian contexts individual NGOs can come under very close scrutiny and pressure from the authorities, and one way of countering this problem is to be better networked with other NGOs. A better understanding of how the relationships in these networks are formed and what role social media, like Weibo, plays in these relationships is therefore worth interrogating. The use of social media by the government has also presented itself as a challenge for the NGOs with suggestions that social media is used as a form of control by the authorities (Goron & Bolsover, 2020). Whilst the environmental authorities in China have been encouraging officials at all levels of government to use the internet and social media to engage with the public (Goron & Bolsover, 2020), how well they are doing this is and how well NGOs are taking advantage of these changes, if at all, is less well understood. Concerns around legitimacy and accountability also plague NGOs in China (Howell et al., 2020; P. Johnson & Saich, 2016), but there is little known about how environmental NGOs might work with others to counter some of these issues. Fundraising has also become more of a challenge as new regulations have been introduced that curb previously used funding avenues. Crowdfunding platforms have started to play a bigger role in NGO funding strategies (C. Cui & Wu, 2022), but how these greater opportunities and roles manifest themselves in the work of individual NGOs in China is, however, less well known.

How different NGOs deal with these various challenges varies from NGO to NGO, but they adopt certain common techniques or tactics that allow them to operate within what can be a constrained social and political arena. On an organisational level, Weibo provides new opportunities for engaging with both government and the public and how it is used can shed light on the operational strategies employed by different organisations. The four case studies presented in this chapter, therefore, analyse how the NGOs operate on an organisational level to deal with the challenges that they face, whether this be ways of networking and capacity building, ways of holding the local government to account, ways of increasing the sense of legitimacy around an NGO, or new ways of fundraising.

There are four case studies presented in this chapter, each focusing on a separate NGO, including: The Institute of Public and Environmental Affairs (IPE), SIP Lüse Jiangnan Public Environment Concerned Center (Lüse Jiangnan), Green River, and Shan Shui Conservation Center (Shan Shui). The locations of the four NGOs are shown in Figure 13.

Figure 13

Map showing the locations of the four NGOs



Map data ©2022 Google, TMap Mobility

IPE and Lüse Jiangnan both focus on pollution prevention and control, including the monitoring of industrial pollution sources and the tracking of pollution in air and water. IPE works nationally, often in partnership with local NGOs, whereas Lüse Jiangnan tends to focus more on the immediate area where they are based, which is in Suzhou, Jiangsu Province. As its name suggests, it focusses on pollution and environmental issues in the Jiangnan region, which encompasses Shanghai, southern Jiangsu Province, southern Anhui Province, northern Jiangxi Province, and northern Zhejiang Province. This area is essentially everything south of the lower reaches of the Yangtze River and is one of the most industrialized and developed areas of China. IPE is based in Beijing but collects and repackages pollution and emissions data from all over the country. The organisation also

works with multinational companies identifying issues within their supply chains in China so there is some international recognition of the organisation although their projects are all based within China.

The other two NGOs, Shan Shui and Green River are more focused on conservation, biodiversity, and nature. Shan Shui is based in Beijing and has attracted national, and even international recognition. Green River is a smaller and less well-known organisation based in Chengdu, Sichuan Province, in southwest China. Although Shan Shui is based in Beijing, it has projects in Tibetan regions that look to conserve rare habitats and species with the help of local people. The organisation also engages with local Tibetan pastoralists working with them on conservation projects and acting as a cultural bridge between the local Tibetan population and the central government (X. Shen & Tan, 2012). Green River has taken a different approach and has based much of its work on volunteerism, setting up several projects at high altitude near the source of the Yangtze River in Qinghai Province, far in the west of China.

The data used in this section will include posts from Weibo, as well as reports published by the organisations, media reports about the organisations, and other online sources such as their websites and WeChat accounts. The chapter presents each case study in turn followed by a summary of the findings.

Case Study 1- The Institute of Public and Environmental Affairs and the PITI

The first case study draws on some of the findings in Chapter 5 in which IPE, a large, well-funded and nationally focussed organisation in Beijing was identified as having an important, central role amongst a cohort of organisations. Delving deeper into the data to look at individual Weibo posts highlights the role that IPE plays in that network of organisations. The first case study will therefore analyse what extent IPE can be seen as a supporter or influencer of the operations of smaller NGOs and what part their use of Weibo plays in this.

IPE is a large, well-funded environmental NGO based in Beijing. The organisation currently employs over 30 full-time staff and has projects ranging from green finance, green supply chains, and their flagship mobile app, called the Blue Map, which provides members of the public a way of accessing government data on the environment, including air pollution indexes, and sources of air and water emissions (Tarantino & Zimmermann, 2017). IPE uses the Blue Map name not just for its app, but also for its Weibo account, where they post information about the NGO and the work that they do. During the data collection period it became apparent that IPE and several other NGOs were collaborating on a report, which they jointly publicised on their Weibo accounts. The posts will be analysed in more detail later in the chapter and can be found in Table 18 and Table 19 but first it is worth providing some details of the report in question, titled the Pollution Information and Transparency Index (PITI).

The PITI is a report published by IPE in collaboration with The Natural Resources Defense Council (NRDC), which is a long-established environmental NGO from the United States with an office in China, and several smaller Chinese NGOs. The PITI is a system of evaluating levels of environmental information disclosure among China's key environmental protection cities nationally. The report is published by IPE and NRDC, but several partner organisations, including Green Anhui, Green Qilu, Fujian Green Home, Lüse Jiangnan, Jiangxi Environmental Communication Center, and Hubei Xingche Environment, evaluate several of the cities included in the report that are local to them. For example, Green Qilu evaluates the cities of Liaocheng, Dongying, Binzhou, Linyi, Heze, Dezhou, which are all prefecture-level cities located in Shandong, which is also where Green Qilu is based (The Institute of Public and Environmental Affairs & Natural Resources Defense Council, 2019). The cities included in the evaluation are evaluated according to the set of metrics as shown in

Figure 14 (The Institute of Public and Environmental Affairs & Natural Resources Defense Council, 2019, p. 6), and then ranked according to their scores.

Figure 14

PITI evaluation metrics

Indicators	Environmental Supervision Information		Pollution Source Self-Disclosure		Interactive Response		Enterprise Emission Data	EIA Information
	Disclosure of Excess Emissions and Other Daily Violation Records	Disclosure of Enterprise Environmental Performance/Credit Ratings	Disclosure of Automatic Monitoring Data	Disclosure of Key Polluting Entities Information	Disclosure of Central Environmental Supervision and Complaints	Disclosure Upon Request	Disclosure of Emission Data of Key Enterprises	EIA Information
Score Distribution	25%	5%	20%	6%	7%	8%	14%	15%

The idea for evaluating and reporting on levels of environmental transparency among Chinese cities came about because of a change in China’s information disclosure laws, in which Chinese cities were mandated to release environmental information to the public. Recognizing that even with a legal framework mandating this release of data, it was unlikely to be universally adopted by environmental authorities across the country, IPE and NRDC decided to evaluate and report on the progress being made, with the aim of highlighting those cities performing well and those performing badly (Moustakerski, 2014). The rationale for the PITI report is largely predicated on the idea that existing environmental governance structures, where conventional practices of regulation and enforcement are used, have failed. As a way of addressing these shortcomings, environmental information disclosure, where data on things like air quality, water quality and emissions releases, is publicly disclosed, acts as a catalyst for the authorities to improve their environmental performance. L. Zhang, Mol, and Yang (2017) have even suggested that “environmental information disclosure has changed from mere rhetoric to an indispensable element in the current environmental governance mode of China” (p. 74) and that “disclosure of environmental data/information can be a powerful instrument to empower the public and impose pressure on both regulators and regulates” (p. 74). By publicising environmental data, IPE hopes to pressure the

environmental authorities to take action to rectify the problems (The Institute of Public and Environmental Affairs & Natural Resources Defense Council, 2019).

When the first PITI report was released in 2009 it was the first time that a third party or NGO had evaluated the government's environmental performance, and so IPE, and NRDC, weren't sure what sort of reception it would receive from the authorities (Moustakerski, 2014, p. 14). Even though some of the reporting of the PITI was unfavourable to the authorities, the NGOs fears that there would be repercussions were unfounded (Yi, 2009). The authorities were largely supportive and eventually a positive form of competition developed between EPBs in different cities (Moustakerski, 2014, p. 14). The report is now released annually, both in English and in Chinese, and the evaluation has expanded to include 120 cities across China rather than the original 113 (The Institute of Public and Environmental Affairs & Natural Resources Defense Council, 2019). The involvement of the authorities has also increased, with government officials from EPBs being invited to attend the press conference and report on best practice (Moustakerski, 2014). This greater acceptance can also be seen in the way that government departments now actively re-publish articles about the findings of the report on their official websites, for example on the official website of the EPB in Guangzhou (Guangzhou Municipal Ecological Environment Bureau, 2017). Over the years the involvement of other NGOs has increased too, and the evaluation is now carried out by several NGOs working on both the national PITI, but also provincial level PITIs.

The PITI evaluation has also attracted the attention of the academic community, both inside and outside of China and has been used in multiple academic studies including one looking at the correlation between pollution and information disclosure (Tian, Guo, Han, & Ahmad, 2016), information transparency with regard to sulphur dioxide concentrations (Zhong, Li, & Zhao, 2021), and the effects of information disclosure on industrial structures and ecological transformation (S. Liu, Liu, & Yang, 2021). The responses to the PITI evaluation report released by IPE and NRDC annually suggest it is accepted by the authorities, the press, important donors, other NGOs, and the academic community as having merit. Importantly it has become a way for NGOs to engage with the authorities in a constructive way, without fear of repercussions. How IPE uses Weibo to publicise the report and attract the attention of the environmental authorities to the findings can be seen in the posts in Table 18.

Table 18

Weibo posts about the 2017-2018 PITI Report from IPE's Blue Map Weibo account in date order

Post	Date	Text (Chinese)	Text (English)	Repost/ Comments	Username
1.	25/12/2018	【最新一期的 120 城市污染源信息公开 PITI 指数评价结果发布啦!】SEE 华北中心主席朱全发言: SEE 对 IPE 十年资助, 是我们的重要战略伙伴。SEE 把 IPE 和地方保护环境的组织共称为保卫环境的“卫蓝侠”, 与地方政府协同作战, 共同推动环境改变。除了在资金上资助 IPE, 阿拉善 SEE 很多重量级会员在两会上提交了污染信息全面公开的提案和议案。	The latest edition of the 120 city Pollution Information Transparency Index (PITI) has now been released! The Chairman of the SEE Foundation's North China branch, Zhu Tong, made this statement: "SEE has been providing support to IPE for 10 years and IPE is one of our important strategic partners. SEE refers to IPE and local environmental protection organisations as the environmental protection 'blue protector knights', who cooperate with local government to fight for and jointly push for the improvement of the environment. As well as providing financial support to IPE, many of the heavyweight members of the SEE Foundation submitted draft resolutions and proposals for total pollution information disclosure at the 'Two Sessions' (the National People's Congress and the Chinese People's Political	40/4	IPE

			Consultative Conference).”		
2.	25/12/2018	<p>【2017-2018 年度 120 城市污染源监管信息公开指数 (PITI) 评价结果正式发布啦!】本期评价覆盖全国 120 个重点城市, 最终温州 @温州环保 以 81 分的成绩名列第一, 北京 @京环之声、泰安 @泰安环保 和青岛 @青岛环保 分列二到四名, 它们的得分都创下了 PITI 指数 9 年来的新高, 宁波 @宁波环保、东莞 @东莞环保、淄博 @淄博环保、济南 @济南环保、杭州 @杭州环保、烟台 @烟台环境 进入了前十名。👏👏👏 本期评价识别的最大亮点, 是污染源信息公开数据量的巨大增长。本期评价, 是基于蔚蓝地图 2017 到 2018 年收集到的近百万条企业超标违规记录, 以及 5.84 亿条企业自行监测数据而完成的。对照官方</p>	<p>2017-2018 Pollution Information Transparency Index (PITI) official evaluation results released. The evaluation covers 120 key cities across the whole country. In the end, Wenzhou @WenzhouHuanbao ranked first with 81 points. Beijing @BeijingZhisheng, Tai'an @TaianHuanbao, and Qingdao @QingdaoHuanbao ranked from second to fourth respectively. Their scores all set a new high for the nine years that the PITI has been running. Ningbo @NingHuanbao, Dongguan @DongguanHuanbao, Zibo @ZiboHuanbao, Jinan @JinanHuanbao, Hangzhou @HangzhouHuanbao, Yantai @YantaiHuanjing made up the rest of the top ten. 👏👏👏 The highlight of this year's evaluation was the huge increase in the amount of pollution source information being disclosed. This year's evaluation was based on nearly one million enterprise violation records collected by the Blue Map from 2017 to 2018, as well as 584 million pieces of enterprise</p>	42/6	IPE (Blue Map)

发布的统计数据，2017 年，公众通过公开渠道，已经可以获取到大约 70% 的企业环境行政处罚信息；其中北京、济南、青岛、广州、东莞、成都、厦门、无锡等 18 个城市日常监管记录的发布，已经接近应公开尽公开，显示日常监管信息公开正趋向常态化。

self-monitoring data. By checking statistical data released by the government, in 2017, the public could access approximately 70% of the environmental administrative punishment data for enterprises. In Beijing, Jinan, Qingdao, Guangzhou, Dongguan, Chengdu, Xiamen and Wuxi, the release of daily supervision records is already approaching full disclosure, showing that the release of daily supervision records has become normalized.

3.	25/12/2018	【2017-2018 年度 120 城市污染源监管信息公开指数 (PITI) 评价结果正式发布啦！】本期评价覆盖全国 120 个重点城市，最终温州 @温州环保 以 81 分的成绩名列第一，北京 @京环之声、泰安 @泰安环保 和青岛 @青岛环保 分列二到四名，它们的得分都创下了 PITI 指数 9 年来的新高，宁波 @宁波环保、东莞 @东莞环保、淄博 @淄博环保、济南 @济南环保、杭	2017-2018 Pollution Information Transparency Index (PITI) official evaluation results released. The evaluation covers 120 key cities across the whole country. In the end, Wenzhou @WenzhouHuanbao ranked first with 81 points. Beijing @BeijingZhisheng, Tai'an @TaianHuanbao, and Qingdao @QingdaoHuanbao ranked from second to fourth respectively. Their scores all set a new high for the nine years that the PITI has been running. Ningbo @NingHuanbao, Dongguan @DongguanHuanbao, Zibo @ZiboHuanbao, Jinan @JinanHuanbao, Hangzhou	36/5	Blue Map (IPE)
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		<p>州 @杭州环保 、烟台 @烟台环境 进入了前十名。👏👏👏 颁奖仪式：由阿里巴巴公益基金会理事长孙利军和阿拉善 SEE 华北项目中心主席朱全为十佳城市颁奖。</p>	<p>@HangzhouHuanbao, Yantai @YantaiHuanjing made up the rest of the top ten. 👏👏👏 Award Ceremony: Alibaba Foundation Chairman, Sun Lijun, and the SEE Foundation North China Project Center Chairman, Zhu Ning, presented awards to the top ten cities.</p>		
4.	26/12/2018	<p>上周，我们把十佳城市的地标建筑放出来让大家猜，大家猜对了几个 10 个城市，包括北京、东莞，以及浙江 3 个城市温州、宁波、杭州和山东 5 个城市泰安、淄博、烟台、济南、青岛。昨天，在 2017-2018 年度 120 城市污染源监管信息公开指数（PITI）评价结果发布会上，我们邀请了阿里巴巴集团合伙人、阿里巴巴公益基金会理事长孙利军和 SEE 华北中心主席朱全十佳城市进行了颁奖哦~~ “十佳城市”颁</p>	<p>Last week, we posted some of the landmark buildings from the top ten cities and asked people to guess what the cities were. Everyone guessed a number of cities in the top ten correctly, including Beijing and Dongguan; Wenzhou, Ningbo and Hangzhou in Zhejiang Province; and Tai'an, Zibo, Yantai, Jinan and Qingdao in Shandong Province. During the press conference for the release of the 2017-2018 Pollution Information Transparency Index (PITI) evaluation for 120 cities, we invited the Alibaba Foundation Chairman, Sun Lijun, and the SEE Foundation North China Project Center Chairman, Zhu Ning, to hand out awards to the top</p>	22/4	Blue Map (IPE)

		奖现场：是什么让他们脱颖而出？	ten cities. Top ten cities: What makes them stand out?		
5.	27/12/2018	2018 年 12 月 25 日，120 城市污染源信息公开 PITI 指数报告在京发布。本次发布会，我们也有幸邀请到了阿拉善 SEE 华北中心主席朱全 @阿拉善 SEE 公益机构，在现场进行了分享，并且给本次获奖的山东城市群泰安、淄博、烟台、济南、青岛颁奖 发布了头条文章：《阿拉善 SEE 朱全：十年相伴 见证改变！》 阿拉善 SEE 朱全：十年相伴 见证改变！	On December 25th, 2018, the Pollution Information Transparency Index (PITI) covering 120 cities across China was released in Beijing. We had the honour of inviting the Chairman of the SEE Foundation's North China office, Zhu Tong (@SEEFoundation), to the press conference to be on-site to distribute the report and hand out awards to the award-winning city cluster in Shandong Province, which included Tai'an, Zibo, Yantai, Jinan, and Qingdao. Headline article: SEE Foundation's Zhu Tong: "Over Ten Years of Working Together We've Witnessed Great Changes!"	13/0	IPE (Blue Map)
6.	7/1/2019	2018 年 12 月 25 日的 PITI 指数评价结果发布会上，生态环境部政研中心环境社会治理研究中心主任、副研究员郭红燕作开场致辞，谈到我国环境信息公开的政策、实践及未来展望建议 快来围	During the press conference for the release of the PITI evaluation results on December 25th, 2018, Guo Hongyan, Director and Associate Researcher, Environmental and Social Governance Research Center, Center for Environmental and Economic	17/0	Blue Map (IPE)

观吧发布了头条文章：《生态环境部政
研中心郭红燕：我眼中的环境信息公
开》

Policy Research, Ministry of Ecology and
Environment, started the event with a speech in
which he talked about the policies, practices and
future prospects of environmental information
disclosure in China. Have a look at the following
article for more information: Guo Hongyan,
Director of the Environmental and Social
Governance Research Center, Center for
Environmental and Economic Policy Research,
Ministry of Ecology and Environment: How I see
environmental information disclosure.

There are repeated mentions in the posts to IPE's funders. For example, posts one, four and five in Table 18 show the support that the SEE Foundation and Alibaba Foundation have shown for IPE and the PITI. The use of Weibo here to publicly acknowledge the support that IPE has received suggests that there is a symbiotic relationship between IPE and the SEE Foundation. As Galaskiewicz (1985, p. 297) has argued, one of the most common interorganisational legitimating strategies is that of donating money to charities. This is evident here as on the one hand IPE receives funds, and on the other, the SEE Foundation, and by extension the wealthy entrepreneurs who donate to it, receive public recognition of their generosity and willingness to contribute to environmental protection issues, thus helping to legitimate their status. There is also mention of the fact that some of the entrepreneurs that contribute to the SEE Foundation have attended the National People's Congress and the Chinese People's Political Consultative Conference, otherwise known as the 'Two Sessions' where national level political decisions are made, which suggests that IPE has access to political decision makers at reasonably high levels of government. Posts two and three in Table 18 show how IPE tags the environmental authorities into posts to alert them to the scores they received in the PITI and post number six shows that the central authorities not only tolerate the PITI report, but have actively supported it by sending a senior official from the Environmental and Social Governance Research Center, Center for Environmental and Economic Policy Research, at the Ministry of Ecology and Environment, to take part in the press conference.

The release of the report also gives IPE other opportunities to try to engage with the environmental authorities, in the form of EPBs around the country, by using mentions to tag the authorities into posts showing the results for their city. Of note in the posts in Table 18 is that there is very little negativity towards the authorities, so all the EPBs mentioned in the posts are from cities that have done particularly well in the PITI ranking. One surprising omission from all the posts on Weibo about the PITI report and evaluation, is that there is no mention of the co-authors, the U.S. NGO, NRDC. NRDC have their own Weibo account with around 12,000 followers but no messages or posts from the organisation appear under their profile. Foreign NGOs have come under considerable pressure and scrutiny over the past few years, especially since the implementation of the new Foreign NGO Law governing foreign NGOs was introduced in 2017 (Holbig & Lang, 2021). More recently nationalist elements have also heaped pressure on

some foreign NGOs and those who associate with them because of perceived slights against China (Rennie, 2022). This could be the reason why there is very little mention of NRDC in the publicity material for the report on Weibo.

IPE is not the only NGO to report on the PITI. Table 19 contains two posts from other NGOs about the 2017-2018 PITI. Post one in Table 19 is from Jiangxi Environment Communication Centre which simply publicises the release of the report. Post two is from Lüse Jiangnan and gives details on how they have contributed to the report by helping to evaluate three cities: Taizhou, Suqian and Huai'an. These organisations are also listed as partners in the PITI report published by IPE and NRDC (The Institute of Public and Environmental Affairs & Natural Resources Defense Council, 2019, p. 5).

Table 19

Weibo posts about the PITI from Jiangxi Environment Communication Centre and Lüse Jiangnan

Post	Date	Text (Chinese)	Text (English)	Repost/ Comment	Username
1.	25/12/2018	#青赣日常# 12月25日, 青赣受邀参加公众环境研究中心 (IPE) 举办的2017-2018年度PITI指数评价结果发布暨研讨会。会议公布了120城市PITI指数评价结果, 肯定了信息公开工作取得的进展, 共同研讨如何更好的推动信息公开工作。	#Qinggan Daily# December 25 th , Jiangxi Environment Communication Centre was invited to attend the 2017-2018 PITI evaluation results press conference and seminar organized by the Institute of Public and Environmental Affairs (IPE). During the press conference the results of the PITI evaluation of 120 cities was released, and the progress made in information disclosure work was confirmed. How to better promote information disclosure work was also discussed.	7/0	Jiangxi Environment Communica- tion Centre
2.	16/1/2019	【污染源监管信息公开指数 (PITI) 2017-2018 江苏省评价结果】本次 PITI 评价报告内容覆盖了江苏省的 13 个地 市, 包括 IPE 评价的南京、苏州、无 锡、常州、南通、镇江、扬州、盐城、 连云港、徐州十个城市以及绿色江南评	2017-2018 Pollution Information Transparency Index (PITI) results for Jiangsu Province. The PITI report covered 13 cities in Jiangsu Province. Ten of these: Nanjing, Suzhou, Wuxi, Changzhou, Nantong, Zhenjiang, Yangzhou, Yancheng, Lianyungang and Xuzhou were evaluated by IPE. The other three: Taizhou,	6/2	Lüse Jiangnan

价的泰州、宿迁和淮安三个非环保重点城市，通过 PITI 评价工作，不仅可以了解环境信息公开制度在江苏省的施行情况，而且可以通过最后的评价结果间接促进江苏省各城市在信息公开制度实施力度的提升。究竟江苏省各个城市的排名如何呢？点击链接，了解详情吧：
污染源监管信息公开指数（PITI）2017-2018 江苏省评价结果 @蔚蓝地图
@何春银微想 @生态梦人 @公众环境马军 @PECCNL @PECC-YWJ
@PECC-LN @PECC-CB @PECC-LiJ
@PECC-YCY @PECC_DD

Suqian and Huai'an, were evaluated by Lüse Jiangnan and were not environmental protection key cities. Through the PITI evaluation work it is possible to not only understand the implementation of the environmental information disclosure system in Jiangsu Province, but also, through the final evaluation results, indirectly promote the implementation of the information disclosure system in cities in Jiangsu Province. What are the results for the cities in Jiangsu Province? Click on the link for details: Pollution Information Transparency Index (PITI) 2017-2018 evaluation results for Jiangsu Province. @BlueMap, @HeChunyinWeiXiang, @ShengtaiMengren, IPEMaJun, @PECCNL @PECC-YWJ @PECC-LN @PECC-CB @PECC-LiJ @PECC-YCY @PECC_DD

Posts in Table 18 and Table 19 refer to the PITI report released by IPE and NRDC, which evaluated the environmental information disclosure of key environmental protection cities nationally. After the success of the PITI evaluation carried out by IPE and NRDC, which started in 2009, other NGOs began to contribute to the evaluation by evaluating cities in their province for inclusion in the report, like Lüse Jiangnan's evaluation of cities in Jiangsu. Some NGOs, like Green Qilu have gone a step further and using the same methodology, have applied it to smaller provincial cities and released the results of their evaluations separately to the IPE and NRDC report. The posts in Table 20 refer specifically to the PITI evaluation of 17 cities in Shandong conducted by Green Qilu. Green Qilu is a Chinese environmental NGO, established in 2012, registered as a private sponsored non-enterprise entity, and based in the industrial city of Jinan in Shandong Province on China's east coast. Its online presence is relatively small compared to that of the bigger NGOs such as IPE. For example, as of March 14th, 2022, Green Qilu had 4832 followers on Weibo, compared to IPE's Blue Map account which had over 428,000. Although much smaller in scale, Green Qilu's stated aims are similar to IPE's in that they centre largely around information disclosure and transparency (Green Qilu 绿行齐鲁, 2022). For example, both organisations advocate supervising polluting companies and environmental information disclosure policies. The two organisations also use some of the same methods, like the PITI, to achieve these aims. The 'About' page on the Green Qilu website talks specifically about the Pollution Information and Transparency Index (PITI) evaluation of 17 cities in Shandong and explains why the Shandong PITI is important:

The Pollution Information Transparency Index evaluation of 17 cities in Shandong can help the Environmental Protection Bureaus become more transparent, and at the same time, through proposals, legislative suggestions, and policy recommendations based on the systematic issues discovered during the investigation can raise and promote system building optimisation. (Green Qilu 绿行齐鲁, 2022, para 4)

Green Qilu also uses Weibo to publicise the results of the Shandong PITI report as can be seen in Table 20. Post one in Table 20 provides a link to a WeChat article in which people can register to attend the press conference for the Shandong PITI report (Green Qilu 绿行齐鲁, 2018b). Post two in Table 20 is a summary of all the NGO's news from the previous month in a monthly roundup, which includes a summary of the Shandong PITI where they name the best performing

EPB. Green Qilu also used their website to report on the press conference for the Shandong PITI, with a specific mention of a representative from IPE in attendance (Green Qilu 绿行齐鲁, 2018a).

Table 20*Posts about the Shandong PITI from Green Qilu*

Post	Date	Text (Chinese)	Text (English)	Repost/ Comment	Posted by
1.	25/12/2018	12月27日, 绿行齐鲁将发布《公众监督新征程——2017-2018年度山东省十七城市污染源监管信息公开指数 (PITI) 排名报告》及《山东省县域依申请公开专项报告》, 朋友们快来围观吧! 活动详情和参与报名请点击: 公众监督新征程——2017-2018年度 PITI 报告即将发布 信息公开	On December 27 th , Green Qilu will publish “A New Voyage of Public Supervision – 2017-2018 Shandong Province 17 City Pollution Information Transparency Index (PITI) ranking report” and the “Shandong Province County Compliance in Disclosure Applications Special Report”. Friends, quick, come and see! For details and how to register for the event, please click: A New Voyage of Public Supervision – 2017-2018 Shandong Province 17 City Pollution Information Transparency Index (PITI) ranking report release. Information Disclosure	0/0	Green Qilu
2.	09/01/2019	👏 2018年12月月报奉上 PITI 报告经历紧张的筹备后成功发布, 德州、临沂名列前茅; 福特汽车环保奖年度先锋奖的授予肯定了绿行齐鲁的持续付出; 聊城	👏 December 2018 monthly report. After intense preparations, the PITI report was successfully released, with Dezhou and Linyi both ranking among the best. The Ford China Conservation and Environment Grants Pioneer of the Year	1/0	Green Qilu

道口铺人工湿地案例终有回复；绿色金融助力环境信息披露；备战 2019，能力建设正在进行中…… 详情请点击：[网页链接](#)

award confirms Green Qilu's continued efforts. A response was finally received about the case of the man-made wetlands in Daokaopu, Liucheng. Green finance helps environmental information disclosure. In preparation for 2019, capacity building is underway... For more details see: [weblink](#)

The Shandong PITI was also featured in local and provincial online news reporting, which mostly concentrated on the positive aspects of the report but did mention those cities that weren't doing so well (Dezhou Daily, 2018; Iqilu, 2018; Yuyan Zhang, 2018). Several EPBs within the province used their Weibo accounts to respond to the publication of the Shandong PITI, as can be seen in **Table 21**. Many of the posts are very similar and suggest a level of coordination between the EPBs, or perhaps an edict from their superiors to post something about the report. Post one in **Table 21**, which is a post from the Linyi EPB, is slightly different in that it's specifically about the score that Linyi received. They are clearly very happy about their performance in the PITI and are proud to have received a similar score to some of the biggest cities in China. Goron and Bolsover (2020), in a study of the use of microblogs by the environmental authorities found that Linyi was one of the most active EPBs on Weibo in Shandong. The other posts are more generic, but they do show a level of engagement from several of the EPBs.

Table 21

Weibo posts from the environmental authorities about the Shandong PITI

Post	Date	Text (Chinese)	Text (English)	Repost/ Comment	Posted by
1.	29/12/2018	#我们在行动# 【得分超 80，一个能够赶超北上广深厦的小城市，我们是临沂环保！】 2018 年 12 月 27 日，北京公共环境研究中心、蔚蓝地图联合绿行齐鲁环保公益服务中心发布了《公众监督新征程·2017-2018 年度山东省 17 城市污染源监管信息公开指数（PITI）排名报告》。临沂市环保局公开指数 81.6 分，获得全省第 2 名（全国 120 个重点大城市超过 80 分的仅 1 个），并做典型经验交流发言，位居公开领先城市行列。收起 d	#We're taking action# With a score of more than 80, a small city that can be up there with Beijing, Shanghai, Guangzhou, and Shenzhen, we are Linyi Environmental Protection. On December 27 th , 2018, Beijing's IPE and the Blue Map, joined with Green Qilu and released a report titled: A New Voyage of Public Supervision – 2017-2018 Shandong Province 17 City Pollution Information Transparency Index (PITI). The Linyi Environmental Protection Bureau's disclosure score was 81.6 points, which was second place in the whole of the province (for the 120 key cities scored nationally, only one got over 80 points), and was used as an example of a model case and ranking among the leading cities.	15/9	Linyi EPB
2.	6/1/2019	#环保资讯# 【山东发布 17 城污染源监管	#Environmental Information# Shandong announces pollution source supervision	11/5	Linyi EPB

信息 临沂排名第二】日前，环保公益组织 @绿行齐鲁 发布了《公众监督新征程·2017-2018 年度山东省 17 城市污染源监管信息公开指数(PITI)排名报告》。根据报告，2017-2018 年度山东省 17 城市平均得分 72.8 分，较上一年度提升 7.1 分，整体表现向好。相比于本年度全国 120 个环保重点城市的平均得分，山东的评分高出 20.7 分，表现也非常突出。

information for 17 cities, Linyi comes second. A few days ago, the environmental protection NGO, @Green Qilu, released a report titled: A New Voyage of Public Supervision – 2017-2018 Shandong Province 17 City Pollution Information Transparency Index (PITI). According to the report, the average score for cities in Shandong Province was 72.8, an increase of 7.1 points on last year, showing that overall, performance was good. Compared to the national average for 120 key environmental protection cities, Shandong's average score was 20.7 points higher, showing outstanding performance.

3.	6/1/2019	【山东发布 17 城污染源监管信息 临沂排名第二】日前，环保公益组织@绿行齐鲁 发布了《公众监督新征程·2017-2018 年度山东省 17 城市污染源监管信息公开指数(PITI)排名报告》。根据报告，2017-2018 年度山东省 17 城市平均得分 72.8 分，较上一年度提升 7.1 分，整体表现向好。相比于本年度	#Environmental Information# Shandong announces pollution source supervision information for 17 cities, Linyi comes second. A few days ago, the environmental protection NGO, @Green Qilu, released a report titled: A New Voyage of Public Supervision – 2017-2018 Shandong Province 17 City Pollution Information Transparency Index (PITI). According to the	11/5	Linyi EPB
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4.	7/1/2019	<p>【山东发布 17 城污染源监管信息 临沂排名第二】日前，环保公益组织@绿行齐鲁发布了《公众监督新征程·2017-2018 年度山东省 17 城市污染源监管信息公开指数(PITI) 排名报告》。根据报告，2017-2018 年度山东省 17 城市平均得分 72.8 分，较上一年度提升 7.1 分，整体表现向好。相比于本年度全国 120 个环保重点城市的平均得分，山东的评分高出 20.7 分，表现也非常突出。</p>	<p>Shandong announces pollution source supervision information for 17 cities, Linyi comes second. A few days ago, the environmental protection NGO, Green Qilu, released a report titled: A New Voyage of Public Supervision – 2017-2018 Shandong Province 17 City Pollution Information Transparency Index (PITI). According to the report, the average score for cities in Shandong Province was 72.8, an increase of 7.1 points on last year, showing that overall, performance was good. Compared to the national average for 120 key environmental protection cities, Shandong's average score was 20.7 points higher, showing outstanding performance.</p>	21/21	Tancheng EPB

5.	10/1/2019	#环保资讯# 【山东发布 17 城污染源监管信息 临沂排名第二】 日前，环保公益组织绿行齐鲁发布了《公众监督新征程·2017-2018 年度山东省 17 城市污染源监管信息公开指数(PITI)排名报告》，临沂居第二。这也是绿行齐鲁连续第五年发布山东省 17 城市政务环境信息公开的专项第三方独立评价报告。	#Environmental Information# Shandong announces pollution source supervision information for 17 cities, Linyi comes second. A few days ago, the environmental protection NGO, Green Qilu, released a report titled: A New Voyage of Public Supervision – 2017-2018 Shandong Province 17 City Pollution Information Transparency Index (PITI), in which Linyi came second. This is the fifth consecutive year that Green Qilu has released a special third-party independent evaluation report on the disclosure of government environmental information in 17 cities in Shandong Province.	0/0	Junan EPB
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The PITI report first conceived and written by IPE and NRDC in 2009 has been successful as a way not only of evaluating levels of environmental information transparency, but also as a way of allowing NGOs greater opportunities to engage and work with the government, funders, and the academic community. Green Qilu's willingness to first work with IPE and NRDC as a partner and then take the concept first developed by another NGO shows a level of knowledge transfer and training happening between NGOs in different locations. Green Qilu also uses Weibo to publicise the report and direct followers to a way of accessing the press conference. Although Green Qilu doesn't use mentions within their posts about the Shandong PITI, there is a level of engagement with several EPBs, which can be seen in **Table 21**.

IPE's motivations for partnering with smaller, provincial NGOs could be as a way of lessening the burden of conducting the evaluation by having other organisations help with the work. It can also be seen as a form of capacity building, which is something that donors often look for. It may also be easier for local NGOs to conduct the evaluation because they have better knowledge of the situation on the ground and as an NGO based many miles away in Beijing it may be hard for IPE to get a full understanding of local conditions. The way that IPE is registered, as a private non-enterprise entity, also means that they cannot set up branch offices in other cities so partnering with other NGOs could be a way of extending their work to different locations.

For the partner NGOs, this approach affords several benefits, in that it provides access to expertise, funding and government contacts. However, it could also be problematic for the sector in that smaller, provincially located NGOs could come to resemble the larger, nationally focussed NGOs on whose work they look to recreate. DiMaggio and Powell (1983) have argued that organisations imitate other successful organisations as a way of increasing their legitimacy, but this approach is not without problems. For example, there could be problems of dependency, in which smaller NGOs become far too dependent on larger organisations, not necessarily in terms of funding as most of this is now channelled through foundations, but in terms of ideas. It was clear that IPE and NRDC took a risk when developing the PITI. They weren't sure how it would be received by the authorities, but they still went ahead and tried it. Now that it is seen as a legitimate and accepted form of evaluation, the risk of conducting this type of evaluation of the government's performance is much lower. By sticking to tried and tested methods, perhaps smaller NGOs may be put off from taking risks and developing innovative and new solutions. M.

A. Shapiro et al. (2018) have also suggested that within an authoritarian context where NGOs come under great scrutiny, there is strength in numbers and networking and coordinating with other NGOs can provide a form of protection. It should be noted that the political context in which the PITI was first developed in 2009 is very different to today's political climate in China so the risks of questioning and criticising the government could be much higher now, which could be another reason smaller NGOs want to work with other, more established, NGOs on joint projects.

The approach that IPE and the other NGOs take to publicising the PITI reports on Weibo are similar, meaning that Weibo is used to engage not just with followers, but also other NGOs and the environmental authorities. The organisations, in their evaluations of the environmental authorities in cities across the country are providing the central government with a very useful source of data, free of charge, and published in such a way that it even generates some good publicity for those cities that score highly. Weibo, as used in this context, does play a role in the process, not as a confrontational or aggressive way of holding the government to account, but more as a way of praising good performance, networking with fellow NGOs and funders, and as a tool for generating publicity around the reports.

Case Study 2 – Lüse Jiangnan and Jiangsu’s Unresponsive Environmental Protection Bureaus

The second case study looks at how Lüse Jiangnan uses information, and more specifically access to environmental information through Weibo, as a way of holding local environmental authorities to account online. The case study looks at an annual report released by Lüse Jiangnan in which they rank provincial level Environmental Protection Bureaus (EPBs) according to how actively and effectively they have been using Weibo. Goron and Bolsover (2020) have suggested that the environmental authorities in China have started using social media sites like Weibo with the aim of ‘occupying’ the online space and to crowd out more dissenting voices. An analysis of Lüse Jiangnan’s investigation into the use of Weibo by the environmental authorities in Jiangsu will be used to study some of the issues associated with local governments using social media, what the NGOs are doing to try and hold them to account, and what role Weibo plays in this.

Over the past ten years the Chinese government has encouraged the expanded use of e-government across the country, including by the environmental authorities (Goron & Bolsover, 2020). In June 2015, the deputy head of the Ministry of Environmental Protection (MEP), as it was then known, publicly called for EPBs nationally to get good at using the internet and new media, to encourage social governance and promote environmental rule of law (Ministry of Ecology and Environment, 2015). As a report from The Institute of Public and Environmental Affairs (2015, p. 26) showed, the use of Weibo by the environmental authorities was already fairly common in 2015, with EPBs from over 154 cities across the country having accounts. Goron and Bolsover (2020) have also analysed the use of Weibo by the environmental authorities in Shandong Province, looking at how different levels of the bureaucracy interact with each other and the public. However, the effectiveness and the extent to which the environmental authorities make use of Weibo, and how NGOs have responded to this, is still little understood. It has been argued that government microblogs allow for direct dialogue between the government and the public and that e-government initiatives can improve levels of government transparency and accountability (United Nations, 2008). There are, however, also questions around the effective use of microblogs by the authorities in China with Hao et al. (2016) showing that interactive features of social media are poorly used by the authorities and Goron and Bolsover (2020) have suggested that the environmental authorities’ use of Weibo is

less about good governance and more about controlling online spaces and crowding out dissenting voices.

The use of social media by the authorities has also attracted the attention of NGOs. During the data collection period, the NGO, Lüse Jiangnan, released a report into the use of Weibo by the environmental authorities in Jiangsu Province. Lüse Jiangnan was founded in March 2012, and is based in Suzhou, in Jiangsu Province, on China's east coast. It is relatively small compared to IPE or Shan Shui and has an online following on Weibo of 39,000 as of June 2022, compared to IPE's 436,000, and Shan Shui's 849,000. Suzhou itself is famous for its traditional buildings, canals and gardens, but outside the old city is one of the most industrialised areas of China, with a particular focus on electronics, machinery, chemicals, automobiles, and textiles (HKTDC Research, 2021). The NGO works across several different sectors, including with industry, and has stated that it doesn't want to close factories that are polluting, but instead wants to see them rectify their pollution problems (Lüse Jiangnan 绿色江南, n.d.). It is also clear in its willingness to work with the local government and has stated that its aims are to,

Fully cooperate with environmental protection departments, promote public participation in supervising industrial pollution emissions and green supply chain procurement by brands, promote enterprise energy conservation and emission reduction, achieve cleaner production, take the initiative to assume social responsibility, achieve pluralistic co-governance and social sharing, so that everyone can support environmental protection, and everyone can participate in the overall pattern of environmental protection (Lüse Jiangnan 绿色江南, n.d.)

Lüse Jiangnan works closely with other NGOs too and as the previous case study showed it's clear that it has a relationship with IPE and has worked closely with it, not only on the PITI, but also on reports into industrial supply chain issues, such as a report into environmental violations in Tesla's supply chain (The Institute of Public and Environmental Affairs & SIP Lüse Jiangnan Public Environment Concerned Centre, 2021). There are examples, however, where Lüse Jiangnan has taken some of the ideas and methodologies that they've previously executed jointly with IPE and adapted them to create reports and investigations of their own. For example, it has released reports looking into the sustainability practices of the financial services industry,

including looking into environmental reporting within insurance companies (Lüse Jiangnan, 2022).

Another report that the NGO has published provides the results of an annual investigation into how well the environmental authorities are using Weibo, in which all Jiangsu's provincial Environmental Protection Bureaus (EPBs) are evaluated using three indicators: dissemination, service, and interactivity. The three indicators are calculated as follows:

Dissemination:

The "dissemination" indicator measures the spread of information posted on the environmental protection authorities' Weibo. The higher the dissemination score, the more netizens will have seen the content of environmental authorities' Weibo. This indicator is calculated based on the annual growth of followers of the official environmental authority Weibo accounts.

1. Annual growth of followers: The increase in the number of followers of the official Weibo account of the environmental protection authorities compared with the previous year.

Service:

The "service" indicator measures how much one-to-one communication there is between the environmental authority Weibo accounts and netizens. A higher service score indicates that the environmental authority has served more netizens through their Sina Weibo account. This indicator is mainly calculated based on the number of active comments, the total number of posts and the number of original posts.

1. Number of active comments: The number of comments actively replied to by the environmental authority Weibo account during the data collection period.
2. Total number of posts: The total number of posts posted by the environmental authority Weibo account during the data collection period.
3. Number of original posts: The total number of original posts posted by the environmental authority Weibo account during the data collection period.

Interactivity:

The "interactivity" indicator measures the potential impact of the information released by the environmental authority Weibo accounts. The higher the interactivity score, the more netizens will have responded to the content of the environmental authorities' posts on Weibo. This indicator is

calculated based on the number of retweets, comments, and likes the environmental authorities' posts have attracted on Weibo.

1. Number of retweets: The number of times posts from the environmental authority's Weibo accounts were retweeted during the data collection period.
 2. Number of comments: The number of times posts from the environmental authority's Weibo accounts were commented on during the data collection period.
 3. Number of likes: The number of times posts from the environmental authority's Weibo accounts were liked during the data collection period.
- (Lüse Jiangnan 2019, section 1)

The purpose of the investigation was to determine how well the environmental authorities in Jiangsu had been using social media. Using the indicators detailed previously, a score was produced for each of the EPBs included in the study. These EPBs were then ranked from best to worst, with the results published on WeChat, on the NGO's website, and publicised on their Weibo account (Lüse Jiangnan 2019). The EPB of the provincial capital, Nanjing, came out on top, followed by the Jiangsu provincial level EPB account. Goron and Bolsover (2020) have suggested that a lack of resources could be to blame for an absence of engagement from the environmental authorities in their study and the same could be apparent in Jiangsu too as these two EPBs are likely the two best resourced EPBs in the province as they sit atop the bureaucratic hierarchy.

Table 22 shows a post on Weibo from Lüse Jiangnan in which they publicise the release of the report. The post received a reasonable level of engagement with 112 reposts and 25 comments. One of the tactics employed by the NGO to get a response from the EPBs was to mention the accounts that they had tracked and evaluated for the report.

Table 22

Weibo post by Lüse Jiangnan publicising the release of the 2018 Jiangsu Province Government Environmental Protection Weibo Account Rankings

Date	Text (Chinese)	Text (English)	Reposts/ comments
23/01/2019	<p>【2018 年江苏省环保政务微博排名】绿色江南公众环境关注中心对江苏省 65 个经过新浪微博认证的环保政务官方微博，依据三个指标：传播力、服务力和互动力，综合运用内容分析和数据统计方法，为江苏省各市、县环保政务微博进行排名，究竟哪个排名稳坐如山，哪个又被转发、被评论、被赞数以万亿？点进来看看吧： 2018 年江苏省环保政务微博排名 @蔚蓝地图 @何春银微想 @生态梦人 @公众环境马军 @南京生态环境 @江苏生态环境 @宜兴环保 @无锡环保 @苏州环保宣教 @宿迁-环保 @常州环保局 @扬州环保 @镇江环保局 @徐州环保 @淮安环保 @南京鼓楼环保 @宿豫区环保 @泰州环境保护局 @高淳环保 @</p>	<p>[2018 Jiangsu Province Government Environmental Protection Weibo Rankings] Lüse Jiangnan carried out an analysis of the 65 official Sina Weibo accounts belonging to Environmental Protection Bureaus (EPBs) in Jiangsu Province. Each of the city and county level EPB Weibo accounts was ranked using comprehensive content and statistical analysis according to three metrics: level of dissemination, service, and interactivity. Which account ranks first? Which has been re-posted, commented on, and liked over a million times? Click here to find out: 2018 Jiangsu Province Government Environmental Protection Weibo Account Rankings. @BlueMap, @HeChunyinWeiXiang, @Shengtaimengren, @IPEMaJun, @Nanjing EPB, @JiangsuEPB, @YixingEPB, @WuxiEPB, @SuzhouEPB, @SuqianEPB, @ChangzhouEPB,</p>	112/25

盐城环保 @连云港环保 @秦淮环保 @昆山市环
境保护局 @张家港环保 @扬中环保 @溧水环保
@江宁环保 @常熟环保 @南通环保微博 @浦口
环保 @雨花v环保 @江阴环保 @宝应环保 @
丰县环保 @美丽金太仓 @沭阳环保 @靖江环保
@六合环保 2012 @宿迁洋河环安局 @绿色新沂
@阜宁县环境保护局 @栖霞-环保 @建湖环保
@建邺环保 @邳州环保 @睢宁环保 @玄武区环
境保护局 @PECCNL @PECC-YWJ @PECC-LN
@PECC-CB @PECC-LiJ @PECC-YCY
@PECC_DD

@YangzhongEPB, @ZhenjiangEPB, @XuzhouEPB,
@Huai'anEPB, @NanjingGulouEPB, @SuyuEPB,
@TaizhouEPB, @GaochunEPB, @YanchengEPB,
@LianyungangEPB, @QinhuaiEPB, @KunshanEPB,
@ZhangjiagangEPB, @YangzhongEPB, @LishuiEPB,
@JiangningEPB, @ChangshuEPB, @NantongEPB,
@PukouEPB, @YuhuataiEPB, @JiangyinEPB,
@BaoyingEPB, @FengxianEPB, @MeiliJinTaici,
@ShuyangEPB, @JingjiangEPB, @LuheEPB,
@SuqianYangheEPB, @XinyiEPB, @FuningxianEPB,
@XixiaEPB, @JianhuEPB, @JianyeEPB,
@PizhouEPB, @SuiningEPB, @XuanwuquEPB,
@PECCNL @PECC-YWJ @PECC-LN @PECC-
CB @PECC-LiJ @PECC-YCY @PECC_DD

Of note was how little engagement there was with the post, and the report in general, from the environmental authorities. None of the 112 reposts were by the accounts of the EPBs that were evaluated in the report, and only one of the comments was from an EPB account: @WuxiEPB in which they stated that their “gradual improvements were only possible with the support of so many internet users” (Wuxi Environmental Protection Bureau 无锡生态环境, 2019). The original post about the report was reposted by IPE’s Director, Ma Jun, the official IPE Blue Map account, and two accounts belonging to @HechunyinWeixiang and @Shengtaimengren, who are both government officials.

The report itself is quite critical of the EPBs and their lack of online engagement. The evaluation looked specifically at how local authorities were using their Weibo accounts, so the scoring is based on an evaluation of the accounts on that platform alone. Nanjing EPB scored highest overall, followed by Jiangsu EPB and then Yixing EPB. Of note was how low some of the scores were. For example, in the 2018 evaluation, first placed Nanjing EPB scored 19.56 out of 100 in the ‘level of dissemination’ criteria and third placed Yixing EPB scored even lower with 2.44 out of 100 (Lüse Jiangnan 2019, score comparison table). It was clear that EPBs located in larger, provincial cities, rather than those at county administrative levels used their Weibo accounts more effectively and scored higher in the evaluation (Lüse Jiangnan 2019, section 3). Other major findings from the report were that even though some EPBs were using their Weibo accounts, many more had ‘zombie’ accounts that existed but only posted very infrequently, some with hardly any activity after they had been set-up (Lüse Jiangnan 2019, section 4). The report authors noted that these zombie accounts often had followers, suggesting that there is an interest amongst the public for more information from the government, and the local government is missing an opportunity to increase levels of trust between local environmental authorities and the public. The second major finding was that there was very little interactivity from the EPBs. One of the most important features of social media is that it’s possible to have two-way communication, but in most cases EPBs were not making use of this and were merely posting information, and not responding to queries or comments from other users. The third finding was that the environmental authorities were still very distant from the public and not serving them sufficiently well (Lüse Jiangnan 2019, section 4).

The report received little or no coverage from the media, either at a national or local level and there was very little engagement from the EPB Weibo accounts, even those that were ranked among the top-ten best performers. Lüse Jiangnan conducted the same evaluation through 2019, although they did change the scoring system used in the report and expanded to four criteria (Updating (20%), Originality (30%), Linkage (30%) and Dissemination (20%)) instead of the previous three. The findings of the report were largely the same as the previous year and many of the EPB accounts that were evaluated had seen little or no improvement in their performance (Lüse Jiangnan, 2020, section 3). Having published the report annually since 2014, it appears that 2019 was the last time that Lüse Jiangnan conducted the evaluation of Weibo use amongst EPBs in Jiangsu Province. There is no record of a report in any year since. This could be because of a lack of funds to conduct the research, or it could be because the report received little traction in the press or from the EPBs that were being evaluated. If the aim of the evaluation was to encourage EPBs to use their Weibo accounts more, then it has largely failed, not through want of trying but because of local government inertia. In contrast to the PITI report in the previous case study, Lüse Jiangnan's report into Weibo use amongst Jiangsu EPBs has not been replicated and expanded beyond Jiangsu, perhaps because it didn't provide a sufficiently appealing blueprint for other NGOs to replicate. Engagement with the authorities was minimal, and there is no mention of how funding for the report was received, meaning that other NGOs looking at it as a possible model may have been put off replicating it.

From the results of Lüse Jiangnan's investigations into the use of Weibo by the environmental authorities it's clear that the Chinese government's attempts to use social media as a way of engaging with the public are not universally successful. The lack of engagement with Lüse Jiangnan's post on Weibo publicising the report is further evidence that the use of Weibo by the authorities is very narrow, with only one of the EPBs responding. Goron and Bolsover (2020), in their analysis of the use of Weibo by EPBs in Shandong province detected a very hierarchical system in place, where EPBs at the top of the bureaucratic hierarchy would post something on Weibo and the EPBs lower down would simply retweet the material. Something Goron and Bolsover (2020) also noted was that information flowed vertically down the hierarchy but not the other way, and certainly not horizontally from the public to the EPBs. Lüse Jiangnan's findings

were largely in line with those of Goron and Bolsover (2020), in that there was very little interaction between the EPBs and the public.

One of the claims that Goron and Bolsover (2020) make is that the use of social media by the authorities, far from being an example of better governance, is in fact a tool to control public opinion. Goron and Bolsover (2020) argue that examples of better e-government would include greater interaction with the public and a way of the public using social media to report on environmental problems, such as pollution incidents. What they found however, was that this did not occur, and EPBs, especially further down the hierarchical chain only posted from official sources with little scope for original input. Lüse Jiangnan's report notes that these problems exist in Jiangsu too, but their findings suggest that in many cases the Weibo accounts belonging to EPBs don't post anything at all. This would suggest that they are neither good examples of e-government nor more sinister attempts to subvert and distort public discussions about environmental issues. More likely is that many of the EPBs are underfunded, understaffed, and lack the necessary training to be able to regularly post and respond to members of the public.

In the wider context of online activist activities, Lüse Jiangnan's report may seem fairly tame, but by publicly shaming EPBs that have not been using their Weibo accounts to the fullest, they are exposing themselves to certain amount of risk. If they were to really upset the local environmental authorities, for example, they could have trouble re-registering at the end of their registration period. The fact that the government has been vocal about EPBs using social media as a way of engaging with the public could provide the NGO with a certain amount of cover though, as once again they are providing the government with useful data on the extent to which their policies are being implemented at a more local level. As with the PITI report featured in the previous case, the NGO here is taking a government position or policy framework and testing to see to what extent it is being implemented, but at no point is there a questioning of the original policy.

Case Study 3 – Green River and a Cultural Icon

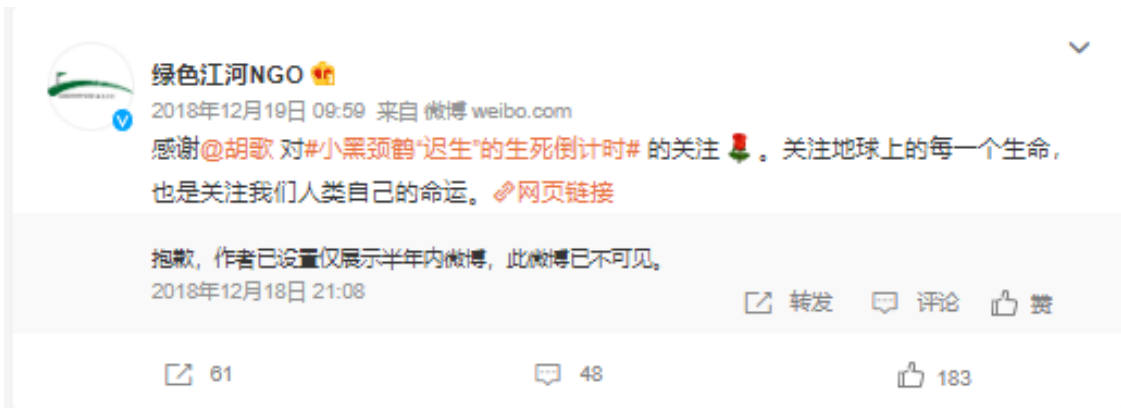
The third case study focusses on the NGO, Green River, and how a Chinese organisation has worked together with one of China's most famous actors to publicise and promote on social media the work that they do. Much has been written about celebrity endorsement of environmental activism. For example, Abidin, Brockington, Goodman, Mostafanezhad, and Richey (2020) have identified common tropes amongst celebrity endorsed environmental campaigns, Doyle, Goodman, and Farrell (2017) have analysed the role afforded to celebrities within the politics of climate change, and Olmedo et al. (2020) have conducted a review of celebrity endorsed environmental campaigns and their effectiveness. However, most studies have an international focus and centre on climate change and animal conservation with little or no attention paid to the ways that domestically focussed Chinese NGOs have worked with celebrities to further their aims and objectives. This case study looks specifically at the role that a Chinese celebrity plays in the relationship with an NGO, from the perspective of not just added reach and publicity, but also the added sense of legitimacy, that this can bring.

Celebrity endorsements of environmental campaigns are common amongst many international NGOs, especially those working in China (Olmedo et al., 2020), so one of the surprising elements of the Weibo data analysed in the previous chapters was the fact that there was a complete lack of celebrity endorsement and very little mention of celebrity culture altogether. Sina Weibo, which is the main source of data for the research is predominantly a platform driven by entertainment and gossip, of which celebrities play a central role. The most popular accounts on the platform are dominated by celebrities like Xie Na and He Jiong, with over 129 million and 120 million followers respectively (Manya Koetse, 2021). There have also been high profile celebrity endorsements of environmental conservation campaigns by the now retired basketball player Yao Ming, and the actress Li Bingbing, who both act as ambassadors for the international conservation NGO, WildAid (WildAid, 2022). Wild Aid has also run a campaign using the hashtag #Bite Nails to Rescue Rhinos# featuring images of famous people like Li Bingbing, biting their nails with the tag line stating that Rhino horns have nothing in them that human nails don't (J. Wang, 2019, p. 116). It was surprising then to see that there were no mentions of celebrities or celebrity endorsements in the Weibo posts by the NGOs during the data collection

period, which ran for 68 days from December 19th, 2018, to February 2nd, 2019. It was only in a retweet of a post that Green River mentions the film and TV star, Hu Ge, shown in Figure 15.

Figure 15

Screenshot of Green River retweet thanking Hu Ge



Note. The original post being retweeted is not visible because the poster has set their account to only show posts from the past six months.

The text in the post in Figure 15 reads:

Thank you @Hu Ge for your attention to the #Little black-necked crane,
"Chi Sheng's¹²" life and death countdown# 🌹. To be concerned with every
life on earth is also to be concerned with the fate of us human beings.
(Green River, December 19th, 2018)

Later in 2019, Green River again retweeted a post about Hu's environmental work, originally posted by Vogue China. In the retweet, they refer to Hu as a volunteer for the NGO, using the nickname, Little Hu. A screenshot of the retweet can be seen in Figure 16.

¹² Meaning 'late arrival' or 'delayed birth'. The bird was late to hatch and so there were worries that he would not be mature enough to migrate with the other birds.

Figure 16

Screenshot of Green River retweet of post by Vogue China



The following is a translation of the text in the retweet posted by Green River:

Volunteer Little Hu carries out the separation of rubbish in an online video 🙌 Environmental protection starts from the source; it starts from you and me ❤️. @Vogue Clothing and Beauty (Green River, December 23rd, 2019)

The following is the text in the original post by Vogue China:

#Vogue Environmental Protection Check-in# @Hu Ge initiates the classification and processing of plastic bottles relay #Hu Ge separates and processes plastic bottles# Under the lens of Vogue's Editor in Chief @angelica Zhang Yu, Hu Ge shares his suggestions for being more

environmentally friendly with us: the separation of plastic and other rubbish to reduce the amount of pollution from non-biodegradable products in the environment. “Do not fail to commit an act of kindness just because it is small in scale”¹³, join Hu Ge and Vogue’s environmental protection check-in and refuse to throw away plastic bottles from today. (Vogue China, December 23rd, 2019)

The reference to Hu Ge as a volunteer is because Hu has been working with Green River as a volunteer and ambassador since 2013 (Wei, 2019). Hu Ge’s celebrity status will be discussed further in the chapter, but it is worth pointing out that he currently has over 71 million followers on Weibo and has acted in the lead role in some of China’s most popular TV dramas such as Chinese Paladin, a fantasy TV drama spin-off of an action role playing computer game. This was the only celebrity endorsement discovered during the data collection period and so is worth investigating in more detail.

It’s first worth defining exactly what is meant by the term celebrity. For example, at what point does someone become a celebrity and why do we refer to them as such? Abidin et al. (2020) argue that celebrity is determined by the sheer amount of coverage a particular person receives in the media, and Turner (2004) describes a celebrity as someone who has usually appeared from the worlds of entertainment or sport, whose private life garners more interest than their actual work. Turner (2004) goes on to suggest that this means that they may have no special achievements or qualities apart from being famous. A slightly less cynical analysis of celebrity is that celebrities are merely those who have a more prominent voice in the media that they can use to shape public opinion (Boykoff & Goodman, 2009, p. 405).

Celebrity endorsement of environmental campaigns is widespread (Olmedo et al., 2020, pp. 2-3) and has grown considerably since the 1990s (Doyle et al., 2017), especially the role that celebrities have played in climate change awareness (Boykoff, Goodman, & Littler, 2010). By reviewing academic literature from various disciplines, news reports and social media, Abidin et al. (2020) identified nine tropes of celebrity environmentalism as detailed in Table 23 (Abidin et al., 2020, p. 393).

¹³ The original Chinese is a classical Chinese quote from the 14th century novel *The Romance of the Three Kingdoms* attributed to Luo Ganzhong.

Table 23*Nine tropes of celebrity environmentalism*

Trope	Definition	Examples
Celebrity animals	Individual animals that have some media exposure	Knut the polar bear
Ambassadors	Famous people usually recruited by NGOs through agents and publicists	Harrison Ford, Cate Blanchett
White saviours	Many conservation celebrities are white. They serve audiences in Europe and North America who feel that wild Africa is under threat and needs saving.	George Adamson, Diane Fossey
Indigenous heroes and heroines	Authentic local voices, according to people outside the country	Wangari Maathai
Guru	Iconoclastic prophets preaching environmentalism	Henry Thoreau
Commercial TV product	A celebrity made famous through nature TV	Steve Irwin
Entrepreneurs	Supposedly environmentally friendly investors and companies	Richard Branson, Elon Musk
Activist intellectuals	Intellectuals who often write cerebral book-length arguments against environmental problems	George Monbiot, Naomi Klein
Ordinary people	Elevated to celebrity status by their arguments not any media or social media machine	Greta Thunberg, Swampy

The nine tropes of environmental celebrity according to Abidin et al. (2020) can be seen as a particularly cynical analysis of celebrity involvement in environmental causes. However, some of the tropes do resonate within a Chinese context. Jack Ma of Alibaba, for example, has in

recent years promoted himself as more of an environmentally friendly investor, while also setting up a foundation that donates considerable amounts of money to environmental causes (Jack Ma Foundation, 2022). Ambassadors are the most recognisable trope amongst Chinese environmental celebrities though and are regularly featured by international NGOs working in China, such as Li Bingbing or Yao Ming for Wild Aid. While the use of celebrity endorsements in environmental campaigns is widespread, the effectiveness of those endorsements is highly contested with some suggesting that celebrity involvement can make distant issues seem closer because of a celebrity's familiar face (Anderson, 2013), while others have pointed to evidence which suggests that people are more likely to engage with marketing campaigns if fronted by celebrities, but they are less likely to recall the contents (Duthie, Veríssimo, Keane, & Knight, 2017). It has also been suggested that celebrities can play an important role in "the processes through which cultural identity is negotiated and formed" (Turner, 2004, p. 4), which could be especially pertinent for NGOs in China whose work sometimes comes under suspicion.

The appearance of celebrities in environmental campaigns is not limited to western countries but also includes celebrity endorsements in China. In fact, in the scoping review conducted by Olmedo et al. (2020, p. 6), most of the campaigns reported on were in Chinese, and most of these involved celebrity endorsements of wildlife or conservation campaigns. It was surprising then that in the previous two chapter's analysis of Weibo posts posted by the NGOs that there was no mention of a celebrity. This could be because the data collection period was not long enough to capture mentions of celebrity endorsement, but it could also point to a desire of Chinese celebrities to work with more internationally focussed NGOs, such as WildAid. Postema and Melissen (2021) have suggested that Chinese celebrities working for the UN as goodwill ambassadors take on a role, not just for the UN, but also as a *de facto* representative of the Chinese state. The same could be happening when Chinese celebrities work for international NGOs, in that they want to become ambassadors on the international stage, not just for the NGOs, but also to bolster their standing in the eyes of the Chinese state.

The only Chinese NGO identified to have worked with a Chinese celebrity was Green River, and the celebrity in question was the famous actor and singer Hu Ge. Green River is a relatively old environmental NGO by Chinese standards, having been founded in 1995 in Chengdu, Sichuan Province, central China. The organisation was founded with the aim of helping Chinese

communities in the upper reaches of the Yangtze River develop sustainably. To do this the organisation established a base near the headwaters of the Yangtze to carry out research projects on endangered species and organise volunteer work. Much of their work involves collecting rubbish to try and prevent it from entering the watercourses that flow into the Yangtze. One of these projects allowed nomadic people to exchange rubbish for food at the environmental conservation station that they had established. They also organise volunteers to travel to the station to help pick up rubbish and sort recycling to then be sent for processing. In addition to this they have created 18 recycling points at sites along the Qinghai-Tibet highway, which they call a “replicable model of trash collection and transportation, based on the collaboration between the government, civil society organizations and volunteers” (China Development Brief, n.d.).

In terms of its online presence, Green River has a Weibo account with over 542,000 followers as of June 2022, making it one of the higher follower counts among the NGOs studied. They also have a website which contains information about the organisation, the projects they run, media stories about the NGO, and a volunteer portal where volunteers can register their interest in volunteering (Green River 绿色江河, n.d.). WeChat is another platform that the organisation uses to post original articles and reposts of other content. A WeChat article posted by Green River on December 6th, 2018, about international volunteers’ day included a short video featuring Hu Ge. A screenshot of the video can be seen in Figure 17 (Green River 绿色江河, 2018) and an extract of the text from the WeChat article stated that,

Hu Ge has visited the Yangtze River Source Water Ecology Environmental Protection Station three times: in 2013, 2016 and 2018. As a volunteer he has participated in the ‘protect the bar headed goose’, ‘wildlife surveys’, ‘rubbish swapped for food’, and the ‘take away a bag of rubbish’ projects, all carried out in the spirit of volunteerism. (Green River 绿色江河, 2018)

Figure 17

Screenshot of video featuring Hu Ge in Green River's WeChat article



To understand the significance of this video it's worth analysing in more detail exactly who Hu Ge is. In 2019 Hu was one of the most famous celebrities in China. He was ranked third in the 2019 Forbes China Celebrity 100 rankings (Sina.com, 2019), and his personal life and marriage are often the subject of media speculation (Sohu.com, 2021). Having made his name in the popular Chinese fantasy television series Chinese Paladin, which first aired in 2005, Hu has managed to build a significant online presence, and as of February 26th, 2022, he had over 71.7 million followers on Weibo. His image is very clean-cut and most of his roles in film and television have been characters that are morally upstanding. His celebrity status is such that he came to the attention of Armani China and modelled for the company for several years before being made global ambassador for the brand in 2020 (T. Zhang, 2020). He has more recently come in for slight criticism for comments he made about men naturally being playboys (Chan, 2021), but it doesn't seem to have dented his overall public persona and he has largely avoided the crackdown on media personalities being conducted by the Chinese state. These crackdowns have included the arrest of the singer Kris Wu on sexual assault charges, the \$299 million fine handed out to the actress Zheng Shuang for tax evasion, and the overnight disappearance of the actress Zhao Wei (Z. Li, 2021). While there may be some legitimate grievances about celebrity

behaviour, the Chinese government's concerted and coordinated crackdown on celebrities, especially against those such as Li Bingbing, who voiced very mild criticisms of government actions, can be seen as part of the government reasserting their authority over a group of people with significant popularity and power, especially online (Z. Li, 2021).

Hu Ge's main contribution and endorsement of Green River involves him volunteering at the research base that they've set up in Qinghai Province near the upper reaches of the Yangtze River. A number of media outlets have written about his time volunteering there with stories showing an unkempt Hu carrying out all the unglamorous things the volunteers are tasked with doing, like mopping out the toilets, cooking dinner, collecting rubbish, and lugging heavy equipment around (Sohu.com, 2019; The Paper, 2020). The articles and photos clearly present Hu as someone who is willing to muck-in and get his hands dirty with the rest of the volunteers. It's very much a man of the people image with him unafraid to do a bit of hard work to keep the environment clean. A cynical reading of these stories might suggest that Hu is just there for a bit of good publicity and to assure people that even though he models for Armani, he can sport a pair of muddy hiking boots and waterproof jacket and get on with ordinary people. A slightly less cynical view is that Hu wanted to do something for the environment and felt that this was his way of contributing. The articles and videos give little indication as to his original motivations for volunteering at the station, but there could be an element of both positions. Hu has spoken fondly about his time volunteering for Green River and has talked in almost spiritual terms about his visits to the Sanjiangyuan area of the Tibetan Plateau (the source of the Yellow, Yangtze and Mekong Rivers), saying that when he first got there he knelt down and kowtowed three times in the direction of the source of the rivers (Wei, 2019).

How important the relationship is to Green River is difficult to ascertain from the articles and posts but it's clear they value the relationship. As an example, post one in Table 24 is the text from a post containing a video with some information about one of Green River's projects and is notable because it was retweeted by Hu. A screenshot of post one in Table 24 can be seen in Figure 18. The post was posted outside of the data collection window so was not included in the analysis in the previous chapters. However, it is still useful to look at as it clearly shows how celebrity endorsement of a post on Weibo can increase the level of engagement online. During the 68-day data collection period, there were a total of 235 retweets and 285 comments for posts

by Green River. Contrast these figures with the one post featuring and retweeted by Hu, which went on to be retweeted 181,948 times and attracted 1503 comments. Saxton and Wang (2014) have shown that an NGOs ability to raise funds online is directly linked to the size of their online network. The fact that a post by the organisation is retweeted and commented on by so many does not guarantee new followers, but it is highly likely that some of Hu's followers who retweeted it will end up following the NGO too, and some may even be encouraged to sign up and volunteer. For comparison, posts two and three in Table 24 are more representative of Green River's posts. They often contain information about volunteering, photos of volunteers, or photos taken by volunteers and submitted to the NGO for publication. Typical engagement with the posts can be less than a dozen comments and retweets. Contrast this with the post about Hu which was retweeted almost 182,000 times and it's clear that some form of celebrity endorsement can really boost the number of people who see or comment on a post.

Figure 18

Green River post featuring Hu Ge



Table 24

Example Green River Weibo posts

Post	Date	Text (Chinese)	Text English (English)	Repost/ Comments	Posted by
1.	24/10/2018	#小黑颈鹤“迟生”的生死倒计时# 迟生已经消失在班德湖的原野上，兴许鹤爸鹤妈带着迟生正在以另外一种方式加入迁徙的队伍。感谢 胡歌 @胡歌 来到长江源班德湖，为迟生祈福，为班德湖所有的候鸟们助力。给野生动物们一片自由的蓝天、绿水、青山，就是在为我们人类自己守护长江源头，创造更美好的生存环境。希望全球的野生动物，都能够拥有属于他们自己的家园，与我们人类和谐共处。 绿色江河 NGO 的秒拍视频	#Little black crane, ‘Chi Sheng’s’ life and death countdown# Chi Sheng has disappeared into the wilderness of Bande Lake. Perhaps mother crane and father crane have found another way of getting Chi Sheng into the ranks of migrating birds. Many thanks to Hu Ge @HuGe, for coming to Bande Lake at the source of the Yangtze, to pray for blessings for Chi Sheng, and help all the migratory birds of Bande Lake. To give wild animals the freedom of blue skies, crystal clear waters, and green hills is why we protect the source of the Yangtze and want to create a more beautiful habitat. We hope that all the world’s wild animals can have a home and live in harmony with us humans. Green River NGO Miaopai video.	181948/1503	Green River
2.	21/2/2019	您好，请关注绿色江河微信公众号 (greenriverngo) ，在公众号菜单中查看志	Hello! Please follow Green River’s public account on WeChat (greenriverngo). In the official account	5/2	Green River

愿者招募信息，只要年满 18 周岁即可报名， menu you can find information on volunteer
期待您的加入！ 请问，如何加入你们呢？ recruitment. We look forward to welcoming you.

3. 20/01/2019 #早安沱沱河# 翻山越岭，只为找到你-by #Good morning from the source of the Yangtze# 3/3 Green
志愿者 @一个神力女超人 Pass over mountain ridges just to find you. By River
@YigeShenliNvchaoren
-

It's likely that there are several factors at play in the relationship between Hu Ge and Green River. From Hu's perspective his association with the NGO helps him to cultivate his image as an upstanding man of the people, unafraid to get his hands dirty and willing to help out in his patriotic duties to keep the country clean. As a background to this, the criticism of celebrities and the crackdowns that have occurred have increased in their size and scope recently but have been simmering for some time. So, on the one hand he could be showing that even though he's famous and incredibly rich, he still knows his place in society is amongst the ordinary people. From Green River's perspective there is no denying that the added publicity that having a celebrity retweeting a message on Weibo brings, there could be other factors at play too. Galaskiewicz (1985, p. 296) talks about the how organisations can benefit and gain legitimacy from partnering with cultural icons, which could be an important motivating factor.

The approach is not without risks for both parties though. For Hu, being associated with an NGO, albeit one that is very much focussed on domestic issues, comes with the risk that NGOs become completely politically untenable, and his image or public persona is tainted by association. It should be noted that the activities that Green River carries out are politically very safe, but this would not always be a guarantee of survival if the government became even more hostile to the existence of environmental NGOs. For Green River, the risks are similar in that Hu's status and image could be seriously tainted if he were to be the subject of some sort of scandal. A certain level of trust must have built up between the two parties though over the years that he has volunteered there and the rewards for both parties from the symbiotic relationship clearly outweigh any current risks.

In terms of increasing Green River's number of followers on Weibo, it's impossible to tell exactly what sort of impact having Hu as an ambassador has had. However, Green River was one of the NGOs with the largest increase in followers between March 2019 and June 2022, increasing their follower count from 130,688 to over 549,000, or by 320%. The increase in online exposure that having Hu on board brings must be a motivating factor for the NGO, as well as the sense of legitimacy that partnering with a cultural icon brings to them. The fact that Hu is so recognisable and has cultivated a very clean-cut image, with his appearance in many historical Chinese TV dramas, could also make Green River seem more legitimate in the eyes of the Chinese public.

Case Study 4 – The #Shan Shui Homeland Guardians# Crowdfunding Campaign

The fourth case study looks at the NGO, Shan Shui Conservation Center, and how they have developed a fundraising strategy incorporating the use of Weibo and the fundraising platform Lianquan.org. With the introduction of the Charity Law in 2016 and the Foreign NGO Law in 2017, the ways that Chinese charitable organisations raise money has changed (Spires, 2020), with social media and crowdfunding platforms now playing a larger role in how Chinese NGOs raise funds (C. Cui & Wu, 2022). To take advantage of these new opportunities, on Lunar New Year's Eve 2019, Shan Shui launched a fundraising campaign to encourage people to sign up to monthly donations on the crowdfunding platform Lianquan.org.

All NGOs face the problem of how to raise funds to pay for their operations, and NGOs in China are no different. NGOs in China have largely been funded by taking on government contracts or accepting money from charitable foundations, mostly foreign, but more recently also domestic (Kang, 2019). However, changes to the way that the NGO sector in China is managed and regulated, in the form of the new Charity Law introduced in 2016 and the Foreign NGO Law introduced in 2017, have resulted in a shift away from foreign foundations to more government contracts and domestic foundation funding (Kang, 2019). How NGOs are dealing with these shifts is only now becoming apparent, and what role social media, and Weibo specifically, plays in these changes is little understood.

On Lunar New Year's Eve 2019, the Beijing based conservation NGO, Shan Shui Conservation Center, launched a new way of donating money to the NGO by regular monthly contributions. Over the course of the first ten days of the Lunar New Year, Shan Shui publicised the campaign using the #Shan Shui Homeland Guardians# (#山水家园守护者#) hashtag on Weibo, providing their followers with a link to the page allowing them to set up a regular donation. Founded in 2007, Shan Shui is a conservation NGO that is mainly concerned with the preservation of species and ecosystems. The NGO is registered as a private non-enterprise entity with headquarters in Beijing but has projects across China including in the far West of the country in Yunnan, Sichuan, Qinghai, and Tibet. The NGO focuses specifically on the conservation of endangered species such as the snow leopard, giant panda, and snub-nosed monkey in Western China, but also run projects helping to educate people about, and protect, urban ecosystems. It advocates community-based conservation and citizen science projects, often trying to involve local populations in

conservation efforts. Since 2018, Shan Shui, together with Peking University, Sanjiangyuan National Park and the SEE Foundation, have jointly established a scientific research and environmental protection workstation in a remote culturally Tibetan area of Qinghai Province, which has become one of the first nature experience project franchises based in a Chinese national park. In the same year, Shan Shui and Huatai Securities started a strategic cooperation, called the "One Yangtze River" project, to protect communities living near the source of the Yangtze River (Shan Shui Conservation Center, 2022a).

Although the philanthropic sector in China has expanded rapidly since 2010, with the 100 biggest givers to charity increasing their annual donations from 1.3 billion in 2010 to 4.6 billion in 2016 (P. Johnson & Saich, 2016, p. 30), charitable giving is still in its infancy and is not as widespread as in other countries (Chang, 2019). Shan Shui has attracted funding from various sources including from Chinese and foreign foundations, government services contracts, and personal donations. However, the way that Chinese NGOs are funded has changed significantly over the past ten years as sources of funding from foreign foundations have become harder to access and new opportunities for domestic fundraising have emerged. In addition to very wealthy donors who have been increasing their charitable giving and setting up foundations (P. Johnson & Saich, 2016), other avenues for the public to donate to charity have also been emerging, with online technology playing a role in facilitating these changes (C. Cui & Wu, 2022).

To understand the potential impact on the fundraising activities of NGOs in China, it's worth exploring the implications of the major changes in some detail. The biggest change to the charitable sector in China has come in the form of two new laws aimed at regulating and controlling the operation of both domestic and foreign NGOs. The Law on Administration of Activities of Overseas NGOs in Mainland China (hereafter referred to as the Foreign NGO Law) which came into effect on January 1st, 2017, and the more domestically focused Charity Law of the of the People's Republic of China (hereafter referred to as the Charity Law), which came into effect in 2016, have both had a profound effect on the sector. As the Foreign NGO Law was being drafted there was considerable concern in China's NGO community that draconian restrictions on the operation of foreign NGOs would be included in the new regulations. Some of the concerns stemmed from the fact that the work of drafting the law and overseeing foreign NGOs was shifting from the Ministry of Civil Affairs to the Ministry of Public Security, meaning the potential for heavy handed oversight was increased.

International NGOs (INGOs) had long operated in China in a regulatory grey area without concrete legal definition or protection, and with the shift of the management of NGOs to the Ministry of Public Security it was feared that there would be a draconian crackdown on the operations of INGOs in the country (Holbig & Lang, 2021). Domestic NGOs also feared that they would be punished, or their operations curtailed, because of their association with INGOs that they had built up relationships with over the years, both in terms of joint projects and through accepting funding from foreign sources. Even before the law was enacted, many NGOs had begun to decouple their operations from INGOs that had in the past worked together with them. While the curtailment and crackdown on foreign NGOs has not resulted in a complete exodus of INGOs from China it has resulted in greater bureaucratic burdens for many organisations and also restricted the work that they can carry out (Holbig & Lang, 2021, pp. 2-3).

The other law that has had a profound effect on the charitable sector is the Charity Law, which was enacted in 2016. The Charity Law was the first time that a law had been drafted to specifically regulate the charitable sector in China. The purpose of the law, according to Deputy Director-General of the Department of Social Welfare and Charity Promotion at the Ministry of Civil Affairs, Meng Zhiqiang, was to better define what charitable activities are; better define what charitable organisations are; to grant fundraising qualifications to charitable organisations so that they can publicly fundraise; to provide legal avenues to crack down on donors that promise a donation but do not deliver; to clarify the measures necessary to set up charitable trusts; and to regulate the public disclosure of information giving details of how the charities were operating, to make their financial and managerial practices clearer to the public (Meng, 2016, pp. 185-189).

Reception to the new Charity Law and Foreign NGO Law have been mixed. The Foreign NGO law has not resulted in the draconian crackdown that was expected, although it has resulted in greater bureaucratic issues for foreign NGOs in China and has inevitably led to fewer collaborations and joint projects between Chinese and foreign organisations. Some of the larger foreign foundations, like the Asia Foundation and Ford Foundation, have been able to reregister without any major difficulties (J. Wang, 2019, p. 80). The longer-term effects of the law on the sector are only now starting to be realised and suggest that there is a shift underway from foreign dominated foundations playing a significant role in the sector to a more domestically focused funding model. In a similar way that foreign companies have been

pushed out of spaces in China, especially highly regulated spaces like the internet, so the Foreign NGO Law can be seen in the same way. The Chinese government doesn't appear to want to destroy the philanthropy sector, after all the sector provides expertise and funding for projects that the government has trouble providing for, but it does want to ensure that those NGOs operating within the sector are aligned with the political and cultural views of the Chinese Communist Party (CCP) (Holbig & Lang, 2021, p. 4). With a reduction in the space afforded to claims-making NGOs working on rights-based issues, but an increase in space for those NGOs working more on service oriented sectors that do not threaten the Chinese state, the result could actually be that the sector is further legitimized in the eyes of the state, and Chinese NGOs gain greater access to domestic projects and funding (Toepler, Zimmer, Fröhlich, & Obuch, 2020, p. 7).

The Charity Law is more directed at the domestic charitable sector and has been received more warmly than the Foreign NGO Law. There was a consensus within the NGO sector that following the scandals involving the Red Cross Society of China and tax deception at the China Charity Federation, there was a need for better and clearer regulation, as the scandals had dealt a blow to the sector and seriously eroded public trust in charities and foundations (P. Johnson & Saich, 2016). The Charity Law aims to address these issues by more clearly regulating the sector, with new regulations for disclosing financial information, thus making NGOs more transparent and accountable to the public. J. Wang (2019) has suggested that the new law makes it easier for NGOs to register, widens the definition of philanthropy from its previous position as just disaster relief and poverty alleviation, and makes it possible for NGOs to publicly fundraise. J. Wang (2019) also cites an increase in NGO registration in the year following the implementation of the law as evidence that it could help improve the sector. Legalising and regulating the ability of NGOs to publicly fundraise has been held up as another positive outcome of the law but still very few NGOs have been able to actually get this authorisation (J. Wang, 2019), and instead turn to working in partnership with online crowdfunding platforms that have been authorised to collect donations on their behalf (C. Cui & Wu, 2022).

There has been further criticism of the laws, with Hasmath (2016) suggesting that they “will create a less free civil society and severely reduce the influence of foreign actors on the domestic affairs of China” (para. 1), which is presumably exactly what the CCP wants. Hasmath (2016) also positions the laws more widely in the global crackdown on civil society

and the reduction in space for NGOs to operate, and he sees the main function of both the Charity Law and the Foreign NGO Law as reducing the influence of foreign actors within China. Hasmath (2016) does, however, concede that the laws will create a more predictable and accountable domestic charity sector, especially for those that are more concerned with service provision rather than those whose actions could jeopardise the rule of the CCP. By regulating the domestic sector and pushing out foreign influence the Chinese government will have much greater control more generally over NGOs and their operations. Another criticism of the Charity Law has come from Spires (2020) who suggests that the new charity law is a tool for political control.

As far as Shan Shui is concerned, there is some evidence to suggest that the way that the organisation is funded is changing. Shan Shui publishes an annual breakdown of their sources of funding and their expenditure available back to 2018. From these disclosures, posted on the NGOs website, it's possible to see that in 2018, Shan Shui was only reliant on foreign funders for RMB 166,700, or 2% of their funding (Shan Shui Conservation Center, 2018). The way that the organisation reports its finances changed in 2019 and no longer contains a breakdown between foreign and domestic sources of funding, which could mean they no longer receive any foreign funding at all. It is still possible to see what proportion of their funding comes from public donations though, which are usually split between large personal donations and small personal donations, as shown in Table 25 (Shan Shui Conservation Center, 2018, 2019a, 2020, 2021).

Table 25

Money received by Shan Shui in personal donations from 2018 to 2021, in RMB

	2018	2019	2020	2021
Large personal donations	284,700	-	94,000	33,000
Small personal donations		70,000	260,000	403,100
Total Income	11,025,900	19,270,000	17,179,000	20,321,100

Note. The data for 2018 was not divided into small and large donations and there was no record of large personal donations in 2019.

From 2019 to 2021 there was a clear increase in money going to Shan Shui in the form of small personal donations. The way that Shan Shui is attracting greater small personal donations can be seen in the way that they launched an online fundraising campaign during

the Spring Festival holidays in 2019. Publicised on their Weibo account on the Lunar New Year's Eve, Shan Shui posted a series of posts, as shown in Table 26, giving details of how people could set up a monthly donation to the NGO.

Table 26

Posts publicising the Shan Shui Homeland Guardian project over the Chinese New Year

No.	Reposts	Comments	Original Post	English Translation	Date
1.	43	14	新春在即，我们选择了今天（大年三十）这个特殊的日子，官方正式上线月捐。许一个#新年愿望#，立一个 Flag，每个月，从一杯奶茶的钱开始，关心自然、亲身参与。最后，祝大家，“猪”事顺利、一夜“豹”富~详情请识别长图中的二维码或者戳评论中的链接。加入#山水家园守护者#，让我们在一起。[心]	Spring Festival is almost here so we've chosen this day (the last day of the lunar new year), this very special day, to officially launch our monthly donations platform. Make a new year's wish and plant a flag, every month, starting with the price of a cup of milk tea, care about nature and participate personally. Finally, we hope things go smoothly for everyone in the year of the pig, and you all 'get rich overnight' ¹⁴ . For details, please scan the QR code in the long picture or click on the link in the comments. Join the #Shan Shui Homeland Guardians# and let's do this together.	04/02/2019
2.	6	6	大年初一给大家拜年了！你们都有什么新年愿望呢？说来听听！雪豹的#新年愿望#是	Wishing everyone a happy new year on the first day of the spring festival! What hopes does everyone have for the new year? Let's hear	05/02/2019

¹⁴ The phrase yí yè bào fù, 一夜“豹”富 is a play on words and uses the character for leopard 'bào 豹', a homonym of the character for sudden 'bào 暴'. The original phrase, which has the exact same pronunciation means to get rich quick, or overnight: yí yè bào fù 一夜暴富.

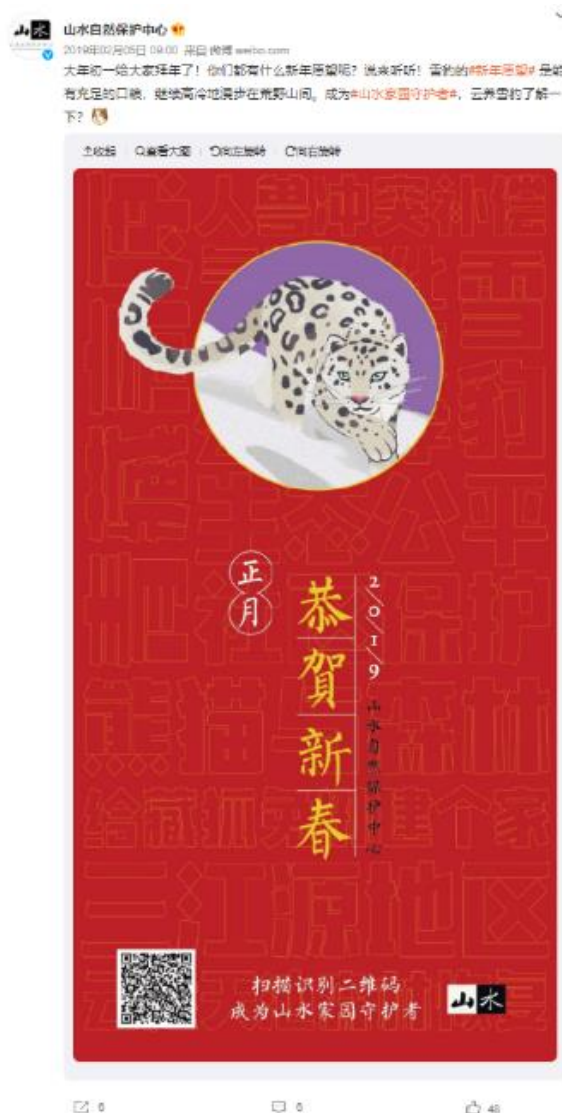
			能有充足的口粮，继续高冷地漫步在荒野山间。成为#山水家园守护者#，云养雪豹了解一下？	them! The snow leopard's #new year's wish# is to have enough to eat and to continue to wander high up in the wilderness and mountains. Become a #Shan Shui Homeland Guardian# if you want to understand more about the snow leopard raised in the clouds.	
3.	39	9	大年初二，狮爷的#新年愿望#是能有一片美好的家园安心带娃，以及自己辛苦叼来的鼠兔别再被半路劫持了。成为#山水家园守护者#，为兔狮藏狐建一个家	On the second day of the Lunar New Year, the Pallas's cat's #new year's wish# is to have a beautiful home to take care of her baby, and not have the pika that she spent so much effort catching taken from her. Become a #Shan Shui Homeland Guardian# and help build a home for the Pallas's cat and Tibetan fox.	06/02/2019
4.	11	6	大年初三，大方脸藏狐的#新年愿望#是继续做高原上最靓的仔，新的一年希望自己的网红地位不被动摇。成为#山水家园守护者#，为兔狮藏狐建一个家~	On the third day of the Lunar New Year, the #new year's wish# of the big square faced Tibetan fox is to continue to be the most beautiful cub on the plateau. He also hopes that his internet celebrity status will not be shaken in the new year. Become a #Shan Shui Homeland Guardian# and help build a home for the Pallas's	07/02/2019

				cat and Tibetan fox.	
5.	17	1	大年初四，水獭的#新年愿望# 是有更清澈的河水，更好吃的鱼，以及在水中旋转跳跃不停歇。成为#山水家园守护者#，新的一年祝你和獭獭一样无忧无虑。	On the fourth day of the Lunar New Year, the otter's #new year's wish# is to have clearer river water, more delicious fish, as well as to be able to spin and jump in the water without stopping. Become a #Shan Shui Homeland Guardian# and in the new year we wish you can be as carefree as the otter.	08/02/2019
6.	6	4	大年初五，大熊猫的#新年愿望# 是希望自己继续做一个安静吃竹子的胖子，以及不要再生病。成为#山水家园守护者#，给大熊猫的邻居打个疫苗。	On the fifth day of the Lunar New Year, the giant panda's #new year's wish# is to continue to be a fatty that eats bamboo quietly and doesn't get sick. Become a #Shan Shui Homeland Guardian# and help to vaccinate the panda's neighbours.	09/02/2019
7.	12	3	大年初六，滇金丝猴的#新年愿望# 是希望自己栖息的家园免受灾难。成为#山水家园守护者#，新的一年祝你的发际线如森林一样茂密。	On the sixth day of the Lunar New Year, the #new year's wish# of the Yunnan golden snub-nosed monkey is to save the homeland they inhabit from disaster. Become a #Shan Shui Homeland Guardian# and we'll wish that your hairline is as lush as a forest this new year.	10/02/2019

Post number one in Table 26 introduced the Shan Shui Homeland Guardians project to the NGO's followers on Weibo, using the hashtag #Shan Shui Homeland Guardians#. Details of post number two in Table 26 can be seen in the screenshot shown in Figure 19, which shows the post from the first day of the Lunar New Year. The post uses the #Shan Shui Homeland Guardians# hashtag, which is hosted by the NGO, but it also includes the more generic #new year's wish# hashtag which ties it into the Lunar New Year celebrations. The image in the post is based on a red envelope, which traditionally contain money and are widely given to people during the Lunar New Year festivities. Each of the posts during the Spring Festival holidays contained one of these images, with a different animal featured each day to highlight which endangered animals the NGO works with. The text within the post also references these animals and highlights Shan Shui's conservation projects. The tone of the language used in the posts is not particularly serious and is conversational, playful, and quite positive. The posts don't dwell on the environmental problems facing the animals but more focus on their endearing physical features.

Figure 19

Weibo post with information about the Shan Shui Homeland Guardian project



At the bottom of the image in Figure 19 there is a QR code which when scanned takes the user to the Shan Shui Homeland Guardian page on the online donations' platform, Lianquan.org. The platform is run by the Shanghai United Foundation, which was the first public foundation to be established in Shanghai, in 2009. The foundation raises funds from individuals and corporations, as well as from "NPO [non-profit organisation] fundraising cooperation" (Shanghai United Foundation, 2022). This cooperation comes in the form of "public fund raising, capability building, sector communication and public advocacy" (Shanghai United Foundation, 2022). In total the foundation has raised over 1 billion RMB

since it was established, some of this through the various cooperation projects that it runs with NGOs using their online donation platform, Lianquan.org.

Shan Shui also provided an update on the online crowdfunding project, which gives details of how much money has been raised and how many people have signed up for monthly donations:

We chose the special day, February 4th, 2019, (Lunar New Year's Eve) to launch our monthly donation project. Over the first month since the project launched 236 people have donated and out of these, 221 are regular monthly donors. The monthly donation amount is RMB 8619.11, and the total amount donated stands at RMB 67,001.88.

We would like to thank Shanghai United Foundation and Lianquan.org for providing Shan Shui Conservation Center with a platform to accept monthly donations. We'd also like to thank everybody who has paid attention to, and supported, Shan Shui Conservation Center's monthly donation project. We welcome more friends to become lovely monthly donors and join the Shan Shui Homeland Guardians! (Shan Shui Conservation Center, 2019b)

The fundraising project is still ongoing as of September 2022, so it's possible to see the total amount raised on the Lianquan.org page, which is just over RMB 1.2 million. On their crowdfunding page on Lianquan, Shan Shui first introduces some of the work that they do,

In the beautiful and mysterious Sanjiangyuan national nature reserve, we sometimes, with the local herdsmen, reflect on how we can live in harmony with the snow leopard. Sometimes we go to the lush forests of Sichuan, Gansu, and Shaanxi, and by using infrared cameras find secrets hidden in the forests. Sometimes we work hard with our partners in beautiful Yunnan to protect the ecology. And sometimes in the city we take volunteers to feel the magic of the flora and fauna around us. And you? In fact, you can also be closer to us.

The page then goes on to show the areas where Shan Shui works, which is mostly the more remote areas of Yunnan, Tibet, Sichuan, and Qinghai, including the Sanjiangyuan National Nature Reserve. Following this is a description some of the projects that Shan Shui undertakes, including snow leopard and grassland conservation, giant panda and forestry conservation, and the conservation of forests in Yunnan and southeast Tibet. They also conduct nature surveys involving urban citizen scientists, the creation and expansion of biodiversity databases, and putting biodiversity data to practical use in the form of a biodiversity impact assessment tool, as well as nature conservation work in urban parks, man-made forest protection and restoration, monitoring and surveys of urban green areas.

Throughout the page Shan Shui promotes itself as an organisation that works in close cooperation with several different partners, for example when introducing conservation work to protect the snow leopard and grasslands where the animals live, they say,

Since 2009, Shan Shui Conservation Center has been carrying out long-term ecological protection work on the Qinghai-Tibet Plateau. Through close cooperation with the government and communities, and based on scientific research and traditional culture, from the perspective of conservation practices and capacity building we promote a conservation model that includes farmers and herdsmen at the centre, so that people and wild animals can coexist in harmony. (Shan Shui Conservation Center, 2022b, What we do section)

With its projects in the Sanjiangyuan National Park area of the Tibet-Qinghai plateau, Shan Shui has been placing itself as a bridge between local Tibetan pastoralists, the scientific community, and the Chinese government since establishing projects there in 2009 (X. Shen & Tan, 2012). This willingness to promote their connections with Tibet take place both in their writing and the images they use, one for example showing a snow leopard captured by one of the organisations camera traps, with a Tibetan town in the background, shown in Figure 20.

Figure 20

Picture of snow leopard used in Shan Shui's monthly donations page on Lianquan.org



Han Chinese perceptions of Tibet have shifted since the region was labelled a barbaric place in need of civilizing during the Maoist era, and now, even though Tibet is still seen as somewhat backward, it is almost venerated as being idyllic and authentic (J. Qian & Zhu, 2016, p. 421). Placing itself as a bridge between local Tibetans and the political and scientific communities, Shan Shui naturally highlights some of the cultural differences and reinforces some of these ideas. J. Qian and Zhu (2016) have argued that Tibet, and all it evokes in people's imaginations, has become a lifestyle for some urban dwelling Han Chinese, resulting in the commodification of Tibetan culture. J. Qian and Zhu (2016, p. 421) also suggest that Tibet "conjures up romantic and nostalgic sentiments largely because it is perceived to be on the verge of being ruined". This perception of Tibet being on the verge of ruin could be a useful one for the NGO if they can elicit these feelings amongst their followers, with an eye on their donations.

As a way of encouraging followers to sign up to monthly donations, Shan Shui offers a number of rewards:

As of October 1st, 2020, anyone becoming a Shan Shui member, will receive these rewards after giving a monthly donation for a whole year:

1. Participate in and supervise the development of Shan Shui, and provide advice on conservation projects of interest;
 2. Together, we will design more activities that will deeply engage the public, allowing them to observe and participate in conservation work up close;
 3. Jointly design and develop more cultural and creative products, to more clearly feel and access nature conservation;
 4. Electronic donation certificate and electronic annual report;
 5. We have prepared small gifts for all Shan Shui People who have been donating monthly for a year, we hope you like them:
 - Monthly donation of RMB 28-57: One enamel water cup
 - Monthly donation of RMB 58-87: Two rolls of washi tape¹⁵
 - Monthly donation of RMB 88-107: One snap bracelet or soft toy pendant
 - Monthly donation of RMB 108-287: One soft toy
 - Monthly donation of RMB 288-497: One thermos insulated coffee cup
 - Monthly donation of RMB 498 and over: Two thermos insulated coffee cups
- (P.S. Items in the list are subject to change and availability) (Shan Shui Conservation Center, 2022b)

Of note is that not all the rewards are material gifts, but instead allow access to the NGO and the way it works. Monthly donors can participate in the way that the organisation is run by providing advice and feedback on projects. Details of what this entails are not given but the organisation has publicised some of the activities that it has organised for monthly donors on their Weibo account using the #Shan Shui Homeland Guardians# hashtag, as shown in **Table 27**.

¹⁵ Decorative masking tape traditionally made from rice paper.

Table 27

Other posts containing the #Shan Shui Homeland Guardians# hashtag

No.	Retweets/ Comments	Chinese	English	Date
1.	3/4	#山水家园守护者# 上周六，山水云南团队在昆明组织了伙伴&月捐人见面会，为自然保护各领域的交叉互补搭建“乱炖平台”，并组建山水在云南的志愿者队伍。观鸟群群主、纪录片导演、研究生、医生、社工……虽然大家的身份和经历不同，却因自然保护走在一起，成为山水的粉丝。期待未来和你们一起努力，保护路上不孤单！	#Shan Shui Homeland Guardians# Last Saturday the Shan Shui Yunnan team organized a meeting of partners and monthly donors in Kunming to build a "mixed platform" for the various overlapping and complementary fields of nature conservation, and to form a Shan Shui volunteer team in Yunnan. Bird watchers, documentary filmmakers, graduate students, doctors, social workers... Although everyone's occupations and experiences were different, they came together because of nature conservation, and have also become fans of Shan Shui. We look forward to working with you in the future. The conservation road we walk is not a lonely one!	17/8/2020
2.	63/20	#山水家园守护者# 睡前给大家介绍一位可爱的山水捐赠人，他是一位来自日本的藏狐喜爱者（因为	#Shan Shui Homeland Guardians# Before going to sleep I just want to give everyone an introduction to a lovely Shan Shui	05/04/2020

#兽娘动物园# 入坑，从此对藏狐的喜爱一发不可收拾）。2018 年 99 公益日，山水上线了#给兔獬藏狐建个家# 的众筹项目，以此为契机，我们认识了这位日本小哥～去年他来到了中国，去到了我们的项目地嘉塘草原，第一次真实的观察到了野生状态下的藏狐。回国后，日本朝日新闻旗下 withnews 频道还对他进行了采访，报道了这件事。

此外，他还乐于自己动手画藏狐，自制手工周边，和自己身边的朋友讲述山水的保护故事。

说到藏狐对他本人的影响（论藏狐报恩的 100 种姿势），从一开始并不关心动物，到后来喜欢藏狐，尤其了解了更多的自然界动物科普与故事，开始慢慢接受自然界的弱肉强食。而且在去到三江源之后，对藏区传统文化对于生命的阐释有了更深层次的理解。

monthly donor. He's from Japan and a big fan of the Tibetan fox (Ever since #Japari Park¹⁶ became popular he's been a huge fan of the Tibetan fox). On the 99 Giving Day¹⁷ in 2018, Shan Shui launched the #Build a home for the Pallas's cat and the Tibetan fox# crowdfunding campaign. Taking this as an opportunity, we got to know this Japanese brother and last year he came to China, went to our project site at the Jiatang Grasslands, and for the first time observed the Tibetan fox in the wild. After returning to Japan, Japan's Asahi Shimbun news channel interviewed him and reported on his trip.

Furthermore, he's also happy to paint Tibetan foxes, make his own handicrafts, and tell Shan Shui's conservation stories to his friends. Speaking of the influence of the Tibetan fox on himself (on the 100 postures of the Tibetan fox), at the beginning he didn't really care that much about animals, but later went on to like the Tibetan fox, and in particular wanted to learn more about the science and stories of animals in nature, and he began to

¹⁶ Location in a Japanese multimedia franchise.

¹⁷ An annual day for charitable giving organized by the software company Tencent.

		最后，希望所有热爱大自然的人，都能从大自然中获取到心灵的能量，温柔的对待生活，以及这个世界。	slowly accept the weak and the strong in nature. Moreover, after going to Sanjiangyuan, he had a deeper understanding of the interpretation of life in traditional culture in Tibetan areas.	
			Finally, he hopes that all nature lovers can nourish their hearts from nature and treat life and the world with tenderness.	
3.	14/7	#獭好吗# 在中国绿化基金会@中国绿化基金会、青海省生态环境厅、三江源国家公园管理局@三江源国家公园 等部门的指导下，由中国 15 家保护组织联合撰写的《中国水獭调查和保护报告 2019》今天下午正式在广州发布，作为中国对于水獭调查和保护现状的第一次系统整理，报告希望能够提高公众对于水獭，这一河流生态系统旗舰物种的关注和了解。除此以外，中国绿化基金会@中国绿化基金会、广汽丰田@广汽丰田 以及山水自然保护中心也开启了濒危物种保护计划，在未来继续关注我国的生物多样性。	Under the guidance of China Green Foundation @China Green Foundation, the Qinghai Provincial Department of Ecology and Environment, the Sanjiangyuan National Park Administration @Sanjiangyuan National Park, the "China Otter Survey and Protection Report 2019", jointly written by 15 conservation organizations in China, was officially released in Guangzhou this afternoon. As the first systematic collation of China's otter surveys and protection statuses, the report hopes to increase the public's attention and understanding of otters, a flagship species of river ecosystems. In addition, the China Greening Foundation @China Greening Foundation, GAC (Guangzhou Automobile Group Co., Ltd.) Toyota @GAC Toyota and the Shan Shui Nature Conservation Center have also launched an endangered species conservation program and will continue to pay attention to China's biodiversity in the future.	15/12/2019

		<p>#山水家园守护者# 感谢今天到场的所有观众以及现场帮了我们超多忙的月捐人。道阻且长，行则将至。让我们关注和参与事关中国水獭的未来，让我们即刻携手启程。</p>	<p>#Shan Shui Homeland Guardians# Thank you to all the spectators who were here today and the monthly donors who helped us so much. Though the road ahead is dangerous and difficult, we can only achieve our goals with constant efforts.¹⁸ Let us focus on and participate in the future of China's otters and start our journey together today.</p>	
4.	4/1	<p>#山水家园守护者# 上周六，我们终于和月捐人见面了！自 2019 年除夕起，山水自然保护中心发布 #山水家园守护者# 月捐计划，希望建立山水的支持者社群，共同探讨自然保护工作。在轻松的氛围中，大家聊了聊环保公益界的现状，脑洞了山水如何扩大圈外影响，也一起观看了精彩纪录片，本君表示收获满满~ 期待和大家的下次见面！（小声：坐标广州）另外，仅对月捐人开放的抽奖活动已经在“山小水”（VX: shanshuiconservation）的朋友圈发出，大家不要错过了哦！</p>	<p>#Shan Shui Homeland Guardians# Last Saturday we were finally able to meet up with our monthly donors! On Chinese New Year's Eve 2019, Shan Shui Conservation Center launched the #Shan Shui Homeland Guardians# monthly donation project, hoping to build a community of Shan Shui supporters to discuss nature conservation work. In a relaxed atmosphere, everyone chatted about the current state of the environmental protection NGO community, brainstormed about how Shan Shui could expand its influence outside this circle, and watched a wonderful documentary together. I want to express how much I got out of it and look forward to meeting with everyone next time! (Whisper: Coordinates Guangzhou) In addition, the lottery, which is only</p>	29/11/2019

¹⁸ President Xi Jinping used this phrase taken from two different classical Confucian texts, the Shi Jing and the Xunzi, at the opening of Expo 2019. The sentence he used it in was in reference to ecological protection. His use of the phrase was widely reported.

open to monthly donors, has been issued on Shan Shui's friends' circle [private group on WeChat] (VX: shanconservation), so don't miss it

The posts in **Table 27** give an indication to the other benefits of being a monthly donor to Shan Shui beyond the material gifts. The Shan Shui homeland Guardian's monthly donation gives donors many of the benefits they would receive from being members of an organisation. The monthly donation platform and the way it is publicised on Weibo work together not just to raise money for the NGO, but also as a way of increasing their social capital. Donors are provided with opportunities to become more widely involved in environmental protection projects, while at the same time contributing to the ongoing operations of the NGO. Q. Zheng and Liu (2017, p. 10) have suggested that donating on crowdfunding platforms like Lianquan.org provides young Chinese people with a cultural identity, and in some cases a greater connection between the online and offline worlds that they inhabit is formed, resulting in a new participatory culture. There is evidence in the Weibo posts from Shan Shui that corroborates this view, with donors to their online crowdfunding campaign meeting up and participating in offline activities.

Conclusion

The four case studies presented in this chapter analysed some of the methods that NGOs in China use to carry out their work, whether that be in the form of capacity building by sharing expertise, assessing the performance of the environmental authorities, partnering with a cultural icon to create a sense of legitimacy, or taking advantage of new ways of fundraising.

The first case study builds on the findings from Chapter 5, which showed that IPE plays a central role within a network of NGOs and analyses whether these online linkages were manifested in other ways. The example of the PITI was used to show how a project first conceived by IPE and the U.S. NGO, NRDC, has gone on to be something involving a whole group of organisations from different locations around the country. Using the PITI reports and the Weibo posts that IPE and the other organisations posted about the report, it was possible to build up a picture of IPE also playing a central role in the formulation of this evaluation system and its spread to other organisations. Representatives from IPE were present at the press conference for the release of Green Qilu's Shandong PITI, for example, suggesting that support from IPE to these other organisations is ongoing. The Shandong PITI, and the way it was received by the Linyi EPB, could also be seen to be fostering engagement with the local environmental authorities, in a similar way that the original PITI played a role in creating relationships between IPE and some officials from the environmental authorities. Although the PITI report has presented smaller NGOs with new opportunities and access to expertise, there is the danger that all the NGOs working on similar areas of environmental protection, like environmental information disclosure, end up appearing very similar, with a form of organisation homogenisation taking place. There is also a danger that the other organisations could become too dependent on IPE for expertise, and the SEE Foundation for funding, creating a situation where there is less chance of innovative and original thinking.

In the second case study, Lüse Jiangnan's evaluation of how well provincial and local EPBs were using their Weibo accounts, received far less attention than the PITI reports featured in the first case study, but it did show a willingness from the NGO to take a risk and try something new. The results of the evaluation and rankings showed a serious gap between the stated aims of the environmental authorities and the reality on the ground. Only the largest and most well-resourced EPBs in Jiangsu were able to use their Weibo accounts for more than just retweeting posts from EPBs higher up the official hierarchy. There wasn't much evidence to suggest that EPBs were using Weibo to flood the social media site with posts and

comments to drown out other dissenting voices as Goron and Bolsover (2020) have previously suggested. There appeared to be a bigger problem with apathy and under resourcing, rather than a more menacing attempt to stifle dissent. It was notable how little traction Lüse Jiangnan got with the report, with scant mention in the media, and very little response from the EPBs included in the report. It's maybe unsurprising that the EPBs were unresponsive to a report about how unresponsive they are, but a greater level of engagement from other parties could have been expected. The hierarchical nature of Weibo posting by the authorities also suggests that the EPBs have little autonomy to make their own decisions and respond to NGOs or members of the public. Far safer for them to retweet a post from the EPBs up the bureaucratic chain of command than respond to members of the public or generate original content. Until the issues of under resourced EPBs and officials not being allowed to use their own initiative are resolved then it's unlikely that there will be a significant change in how the environmental authorities use Weibo in China. Lüse Jiangnan's attempt to hold the local environmental authorities to account may not have been completely successful in terms of pushing the EPBs to use their Weibo accounts more effectively, but the report produced some interesting findings that highlight some of the deficiencies in the implementation of e-government policies formulated by central government.

The third case study analysed how the NGO Green River partnered with one of China's most famous TV and Film actors, Hu Ge, to publicise the work that they do in remote regions of China, help attract followers to the organisation, and provide a sense of legitimacy to the NGO. Celebrity endorsement of environmental campaigns is nothing new amongst international NGOs, but what makes this case stand out is the fact that it is a domestic Chinese NGO that has worked with Hu. The role that Hu plays could be considered more than just an ambassador too, as his stints volunteering seemed like a genuine way of helping. The seemingly symbiotic relationship built up between Hu and Green River points to ways that other NGOs could partner with celebrities to help promote the work that they do and make it seem more familiar and acceptable to a Chinese audience.

The final case study highlighted how some Chinese NGOs are creating, and making use of, new opportunities to fundraise online. Using a mixture of Weibo posts and the crowdfunding platform, Lianquan.org, Shan Shui has managed to create a monthly donation program that goes beyond material giving. In its fundraising activities, Shan Shui uses cultural identity both as a marker of how Chinese it is, in the way that they used the Lunar New Year to

launch the campaign with traditional Chinese imagery, but also Tibetan imagery and connections as a way of promoting the projects it carries out in Tibetan regions of the country. Using these kinds of cultural signs or markers within their social media campaigns and their fundraising pages allows Shan Shui to tap into perceptions of Tibet as a place on the verge of being spoiled, and therefore in need of conserving. There is also evidence that these new ways of crowdfunding have helped to build up, not just monetary capital, but also social capital, in the form of followers meeting up to discuss the NGOs projects, and conservation issues more widely, which has created new offline participatory spaces.

Chapter 7: Conclusion

Introduction

The internet, and more specifically, social media, has had a profound impact on how NGOs in China operate, affording them new opportunities to interact with supporters, funders, and government departments. This thesis provided an analysis of the social media output, in the form of Sina Weibo posts, from 29 environmental NGOs in China over a period of 68 days from December 19th, 2018, to February 25th, 2019, to understand what they posted, their motivations for posting, how their use of social media has contributed and shaped their activism, and what their social media use tells us about their relationship with the state and society.

Since the first computers in China were connected to the internet in the late 1980s and early 1990s the effects of internet connectivity have shaped so many different aspects of Chinese society and the economy. Happening concurrently with the rise in internet penetration and use has been the proliferation of NGOs, in sectors ranging from children's services, poverty alleviation, health, and the environment. Many of these NGOs were established in the 1990s, did not exist in a pre-internet age (J. Wang, 2019, p. 81), and so the way that they operate has been shaped by both the offline and online worlds that they inhabit.

A constant debate since the proliferation of NGOs in the 1990s has been their relative autonomy from the state, and to what extent they can be seen as oppositional, contentious, and activist organisations, or whether they are merely an extension of the state. These relationships have been portrayed in several different ways. The state corporatist approach to social organisations employed by Unger and Chan (1995), in which they argue that the government holds such a tight control over the formation and running of social organisations that they cannot really be separated relied predominantly on the premise that formal registration and supervision by state authorities was the only route to the formation of social organisations (Unger & Chan, 1995). Foster (2002), in a study of business associations (which includes many professional associations) in Yantai, suggests that the organisations were all created by Party officials and are “in essence appendages of government or Party organization” (Foster, 2002, p. 42), essentially continuing the earlier corporatist discourse. Both approaches assume that only legally registered social organisations existed in China, whereas this was clearly not the case, especially during the 1990s and 2000s, where many

unregistered NGOs existed in a legal grey area where they were tolerated by the authorities, usually because they were providing some kind of public service, but were not entirely legal (Yang, 2005, p. 55). The second assumption made is that those organisations that are legally registered will be subject to total operational oversight and control by the government department they are registered under, which is unrealistic (Yang, 2005).

The state corporatist approach has therefore been called into question as it doesn't fully explain the nuances of NGO-state relationships and their ability to retain a certain amount of autonomy. Peter Ho and Richard Edmonds, in an edited volume title *Embedded Activism* advocate that NGOs are not merely co-opted organisations doing the bidding of the state, but that there are complex ties between the state and NGO workers that form a symbiotic relationship (P. Ho & R. Edmonds, 2007). Tony Saich (2000, p. 125) describes these relationships as being "symbiotic, because social organizations have devised strategies to negotiate with the state a relationship that maximizes their members' interests or that circumvents or deflects state intrusion" and Jessica Teets' has developed a model for understanding the relationship between NGOs and the state that she calls "consultative authoritarianism" (J. C. Teets, 2014). What these more recent interpretations of NGO-state relations have in common is that they question the narrative that civil society cannot influence government decisions or policy changes. Teets, for example, asserts "that cooperation, not opposition, is possible between the two and that each side learns from the experiences of the other" (J. C. Teets, 2014, p. 4). Teets especially demonstrates how policy makers "seek to change existing policy just enough to dispel the dissatisfaction by using policy ideas that are easily accessible" (J. C. Teets, 2014, p. 15), and these policy ideas can come from civil society. Jing Wang (2019), has also built further on these ideas of cooperation and consultation between civil society actors and the state, in her case looking specifically at the relationship between environmental NGOs and the state and drawing on her own experiences running an environmental NGO in China and she uses the term "nonconfrontational activism" to describe the type of online activities that environmental NGOs in China carry out (J. Wang, 2019).

A concurrent debate has also surrounded the development of the internet in China and whether the increased interconnectedness of people and organisations will usher in greater levels of freedom for civil society to operate within, or even help to bring about a form of democratisation. These two debates have points of interconnection, where the power of the

internet has been voiced as a means for civil society organisations, and NGOs specifically, to be able to increase the political space in which they can operate and, in some cases, directly organise opposition to the state. At times the internet, sometimes referred to as a ‘liberation technology’ (L. Diamond & Plattner, 2012), has been held up as a transformational technology, helping to foster democracy in Indonesia (Hill & Sen, 2000), or be a major element in the uprisings during the Arab Spring (Arafa & Armstrong, 2016). In China, the internet has been promoted as having increased political transparency and accountability (Y. Zheng, 2007, p. 167), and as having expanded “citizens’ unofficial democracy” (Yang, 2009, p. 213). It has also been suggested that collective actions happening online have helped to promote “political openness, transparency, and accountability to a great degree” (Y. Zheng, 2007, p. 186). The internet’s role in the expansion of civil society has also been a focus. Zixue Tai, for example, has related the expansion of internet connectivity to the opening up of space for civil society and “redefining existing social relations and propelling existing civil forces into new possibilities” (Tai, 2006, p. xx).

As the Chinese government has become more adept at controlling the flow of information and censoring content online (King et al., 2013), questions have also been asked about whether internet technologies will create greater opportunities for civil society or become a technology of control (Tsui, 2003, p. 66). Although there have been increased efforts to understand the nuances of the relationship between environmental NGOs and the Chinese state, there is still a limited understanding of the role, if any, that social media plays in facilitating this relationship, and whether NGOs are able to use and harness all of the social and communicative functionality that social media brings. Jing Wang’s (2019) study of nonconfrontational activism and its manifestation online by NGOs has highlighted the need for greater enquiry into this relationship and what role the internet, and social media in particular, play. This thesis helps to bridge that gap in our understanding of these relationships and Chinese environmental NGOs’ uses of social media. It looks at the content, functionality, networking, and strategies that NGOs employ through the use of social media and places these in the context of NGOs adopting nonconfrontational practices whose purpose is not to sit in opposition to the state but to work promoting incremental change.

Summary of Key Findings

Chapters one and two introduced the thesis and provided a review of the existing literature. Chapter 3 provided details of the methodology used to select the NGOs that would be

included in the study, as well as the reasoning for, and method of, collecting data from Weibo. Using existing databases of environmental NGOs in China it was possible to select a wide and comprehensive group of domestic environmental NGOs operating within the country. It was then possible to ascertain whether they had social media accounts and how regularly they were using them. It was found that Sina Weibo was the most used social media account amongst the organisations as well as the most public, so it was decided that the main data set would be taken from this platform. Data was then scraped using a data scraper created using Python programming software, which essentially visited each page and collected data into a database for later analysis.

The analysis in Chapter 4 centred on individual Weibo posts that had been scraped from the site during the research period. Two different coding systems and in-depth thematic analysis to identify both the motivation behind the post, as well as the theme of the post, were used. The methodology here built on and adapted that used to evaluate the use of social media by NGOs in the U.S. (Lovejoy & Saxton, 2012) and rural education NGOs in China (Zhou & Pan, 2016). Findings from the analysis showed that most posts were posted to inform followers in a one-way flow of information from the NGO to other users. There were far fewer posts that helped to build community or ask their followers to take some forms of action, suggesting that even though social media provides the functionality to create two-way communications between a user and their followers, the main purpose of using the platform remained to be the broadcasting of information. This mirrored the findings in Zhou and Pan's (2016) study of rural education NGOs, suggesting that even though environmental NGOs have in the past been highlighted as being early adopters and effective users of internet technologies (Yang, 2009, pp.147-152), the results suggest that, in the same way as NGOs in other sectors, they are still not utilizing the full functionality of social media. The results were also similar to Lovejoy and Saxton's (2012) study of NGOs in the U.S. suggesting that NGOs share these issues even in different countries. Even though the U.S organisations were better organised more generally, they were still largely using social media for information dissemination and less so for dialogic engagement with followers. It should be noted that some of the environmental information posted did help to frame environmental debates and policy directions that were taking place. One example was IPE posting a news article which suggested policy solutions to deal with the problems of air pollution crossing provincial boundaries. Ma Jun has described the work that IPE carries out as a form of nonactivism (J.

Ma & Zhao, 2009), and yet what they post on Weibo, although nonconfrontational, still highlights environmental issues and subtly advocates for incremental political and social change. Although none of the posts were contentious or confrontational, in some cases, as the previous example suggests, they articulated a policy position and played an important role in contextualising pertinent environmental issues. When an NGO asked followers to take some form of action, they were never confrontational or contentious, but did play an important role in creating networks of active followers. For example, followers were asked to take part in competitions, post photos, or in some case report on levels of pollution.

A further thematic analysis of the posts revealed that air pollution, water pollution, nature and conservation, and posts without any environmental connection were recurring themes throughout the data. Of note were a considerable number of these miscellaneous posts that were unrelated to the environment or any of the work that the NGO carried out. Zhou and Pan's (2016) study of rural education NGOs, found similar results. They came to a number of conclusions: that this was a reflection of Weibo more widely and the fact that so much of the content on the site is essentially frivolous; the accounts were run by people within the organisation who forgot or blurred the boundaries between personal and professional; and finally they suggest that many of the posts were posted in praise of the government (Zhou & Pan, 2016, pp. 2450-2451). Another explanation could be the need to build a rapport and trust between the organisation and their followers, essentially as a way of increasing the legitimacy of the organisation. If, as J. Wang (2019) has noted, NGOs and the employees of NGOs carry a certain stigma, then posting this seemingly unrelated information could be a way of fitting in and appearing less alien. This could also explain why there was so little content that could be deemed politically contentious. An overtly activist organisation would not only attract the attention of the authorities but could also be seen as a socially destabilising actor leading to a lack of public support.

Of further note was the very low number of posts about climate change. As a topic regularly covered in the traditional press in China with explicit targets and ambitions also articulated by the central government and mandated in international agreements such as their commitments under the Paris Agreement (H. Liu & You, 2021), it was surprising that so little attention was paid to the subject. These findings mirror those of another study which found that discussions around climate change during the Paris Climate Summit were dominated by foreign NGOs and state media, with very little input from Chinese NGOs or commentators (J.

C. Liu & Zhao, 2017). J. C. Liu and Zhao (2017, pp. 421-422) also showed that most of the posts about climate change were framed as entertainment or as if it was a distant, international issue, with little mention of Chinese climate change policy. Posts from the NGOs studied in this thesis show that they are, publicly at least, equally unconcerned with international issues, so if climate change is considered a foreign or distant issue that was a concern for central government only, unlike air pollution for example, then this could explain why so little attention is paid to it. The fact that it is the central government that has set the targets and direction for climate change mitigation could also point to the reasons for little engagement. Throughout the data it was possible to see examples where NGOs took on a role of overseeing or monitoring the enforcement of centrally mandated regulations, but at a local or provincial level. There was little or no mention of central government policy in terms of changes that the NGOs wanted to see. More recently, as China's climate change mitigation goals have developed into local targets for reductions in greenhouse gas emissions, there may be an increase in attention paid to the monitoring of these targets at the local or provincial level by the NGOs, which would be an important aspect to look at in future research.

Chapter 5 provided an analysis of the features of social media that were used by the NGOs, such as hashtags, mentions, and retweets. The chapter examined how much interconnectivity there was between the NGOs on Sina Weibo, how this manifested itself, and what opportunities or constraints these linkages provided and how were they exploited by different NGOs. Hashtags have been identified as an important tool which can be used by advocacy groups to increase engagement with followers (Saxton et al., 2015) and coordinating publics during protest and social movements (A. Bruns & J. Burgess, 2011). Hashtags on Weibo have been analysed to measure attitudes to old people during the Covid-19 pandemic (Xi et al., 2020), and as a way of gauging social emotions online (K. Ding et al., 2020), but very little attention has been paid to the way that hashtags are used by Chinese NGOs on Weibo. During the research, hashtags were found to be widely used but tended to be used in a way that allowed for the organisations to easily index information. The hashtags most used were often the hashtags created and managed by the organisations themselves and centred around a particular campaign or project that they were working on. The use of hashtags as a viral marketing or advocacy tool to publicise an NGO, push a message, or campaign for a specific action was very limited and points to a lack of marketing and online campaigning expertise within the NGOs. It could also be because of the constricted political space in which they

operate. It was only Shan Shui Conservation Center that took the viral marketing approach and used a hashtag around the time of the Chinese New Year to publicise the work they were doing to a wider audience. Mentions were also widely used across many of the NGOs but there is scant research into their use on Weibo generally, and NGOs more specifically. The use of mentions has been studied on Twitter as an analysis of how and why gubernatorial candidates in the 2014 elections in the U.S. used them (Hemsley, Stromer-Galley, Semaan, & Tanupabrunsun, 2018), and a study of how Twitter use differs in different languages (Weerkamp, Carter, & Tsagkias, 2011), but there is very little research on their use on Weibo. During the research, mentions were found to be used as both inter and intra-organisational communication devices to alert other users of content that they felt they should pay attention to. For some organisations with multiple usernames, often adopted by different staff members or the founding member, the lines between personal and professional accounts were sometimes blurred, with some of the most prolific retweeting, commenting, and mentioning occurring from these personal accounts.

Network analysis of mention and retweet networks showed several clusters of NGOs linked together through either the fact that they mentioned each other in posts, or they retweeted each other's posts. On further analysis these clusters of organisations were not based around geographical locations, although most were based in large urban centres, but were linkages based on common areas of environmental protection that they were engaged in. For example, those concerned mostly with the monitoring of pollution through transparency measures tended to cluster together. The organisations that connected disparate groups were those providing funding, including the large charitable foundations working in the sector such as the SEE Foundation and the Alibaba Foundation. These organisations tend to work across different areas of environmental protection. J. Wang (2019, p. 31) has suggested that interconnectedness and networked activism, with its "quiet, unobtrusive alliances", where actors from different sectors come together to push for incremental change, is one of the things that makes a network of nonconfrontational activist so resilient, and therefore, less likely to fail. This kind of networked activism was evident amongst the NGOs and the linkages created by mentions and retweets went beyond just NGOs, and involved government departments, officials, and the media. Examples of this were some of the posts about the PITI report, which mentioned government departments and were retweeted multiple times by various different users.

Chapter 6 presented four case studies that analysed the different strategies used by the NGOs to further their aims and what role the internet and social media played in facilitating this. Data from the previous two analysis chapters were used as a starting point for further investigation into the four different organisations and the projects they are involved in, which have both online and offline elements to them. The first was a study of how a small network of NGOs, government officials, EPBs, and academics had formed around the Institute of Public and Environmental Affairs (IPE) and the annual Pollution Information Transparency Index (PITI) report which they publish jointly with the Natural Resources Defense Council (NRDC).

The case study showed how the smaller organisations replicated the methodology of the national PITI carried out by IPE and applied it locally, but in doing so resulted in the organisations taking on many similarities in how they operated. The methods that they used to engage with different parties online were also replicated. It was clear that the smaller NGOs looked upon IPE's PITI report as a success and one worthy of replication. The access to government departments and officials, academics, and funders, which had clearly been granted to IPE through the research they had conducted, and the publication of the report would appear to be an attractive reason for completing their own smaller versions, always with the support and guidance of IPE. The success of this approach could be seen in the way that large funders like the Alibaba Foundation began to provide funding to them and local government departments began to interact with them. The case also highlighted how environmental laws and regulations that shape the work that the NGO does, in this case measures to make government departments more transparent with their environmental data, have direct influence on the type of content being posted on their social media and the way in which the organisations use certain functions, such as mentioning government department accounts within the social media platforms. It has been claimed previously that the internet is a useful tool for NGOs to network with their peers and overseas organisations, but not so good for interacting with government departments (Yang, 2009, pp. 153-154). Evidence from this case study suggests that in some cases, especially where a positive message about government behaviour is being expressed, it can now be useful tool for interacting with government departments and officials. If we can consider, as J. Wang (2019) does, that it is the diversity of different actors within the environmental field that give it some of its strength

then the standardisation or homogenisation of previously disparate groups of NGOs could undermine the sectors resilience and could be a cause for concern.

The second case study highlights the limits of some of the features of Weibo, namely mentions, in fostering behaviour change when the recipients are reluctant to engage. It looked at Lvse Jiangnan's attempts to motivate the local Environmental Protection Bureaus (EPBs) in Jiangsu Province to be more active and transparent in the way that they use social media, both to inform and respond to the local population online. The annual survey and scoring results carried out by Lvse Jiangnan showed how difficult it can be to get local EPBs to not just effectively communicate and inform the local population about environmental matters, but just to use their Weibo accounts at all. The case highlights the limited leverage that an NGO has when calling for a change in government behaviour. Over the four years that the project had been running there had been minimal gains in the levels of local government Weibo use. The only real progress had been made with the provincial level EPB, which had improved its scores over the course of the four years. The case highlights the limits in using the functions of social media like mentions to get a response from the users they tagged in messages. Most of the EPBs that were mentioned ignored the fact that they had been mentioned and the only ones that did respond in any way were those that had been portrayed in a positive light. The case suggests that without other factors contributing to the pressure put on local governments to engage and respond then engaging them purely through social media using functions like mentions are not sufficient to elicit a meaningful response.

The third case study looked at how the NGO, Green River, worked with one of China's most popular celebrities, Hu Ge, in a symbiotic relationship, bringing publicity and wider recognition to the work that the NGO did, as well as providing Hu with the opportunity to bolster his image as a responsible, environmentally conscious citizen. Celebrity endorsement of social causes and the support given by them to NGOs has garnered significant attention, particularly in China, where numerous celebrities have endorsed endangered species conservation and tried to influence consumer behaviour (Olmedo et al., 2020, p. 8). How successful these celebrity endorsements have been is debatable as there is very little analysis of their effectiveness, and more general studies of celebrity endorsements found mostly negative or inconclusive results (Olmedo et al., 2020, p. 9).

The relationship between Hu and Green River was noteworthy because celebrity endorsement and collaborations are widespread amongst many international NGOs, especially those

working in China (Olmedo et al., 2020), but amongst the domestic NGOs included in the study, the relationship between Hu and Green River was the only one identified. The organisations that Chinese celebrities tend to work with are very large international NGOs, such as Wild Aid, which boasts the now retired basketball player Yao Ming, and the actress Li Bingbing amongst their ambassadors (WildAid, 2022), or international bodies such as the UN Environment Program, which has an affiliation with the actor Li Chen (Postema & Melissen, 2021, p. 678). The international organisations that the celebrities work with benefit by having greater exposure to a Chinese audience, which are likely unfamiliar with what they do. A familiar face from a trusted and well-respected celebrity can also make the international organisations seem less alien and threatening. The fact that very few work with domestic NGOs could be a result of the limited size and recognition that domestic organisations have. Even the most popular NGO in the study in terms of followers only had 850,000, compared with the major celebrities in China who have over 100 million. The support given to international organisations could also point to a desire to increase their exposure to foreign audiences, perhaps for their personal careers, but also as a form of celebrity diplomacy (Postema & Melissen, 2021). There has been little research conducted on the type of relationship that exists between celebrities and Chinese NGOs, so this case study helps to bridge this gap in our understanding. It's clear that through the cooperation with Hu Ge, Green River's posts were seen by a much wider audience than was normal for one of their posts, which could result in a greater number of followers. Creating this online network is important as the size of online network has a direct influence on the level of fundraising that the organisation is able to generate (Saxton & Wang, 2014).

The final case study was an exploration of the role that online crowdfunding and social media play in the fundraising activities of a Chinese NGO, Shan Shui Conservation Center. Shan Shui was able to use a hashtag campaign on social media coupled with a fundraising page on the crowdfunding page, Lianquan.org, to encourage people to sign up to monthly donations. The #Shan Shui Homeland Guardians# (#山水家园守护者#) campaign portrayed the organisation as not only advocates for environmental protection, but also a bridge between different cultures and groups in society. The NGO was also able to play on image in many urban Chinese residents' consciousness of the precariousness of Tibet, which helps to foster the idea that the flora and fauna there are in desperate need of saving. The use of the crowdfunding platform was also of note because it helped to encourage not only monetary

donations, but also inclusion in a group of like-minded people all concerned about environmental protection. In this way donating to the NGO was about more than just giving money and was also a cultural identity which donors could take on. The act of giving also provided new opportunities for people to come together in offline participatory spaces, suggesting that the internet and social media, when used by the NGO in this way, was helping to build social capital.

Wider implications of the findings

The thesis analysed the way that Chinese NGOs use social media, and more specifically, one of China's most popular micro-blogging sites, Sina Weibo; what their motivations for spending time and resources on posting to the sites were; how different NGOs use the technology in ways which are specific to them; and finally, what form the relationship between the NGOs and other users which they interact with online takes and how is it shaped. The findings help to inform the ways in which Chinese NGOs have been able to use the internet and how this has shaped their relationship with the state. The lack of contentious posts or explicit criticism of government policy suggests that none of the NGOs feel a confrontational or explicitly activist approach to environmental protection is an effective way of working in China and that there is no effective political space for overt criticism and campaigning. Examples throughout the thesis show that the NGOs employ different strategies to further their stated aims and these strategies help to inform a wider debate around the use of the internet and communication technologies by NGOs in authoritarian political systems.

The Internet and Civil Society

First, it is worth stressing just how quickly and by how much the operational environment has changed in China since there was a proliferation of grassroots¹⁹ environmental NGOs in the late 1990s (Yang, 2009, p. 148), as much of the literature written about the transformative effects of online connectivity can only really be understood in this context. Even toward the end of the 1990s, online content providers in China were dominated by foreign companies, who still had a significant amount of power in protesting and changing Chinese internet policies that they felt were disadvantageous to their operations (Harwit & Clark, 2006, p. 27).

¹⁹ The term grassroots is used here to refer to NGOs, both registered and unregistered, that exist without the financial and organizational reliance on a state department. They are not GONGOs or community associations, which are largely created by state departments, and can be thought of as an extension of the state. Grassroots NGOs may, if registered, have to be overseen by a government department, but they will retain some autonomy from them, both financially and organizationally.

It is hard to imagine a non-Chinese company (or even Chinese company) having that kind of leverage or influence now, and there are plenty of examples of big U.S. tech companies, such as Apple Inc., bowing to pressure to remove content or apps that the Chinese government deems problematic (Hern, 2020). There was also a wider sense at the time that content on the internet was largely uncontrollable, most famously articulated by Bill Clinton when he referred to attempts to control the internet as ‘sort of like nailing jello to the wall’ (C-SPAN, 2000, 0:31).

Reflecting these sentiments at the more optimistic end of the spectrum, the internet has been heralded as a force for political good, shifting control over information “from the state to networked citizens” (Hachigian, 2001, p. 129), and in the case of China, it has been suggested that even where there is strong resistance to change “the new technologies may become a strategic opportunity and resource for achieving organizational and social change” (Yang, 2009, p. 154).

Others have been less convinced of rapid, wholesale transformation, but nonetheless, even with government censorship, still see the internet as fostering “powerful, socio-political change” (MacKinnon, 2008, p. 45), although this would be a gradual evolution rather than a revolution (MacKinnon, 2008, p. 45). Chase and Mulvenon (2002, p. 90) echo this sentiment and go a step further suggesting that although the internet will not bring about revolutionary change, it could help usher in a more democratic system. The intersection of digital media technologies, such as social media, and the ability of civil society to organise in opposition to powerful state actors has also been promoted as happening concurrently. For example, Tai (2006, p. xx) suggests that the internet has created new social spaces, changing social relations, and “propelling existing civil forces into new possibilities”. He has made an explicit connection between the internet and the rise of civil society and suggests the reasons for this are the new ways that citizens can access information, which is no longer monopolised by the state (Tai, 2006, p. 163).

As early as 2003, however, Lokman Tsui was warning that “rather than being a technology of freedom, the internet is well on its way to becoming a technology of control” (Tsui, 2003, p. 66), and this was especially the case in China where the law, the market, social norms and the architecture of the internet have all been used as a means of control (Tsui, 2003, p. 67). It has been suggested that in line with Chinese citizens’ greater acceptance of government

involvement in society, the general public are also more relaxed about government involvement in regulating the internet (Liang & Lu, 2010, p. 109).

Whilst the promise of the internet as a ‘liberation technology’, free from government control, has not been realised in China, it has created new ways that NGOs work, as evidenced by Weibo being used as an inter-organisational communication, networking, and organising tool. There was also evidence that the NGOs were able to provide content to their followers that they would not have been able to access from other, more traditional, media sources, such as updates about their projects and more general information about pollution and conservation in their area. It was evident from the posts that the interactive functions of social media are used, though sometimes not to their full potential.

Specific communicative functions built into Weibo and the way that these are utilised helps to shed light on the strategies employed by the NGOs and their ability to harness the communicative functions built into the platforms. Hashtags for example, have been cited as one of the most important features of social media (A. Bruns & J. Burgess, 2011), and have attracted significant controversy when used in advocacy campaigns (J. Wang, 2019, 108), yet we have very little understanding of how hashtags are used by environmental NGOs on Weibo. It’s also important to note the differences in the way that hashtags are used on Weibo and on Twitter. Hashtags on Weibo are sometimes referred to as topics, but they still serve a similar purpose, but with one major difference. Hashtags on Twitter, Instagram, and Facebook do not belong to, and are not managed by, a certain user, as they can be on Weibo. Saxton et al. (2015, p. 5) have claimed that “the use of hashtags is powerful because it is participatory. Hashtags are not decided in advance by a pre-determined set of users. The hashtag system constitutes a decentralised, user-generated tagging, organising, and classification system.” This clearly isn’t always the case on Weibo where hashtags can be managed and created by a particular user, so this could be one reason why they are more used as an indexing or collating system rather than in more widespread advocacy campaigns.

Regulatory Framework Shapes Online Content

Strict control of online content is a feature of the internet in China. Censorship and control of the flow of information have been widely studied, and the ability of the Chinese censors to snuff out online debate when it threatens to spiral out of control or encourage offline protests have been well documented (e.g. Peter Ho, 2008; King et al., 2013; Ng, 2015). The private companies that run social media platforms also play a part in controlling online debate and

content and are obliged to ensure that their operations fall within the boundaries set by the authorities (Fuchs, 2016). The regulation of content online may play a role in the timidity of criticism against the authorities, but a greater factor is likely to be the way that the NGOs themselves are regulated. Through a system of registration which requires NGOs to register with the Ministry of Civil Affairs (MOCA) and identify a sponsoring unit, usually a government department, research facility or university, control over the sector is maintained. Many unregistered NGOs continue to operate in China, but failure to register can result in the NGO being unable to open bank accounts, having avenues for funding closed off to them, and opens them up to increased risk, which can severely hinder the organisation's ability to operate (J. Teets, 2018). These requirements to register mean that the existence of the organisation and their ability to operate is held solely by the authorities and an NGO that finds itself in direct conflict with an influential government department could find its registration status revoked. These regulations may not always be enforced, but the threat of this, which is usually not explicit but is implied, acts as an effective deterrent to any overt criticism. The Chinese government's relationship with NGOs and their means of controlling them has created an online environment characterised by politically safe and un confrontational content.

China's environmental governance structures have also helped to shape the content put out by Chinese environmental NGOs. Lack of state capacity, particularly at a local level, has allowed NGOs to play a role in the enforcement of environmental regulations, particularly around disclosure of environmental information (Pien, 2020). This has also allowed NGOs to carve out some political space criticising those government departments that do not enforce regulations or are not as transparent as they should be. Overtly politically contentious content that questions the legitimacy of the central government is non-existent, but NGOs do use social media to question and probe the government action and inaction, usually at a local level. This was evident in the data where local government actions were called into question.

Wider Implications for NGOs in China

Theories of civil society as applied to China have evolved over time and the most convincing approaches have moved away from a Tocquevillian concentration on civil society's role in the democratisation of society (Larry Diamond, 1994) towards an understanding of the role that NGOs play within an authoritarian context. Tocquevillian interpretations of civil society have proved insufficient to explain the complex interactions between NGOs, the public and

the state in China and more recent studies have put forward that suggest that NGOs work in symbiosis (Spires, 2011), or consultation (J. C. Teets, 2013), or are embedded (Peter Ho, 2007) within the state. J. Wang (2019) has expanded on these ideas even further and has suggested that far from being cowed or complicit state actors, NGOs have found a way of working closely across many different disciplines and fields. They have used social media specifically, to create a form of ‘nonconfrontational activism’ that helps to hold the state to account and make meaningful interventions in policy decisions and the application of regulations, which is also seen in the data in this thesis. These analyses also help to illustrate the complex role that the state plays in different locations and in different sectors. No longer is the state portrayed as a monolithic entity where interaction is simply a one-way top-down relationship between NGOs and government departments, but instead a far more nuanced picture emerges where NGOs and other civil society actors can exploit fissures and fault lines within government to push for changes.

The analysis in this thesis builds on these themes and evidence of nonconfrontational activism helps to show the relationships that have built up between NGOs and state actors and the way that these parties interact with each other. There is sufficient evidence to suggest that in keeping with P. Ho and R. L. Edmonds (2007) and J. C. Teets (2014) interpretation of NGO state relations, the relationship between them is complex and multi-faceted, and also that they are sufficiently autonomous to be considered separate from the state. Part of the reasons for this is a lack of state capacity, which has created opportunities for NGOs in that they can play a role in policing not only companies that are breaking regulations, but also local and provincial government departments that are not performing (Pien, 2020).

The findings of this thesis clearly show that there is little appetite amongst environmental NGOs for posting politically contentious content online and that access to digital media technologies such as Sina Weibo has not afforded them with the opportunities to challenge the overarching control and rule of the state. Even if there were fewer restrictions on internet content, it is unlikely that the environmental NGOs in this study would post seriously contentious material as many of them don’t position themselves in this way, as an oppositional, activist force against the central government. The focus of the NGOs in the study is far less confrontational and based largely on a set of goals that doesn’t put them in conflict with state actors at a national level. This approach has been made very clear by some of the NGOs themselves, who have stated that their aim is not to be politically

contentious organisations but to work with the authorities. For example, Ma Jun has described IPE's agenda as, "one of nonactivism" (J. Ma & Zhao, 2009, 60). The NGOs also operate not just with political constraints but also societal ones in which they must navigate an environment in which to remain relevant they have to be seen as separate and distinct from the environmental authorities, but also not so politically contentious that their followers see a risk in publicly supporting them.

This is not to say that the internet and digital media technologies like Sina Weibo have not afforded NGOs with opportunities to carry out their work, it is just that these opportunities should not be viewed through the prism of the traditional civil society literature but should instead be seen as allowing the NGOs to further their aims through a form of nonconfrontational activism. For example, NGOs like IPE and Lvse Jiangnan have used social media as a way of holding local government to account for their failures to publish information as they are legally mandated to do. They have also used their accounts to post information about private enterprises that have failed to adhere to environmental regulations, in the expectation that public interest in the case will spur the environmental authorities into action. The need for NGOs to act in this role points to a serious lack of state capacity in the enforcement of environmental regulations, particularly at a provincial or local level, which has resulted in a symbiotic relationship being built up between some of the NGOs and the central authorities, in which the NGO acts as monitoring system which bypasses local government officials who may be reluctant to enforce environmental regulations against local companies that they have a relationship with or that contribute to local employment and GDP (Y. Shen & Lisa Ahlers, 2018).

The NGOs that are concerned with conservation also perform a useful function for the government in the way that they monitor the state of the environment and educate people about the importance of protecting the environment. These aims are largely shared by the central government and so there is little conflict between the two parties. The themes and contents of posts tend to cover environmental issues that are politically safe. Air pollution, water pollution, and environmental conservation are all topics which are now regularly covered by the mainstream media in China and various government policies outline ways that these issues will be tackled. NGOs posting on these issues cannot therefore be considered contentious unless there is a direct criticism of government policies and how these are enacted, which is largely absent from the data. In fact, there is very little mention of

government policy at all, suggesting that social media is not used to directly question wider government policy, or if it is then it is not explicit. J. Teets (2018) has suggested that NGOs are able to exploit the connections that they have built up through their registration with a government department, giving them access to policymakers which they would not otherwise have. The supervising bodies are rarely publicly mentioned by the NGOs which suggests that these relationships are largely kept private, which could also point to a reason why public criticism or policy suggestions are so limited.

To look at the social media content only in terms of its politically contentious nature or otherwise misses one of the most important uses of social media accounts amongst the NGOs, which is to build up a community of followers who recognise and trust the work that the NGOs are doing. Lack of trust in NGOs through scandal and unfamiliarity is an issue that they must grapple with, even more so as foreign sources of funding and collaboration have been cut off to them because of new laws regulating NGOs and the charitable sector (Holbig & Lang, 2021). Building a network of followers, but also a network of like-minded organisations, NGOs, government officials etc. with whom to collaborate on projects, channel funding through is an important function of social media use. This can be seen in the way that NGOs use mentions, hashtags, and retweets, as a way of networking together online, but also through the way they post seemingly miscellaneous content with no environmental focus. This form of network building is evident in the data collected and is an important factor in how nonconfrontational activism on Weibo helps to build consensus and influence government actions (J. Wang, 2019). Whilst the development of the internet and the communicative functions of social media have afforded NGOs with new ways of working, networking, and collaborating, this should always be seen in the wider context of how the internet is used in China.

Environmental NGOs Take Up Little Bandwidth on a Crowded Internet

When concentrating solely on one sector of the internet or one group of social media users there can be a danger that this group is seen in isolation without the wider social context being taken into consideration. It's important therefore to consider the scale of these organisations in comparison to other users online to gauge the level of social recognition that they attract. This means that their reach online is limited and compared with the most popular accounts on Weibo they are operating at a very small scale. That is not to say that their online

presence or the work they do online is unimportant, but it must be seen in the wider context of the sheer scale of social media use on Weibo in China.

The literature on the internet in China can also give the impression that what occurs online in China is a constant struggle between control, by the authorities, and resistance, from bloggers, social media users and some NGOs, something which Leibold (2011, p. 1023) terms the control/resistance paradigm. By concentrating merely on control/resistance there is a danger that the true nature of internet use in the country is obscured, and the political nature of internet use is elevated to artificially high level of importance. The true nature of internet use in China, and social media specifically, is that it is largely dominated by celebrity gossip, echo chambers, and infotainment (Leibold, 2011, p. 1024), with little change since Leibold made those pronouncements in 2011. This means that competition for people's attention online is fierce and breaking through the noise of celebrity gossip and everyday content that characterizes Weibo's online environment is a challenge. It's essentially tabloid news, not politics, which is attractive for many users of Weibo (J. Wang, 2019, p. 29).

This could also help to explain the topics that are covered by the NGOs online. They tend to concentrate most on those issues which have an immediate and damaging effect on people's health and wellbeing, as these are most likely to cut through and grab people's attention. For example, air pollution and water pollution feature heavily in the content, and in the context of people's immediate health this makes sense. Other, more abstract issues such as climate change, which don't necessarily have such a visceral or immediate impact on daily life are mostly absent, although this might be changing as extreme weather events in the country are increasingly linked with climate change (Yuan, 2021). Posts about topics unrelated to the core aims of the NGOs were also a common feature, which perhaps reflects the nature of the more general content on Weibo and the NGOs desire to fit into the mainstream discourses that take place online.

Recommendations for Future Research

Due to the constraints of time and space it was not possible to investigate all the many avenues and topics that became apparent during the research. Difficult decisions had to be made about which direction to take and what the focus of the thesis should be, but these constraints present some exciting opportunities for future research. The methodology used in this thesis is replicable and scalable and so could be used to investigate a myriad of online topics on Sina Weibo, even beyond environmental NGOs. As the Lüse Jiangnan case study illustrated

there are requirements for government departments to use Weibo as a tool to communicate, inform, and respond to local people on environmental matters, but they are not fully utilized. A widespread study of these accounts could provide valuable insight into e-governance structures and methods in China and whether the lacklustre performance of EPBs in Jiangsu is replicated nationally. The focus of this thesis was domestic Chinese NGOs, but several international environmental NGOs still operate in China, so it would be interesting to compare their use of social media with their domestic counterparts.

It was clear when analysing the data that there was an intersection between the institutional social media accounts used by an NGO and the personal, for example belonging to the founder of the organization or members of staff. In some cases, the personal accounts of people working for the NGO had more followers than the institutional accounts, and content included in the personal accounts touched on the work that the NGO was doing. The thesis did look at some of these posts but there is scope for further study into the relationship between the often more well known, charismatic founder of an NGO and the organization itself online, and whether this was more prevalent amongst a particular type of NGO.

The study was confined to looking at grassroots organisations and did not look at GONGOs or environmental associations. These organisations often also have some sort of online presence, and it would be interesting to look at the content that they produce and any networks that form around them.

Limitations

One of the biggest challenges during the research was the Covid-19 pandemic. The pandemic made it impossible to travel to China to conduct in-person interviews and research, as was originally intended at the start of the PhD. It was originally hoped that interview data would help to supplement and add context to the analysis of data gleaned from online sources, but because of the difficulties in conducting interviews this meant that the online data became far more important. An alternative to in-person interviews was conducting them online and this was successful for two of the organisations being researched. However, the interviews were conducted with people who I had known for some time while living in China and there was already a level of trust and familiarity between us. It was much harder to arrange interviews with people I had limited or no contact in the past, which is something that would have been much easier to overcome if an in-person meeting could have been arranged. It was, therefore, necessary to change the focus of the thesis and concentrate far more on the online data that

could be gathered, both from social media and other online sources such as the organisations' websites or media articles about their work. These sources were always intended to be used but they took on greater significance since travel to China became impossible.

There is significant amount of churn within the NGO sector in China with new NGOs appearing, while older ones disband, so identifying a representative sample of NGOs for inclusion in the study could have been problematic. Measures were, therefore, taken to ensure that the sample of NGOs included in the study was representative of domestic, environmental NGOs in China. However, the selection of NGOs in the study was reliant on the data collected and maintained by the NGO, China Development Brief. There is the possibility that data in these databases is not completely up to date or is missing some organisations, maybe because they are too small, or they operate under the radar to avoid scrutiny by the authorities, or maybe they have only recently been founded. This could skew the results in favour of the larger, legally registered organisations and miss smaller, more recently formed NGOs.

Looking Forward

As the disruption caused by the pandemic has subsided in the U.K. the opposite has happened in China with new restrictions in place on travel within the country, the continuation of strict quarantine, and new exit restrictions for Chinese nationals wanting to leave the country. All of these restrictions are in place ostensibly to control the spread of disease, but they point to a wider political narrative under Xi Jinping in which the movement and interaction of people in China with those outside is restricted. Many of these restrictions could remain in place even after the threat of the pandemic is over, which would make in-person research in China very difficult and restricted. Merely accessing data could become even harder in the future, even for those with deeper pockets and the funding to buy information from Chinese platforms. If this data is seen as a resource and subject to controls on its flow out of the country, then it may not be possible to even buy the data needed. Collaborations with Chinese university researchers are already becoming harder, but they could cease entirely, removing another avenue to research on China. It could be possible that the only way to access large datasets is through the scraping of data from Chinese websites, so this methodology could be applied more widely. Under these circumstances digital humanities and digital research takes on a far greater significance and importance when trying to understand Chinese politics and society. The methodologies used in this thesis, first to gather data, then to analyse it and identify

topics of interest for further investigation, are replicable and could be used across different disciplines to research a myriad of different topics of interest.

Beyond China's Borders

The focus of this thesis was domestic Chinese NGOs using the Chinese social media platform, Sina Weibo, but there are implications for research beyond China. Care should be taken when applying findings from one country, with its specific regulatory, political, and social environment, to another, but there are several factors, such as internet censorship, and control of NGOs that take place in other authoritarian countries. There is evidence though of China's restructuring of internet standards and technologies, with a view of exporting these technologies to foreign users through initiatives such as the Digital Silk Road, which eventually creates a scenario where the internet becomes far easier for central governments to control the flow of information (Hoffmann, Lazanski, & Taylor, 2020). In Cambodia, for example, internet censorship and controls are increasing and it is becoming harder for civil society organisations to organise meaningful opposition online (Vong & Sinpeng, 2020), while the 2015 Law on Associations and Non-governmental Organisations in Cambodia has made it harder, particularly for advocacy NGOs, to continue their work (Curley, 2018). Many other countries, including Iran, Myanmar, Cuba, Vietnam, Pakistan, Egypt, United Arab Emirates and Ethiopia all practise strict forms of internet control (Freedom House, 2021), and many also have strict control over NGO operations. There are certainly lessons that can be learned from the ways that NGOs in China adopt a nonconfrontational approach to their activism, but how well these would transfer to other countries would really depend on the local conditions. For example, while environmental laws and regulations in China are often not strictly enforced, they do provide a framework with which NGOs can use and push for greater enforcement, often using the online strategies analysed in this thesis.

Closing Summary

The role that Weibo plays within the NGOs varies significantly according to their capacity to make the best uses of the technology. In many cases their social media accounts are just extensions of traditional forms of communication, where the organisation broadcasts information to a group of followers without really making the best use out of all the innovative communicative functions that make social media 'social'. Those NGOs that do make better use of the technology employ it to create broader networks across different types of organisations and sectors, and it is these broad networks that are likely to make the sector

more resilient. The use of Weibo by Chinese NGOs, however, is widespread and environmental NGOs in China make use of Weibo in diverse ways reflecting a sector that has many different organisations with different aims, objectives, and positions. For some, Weibo is a tool for organising and networking with like-minded organisations, for others it is a way of holding environmental transgressors to account. For others it is a way of building a community of supporters who can then be informed of environmental issues and encouraged to take action to help protect the environment or support the NGO to do so. Sometimes, the NGO uses Weibo for all these purposes. The thing that this diverse group of organisations has in common is that they all operate within a regulatory, political, and societal system which dictates the boundaries of their activities, and they all employ nonconfrontational methods to navigate this environment.

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