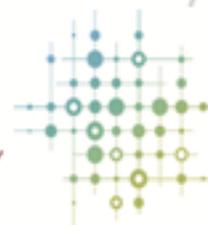
A complex network diagram background consisting of numerous interconnected nodes and lines. The nodes are represented by circles of various sizes and colors, including orange, pink, purple, blue, green, and grey. The lines connecting them are thin and grey, creating a dense web of connections.

The Geopolitics of Tech: Baidu's Vietnam

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Introduction

Recent revelations concerning the US National Security Agency's (NSA) attempts at global surveillance bring the re-emergence of the 'state' in cyberspace into sharp relief.¹ These events draw our attention to the web as a bordered, sovereign space rather than as the 'placeless' cyber domain which occupied the minds of early internet researchers. As Jiang and Okamoto note given the NSA revelations, "The need to explicate the symbolic, economic, and political implications of information technologies thus has never been greater (2014, 1)." Work on the 'state' and the internet is most clearly demonstrated by work on national web studies, which focuses on political, economic, and social consequences of state internet regulation and policies in a particular domain (Rogers et al, 2013; Jiang, 2011, Jiang and Okamoto, 2014). This research focus is also engaged by literature that addresses the political, social, and economic implications of information technology platforms (Introna & Nissenbaum, 2000, Jiang, 2011), while associated work on 'national information shaping strategies' (Diebert and Rohozinski, 2010, 6) focuses on the ways in which such economic, political, and social effects are manipulated by states to achieve certain political goals.

Work on such strategies and their political, cultural, and economic effects has focused most clearly on China, where the state's determination to engage in national information shaping strategies is clear. The so-called 'great firewall' shows the scope of the state's ambition to control online information access, and the concept of 'internet sovereignty' is clearly defined in official documents, showing the state's desire to shape as well as control such information. Research on the Chinese web has focused on the complex links between government and internet technology companies in the practice of censorship—in maintaining the great firewall—and the effects of this censorship on the Chinese population. Such studies show that internet companies in China cooperate closely with the Chinese state in the management of

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information within China: the price of accessing the huge Chinese market is that they must act as the workhorses of the state in Chinese cyberspace (Jiang, 2011, 2014, King et al, 2013, MacKinnon, 2011). But Chinese internet companies are now expanding beyond Chinese borders. Private companies such as Alibaba, Baidu, and Tencent are worth millions, and all three are listed on international stock exchanges: they are private actors rather than direct agents of the Chinese state outside China. However, despite their private status, their close relationship with the state within Chinese borders is widely known beyond China, as the country makes no secret of the importance it places on information control. This paper asks: *does the relationship between the Chinese state and Chinese internet companies affect those companies' international expansion? If so, how?* In asking these questions, the paper contributes to emerging studies of the political, social, and economic implications of information technology platforms, but adds a focus on the geopolitical implications of such platforms. It adds to studies of the 'state' in cyberspace, but does so by studying Chinese internet companies as embodiments of the Chinese state in cyberspace, beyond Chinese borders, and even inadvertently.

This paper investigates the international expansion of one of China's biggest internet technology companies, Baidu, using Baidu's recent attempted expansion into Vietnam as a test case and taking a mixed methods approach. The first section of the paper begins by outlining Baidu's role in Chinese information control practices, and its participation in China's broader goal of 'internet sovereignty.' This section shows that the company participates actively in the Chinese state's goals of domestic information control, as it must if it is to maintain its access to the Chinese market. This section also outlines Baidu's international expansion plans and shows that the company receives no official funding from the Chinese state in support of its expansion.

The second section of this paper examines the detail of Baidu's expansion into Vietnam in 2012. It argues that Vietnam is a natural market for Baidu given the Vietnamese government's interest in information control and historically strong relationships between the two countries. However, it shows that Baidu has failed in the Vietnamese market and investigates the reasons

for this puzzling failure given the apparently close relationships between China and Vietnam. This failure offers a useful test case to investigate how the relationships between the Chinese state and Chinese internet companies affect those companies' international expansion.

In order to understand whether the relationship between the Chinese state and Chinese internet companies affect Baidu's international expansion this section operationalizes the research question using a mixed methods approach combining a brief history of Baidu's product analysis in Vietnam, interviews with stakeholders in Vietnam's technology community, and analysis of Vietnamese press reporting. The latter involves inductive content analysis of eleven Vietnamese news outlets over 2012, when Baidu began its launch in Vietnam in earnest. It examines three themes which emerge consistently in this cohort of reporting concerning Baidu's expansion into Vietnam. These three themes link Baidu's products in Vietnam to the 'internet sovereignty' practices of the Chinese state and to toxic Chinese geopolitics in the South China Sea. These stories fostered an association between Chinese internet technology platforms and controversial Chinese geopolitics in the South China Sea. An analysis of their claims and interviews with members of Vietnam's technology community quoted in the stories suggest that such articles make false claims about Baidu's practices which play on a broader populist Vietnamese anger against Chinese moves in the South China Sea, as demonstrated by boycotts of Chinese goods and anti-Chinese riots at the same time the stories were published. It shows that this association occurs despite the fact that, as demonstrated in section one, Baidu receives no official support from the Chinese state in its expansion efforts.

This paper contributes a new area of research on the geopolitical associations of internet technology platforms to existing studies of the social, political implication of information technology. It adds to studies of the state in cyberspace by showing that, at least for Chinese companies in Vietnam, the state is embodied in perceptions of the platform, even outside the state's physical borders: the company itself is 'bordered.' This finding has clear policy implications for those policy actors who seek to predict the effects of the international expansion of Chinese technology companies. It suggests that the market impact of such

companies is potentially limited by negative public perceptions of the Chinese state in those markets. These perceptions may be linked to understandings in those markets of the link between Chinese government and Chinese information technology companies within Chinese borders, and may also be linked to broader perceptions of Chinese geopolitics.

Section 1: Baidu and Chinese Internet Sovereignty

China's domestic internet landscape is managed via a state policy known as 'internet sovereignty.' First described in a Chinese white paper in 2010, this means that for the Chinese state 'within Chinese territory the internet is under the jurisdiction of Chinese sovereignty' (Jiang, 2010, 73). As is well described in the literature, this means that the Chinese state controls its citizens' access to the internet by restricting access to certain sites, and controls the flow of information online within its borders in more subtle ways, using the internet as a tool of surveillance, censorship and information shaping (see King et al., 2013, Jiang, 2011, 2014, MacKinnon, 2012). This 'information shaping strategy' (Diebert, Rohozinski et al., 2010, 6) is exercised very clearly as part of the Chinese state's goals of domestic political control, an approach which Jiang (2010) describes as 'authoritarian informationalism.'

Chinese technology companies are inextricably associated with these practices of internet sovereignty via a process known as 'networked authoritarianism' (MacKinnon, 2010). This term highlights the fact that Chinese information-shaping strategies are complex and reactive, and MacKinnon's work emphasises the fact that Chinese networked authoritarianism cannot work 'without the active cooperation of private companies' via a system of strict, stringently enforced, and wide-ranging intermediary liability. The Chinese government imposes liability for unlawful content on all intermediaries. If they fail to sufficiently monitor user activity, take down content, or report violations, they may face fines, criminal liability, and revocation of business or media licenses (MacKinnon et al., 2014). In practice, MacKinnon notes, this means that "All Internet companies operating within Chinese jurisdiction – domestic or foreign – are held liable for everything appearing on their search engines, blogging platforms, and social networking services. They are also legally responsible for everything their users discuss or

organize through chat clients and messaging services. In this way, much of the censorship and surveillance work is delegated and outsourced by the government to the private sector – who, if they fail to censor and monitor their users to the government's satisfaction, will lose their business license and be forced to shut down. All of China's large Internet companies have entire departments of employees whose sole job is to police users and censor content around the clock (2010, 14-15)."

This paper focuses on one of the most prominent of China's large internet companies, Baidu. Although the company offers a dizzying array of products, Baidu's flagship product is its search engine. It is currently the largest search engine in China and the second-largest search engine by users in the world, dominating the online Chinese population of over six hundred million. This statistic is even more significant given that, until recently, Baidu had only operated within China, and Chinese internet penetration is still below fifty percent (CNNIC, 2014). This means that even as Baidu expands internationally, the bulk of its revenue is dependent on the Chinese market, a fact confirmed by the company's 2013 annual report (Baidu, 2013).

Like all Chinese internet companies, Baidu's dominance of the market in China is dependent on its cooperation with the Chinese government's information management goals: as described above, the company's censorship practices must satisfy authorities. Accordingly, as Jiang (2013) shows, Baidu shapes its search results in accordance with keywords banned by the state. Founder Robin Li openly acknowledges the company is willing to cooperate with the Chinese government in its censorship goals in order to further the company's business strategies. For example, in 2009, with nineteen other internet companies, Baidu received a 'Chinese Internet Self-Discipline Award' for fostering "healthy, harmonious internet development (MacKinnon, 2012, 105).²"

² The company also filters according to its commercial imperatives, taking paid search listings and placing listings for its own products above those of its competitors (Jiang, 2011).

Despite its close cooperation with the Chinese state, Baidu is a privately-owned company rather than a state-owned enterprise. Baidu was listed on the NASDAQ in 2005, at that point the most successful IPO in five years (Bloomberg, 2005). It currently has a market valuation of approximately \$US66billion (Fannin, 2014). It has no explicit links to the Chinese state in terms of its ownership or its key personnel. As with all Chinese internet companies, however, Baidu's profitability and access to the Chinese market is determined by the state. This means that despite being a private company Baidu is inextricably linked to China's internet sovereignty by the state, and by the company's own business model. The state owns the very infrastructure via which Baidu operates, controls currency exchange mechanisms in China, and restricts foreign investment in 'sensitive sectors,' including the internet industry. The sector is also under increasing political pressure as the state continues to introduce further regulation of online space.

The relationship between companies like Baidu and the Chinese state, then, is complex. It recalls Castells' characterization of such enterprises as 'little sisters': commercial entities whose online activities are simultaneously intertwined with, separate from, and arguably dependent upon the state's agenda (2001, 180). Baidu is a private actor constrained by the demands of the Chinese state: its profit in China is dependent on the whims of the government.

Baidu Goes Global

Responding to increasing competition in the Chinese market, Baidu began expanding internationally into emerging markets in 2010, focusing on South East Asia, Sub Saharan Africa and Latin America. Founder Robin Li has announced that he intends Baidu to be the top search engine in fifty percent of the world's markets by 2020 (Carlson 2012). Baidu is not alone in its international expansion. Chinese tech companies including Tencent and Alibaba are also expanding their international operations. In 2011, Baidu opened a research centre in Singapore focused on developing localised search products in South East Asian languages, especially Thai,

Indonesian, and Vietnamese.³ Baidu now has a presence in over ten countries outside China, including Egypt, Brazil, Indonesia, Vietnam, Thailand, and Malaysia. In January 2013, Baidu signed its first global operator agreement, with French telecommunications company Orange, to co-develop an enhanced mobile browser designed for emerging markets in Middle East and North Africa, where Orange has 80 million customers (Orange 2013).

The Chinese government is generally supportive of such expansion by Chinese technology companies describing it as an opportunity to ‘win honour for Chinese companies (Chao and Fletcher, 2011),’ and international expansion of high-tech industries is an important feature of China’s ‘Go Global’ policy, first introduced in 1999 (see Smith and Darcy 2013 for an overview of this policy). For a private technology company like Baidu, such support could mean loans for capital investment overseas, innovation funding, or favourable currency exchange mechanisms.

However, state financial support for Baidu’s expansion appears nonexistent and to a large degree unnecessary. For example, a detailed search of Chinese-language loan documents by the author suggests that Baidu has not accessed any state-held lines of credit from any of China’s three development/export banks: the China Development Bank, the Export-Import Bank of China and the China Development Bank. When asked about state support for capital expansion, head of international communications Kaiser Kuo explained in an interview with the author that Baidu was a ‘cash-rich company’ and had no need of such credit (Kuo, 2014). A detailed search by the author of Baidu’s publically available financial statements and SEC filings show no financial support from state-linked bodies and there is no indication of support in the form of exemptions from particular aspects of the currency exchange regime. Indeed, there is little evidence that this should be necessary given the relatively small capital costs associated with the overseas expansion of an internet company as opposed to, for example, a manufacturing company.

³ The company engaged in a limited attempt at international expansion in Japan in 2007. This expansion proved a substantial failure, largely due to the company’s inability to compete in a search environment dominated by mobile phones. However, it is important to note that the company has also attracted a significant amount of anti-Chinese sentiment in Japan (Japandaily 2013).

In addition, the relationship between Chinese information technology companies and the state is increasingly complex—far more so than in other sectors, where state bodies are ready to support international expansion (Sanderson and Forsythe 2012), complicating the level of state support for this purpose. Domestically, the government is attempting to exert power even more broadly over information flows and business in the internet sector. For example, in January 2014, the Chinese Communist Party (CCP) established the Central Internet Security and Informatization leading group following the party congress in late 2013. The group is led by the party's head of propaganda, Liu Yunshan, who was named as a co-chair along with Premier Li Keqiang. The state has also invested in developing its own search engine (Jike) introduced in 2010 (although it was then known as Goso)—in direct competition with Baidu. Jike is unsurprisingly filtered even more strongly than other state-approved search products and 'signals a significant state attempt at producing technologies to shape values (Jiang and Okamoto 2014, 93).' Baidu has also been subject to increasing state interest. In 2008 and 2011 the company was subjected to substantial investigations by CCTV, the state television company, for including paid search results: no other internet companies have been subject to such investigations.

This apparent attempt to exert more control over the internet environment domestically is also likely a response not only to the internet's political import but also to its already vast and steadily increasing economic impact. The three biggest Chinese internet companies—Baidu, Alibaba, and Tencent—have become the largest private sector companies in China by capitalisation and revenue (Clover, 2014). This means they are not only powerful in terms of the politics of information but also as private economic actors. The state has responded by attempting to limit some aspects of their financial power. For example, the government recently acted to stop the expansion of tech giants into other sectors, like finance. It suspended virtual credit cards issued by Alibaba and Tencent, as well as mobile payments made by scanning bar codes. Although these companies are central to the Chinese economy, the tech sector is unlikely to be allowed to run unfettered because of its central political and increasing

economic importance. This means state support for international expansion –and increased profit—may be more complex than in other, less controversial sectors.

Baidu's international expansion, then, is a commercial decision by a private company. However, as outlined earlier in section one, because it by definition participates in the practice of Chinese internet sovereignty, its identity as a private actor is fraught and inextricably linked to the information control practices of the Chinese state.

Section 2: China, Vietnam and Baidu

China and Vietnam

Baidu began expanding into Vietnam in 2011, and the country served as Baidu's first large-scale expansion outside of China under its new policy. The Vietnamese market is a useful point of expansion for Baidu for several reasons. First, Vietnam's internet penetration is currently at approximately forty percent, but is growing rapidly, and the country has the biggest online population in South East Asia (Do, 2013b). The country is the largest games market in SE Asia, and that market is dominated by Chinese games (Do, 2013). Second, China and Vietnam have a close trade relationship, although that relationship heavily favours China: in 2012, China was Vietnam's second-largest export destination, and imports from China accounted for twenty-eight percent of Vietnam's total import value (State, 2014).⁴

Third, as one-party Communist states (broadly speaking), both countries share an interest in information control. This should make the expansion of a company like Baidu into the market relatively unproblematic, particularly in a context where the online space is clearly regulated in the interests of a government with similar political 'information sovereignty' goals to the Chinese state. Indeed, one senior technology figure within Vietnam suggested that Vietnamese regulators were keen to associate with a company whose approach might be more respectful of Vietnamese regulations than companies like Google and Facebook (Interview b, 2014). Beyond similar political systems, then, the Vietnamese and Chinese states share similar approaches to

⁴ Note that this relationship was under strain in other sectors throughout 2013 – 2014 in the context of geopolitical tensions concerning the South China Sea, as outlined in below in section 3.

information control. Almost all traditional media in Vietnam is state controlled and the country sits at 174 out of 180 on the Reporters Without Borders press freedom index, between Iran and China (RWB, 2013). This interest extends to online material. Testing by the Open Network Initiative found substantial filtering of politically sensitive websites in 2005, 2007, and 2010—today, Vietnam's netizens appear to be the heaviest users of censorship circumvention tools in the world (OTF, 2014). Facebook is unofficially banned, though seventy-one percent of the online population uses it: Vietnam has one of the highest rates of use of circumvention tools globally (Do, 2013; OTF, 2014).

The Vietnamese government's interest in control of online information is increasing, as demonstrated by increasing crackdowns on bloggers: of the thirty-four bloggers detained in early 2014, twenty-five were arrested since Nguyen Phu Trong became the ruling party's general secretary in January 2011 (RWB, 2014). Vietnam is the world's second largest prisoner of bloggers and netizens (RWB, 2014). A recent regulation is clearly intended to further chill online speech: Decree 72, the 'Management, Provision, Use of Internet Services and Information Content Online', came into force in mid-2013 and bans the sharing of online news stories on social media sites. Other measures appear to include manipulating Facebook's complaints process (Geigner, 2014). Anecdotally, interviewees reported that the Chinese and Vietnamese governments appear to have cooperated in state-sponsored hacking – sharing technology and techniques. It is reasonable to suspect, then, that Baidu might enjoy a 'censor of choice' status in Vietnam, given close China-Vietnam relations, the government's interest in information control, and Baidu's close identification with Chinese information control practices.

Baidu in Vietnam

Baidu entered the Vietnamese market in 2011, under the seemingly favourable conditions outlined above. However, by mid-2014, the company had largely withdrawn, and its venture in Vietnam appears to have failed. Baidu has failed to build a market for its flagship search engine product or for its social network: the latter no longer exists, having been introduced in 2012, and the former was never introduced despite a domain name being registered. The company

did not open a standalone office in Vietnam, and its staff numbers have been reduced considerably, reportedly never rising above twenty (Interview d, 2014). By 2013, the company had stopped investing in Vietnamese in its Singapore research lab (Millward, 2014) and Baidu is reluctant to comment further on its ventures in Vietnam. The director of international communication stated in an interview: “Our expansion has not just slowed, it has stopped (Kuo, 2014).” This is puzzling: Baidu entered Vietnam as the world’s section-largest search engine and as a company with products ostensibly of interest to the Vietnamese government, as well as with a strong history of China-Vietnam economic relations. This section investigates this failure and argues that Baidu’s failure in Vietnam is due to Baidu’s susceptibility to anti-Chinese sentiment, driven by geopolitical tensions in the China-Vietnam and by its inescapable associations with Chinese internet sovereignty.

Changing China-Vietnam Relations

China-Vietnam relations stretch over five thousand years, during which time the relationship between the two countries has ranged from friend to foe and back again. As a result, although the countries today have an important trade relationship and ostensibly share a broadly similar political system as one-party Communist states, relations are more complicated than they might first appear.

For almost ten centuries, Vietnam was under Chinese rule, after which point the Vietnamese established their own empire in the region, followed by a period of French colonisation and wars of decolonisation. China recognised the independent republic of Vietnam in 1950, but the country became an ideological battleground in the Sino-Soviet split of the 1970s, marked by the Sino-Vietnamese border war of 1979, when Chinese troops crossed the border and occupied part of Vietnam. Relations were normalised in 1991 (see Thayer 2008 and Womack 2008 for an overview of the history of SCS tensions).

Territorial issues animating current relations between Vietnam and China focus on the South China Sea (SCS), a maritime area bounded by China, Vietnam, the Philippines, and Japan. The

area has historically been contested by a variety of these states and is an important maritime trade route—over a third of global trade passes through its shipping lanes. The discovery of significant oil and gas reserves in the late 1960s has only intensified matters, and the area has been the site of longstanding geopolitical jockeying between China and the United States.

The conflict between China and Vietnam in this area dates to before the discovery of oil and gas and is arguably driven as much by nationalism and the history of territorial conflict between the two nations as by oil and gas reserves. China first laid controversial claim to the Paracel Islands in the South China Sea in 1948, issuing a map now known infamously in Vietnam as the ‘Cows Tongue Map,’ which increased its territorial claim in the South China Sea to include areas beyond its official maritime boundary, including the Paracel and Spratly Islands, which form the basis of current tensions. Reunification saw Vietnam become more aggressive in its territorial claims, leading to numerous naval clashes between the two nations over the Paracels in 1974 – 1975, and over the Spratlys between 1979 and 1982. Tensions flared again in the 1980s, and in 1988 a naval battle off the Spratly Islands saw seventy Vietnamese sailors killed.

Despite normalisation in 1991, China attempted a legal claim to the area via its ratification of the UN Convention on the Law of the Sea (UNCLOS) in 1996, and territorial incursions continued throughout the 1990s in the form of oil and gas exploration and fishing vessels. Despite this, Vietnamese responses remained at the level of discourse, and relations between China and Vietnam remained regularised, with little to no disruption in high-level visits and trade negotiations.

From 2005, onwards, however, Beijing renewed its territorial aggression in the SCS.⁵ In July 2012, for example, China formally created Sansha City, an administrative body with its headquarters in the Paracels which purports to oversee Chinese territory in the South China Sea—including the Paracels and the Spratlys (Zhang, 2013). Tensions continued to escalate

⁵ Analysts disagree on the reasoning behind these anxieties, but suggestions include concern about increasing US influence in the SCS and concern over the development of resources in the region (see Thayer 2008, 2014, Womack 2008).

throughout 2012 and beyond: the Chinese navy allegedly deliberately sabotaged two Vietnamese exploration operations in 2012, and reports throughout 2011 – 2012 of Chinese naval vessels kidnapping or harassing Vietnamese fishermen continued to raise tensions. A new version of the Chinese passport in November 2012 depicts a map of China including its controversial South China Sea claims. In May 2014, the installation of a Chinese drilling rig into waters near the Paracel Islands led to multiple confrontations between Vietnamese and Chinese ships. The rig was removed after three months, but the period marked what many analysts see as the most dangerous period in China-Vietnam relations in modern times (Thayer, 2014).

This assessment of actual crisis was driven by changes in Vietnam's stance on Chinese territorial ambitions in the SCS, beginning in 2011-12 and reaching their peak in 2014. Since the normalisation of relations in 1991, and in recognition of the extreme trade and military imbalance between the two countries, the Vietnamese government has been reluctant to convey its displeasure at Chinese incursions. Indeed, anti-Chinese protests and sentiments have long been censored in Vietnam. This reluctance to allow the expression of anti-Chinese sentiment also has a domestic importance. Because of the strong political relationship between the two one-party states, in many cases anti-Chinese sentiment in Vietnam is conflated with anti-government sentiment or with divisions between progressive and non-progressive factions in government, and so banning its expression serves an important domestic political function. For example, anti-government activists began focusing on renewed Chinese territorial incursions in the SCS in 2008, long before the government reacted in any way. These protests were quashed and the issues not covered in the Vietnamese state press (BBC, 2011a, 2011b; Viet Tan, 2008).

The Vietnamese government's approach appears to have changed in 2011-12, and more significantly in 2014. Large-scale street protests in 2011 were allegedly-though not openly-sanctioned by government, because they were not clearly shut down as others had been in the past (Ruwitch, 2011). State sanctioning of anti-Chinese protests was clearer in 2014 when, following the oil rig incident, the government not only allowed large demonstrations in front of

the Chinese embassy in Hanoi and elsewhere in Vietnam, but also allowed the state press to report freely on them for the first time (AP, 2014).

Despite these apparent changes, following large-scale anti-Chinese riots in mid-2014, the government resumed its crackdown on anti-Chinese protests, claiming the riots had been organised by Viet Tan, the banned opposition political party, and explicitly prohibiting such gatherings and reinstating crackdowns on anti-Chinese reporting. Tensions remain, but government support for protests has not been reinstated, and links between the government and China have continued to be the focus of anti-government groups. Indeed, following anti-Chinese riots in May 2014, the government sent a text message to all Vietnamese mobile subscribers ordering citizens to ‘stay within the law’ and announced that security forces would arrest those who violated the law. Anti-Chinese protests were violently quashed and protesters arrested, whereas previously-as described above-the government had become unusually permissive of anti-Chinese activity (Khanh et al, 2014).⁶

Press Reporting on Baidu in Vietnam

Baidu’s entry into Vietnam was initially relatively unproblematic. It registered its first domain name, baidu.com.vn, in 2006, indicating that it intended to introduce a standalone search service. It also introduced a question and answer service, zhidao.com, and a web portal, hao123.com, in late 2011, though without a large marketing campaign. In mid-2012 it launched an advertising campaign for two products: its social network, Baidu Tieba (also known as tradaquan), and a music player, TTplayer. However, as mentioned above, the company experienced a crippling failure, and by 2014 had essentially withdrawn from Vietnam. The company refuses to comment on the mechanics of its failure and withdrawal, but 2012 was a pivotal year for Baidu’s expansion into Vietnam, as it marked the company’s attempts to introduce two flagship products to the market.

⁶ This means many interviewees who participated in this project were clear that they did not wish to be identified or to directly link themselves to anti-Baidu reports given the issue’s links to anti-Chinese activity.

This section of the paper undertakes a basic inductive content analysis of Vietnamese press reporting on Baidu in 2012 to operationalize the following research question: *Does the relationship between the Chinese state and Chinese internet companies affect those companies' international expansion?* This section analyses a range of newspaper reporting to understand the framing of Baidu in the popular press in Vietnam, seeking to ascertain the role of newspapers in agenda-setting and framing on this issue (McCombs and Shaw, 1972; Scheufele and Tewksbury, 2007). Vietnam is an interesting case study in this regard. Despite the fact that Vietnam's media is 'not free' (RWB, 2014), the relationship between the state and the media in Vietnam is complex, driven by the interplay of communist party apparatus, intra-party and inter-bureaucratic competition, market reforms, and the pluralisation of Vietnamese society (see Cain 2013). This means that rather than simply reflecting a government agenda, press reporting in Vietnam may in fact reveal both government *and* public sentiment. This is important on an issue involving Chinese companies given the complexities of the China-Vietnam relationship during 2012 as outlined above.

As Cain (2013) shows, the press in Vietnam is allowed a certain amount of freedom to report on issues which may be controversial—such as certain types of corruption and environmental issues—but which legitimate the party's position or resolve elite conflict. Cain (2013, 88) describes this as the press' taking on a role of state-sanctioned watchdog under state authority, but one utilised by the government as an agent of 'repressive tolerance (Marcuse, 1969, 95-137),' meaning journalists are allowed to push the boundaries on 'legitimate controversies' as long as they do not threaten the party directly (see Hassid 2012 for a similar discussion of agenda setting in Chinese news media). This accounts for the party's use of the media to manage inter-bureaucratic competition and elite dissatisfaction, both processes which can facilitate some level of anti-government reporting within a state-sanctioned framework. In addition, the newspaper sector has been subject to marketization reforms introduced in the 1980s and 1990s. Unable to pay adequate salaries or provide free newsprint, the government allowed media companies to generate revenue through advertising under revised media laws (McKinley 2009). This means that some media outlets have taken advantage of non-state

investment to create financially independent organisations run along business lines. Decreased financial dependence on the state has arguably contributed to a loosening of editorial constraints imposed by the state and an increase in press standards (McKinley, 2009). As Cain (2013, 88) points out, such ‘soft corporate authoritarianism’ (Dixon, 2004) means that newspaper outlets have the space and the incentive to pursue controversial reporting as well as standard, party-approved reporting. Such reporting is fostered or tolerated by the state when it conforms to party interests—for example, on certain types of reporting about corruption—and also proves an attractive business model (especially for online news outlets), as it attracts readers.

Following McKinley (2007, 24), this analysis focuses on eleven news outlets, selected because they range from news outlets close to central party organisations that are based in Hanoi to news outlets more distant from the centre that are based in Ho Chi Minh city (HCM). News outlets in HCM are generally further from the centre of party power in Hanoi, reflected in the greater liberties such papers may take in publishing controversial articles, as well as in their relative financial independence. This analysis includes two such outlets, Vietnam’s two most popular newspapers *Tuoi Tre* and *Thanh Nien*. These papers are both based in HCM and are owned by Party youth organisations. Both have a strong online presence and are run on a for-profit basis. This analysis also included two news websites: *ictnews.com*, which is published by Vietnam’s Ministry of Information and Communication; and *vietnamnet.vn*, Vietnam’s oldest online news site. Analysing a range of Vietnamese sources allows this project to understand a range of governmental and popular attitudes in a way perhaps unique to Vietnam’s ‘soft corporate authoritarianism (Dixon, 2004).’

This paper collected and analysed all reports which contained the word ‘Baidu’ across nine newspapers and two online media outlets in Vietnam over 2012. These reports were collected via a search of the online corpus of these outlets in Vietnam for the keyword ‘Baidu’ in 2012 (hard-copy archives are not routinely kept for Vietnamese newspapers)⁷. These results were

⁷ Newspapers examined include: *Thanh Nien*, *Lao Dong*, *Tien Phong*, *Tuoi Tre*, *Vietnam Economic Times*, *Quan Doi Nam Dan*, *Saigon Giai Phong* and *Ha Noi Moi*.

coded for those which had Baidu as their main topic of discussion. Of twenty-three reports which contained the word 'Baidu,' this search revealed eighteen reports which had Baidu as their main topic of discussion across the eleven outlets. The remaining five reports simply included Baidu in a list of companies discussed in neutral terms such as within the context of Chinese IPOs. This analysis found that, although there were eighteen reports on Baidu across these eleven outlets in 2012, the four more conservative newspapers did not carry any stories at all.⁸ This process then coded the eighteen reports for a basic attitudinal stance to Baidu – positive, negative or neutral. Of the eighteen stories which had Baidu as their primary topic, fifteen were negative, with the remaining three being positive or neutral.⁹ Of the negative stories, all appeared within two months of each other, between late June and late August 2012, just as Baidu's social network was launched in Vietnam. These stories also appeared following China's initiation of deep-water oil drilling in contested areas of the South China Sea in 2012, when Vietnam-China relations began to deteriorate further. This shows a clear spike in reporting, with that spike being wholly negative.¹⁰

The bulk of the anti-Baidu reports appeared in four outlets, *Thanh Nien*, *Tuoi Tre*, *ictnews* and *vietnamnet*. The two newspapers in this list are described by media analysts as three of the most progressive newspapers in Vietnam, owned respectively by the National Youth Union (*Thanh Nien*), and the Ho Chi Minh City Youth Communist league (*Tuoi Tre*) (McKinley, 2007, 24; Cain, 2013). One other newspaper, *Tien Phong*, also carried some negative stories about Baidu, and is owned by the National Communist Youth League. Interestingly, the three newspapers carrying anti-Baidu stories have also adopted a profit-driven model, differentiating them from more traditional newspapers. Although their content is regulated by the state, the two newspapers which carried anti-Baidu stories most prominently are profit-making enterprises, as is *vietnam.net*. The populist overtones of much anti-Chinese sentiment in Vietnam, particularly

⁸ *Ha Noi Moi*, *Quan Doi Nam Dan*, *Saigon Giai Phong* or the *Vietnam Economic Times*

⁹ These comprised two stories on new Baidu tech products in China, and one on Baidu's success in China.

¹⁰ At this point, as described above, the government had taken the unusual step of sanctioning anti-Chinese protests: a spike in anti-Chinese reporting (usually controversial given its anti-government associations) is contemporaneous with other state-sanctioned anti-Chinese measures. Cain (2013) describes a similar situation in 2009, where reporting on anti-Chinese sentiment was allowed in the press in an unusual manner to act as a release for community tension concerning a controversial proposed Bauxite mine owned by a Chinese company.

during 2012, means that those newspapers with a more profit-driven model are more likely to be driven by delivering stories which attract readers whereas wholly state-owned newspapers are not, suggesting that profit-driven outlets may be more likely to publish anti-Chinese stories. As the managing director of *Thanh Nien*, and the author of all of that paper's anti-Baidu stories noted: "These stories are popular with readers. They want to read them and share them with friends...That is why lots of newspapers copy my stories (Tri 2014)." All reports on Baidu are, by default, subject to editorial review – a process which, according to one interviewee, happens at weekly meetings between editors and government representatives from MICT (Interview f, 2014). Although the existence of a review process does not mean that these stories are officially sanctioned, it does mean that, on some level, there was government visibility of Baidu reports. This line of thinking is supported by the fact that ictnews, owned by the Ministry of Information and Communications, was one of the main sources of anti-Baidu reporting.

Having conducted a basic analysis of the positivity or negativity of reporting, further analysis involved inductive coding of themes among the fifteen negative stories. Three clear themes emerged across the reports. All reports shared at least one of these themes and none of the reports contained any alternative themes. The first theme alleged that Baidu Tieba had failed to register under Vietnamese law, the second that Tieba had limited discussion of the Paracel Islands (the subject of contentious Chinese territorial claims in the South China Sea), and the third claimed that TTplayer was installing spyware on behalf of the Chinese government. These reports shared extremely similar wording, and were sometimes direct copies of earlier reports in other newspapers. All reports shared the same quotes from representatives from Vietnam's technology security community, mainly the Vietnam Hackers Association, who raised issues about Baidu's links to China and who verified that Baidu's products were indeed engaging in pro-China practices. The following paragraphs outline these themes in more detail.

(i) Baidu Tieba's Failure to Register Domain Names

The first negative report about Baidu in the Vietnamese press appeared in *Thanh Nien* on June 28, 2012 and was titled 'China's Baidu to launch unpermitted social network in Vietnam.' The

piece highlighted the fact that Baidu had quietly launched two products in Vietnam already (hao123.com and zhidao.com), and noted that the company was about to launch a social network (Baidu Tieba), but had failed to register it properly. The article quoted representatives from the Ministry of Information and Communications Technology who outlined the necessary procedures but did not directly comment on Baidu's progress. One day later, ictnews.net featured a very similar story, titled 'Chinese Baidu attempts to silently penetrate Vietnamese market,' which contained the same quote from the ministry representatives and again highlighted that Baidu had not registered its services. This article differed only in asserting that Baidu was likely to have difficulty attracting users in Vietnam. On June 30, 2012, *Thanh Nien* carried a story with the headline 'Baidu silently invades Vietnam' (Truong and Tri, 2012). This story repeated the earlier story that Baidu was planning to launch products in Vietnam, but included further examination of all the domain names registered by Baidu in Vietnam. In doing so, the piece suggested-wrongly-that Baidu had violated regulations by using a local company to register some of the domain names: no such regulations exist in Vietnam.

On July 2, 2012, vietnamnet carried a story titled 'Baidu's social network has no license to operate in Vietnam (vietnamnet, 2012a).' This story focused on the launch of tradaquan, Baidu's social network (otherwise known as Baidu Tieba), and carried quotes from ministry officials confirming that Baidu had not applied for a license to operate a social network in Vietnam. The story also highlighted the fact that 'IT forum users' were calling for a boycott of Baidu's products. The story was repeated on *Tuoi Tre* on July 4, 2012, with that story also quoting an IT security consultant as saying: "Baidu websites have used their overseas servers so that they avoid Vietnam's control and can operate on the Internet without obtaining a license from Vietnamese authorities (Nhung, 2012)." A version of the story attributed to *Tuoi Tre* was published in a less progressive newspaper, *Lao Dong*, on July 4, 2012. *Lao Dong* also published a story on July 5, 2012, suggesting that registration requirements were unclear, but ultimately arguing that tradaquan should be registered because it had the capacity to draw revenue in Vietnam (*Lao Dong*, 2012).

However, in contrast to these claims, Baidu appears to have followed the required regulations. For example, each of the articles mentioned above highlighted the fact that Baidu did not operate its social network, Baidu Tieba (which was a direct copy of the Chinese site of the same name) using the domain .com.vn, operating it instead via the domain vn.Tieba.com. Were the reports true, this would mean that Baidu was refusing to use a local server and was insisting on hosting its sites on a Chinese server. However, this was not the case. The company registered Tieba.com.vn in January 2012, but in early June 2012 it registered the domain names tradaquan.com.vn and vn.tradaquan.com and ensured that all versions redirected to Tieba.com.vn. This suggests that Baidu changed the name of its service from Baidu Tieba (a direct copy of the Chinese name of the same service) quite late in the launch process to tradaquan, a Vietnamese word meaning ‘iced tea shop.’ The reasons for the late-stage name change are unclear, but suggest an unanticipated attempt to distance the Vietnamese version of the service from the Chinese service. Baidu representatives were unwilling to discuss this issue.

The use of Tieba.com.vn as the ultimate address despite the name change also shows that company had no qualms about operating as a .com.vn domain, meaning it used a local server; therefore, the story about the company refusing to use a local service appears false. In fact, regulation of offshore social networks in Vietnam was, at that time, entirely unclear, and Baidu appears to have exceeded the required level of regulation. Decree 72, introduced late in 2013, requires all social networks to register with the Vietnamese authorities and to operate at least one server in Vietnam. This was not the case in 2012. As one leading technology lawyer agreed, in 2012, social networks were only required to register with the authority, without having to have local servers in Vietnam, noting:

‘There were no specific conditions regarding whether a social network of an offshore service provider having a “.vn” domain must register. Our understanding is that Baidu at first tried to launch without registering with the relevant authority. However, the authority really wanted Baidu to register but they lacked the legal basis for that, and that incident caused some bad press for Baidu. Baidu then changed the domain to “.com.vn” to avoid a messy situation.’ (Seck Yee 2014).

Indeed, in an interview with BBC Vietnam in early July 2012, one Baidu official stated that the management of the website would ‘fully conform to Vietnam government regulations’ in operating internet forums (BBC, 2012a). However, the *Thanh Nien* report from June 30, 2012 quoted above (wrongly) alleged that Baidu continued to violate the registration by failing to route traffic through Vietnam, simply because the .com.vn address resolved to www.vn.Tieba.com. As one member of Vietnam’s Hacker Association (HVA) noted, ‘Baidu was going to use the .vn domain but they didn’t get the chance’ - acknowledging that in this case, Baidu was not opposed to doing the correct thing, but was simply unable to gain traction in the face of negative reporting (Interview c, 2014).

(ii) Baidu Tieba and the South China Sea

A second theme of reporting on Baidu’s social networking product emerged at the same was regularly covered in the same reports concerning Baidu’s registration as discussed in the previous section. These reports, published immediately after Baidu Tieba’s launch on July 20, alleged that Baidu did not allow discussion of the Paracel or Spratly islands on its social network to include the Vietnamese names for the islands: reports asserted that the network would only allow discussion using Chinese names for the islands. On July 22, 2012, *Thanh Nien* published a piece titled ‘Concerns with Social Networking product Baidu Tieba’. In the piece, Ngo Minh Tri, the *Thanh Nien* reporter, described his attempts to set up a discussion of the Spratly and Paracel Islands using the Vietnamese terms, but alleged that only discussions using the Chinese names (Nansha and Xisha, respectively) were allowed. He argued that this showed the “...hidden risk that Baidu Tieba could become a vehicle for improper or infringing upon the sovereignty of Vietnam. (Truong and Tri, 2012b).” A screen shot provided evidence of his efforts.



Figure 1. (taken from Thanh Nien) showing that the social network did not allow discussions of the Vietnamese name of the Spratly Islands (Hoang sa, 2012). [Text reads: ‘Sorry! Search has been disabled for violation of laws or inappropriate content. You may open another box or go back to the homepage’]

Similarly worded reports, with the same screen shot, appeared in *ictnews* on July 23, 2012, which the author described as: “This hidden risk in Baidu Tieba is a means of spreading misinformation and violating Vietnam’s sovereignty (My, 2012a).” The same test, with the same screenshot, was discussed on *Vietnam.net* on the same day. Intriguingly, when asked to provide evidence of the argument that Chinese names were allowed and Vietnamese names were not, the author of the original article could not provide the relevant screen shot, and later said that Baidu had changed its practices after his article had been published so that neither name could now be used – it simply banned discussion of the issue. This resulted in the same screenshot

captured in Figure 1 (Tri, 2014). Without direct evidence of the prioritisation of Chinese over Vietnamese names, it is arguably the case that Baidu was simply trying to avoid facilitating the discussion of controversial topics in general, rather than engaging in geopolitically-driven naming practices, despite the way the issue was framed in the reports discussed above.

(iii) TTplayer, Baidu, and Spyware

The third theme which emerged in reporting on Baidu in 2012 focused on Baidu's alleged installation of 'spyware' on users' computers. Such reports focused on TTplayer, Baidu's online music player, which requires users to download software to play music online. Several reports also referred to hao123.com.vn Baidu's web portal page. The service was launched on July 1, 2012 and the first report on TTplayer appeared on July 3, 2012, on ictnews.com. The same claims were made, with the same quotes from the same sources, on vietnamnet on July 9, 2012, and on July 8, 2012 and July 10, 2012 on *Tuoi Tre*. Excerpts appeared in *Thanh Nien* on July 22, 2012. Titled 'Can Baidu interfere with users' computers?' on ictnews.com, the original story outlined the fact that users who downloaded TTplayer automatically had an executive file installed into their computers. This file changed users' homepages to hao123.com.vn, Baidu's web portal page (My, 2012b).

The articles directly quoted representatives of the HVA and the CMC Infosec Security Research Team that warned users of the spyware danger of this file. The articles quoted the VHA representative as saying that TTPlayer contained a malicious file that "...was in fact a trojan, which secretly hides on the host computer and can automatically download more viruses or malicious files under the request of its creator via a remote connection...The infected computers are easily subject to remote control, information stealing, or becoming zombie computers in hackers' distributed denial-of-service (DDoS) attacks (Truong and Tri 2012b)." Similar claims were made in these articles about hao123, a web portal launched by Baidu with little fanfare some six months earlier.

Importantly, and despite the technical credentials of the commentators, TTplayer does not install spyware as outlined in the articles, although it certainly contains annoying adware. When asked about this disparity, a senior member of the VHA answered as follows: “The evidence about TT player and Hao123 is not real evidence. They just have automatic updates running in the background. They update from a Chinese server...it’s just adware”...“But we tell the media ‘Hey, this can infect your computer and we don’t know what it will do’...”“There is no evidence of some things, so when we want to banish Baidu we can’t use some of the evidence which is not strong enough. So we collect small amounts of evidence and wrap it up in the bigger research, and then the media exaggerates (Interview c, 2014).” In summary, members quoted in this article explicitly traded on fears in the community about Baidu’s links to Chinese internet sovereignty practices such as spying and hacking.

Analysing anti-Baidu reporting in 2012

The preceding analysis shows a significant spike in July 2012 for reports in the Vietnamese press that painted Baidu in a negative light. Importantly, these three themes are associated with the practices of Chinese ‘internet sovereignty,’ outlined in the first section of this paper. The first theme concerns Baidu’s failure to route Vietnamese traffic through Vietnamese servers, and falsely alleged that the company routes all Vietnamese traffic through Chinese servers. This theme links Baidu to Chinese territory in a particular way, suggesting that the way Chinese internet companies handle information is territorially bounded by the Chinese state: in this telling, Internet-borne data travels from Vietnam to within the borders of the Chinese state, literally interpreting the concept of ‘internet sovereignty.’ The second theme, which alleges that Baidu’s social network does not allow Vietnamese users to use Vietnamese terms to refer to contested territory in the South China Sea, links Baidu to contentious Chinese geopolitics. In doing so, these reports allege that Baidu engages in practices of Chinese ‘internet sovereignty’ outside China’s borders by shaping online discussion just as it might within China, but this time outside China, on non-Chinese users, and in support of China’s extraterritorial geopolitical goals. The third theme falsely alleges that Baidu’s products install malware that facilitates broadly defined ‘hacking’ activities. Security experts framed the issue as one of ‘remote control,’

alleging that those who control the trojan (presumably Baidu, a Chinese company in China) could influence the operation of users' computers in Vietnam in a nefarious manner reminiscent of the lack of control Chinese users have over their own computers. The commentary thus frames Baidu in Vietnam as an extension of a company with interests geographically located in China. Again, like the first theme, this theme suggests that the way Baidu handles information is linked to the territorial identity of the Chinese state. Once again, internet-borne data travels from Vietnam to within the borders of the Chinese state, resulting in literal 'internet sovereignty.' Although the supposed malware is not discussed in terms of international Chinese hacking practices (CitizenLab, 2014) or and the absence of privacy for Chinese internet users, these issues are implied in the discussion.

In 2014, when this research was conducted, anti-Chinese demonstrations and reporting of anti-Chinese sentiment were explicitly banned, whereas in 2012 they had not been. This meant that securing interviews with the journalists responsible for the above articles in order to ascertain the reasons behind both this spate of reporting and what appears to be misrepresentation of Baidu's products was largely impossible. However, interviews with two senior members of VHA¹¹, the hacking community quoted in four of the fifteen articles outlined above, suggest that the contributions of the respondents to these articles consciously frame Baidu as part of China's internet sovereignty. These answers elucidate the reasons for anti-Baidu sentiment within the Vietnamese technological community, sentiments reflected in the articles identified above.

When asked why they had consciously misrepresented Baidu's TTplayer as carrying malware, for example, two interviewees from the HVA responded with answers which clearly framed Baidu as a tool of Chinese 'internet sovereignty.' As one interviewee noted: "They [the Vietnamese government] want to do what China has done ... We don't want Chinese companies here because they will do what the government wants (Interview c, 2014)." Another explicitly

¹¹ The Vietnam Hackers' Association is Vietnam's oldest hacking community. In existence since 1997, in late 2014 it reportedly had close to 200,000 members, allegedly including some government members and journalists. Hacking was made illegal in Vietnam in late 2014, when the VHA was shut down, allegedly by government demands.

referred to Baidu's role in Chinese networked authoritarianism: "Chinese products always include censorship in their products because of the government ... The Chinese products in Vietnam are just the Chinese version translated into Vietnam (Interview e, 2014)." Another noted: "We see it [Baidu] as a way for the Chinese government to broadcast their views. Because we know how they control their own community (Interview c, 2014)."

These interviewees directly compared Chinese and US companies, saying that "It's better to use the Western product ... If it's Chinese it has the censorship engine. The government can use it, so we should ban them." Even when asked about the Snowden revelations, which suggested that American companies were also likely to act in their government's interests, interviewees demurred: "Yes, but the Americans would never just invade us. They would tell us first (Interview c, 2014).¹²" Here, interviewees add context to the content analysis by suggesting that they provided deliberately misleading commentary on Baidu because they link it to practices of Chinese 'internet sovereignty' which they do not want to see replicated in Vietnam, practices which they link to Chinese geopolitical aggression.¹³

The fact that the bulk of anti-Baidu reporting appears in the two newspapers with a clear profit model – *Thanh Nien* and *Tuoi Tre*—suggesting that the stories are profit generators: a judgment borne out by the interview with Ngo Minh Tri quoted above. This is supported by the observation that Baidu appears to have been caught up in a broader consumer backlash taking place against Chinese products in 2012. For example, a Facebook page founded on June 23, 2012 urges users to boycott *tradaquan*, and the page achieved over fifteen hundred likes—a not insignificant amount—within thirty days. Baidu Vietnam's Facebook page for *tradaquan*,

¹² Although beyond the concerns of this paper, this speaks to an interesting 'civilisational' valuation of information technology products, and one which is important in the context of fraught and ongoing geopolitical tensions between China and the US in Vietnam. As Wang and Ames (2010) argue, technological platforms embed values which are associated with approaches to information which draw on longstanding cultural and political values – they argue that Google, for example, embodies a 'post-Enlightenment' approach to information where Baidu and other platforms offer a Confucian approach.

¹³ In fact, these interviewees suggested that the HVA influenced anti-Baidu reporting by planting stories in the media via journalists who frequented their online forums. There is, of course, no way to check this assertion, but it is notable that the first articles which appeared under the first and second themes referred to claims arising from 'online IT forums'.

now deleted, reportedly failed to gain above five hundred likes (Various, 2012; Millward, 2014a). The anti-Baidu page associated Baidu products with a broader consumer boycott, including discussions of boycotts of Chinese fruit and vegetables and school textbooks printed in China. The page associated itself explicitly with broader geopolitical tensions around the South China Sea. For example, it lists itself as founded in 1948, when China first published the map of its extended claims in the South China Sea, and lists naval scuttles between China and Vietnam in the region in the 1970s and 1980s as ‘significant life events.’ Technology companies like Baidu are arguably more vulnerable than other Chinese companies to consumer boycotts. Chinese agricultural and industrial goods have a price advantage which other producers simply cannot match. In contrast, Chinese technology companies have no price advantage and have obvious competitors in Google, Facebook, and other products—consumers switching products incur no costs.

A simple content analysis, as has been undertaken here, makes no claims to causal inference. It does not prove that the reason Baidu failed is that the Vietnamese population associated it with Chinese practices of internet sovereignty. Instead, the analysis simply indicates a spike in anti-Baidu reporting that falsely links Baidu’s practices in Vietnam to nefarious practices associated with Chinese geopolitics and practices of Chinese internet sovereignty. This spike occurred in the context of larger anti-Chinese sentiment associated with Chinese adventurism in the South China Sea, and with rare governmental lenience on reporting of anti-Chinese sentiment and anti-Chinese protests. Given the structure of the Vietnamese media, we can assume state oversight of these media reports to some extent, and also, usefully, some popular appeal.

It is important to note that, outside of its association with anti-Chinese sentiment, Baidu’s performance in Vietnam may have been affected by other factors. First, Vietnam’s internet market is fragmented and the market is underdeveloped but dominated by Google (Do, 2014) (Lavrenko, 2014). This may explain why even Naver, the giant Korean search engine, decided not to compete in Vietnam, despite initial interest. At least one other senior tech executive in the region also suggested that Baidu simply did not employ good local staff and failed to spend

enough money on advertising (Interview f, 2014). Second, the government has an interest in the online market, with close links to VNG, the country's largest gaming and technology company, which some observers argue leads the government to actively stifle competition (Ngan, 2014). Indeed, ictnews, run by the Ministry of Information and Communications (MIC), not only ran the same stories as other media outlets as outlined above, but added one story of its own, which was not picked up by other outlets. On 6/7/2012, it ran a story reporting VNG as complaining about Baidu threatening the 'digital sovereignty of Vietnam' by not complying with government regulations (My, 2012c).

Ultimately, however, Baidu should have been the 'censor of choice' in Vietnam. As a Chinese company, it enjoys the benefits of strong governmental and trade relations between the two countries, and its practices in information control were likely to have been in demand by the Vietnamese government. But early 2014, Baidu-branded products no longer existed in Vietnam, and the company had stopped investing in Vietnamese language products. The company never employed more than twenty staff in Vietnam, never opened branded office space, and never launched its flagship search engine, despite having registered the appropriate domain name. The cause of this failure is difficult to determine unequivocally. What is clear is that media reporting in 2012 linked the company to Chinese geopolitical ambitions and to practices of Chinese 'internet sovereignty' at a time of great strain in China-Vietnam relations and in the context of associated boycotts of Chinese goods. The company itself recognized that it was subject to anti-Chinese sentiment driven by toxic geopolitics and that these associations directly affected the company's interests. As an anonymous 'high-placed' Baidu employee explained to BBC in late 2012: "The reason our product has not gained any success yet is because it was launched into Vietnam market in a very sensitive period when Vietnam-China relations were deteriorating...We are very surprised at the angry response of the Vietnamese Internet community towards our products...Baidu is considering whether we should keep going or not...The reason our product has not gained any success yet is because it was launched into Vietnam market in a very sensitive period when Vietnam-China relations were deteriorating (BBC, 2012b)."

Baidu has also been subject to anti-Chinese sentiment elsewhere. In Japan, where relations between the two countries have long been strained, recent allegations suggest that the company's products include forms of spyware (Japan Daily, 2014). Importantly, other Chinese technology companies are not immune: WeChat experienced a significant consumer backlash in Vietnam after it was discovered that maps accessed when users were in China showed a map of the SCS in China's favour (Millward, 2014b), and the Indian air force reportedly initially banned its pilots and their families from using phones by the Chinese phone company Xiaomei due to spying concerns (D'sa, 2014).¹⁴ Both of these examples are associated with significant geopolitical tensions between China and Japan and between China and India, respectively.

Conclusion

Scholarly research on the Chinese internet which attends to the social and political impact of search has so far focused on the complex relationship between Chinese technology companies and state demands (MacKinnon, 2010; Jiang, 2011, 2014; King, 2012). Such work broadens research on the role of the state in cyberspace, highlighting the bordered nature of cyberspace, in contrast to earlier ideas of the internet as a globalized and borderless space. This paper has shown that the relationship between the state and internet companies in China extends the concept of the state beyond physical borders, arguing that the 'state' is imbued in the corporate identities of Chinese internet companies as they expand abroad, despite these companies' statuses as private entities.¹⁵

¹⁴ The company denies these allegations and is planning to move its servers for non-Chinese users outside China to alleviate these concerns (D'Sa 2014).

¹⁵ On occasion, association with the Chinese state even outside Chinese borders is largely beyond Baidu's control. For example, Baidu recently established an office in Brazil, which was formally opened by Xi Jinping, who was in Sao Paulo to secure Brazil-China trade talks. As one of the giants of the Chinese internet industry, Baidu's expansion was lauded by Beijing at the Brazil launch and in state press as an example of Chinese soft power. State press reported the opening in distinctly geopolitical terms: 'If the Brazilian search market is not captured by China-led Baidu, it will be taken by US-led Google. From material to spiritual influence, Baidu's Brazil search is the triple jump for China's influence and for Chinese industries going abroad, and has great symbolic significance for both endeavours'. Such reporting also expounded unhelpfully on the link between Chinese government information control practices and Baidu's products. 'Everyone knows that search is the essence of information technology, and this technology is based on natural sequencing and crawler bots, but human intervention is an important and indispensable step. In determining search results, there are value judgements and tendentious interventions. It's fair to say that all search engines have a position and an orientation, regardless of whether this orientation is

The first section of this paper outlined the role of Chinese internet companies like Baidu in the practices of Chinese ‘internet sovereignty.’ It showed how Chinese controls on internet company infrastructure and finances keep such companies subject to significant government influence as long as the bulk of their market remains in China. However, it also showed that, at least in terms of official financing, there is no state support for Baidu’s international expansion. The second section of this paper showed that Baidu has failed to gain any market share in Vietnam, a market in which it might reasonably be expected to excel. This section finds that, even in the absence of any clear links to the Chinese state, the company is subject to popular depictions in the Vietnamese press as an agent of the Chinese state in terms of both internet sovereignty practices and the role of information in broader geopolitics. This finding cannot determine the ultimate cause of Baidu’s failure in Vietnam, though at least one quote from an anonymous Baidu official to the BBC suggests that anti-Chinese sentiment certainly played a part in this failure.

Whatever its causal veracity, this finding has clear implications for those policy actors who seek to predict the effects of the international expansion of Chinese technology companies. Quite apart from evidence gathered elsewhere which suggests that Baidu *is* progressing the information control goals of the Chinese state outside Chinese borders (Fei Chang Dao, 2014), this study suggests that the market impact of such companies is potentially limited by negative public perceptions of the Chinese state and Chinese technology companies. These perceptions may be linked to public understandings in those markets of the link between Chinese government and Chinese information technology companies within Chinese borders, and may also be linked to broader perceptions of Chinese geopolitics held by government actors and the wider public which go beyond any appeal Baidu’s practices in China may hold for other

conscious or not: impacts from business, culture or politics are natural ... Baidu in Brazil will bring Chinese-style influence to Brazilian netizens and Brazil as a whole’ (Hexun, 2014). Such reports suggest that for the state, at least, Baidu is also closely associated with Chinese geopolitical goals and ‘internet sovereignty’ even outside the state, although no such reporting exists in Vietnam and although, as described, Baidu likely receives little concrete assistance from the state in its international expansion and operates entirely as a private actor.

authoritarian states. This effect may be particularly acute in markets already dominated by Google, which offers a stark alternative, and where the government lacks the ability to control the market absolutely. For Chinese technology companies outside China, then, the failures of Chinese soft power in a range of fields-including the ways it manages the informational rights of its own citizens-may prove influential.

This study extends existing work on the role of search engines and other technology platforms in 'national information shaping strategies' (Diebert and Rohozinski, 2010, 6) by analyzing the impact of such strategies outside national borders. It shows that such platforms are not only socially and culturally embedded, but geopolitically embedded as well. The geopolitics of tech is an emerging issue, hinted at by a body of work on the geopolitics of internet governance (see Mueller 2010 and Wagner 2011). However, there is limited research on the geopolitics of internet technology companies rather than on the internet infrastructure itself. This paper demonstrates that the expansion of Chinese internet companies suggests a fruitful research agenda on the geopolitical implications and associations of internet technology companies. This agenda extends beyond Chinese companies. For example, the Snowden revelations have shown that Western companies, particularly those associated with the United States, can also be associated with geopolitical goals. This association is arguably strengthened, in retrospect, within the context of US internet freedom agendas. Indeed, the limited existing body of work on the geopolitics of technology companies has so far focused on the link between US internet policy and US foreign policy (Carr 2013, McCarthy 2010).

Baidu's failure in Vietnam shows that internet platforms have or are perceived by publics to have geopolitical implications. It also shows that, in this instance, the state is defined by its information practices as much as by its territory. Here, Baidu's association with the practices of Chinese internet sovereignty means the company itself and its approach to information are bounded, even in the borderless plains of cyberspace beyond the Great Firewall.

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