The Role of China's Patriotic Hackers andTheir Relationship to the Government

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Abstract

China is one of countries around the world known for the use of patriotic hackers who conduct many cyber-attacks. Patriotic hackers tend to be linked to nationalist movements or work for the government. For example, when ethnic Chinese were blamed for violent riots in Indonesia in 1998, Chinese patriotic hackers attacked Indonesian government websites in protest. Patriotic hackers also blocked CNN's website during Beijing Olympics in 2008 because it reported protests in Tibet and reported bad news about China as Olympic host. They also attacked Vietnamese websites reporting conflict with China in 2014. China's patriotic hackers struggle to control how China is represented in the cyber sphere and Chinese authorities condone their actions. There are many benefits that the government gains from patriotic hackers and it is possible that the government sponsors their actions. But there are also risks for the government. This paper assesses the role of china's patriotic hackers.hackers.

Keywords: *China patriotic hacker, cyber, China government*

Introduction

China has many hackers. According to Perlroth, the majority of cyber-attacks originate in china.[1] In 2001 china's hackers had broken the US government's network, stealing companies' intellectual property and infiltrating US military information system in big numbers.[2] Wark argues hackers might associate with 'folk devils on the internet, they are people who tend to interrupt service, steal companies fund and information, and crack the internet system, and so on.[3] However, hacker's objectives to hack a system are not always to steal the data and rob and broke the system. Some of them can hack to raise other issues such as nationalism. For example, in 1998 China's hackers defaced Indonesian government websites to deliver message stop killing Chinese in Indonesia during 1998 riots.[4] Hackers who are motivated by nationalism are known as patriotic hackers. Dinnis defines patriotic hackers as individuals and groups motivated by nationalistic and political aims –but no evident link them to the administration and government.[5]

China has powerful patriotic hackers groups working on the internet to raise nationalist issues. Capaccio argues that China's hackers are the most threating actors in cyber space.[6] There are some reasons why China's patriotic hacker are threating. First, they conduct their action in big numbers so they can attack many websites in well organized and coordinated.[7] For example When China's hacker attacked US government networks in 2001, some hackers gathering information about target websites to attack, some others released in news media to expand the phenomena, and the rest coordinated operating schedule and attacked the website.[8] Usually their targets are government websites, since government websites are affiliated with

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[1] Perlroth, N. 2013. Hackers in China Attacked The Times for Last 4 Months. *New York Times*, 01/31/2013 Jan 31. Available online http://www.nytimes.com/2013/01/31/technology/Chinese-hackers-infiltrate-new-york-times-computers.html?pagewanted=all&_r=0, accessed, 28 October, 2014

[2] Segal, A. 2012. Chinese computer games: keeping safe in cyberspace. *Foreign Affairs*.91.p.14

[3] Wark, M.2003.Hackers. *Theory, Culture & Society*, 23, p.321.

[4] Wu, X.2007.*Chinese Cyber Nationalism: Evolution, Characteristics, and Implications,* New York, Lexington Books. p.41.

[5] Dinniss, H. H. 2013.Participants in Conflict –Cyber Warriors, Patriotic Hackers And The Laws Of War. *In:* Saxon, D. (Ed.) *International Humanitarian Law and the Changing Technology of War.* Boston: Martinus Nijhoff Publishers.P.251

[6] Capaccio,Tony, China Most Threatening Cyberspace Force, U.S. Panel Says, Nov 6, 2012. Available online at http://www.bloomberg.com/news/2012-11-05/china-most-threatening-cyberspace-force-u-s-panel-says.html, accessed in 28 october 2014

[7] Wu, *Chinese Cyber Nationalism: Evolution, Characteristics, and Implications*.p.35.

[8] Volland, N. 2008. Chinese Cyber Nationalism: Evolution, Characteristics, and Implications. *The China Journal,*p.192

each other; broking one website can impact several websites. Second, some of their actions, primarily in defacement, use Chinese language, which means that it is quite difficult to repair the system without understanding Chinese encrypt code.[9] Moreover, what make China's patriotic hacker different and better than other countries' hacker such as US is they proud to be patriotic hacker, so, they do not care if the authorities caught them, whether China authorities or others.[10]

China's patriotic hacker tend to be involved in nationalist campaigns that serve china. Most react when China is criticized by other countries or threat China nationality. For example, in 1999 China's patriotic hackers hacked and defaced 10 Taiwanese government websites and posted the message, "there is only one China in the world and the world only need one China"[11] to show Chinese nationalism. In that action, the hackers crossed Taiwan's national flag and appeared China's national flag.[12] Moreover, Wu in his research who interviewed a China's hackers who deny to open his identity states that its campaign was to "safeguard national unity, protect China national sovereignty, resist foreign bullies, and deflate anti-China arrogance".[13] Patriotic hacker's motto is "We are ready to devote anything to our motherland, including our lives.[14] This motto was promoted by Wan Tao, the founder of China Eagle Union in 1997, one of the oldest patriotic hackers group in China to obtain respond from China's youth to join patriotic hackers to show their nationalist feeling in China. At this time they see themselves patriotic hackers or honker were not only hackers but patriot who intend to promote nationalistic cause.[15]

China's patriotic hackers emerged in 1998 during the Indonesia riots. At the time, Indonesian's were against ethnic Chinese

[9] Hassid,Jonathan,2013.Cyber-nationalism in China: challenging western media portrayals of censorship in China, Continuum: Journal of Media & Cultural Studies, 27:6,p.938

[10] The economist report, Masters of the cyber-universe China's state-sponsored hackers are ubiquitous—and totally unabashed, 6 April 2013, Available online at http://www.economist.com/news/special-report/21574636-chinas-state-sponsored-hackers-are-ubiquitousand-totally-unabashed-masters, accessed, 28 October, 2014

[11] Rawnsley, G. D. 2005, Old wine in new bottles: China–Taiwan computer-based 'information warfare' and propaganda. International Affairs, 81,p.1071

[12] Chang, Y.-C. Cyber Conflict between Taiwan and China. Strategic Insights, 10, 2011,P.28,

[13] Wu,Chinese Cyber Nationalism: Evolution, Characteristics, and Implications, p.70

[14] Smith 2001 in Kshetri, N, The Global Cybercrime Industry Economic, Institutional And Strategic Perspective, , Springer, New York, 2010, p. 152

[15] Friedman,E.1997,Chinese Nationalism, Taiwan Autonomy and The Prospects Of A Larger War. Journal Of Contemporary China, 6, 1997.P.14

because their assumption was that the Chinese caused the economic crisis at the time. In response, many hacker groups in China attacked Indonesian government websites in the form of website defacements, distribution denial of service (DDoS) attacks of websites, and malware attacks.[16]

Further, patriotic hackers are citizens, but they can work like military operatives for cyber spies to provide information needed by their country and see their work as helping the country to deal with political issues as military issues.[17] Chinese patriotic hackers also have unique relations with government. Although they are independent and there is no strong evidence that the government backs them like they do the military's cyber warfare units, government back up or sponsorship cannot be denied, because patriotic hackers serve government interests.[18] However, Chinese government denies that they are sponsoring the hackers. Chinese government said they have no affiliation

with any hacker.[19] Their actions are pure the hackers' action without government intervention. For instance, recently in 2014 when i-cloud in China were targeted cyber-attacks, China authorities deny their involvement in this action although some cyber security experts such as Alan Woodward[20] believes the government do so because the attacks are hosted from servers (servers where i-cloud located in China) to which only the government and state-run telecommunications companies have access on it.[21] However, Hua Chunying, a spokeswoman for China's foreign ministry, said that the government "resolutely opposed" to hacking.[22]

This paper examines the role of China's patriotic hackers in assisting authorities in the cyber sphere. How they act and indirect government support. This essay argues that there is a possibility that China's government backs the activities of the patriotic hackers though it cannot be

[16]Denning, D. E.2011,Cyber Conflict as an Emergent Social Phenomena. *In:* Jhonston, L. (Ed.) *Corporate Hacking And Technology-Driven Crime: Social Dynamics And Implications,* : Igi Global, Pennsylvania,p. 176

[17] Kshetri, N.2005, Pattern of Global Cyber War and Crime: A Conceptual Framework. *Journal of International Management,* 11.P.30

[18] Browdie, B. 2013. Chinese Hackers Renew Attacks On U.S. Targets: Report. *American Banker*, 05/21/2013 May 21.

[19] The economist report, Masters of the cyber-universe China's state-sponsored hackers are ubiquitous—and totally unabashed

[20] A security researcher from the University of Surrey

[21] Mozur, P., Perlroth, N. & Chen, B. X. 2014. *Apple's Icloud Storage Service Is Aim of Attack in China* [Online]. New York Times. Available: Http://Www.Nytimes.Com/2014/10/22/Technology/China-Attack-Aims-At-Apple-Icloud-Storage-Service.Html?_R=0 [Accessed 28 October 2014].

[22] Bbc news, China denies backing iCloud hack, 21 October 2014, http://www.bbc.com/news/technology-29704371 accessed on 28 October, 2014

demonstrated conclusively, because the government can benefit from their actions.

Who are China's patriotic hackers?

Patriotic hackers are citizens or groups within a nation joining together to carry out cyber-attacks on perceived enemies who pose a threat to a state's strategic interests with nationalism objectives.[23] China's patriotic hackers tend to be young people, often university students but are not limited to these groups, such as China Eagle Union' member's age is from 20 to 27.[24] Cyber-attacks conducted by these hackers focus on promoting nationalism and emphasizes the public nature of the effect. In order words, they want to raise public attention to China's nationalism.[25] So, people will not take China for granted and will not see China as less powerful.

The high number of hackers in China does not mean that all of them are patriotic hackers. This is important to note that not all hackers are interested in politics and nationalism. According to Chu Tianbi in Henderson (2007)[26], there are three types of hackers in China: 'Red hackers,' known as *honke,* who are interested in political and nationalistic matters. 'Blue hackers' are interested in internet security and technology and other technical matters such as building systems, creating cyber-tools and others. 'Black hackers' are interested in cracking, cyber theft and so on. So, which count as patriotic hacker? According to Verma, patriotic hackers in China is red hackers, it is named red hackers to show its nationalism as China is red.[27] In addition, most of attacks in term of patriotism and nationalism are conducted by red hacker's alliances. Its alliance are Chinese eagle union, green army, cnhonker, blue sky eye, and others.[28] But it cannot be said that other types of hackers act against their own regime and do not interest in social or political issue, they might involve in hactivism. 'Hactivism'[29] can be pro or anti-government actions.[30]

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[23] Singer, P. W. & Friedman, A. 2014. *Cybersecurity And Cyberwar : What Everyone Needs To Know* New York, Oxford University Press, 2014.p.113

[24] Kshetri, N.Pattern of Global Cyber War and Crime.P.30

[25] Gutmann, E.2010,Hacker Nation: China's Cyber Assault. *World Affairs,* 173,p.74

[26] Henderson, S. J,2007,*The Dark Visitor: Inside The World Of Chinese Hackers,* Lulu.Com, Illinois, p. 25

[27] Verma, B.2013,*Threat From China,* United States, Lancer Publisher.P.328

[28] Lerer, L. 2010. *China's `Patriotic Hackers' Attack U.S. Sites Including Google, Nyt Says* [Online]. Bloomberg. Available: Http://Www.Bloomberg.Com/News/2010-12-05/Chinese-Patriotic-Hackers-Hit-Google-U-S-Sites-New-York-Times-Reports.Html#Disqus_Thread [Accessed 5 August 2014 2014].

[29] Hacktivism firstly emergence since a loose knit group of politically motivated hackers called "Anonymous" launched a series of high profile cyber-attacks against companies who had cut off services to

Hactivism combines activist and hack. Hactivism is an activity about to deliver message about political or social purpose such as human rights, freedom of speech and others through hacking heavy traffic media in cyber sphere to catch public attention.[31] This action do not consider the targeting websites, government websites or not. As long as the websites or media platform have heavy traffic and often visited by internet user, it will be their target.[32] Having said that, patriotic hacker is the actor and hactivism is one of their actions. However, not all of patriotic hackers' action are hactivism because sometimes hactivism action can be protest to government.[33] While patriotic hackers tend to save image of their country in the world especially in cyber sphere. If we see it from the country attacked, the patriotic hackers' action is hactivism. For example, Chinese see their hackers hacked Indonesian government websites as patriotic action, while Indonesian see the action as hactivism.[34]

This case is same as when Hong Kong blonde hacked China's government website in 1999 to raise public attention about human rights as their protest about Tianmen tragedy in 1989 who killed many of Hong Kong blonde member's relatives.[35] Another case when Anonymous attacked China's government website as protest about censorship to raise issue about freedom to speech.[36] This action was categorized as hactivism because they use hacking method to raise political or social issue in this case is human right.

Wikileaks due to the intense pressure from the US government

Yip, M. & Webber,C,2011.Hacktivism: a Theoretical and Empirical Exploration of China's Cyber Warriors. In, ACM WebSci '11, Koblenz, Germany, 14 - 17 Jun 2011. *web science*. Koblenz, germany: acm web sci. P. 3

[30] Krapp, P. 2005,Terror and Play, or What Was Hacktivism? *Grey Room*,10.p.77.

[31] Ventre, D. 2014,Discourse regarding china: cyberspace and cybersecurity. *Chinese cybersecurity and Cyber defense*. London: Wiley.p.221

[32] Krapp, P. Terror and Play, or What Was Hacktivism? p.78

[33] Samuel, A. W. 2004,*Hacktivism and the Future of Political Participation*. doctoral, hardvard university.p.51

[34] Wu, *Chinese Cyber Nationalism:* p.50

[35] Samuel, A. W. *Hacktivism And The Future Of Political Participation.* P.105.
to read about the news who tell about Hong Kong blonde hacked Chinese government and some multinational cooperations operate in China can be read in
Lobaido, C Anthony, 1999, The Beijing hack attackHong Kong-based cyber warriors build anti-China techno army, 12/16/1999 WND newspaper. Available online at http://www.wnd.com/1999/12/3914/#ISaPzf7Y5jU6P4V8.99 accesed 28 october 2014

[36] Hill,Suzanna, International hacking group Anonymous attacks official Government sites in China in protest at the country's internet censorship, 6 April 2012,
Read more:
http://www.dailymail.co.uk/news/article-2125683/International-hacking-group-Anonymous-attacks-official-Government-sites-China-protest-countrys-internet-censorship.html#ixzz3HyPUVXQc, accessed 28 october 2014.

The first China's patriotic hacker's generation were Honker Union of China, Green Army, and China Eagle Union which attacked Indonesian government website in 1998.[37] They were red hackers' alliances.[38] However, some of these groups such as China Eagle Union had closed the group in 2005. This group then change its name and now known as China Will.[39] China Honker union then replaced its name to cnhonker.[40]

After 1998, Chinese patriotic hackers actively attack other countries to control China's representation in the cyber sphere and many groups emerge such as China Will[41], cnhonker[42], and so on. Their targets are political institutions with cyber accounts such as government websites, government mailboxes, activist's websites, and others. For example, in 1999 Chinese patriotic hackers attacked US websites as an action for bombing China embassy in Belgrade.[43] In 2000, they attacked

Japanese government websites due to Japan's historical accounting for the Nanjing massacre[44] and attacked Taiwan's government websites because of Taiwan election in the same year.[45] They also attacked the white house website after the Hainan island spy plane incident in 2001,[46] and the CNN website over its coverage of the Beijing Olympics[47] in 2008. In 2009 patriotic hackers attacked Melbourne festival film website as protest about to screen a documentary about the exiled Uighur leader, Rebiya Kadeer.[48] As a result, no more tickets could be sold because of attacked.[49]In 2014, they hacked many Vietnamese official websites due to border dispute between these countries.[50]

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[37] Wu, *Chinese Cyber Nationalism: Evolution, Characteristics, and Implications*,p.48

[38] Denning,p.176

[39] China eagle union is the former of china will. Now they use the same domain. If we search in Internet the China Eagle Union, it will directly link to china will. I open chinaeagle.org as official website of China eagle union, but I enter to chinawill websites http://www.chinawill.com

[40] Wu, *Chinese Cyber Nationalism: Evolution, Characteristics, and Implications,* p.173

[41] Chinawill.com

[42] Cnhonker.com

[43] Segal, A,'Chinese Computer Games Keeping Safe In Cyberspace.p. 15.

[44] Henderson, *The Dark Visitor: Inside the World of Chinese Hackers*.p.22

[45] Denning, p.179

[46] Valigra, I, 'china-u.s. Aircraft collision incident of april 2001: assessments and policy implications', congressional research service, 2001, p. 21

[47] Kshetri, N. *The Global Cybercrime Industry Economic, Institutional and Strategic Perspective*, p.45

[48] Tran,Mark, 2009,Chinese hack Melbourne film festival site to protest at Uighur documentary the guardian, Sunday 26 July 2009, available online at http://www.theguardian.com/world/2009/jul/26/rebiya-kadeer-melbourne-film-china, accessed 28 october 2014

[49] Levin, D. 2013. *Film Festival in the Cross Hairs* [Online]. Available: http://www.nytimes.com/2009/08/10/movies/10festival.html?pagewanted=all&_r=0 Accessed 20 september 2013.

[50] Thanh Luan, Chinese hack some 750 Vietnamese websites in a week, Saturday, September 06, 2014, http://www.thanhniennews.com/tech/Chinese-hack-some-750-vietnamese-

The China's patriotic hackers attacked at least 745 Vietnamese's websites.[51] More than 200 Vietnamese websites have been defaced with Chinese flags and hacker messages in Chinese, while the rest attacked by malware so the homepage cannot be accessed.[52] They attacked government and education websites (gov.vn and edu.vn), for example foreign ministry's translation center[53] and leave flags and hacker messages in Chinese language.

There are several common types of attacks used by patriotic hackers, such as distributed denial of service attacks (DDoS), malware attack, and web defacements.[54] DDoS attacks computer systems seen as unavailable for user. This method causes web pages only to display messages from the attacker so the user cannot access other menus in the system.

As a result, the user can no longer use the website, until the administrator resets the system to default and removes the hacked messages.[55] Website defacement attacks cause wrong information from website to appear, or change the content. Users still can open the web page normally but the information provided is wrong. For example, during Melbourne film festival in 2009,[56] China's patriotic hackers used both the DDoS and web defacement methods.[57] The website selling ticket stated that no more tickets were available, even though there were many tickets left[58] but users could only access the wrong information. The official website for the film festival was attacked by web defacement so only hacker messages and china's flag appeared on web pages.[59] The malware attack is the

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websites-in-a-week-30791.html, accessed, 28 October, 2014

[51] Tuoi Tre, 2014, Chinese hackers attack 745 Vietnam websites in a week: report tuoitrenew Vietnam.http://tuoitrenews.vn/business/22202/Chinese-hackers-attack-745-vietnam-websites-in-a-week-report accessed, 28 october 2014

[52] Vietnam net,Chinese hackers infiltrate Vietnamese websites,http://english.vietnamnet.vn/fms/science-it/111353/Chinese-hackers-infiltrate-vietnamese-websites.html, accessed, 28 october 2014

[53] Martin, R, 2014, Hundreds of vietnamese Websites Hacked After Island Dispute With China, https://www.techinasia.com/vietnam-china-hack/ accessed, 28 october 2014

[54] Denning,P.176

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[55] Kshetri, N.Pattern of Global Cyber War And Crime: A Conceptual Framework. P.33

[56] Tran Mark, Chinese hack Melbourne film festival site to protest at Uighur documentary

[57] Alexander Klimburg,Mobilising Cyber Power, Survival: Global Politics and Strategy, 53:1,2011.p. 47

[58] The australian, Hack attack hits Melbourne Film Festival,August 01, 2009, http://www.theaustralian.com.au/news/latest-news/hack-attack-hits-melbourne-film-festival/story-fn3dxity-1225757001240?nk=9131650f7054fa405a22bb7f4a47de0d,accesed 28 october 2014

[59] Simon Leo Brown, 10 Conditions of Love screens at Melbourne International Film Festival, abc net,27 July, 2009, http://www.abc.net.au/local/stories/2009/07/27/2637583.htm, accessed, 28 october 2014, see appendix about the image Melbourne film festival had been hacked.

more dangerous attack.[60] It collects personal information from websites, transfers it to the hacker, then corrupts and destroys the data. The advantage of this system is that besides damaging the data, the hacker gains the information they need.

Patriotic hackers can cause big impacts if they attack or spy on government personal email boxes or particularly sensitive information from governments with malware attacks. This type of spy though will not cause damage in short term can give serious impact in the future.[61] For example such as hackers can change the personal information of the target but the target does not realize. Usually this job is part of military hackers.[62] However, such as this case when China's patriotic hackers hack for this purpose indicate that, Chinese citizens are also involved in national security that commonly handled by military officials.[63]

The question arises as to why China's youth is inspired to be patriotic hackers? Why do they feel inclined to use the internet to struggle for Chinese nationalism? Strong nationalist sentiment cannot be denied as their primary motivation. This can be seen from one of patriotic hacker's web page, which stated that: "I solemnly swear to put the interests of the Chinese nation above everything else. I am willing to do everything in my power to make the Chinese nation rise up"[64] Wan Tao the former of China Eagle Union in one of interview with a media stated his motivation to be patriotic hackers because he thought Chinese nation is a great nation and need to be powerful and not so weak.[65] This indicates that China's patriotic hacker want to see China as the power in the world and they try to realize it through their skill in cyber.

However, we cannot deny other motivations as less important. Financial issue could also be their motivation, as the hackers have the potential to make money from attacks they undertake when hired by a company or from government. Wong

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[60] Brodsky, J. 2011. Control Systems Security. *In:* Jhonston, L. (Ed.) *Corporate Hacking and Technology-Driven Crime: Social Dynamics And Implications.* Pennsylvania: Igi Global. p.183

[61] Grunwald, G. L. 2008. *China's Pursuit for World Power Status: Is the Transformation of the People's Liberation Army a Threat to the United States Global Interest and Security?* Master United States Marine Corps Command And Staff College,p.39

[62] Yuxiao, L.2012.China and Cyber security: Political, Economic, and Strategic Dimensions. *In:* Team, S. O. I. O. T. C. (Ed.). San Diego: University Of California.p.52

[63] Henderson, S. 2008. Beijing's Rising Hacker Star How Does Mother China React? *Iosphere,* 4**,** p.27

[64] Henderson, Beijing's Rising Hacker Star How Does Mother China React? p. 32

[65] Chinese-based hacking proving pervasive, presents opportunities for diplomacy,PRI's The World http://www.pri.org/stories/2012-04-21/Chinese-based-hacking-proving-pervasive-presents-opportunities-diplomacy

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states that hackers can earn generous salaries by practicing their skills about cyber security to companies providing network defense services or to the government, state-owned enterprises and private companies. Moreover, from one of the author resource who use v8 as his name states that "I have personally provided services to the People's Liberation Army, the ministry of public security and the ministry of state security, but government jobs are usually not well paying or prestigious, and most skilled hackers prefer working for security companies that have cyber defense contracts.[66]

Another motivation is that hacking tests their skills, how far they can go, and increases prestige, and even fame, especially if the hack is sophisticated and spectacular. Moreover, pride can be motivation for hacking. Chinese youth see patriotic hackers as heroes of the nation who save China's image in front of the world and patriotic hackers are proud to call them self so. Liu Qing, a former of Chinese patriotic hacker who joined Lion a patriotic hacker group, who is entrepreneur recently, states that, "I am proud to have participated in a patriotic cyber war back

then"[67] He was so excited be a hacker because he show his senior in patriotic hackers as people who save China's nation in the world. Further he states that "we were so angry and decided to fight back because many China websites suffered attack from US attacker. We were united by the patriotic impulse. We believed we were defending ourselves on the principle that the Chinese would not be bullied, "this is the spirit of Chinese honkers"[68] Furthermore, Wu conducted a survey in 2001 and asked his respondent about their opinion about patriotic hackers, 80% from 197,284 respondents state that they agreed with patriotic hacker's action and enhanced their national sprit.[69]

To give an indication that patriotic hacker do cyber-attack on behalf of nationalism can be seen from every message they left on websites they have been attacked. For example in 1999 during the Indonesian riots the hacker leaved message "stop

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[66] Wong, E. 2013. Hackers Find China Is Land Of Opportunity. *New York Times*, 05/23/2013 May 23.

[67] Chinese-based hacking proving pervasive, presents opportunities for diplomacy,PRI's The World http://www.pri.org/stories/2012-04-21/Chinese-based-hacking-proving-pervasive-presents-opportunities-diplomacy

[68] Nan,wu, From hackers to entrepreneurs: The Sino-US cyberwar veterans going straight, Wednesday, 21 August, 2013, http://www.scmp.com/news/china/article/1298200/hackers-entrepreneurs-sino-us-cyberwar-veterans-going-straight

[69] Wu, X. *Chinese Cyber Nationalism: Evolution, Characteristics, and Implications*.p.70

killing Chinese"[70] the hackers wrote: "there is only one China in the world and the world only needs one China[71]" when attacking Taiwan's government websites in response to the concept of Taiwan as a separate nation state, independent of mainland China. According to Henderson "the alliance is comprised completely of fervent patriotic Chinese net worms"[72] in attacking Japanese websites in reaction to the denial of the Nanjing massacre. Further, when attacking Taiwan's websites, patriotic hackers crossed out Taiwan's national flag and replaced it with china's flag.

Patriotic Hacker and Government

There is no strong evidence that China's patriotic hackers are part of the government or work for it officially. They are an independent and disparate group dedicated to the defense of China against cyber threats for national pride reasons.[73] So, why do China's patriotic hackers, as citizens, involve themselves in state business, such as defending the nation, attacking government websites, and providing information needed by the

government? To begin with, according to Henderson, there is some indication of patriotic hacker affiliation with the government.[74] China's government views their citizens as integral part of national power and primary component in national security.[75] This does not separate citizen action from the state's defense of the national interest. This is stated in PLA strategic doctrine of future wars that civilian and military will work side by side in peace or war time to support the nation in political, economic, technical, culture, moral means for their country. [76] This is the indication that China's citizens think that they are part of the nation and are available to defend the nation whenever

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[70] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* p.19

[71] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* p.20

[72] Henderson, S. 2008. Beijing's Rising Hacker Star How Does Mother China React? *Iosphere,* 4**,** p.28

[73] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* p.102

[74] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* p.102

[75] Peng Guangqian, Yao Youzhi, 2005,The Science of Military Strategy, Military Publishing House; Academy of Military Science of the Chinese People's Liberation Army, p. 455

[76] Quted from Qiang in his book state about PLA strategic doctrine; "In the high-tech local war which we will face in the future, the role of the masses as the main body of the war is embodied by the country. The great power of the people's war is released through comprehensive national power, the combination of peace time and war time, the combinations of the military and the civilian, and the combination of war actions and non-war actions. Besides the direct participation and cooperation with the army's operations in the region where war happens, the masses will support the war mainly by political, economic, technical, cultural and moral means.
Qiang, P. G. 2012. The Twenty First Century War; Chinese Perspectives. *In:* Lindleyfrench, J. & Boyer, Y. (Eds.) *The Oxford Handbook Of War.* New York: Oup Oxford.2012.P.297,

the government needs them.[77]Therefore, the Chinese government can mobilize its citizen, in this case China's patriotic hackers, for political purposes or other objectives. According to Henderson, patriotic hackers,[78] for example, in 2001 after the Hainan island incident, the Chinese government was angry and encouraged red hackers to release a 'letter of sorrow,' [79]

The PLA also sees the patriotic hackers as an important part in China's cyber warfare strategy. According to Si, a patriotic hacker also served in the PLA's cyber warfare units such as the patriotic hackers do cyber spying or other actions.[80] Recently, the Chinese government has expanded the PLA's cyber capabilities. The Dongshan district militia base is a good example in this case. In 2003, Dongshan district in Guangzhou province is one of China's major centers for science and technology with major research and development centers in information technology, satellites, and data and microwave communications, transformed into a militia information warfare battalion.[81] Here the PLA works side by side with civilians so this military unit 61298 can learn how improve their cyber capabilities.[82] In doing so, PLA corporates with computer savvy citizens, engineering schools such as from Shanghai Jiaotong University[83] to recruit patriotic hackers or programmers to be part of them but do not count them as army.[84] To recruit student who wants to join this activity, sometimes several universities publish public recruitment notices on their websites. [85]

Another example is the claim by Chang Wei, [86] a civilian that he works for the ministry of information technology and telecommunications industries. His tasks are breaking the computer codes of foreign companies and governments. He said that there are many people like him work in this service and call them self as "internet warrior". From this job he can earn $52

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[77] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* P.101

[78] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* p. 102

[79] Singer, P. W. & Friedman, A. 2014. *Cybersecurity And Cyberwar : What Everyone Needs To Know* p.113

[80] Si, C. 2011. *The Threat Of China's Patriotic Hacker Army Thinking About China Opinion* [Online]. The Epoch Times Available:Http://Www.Theepochtimes.Com /N2/Opinion/The-Threat-Of-Chinas-Patriotic-Hacker-Army-60695-Page-2.Html [Accessed 5 August 2014 2014].

[81] Henderson,*The Dark Visitor: Inside The World Of Chinese Hackers.* p.117

[82] Singer, P. W. & Friedman, A. 2014. *Cybersecurity And Cyberwar : What Everyone Needs To Know* p.114

[83] *AFP,* Papers link top China university to army 'hacking' unit, March 25, 2013, the Australian, available at http://www.theaustralian.com.au/higher-education/papers-link-top-china-university-to-army-hacking-unit/story-e6frgcjx-1226605148894

[84] Qiang,P, Yao Youzhi,2005,The Science of Military Strategy, p. 450

[85] Singer, P. W. & Friedman, A. 2014. *Cybersecurity And Cyberwar : What Everyone Needs To Know* p.142

[86] Henderson, 2008, Beijing's Rising Hacker Star How Does Mother China React? p.116

per month. Government also provides training and requests what kind of information they have to obtain from this service.[87]

These examples suggest that the Chinese government is behind the patriotic hacker's actions, asking them to do undertake several tasks, though they are not officially part of government. This is obviously easier diplomatically for the government than doing it directly and being exposed. It helps keep the image of the Chinese clean China in the eyes of the international community, or at least that is the political intention. However, Singer argues that it is impossible to identify any government institution or agency engaged in cyber warfare, whether cyber-attacks or to collect data from other countries and their militaries.[88] The country doing cyber-attack and collect data from other countries will give bad impression in international.

Even though the government can mobilize patriotic hackers, this is not be easy to number of the members. In 2001 Honker Union of China's member were 80,000 regular member which are consisted of many teams.[89] This is also impossible to communicate with them one by one, and there is likelihood that one hacker group cannot work with other groups together.[90] Obviously, China authorities need to communicate with the hackers groups to either initiate or cease cyber-attacks. Usually, the government communicates with patriotic hackers through its leader and chooses the strongest patriotic hacker group at the time. Henderson states that, while the Chinese government think the action is enough, the state uses media to signal patriotic hackers stop their actions.[91] For example on 15 august 2001, Wan Tao, the leader of China Eagle Union, announced a temporary termination of attacks on foreign enemy websites. Wan states this was based on instructions from government departments.[92] In his paper, Henderson argues that from 2001 to 2005, the government gradually developed more sophisticated and expansive methods for communicating with its patriotic hackers, while before they can use newspaper but shifted to cell phone and email as a

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[87] Dinniss, H. H. 2013. Participants in Conflict –Cyber Warriors, Patriotic Hackers and the Laws of War. *In:* Saxon, D. (Ed.) *International Humanitarian Law and the Changing Technology of War.* Boston: Martinus Nijhoff Publishers.2013.p.262

[88] Singer, P. W. & Friedman, A. 2014. *Cybersecurity And Cyberwar : What Everyone Needs To Know*,p.74

[89] Wu, *Chinese Cyber Nationalism: Evolution, Characteristics, and Implications*.p.179

[90] Wu, *Chinese Cyber Nationalism: Evolution, Characteristics, and Implications*.p.175

[91] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* p.118

[92] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* p.119

younger generation that felt more at home on the computer.[93]

Although the authorities in Beijing issued notices to stop the cyber-attacks, there is no evidence that they make any effort to shut down patriotic hacker groups. Thus, to summarize, the government gains much from the patriotic hackers, and little damage is done to the government which can plausibly deny that it is not involved in or sanction hacking.

However, there are risks allowing groups not connected officially with government agencies to do the government's work, especially tracing useful information. There is also the risk that hackers will gain access to sensitive information on Chinese government and company websites and sell the information to other parties. There are both advantages and disadvantages of patriotic hackers cooperating with. Further research need to be examined in this area.

Conclusion

One of China's strategy in cyber warfare is using patriotic hacker. Patriotic hackers form a group within a state joining together to carry out cyber-attacks on perceived enemies or pose a threat to country strategic interest. Usually their actions are designed to increase China's nationalism. They have been existed since 1998 and assist the government in many ways that are not limited to political and military issues. China benefits from using patriotic hackers in cyber warfare, while their role can involve many things. Though the government is not involved officially and patriotic hacker groups are not endorsed officially by the government's official, government sponsorship for patriotic hackers is difficult to deny. China's patriotic hackers since 1998 has been actively struggle for China nationalism in cyber sphere. They use several methods in attacking commonly, DDoS and web defacement. There are advantages government gain from them while on the other hand government has to be more selective and careful working with patriotic hacker as they can cause opposite impact and other destruction that unforeseen. Government also enjoys attacks doing by patriotic hacker on behalf of nationalism and politics government can obtain sensitive information from patriotic hacker intelligence with high number or hacker work without limiting hours, they also can get expert and capable people to work in cyber without having to train them, and rising patriotic hacker can increase Chinese education and knowledge in information technology as well human resources in the field. However, China's youth as patriotic hacker motivation is not

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[93] Henderson, *The Dark Visitor: Inside The World Of Chinese Hackers* p.118

limited to nationalism and there is no guarantee that their nationalism will make them keep the information without share it to other parties.

Appendix

Indonesia

Sample of Indonesian website defaced by China's patriotic hackers[94]

CNN

Sample of CNN website defaced by China's patriotic hacker in 2008[95]

Sport network management notification in 2008 about their website had been defaced by China's hacker. Sport netwok Management is part of CNN sport News. Its domain is sports.si.cnn.com[96]
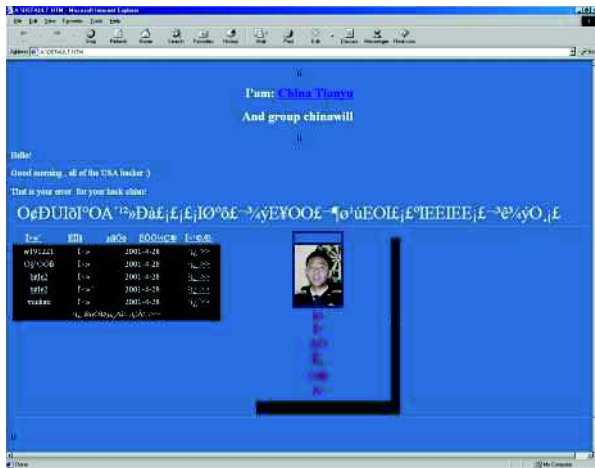
US
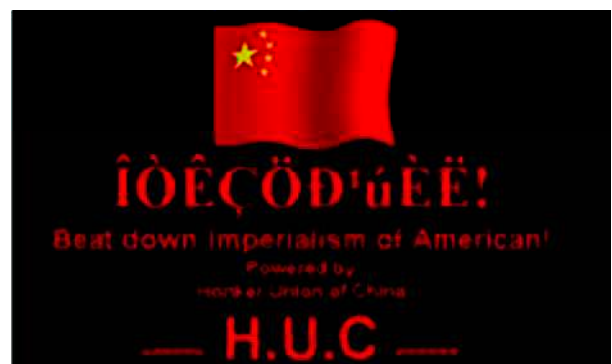
Defacement White House websites in 2001 by China's Patriotic Hackers[97]

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[94] Henderson, S. J. 2007. *The Dark Visitor: Inside The World Of Chinese Hackers,* Illinois, Lulu.Com p. 19

[95] Arrington, Michael, 21 April 2008. Techcrunch, Chinese Hackers Take Down SportsNetwork, available online at http://techcrunch.com/2008/04/21/Chinese-hackers-take-down-sportsnetwork/, accessed, 28 October, 2014

[96] Arrington, Michael, 21 April 2008. Techcrunch, Chinese Hackers Take Down SportsNetwork, available online at http://techcrunch.com/2008/04/21/Chinese-hackers-take-down-sportsnetwork/, accessed, 28 October, 2014

[97] Bbc news, White House website attacked 5 May 2001,available online at http://news.bbc.co.uk/2/hi/americas/1313753.stm, accessed, 28 October 2014

China hacked US department health and
human service website in 2001[98]

Vietnam

China Hacked Vietnamese foreign ministry

Translation centre and other webs defaced[99]

Taiwan

China's hackers defaced Taiwanese
government websites[100]

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[98] Harries, Shane, Chinese hackers declare war on
U.S. Web sites, available online
at,http://www.govexec.com/technology/2
001/05/Chinese-hackers-declare-war-on-
us-web-sites/9062/ accesed 28 october
2014

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[99] Chinese hackers attack 745 Vietnam websites in a
week: report, 2014 available online at
http://www.talkvietnam.com/2014/09/Chinese-
hackers-attack-745-vietnam-websites-in-a-
week-report/ accessed 28 october 2014

[100] Henderson, Taiwan, Available at
http://www.darkgovernment.com/news/Chinese-
hacker-community/ accessed, 28 October, 2014

China's hackers defaced Taiwanese
democratic progressive party[101]

Melbourne Film Festival
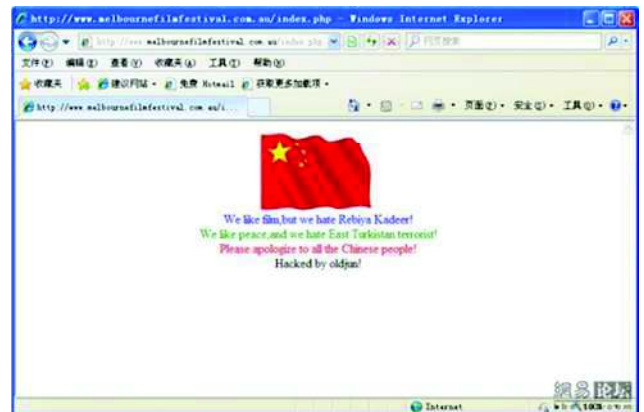
China defaced Melbourne film festival
homepage[103]

Hactivism

Anynomous hacked cdcbd.gov.cn, a home
page for Chengdu's business district to
protest about cencorship an example about
hactivism[102]

Ticket sold out in melbourne film festival and
so the offcials release this page[104]

References

Bbc News, China Denies Backing Icloud
Hack, 21 October
2014,Http://Www.Bbc.Com/News/Techno
logy-29704371 Accessed On 28 October,
2014

Brodsky, J. 2011. Control System
Security. *In:* Holt, T. J. & Schell,
B. H. (Eds.) *Corporate Hacking
And Technology-Driven Crime :*

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[101] Henderson, Chinese hacker defaces Taiwan DPP
website, 2008, available at
http://www.thedarkvisitor.com/category/taiwan/,
accesed 28 october 2014

[102] Suzannah Hills, International hacking group
Anonymous has attacked Chinese Government
websites in protest at the country's internet
restrictions. 6 April 2012,available online at
http://www.dailymail.co.uk/news/article-
2125683/International-hacking-group-
Anonymous-attacks-official-Government-sites-
China-protest-countrys-internet-
censorship.html#ixzz3HyQBPGdF accessed, 28
October 2014

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[103] http://www.chinahush.com/2009/08/02/Chinese-
hackers-hacked-melbourne-film-festival-website-
again/

[104] Abc news, Film festival braces for more website
attacks, 3 August
2009,http://www.abc.net.au/news/2009-08-
01/film-festival-braces-for-more-website-
attacks/1375926

Social Dynamics And Implications. Hershey: Information Science Reference.

Browdie, B. 2013. Chinese Hackers Renew Attacks On U.S. Targets: Report. *American Banker*, 05/21/

Capaccio, Tony, China Most Threatening Cyberspace Force, U.S. Panel Says, Nov 6, 2012. Available Online at Http://Www.Bloomberg.Com/News/2012-11-05/China-Most-Threatening-Cyberspace-Force-U-S-Panel-Says.Html, Accessed In 28 October 2014

Chang, Y.-C. 2011. Cyber Conflict between Taiwan and China Strategic. *Insights,* 10, 26-35.

Denning, D. E. 2011. Cyber Conflict as an Emergent Social Phenomena. *In:* Jhonston, L. (Ed.) *Corporate Hacking and Technology-Driven Crime: Social Dynamics and Implications.* Pennsylvania: Igi Global.

Dinniss, H. H. 2013. Participants in Conflict –Cyber Warriors, Patriotic Hackers and the Laws of War. *In:* Saxon, D. (Ed.) *International Humanitarian Law and the Changing Technology of War.* Boston: Martinus Nijhoff Publishers.

Friedman, E. 1997. Chinese Nationalism, Taiwan Autonomy and the Prospects of a Larger War. *Journal of Contemporary China,* 6, 5-32.

Grunwald, G. L. 2008. *China's Pursuit for World Power Status: Is the Transformation of the People's Liberation Army a Threat to the United States Global Interest and Security?* Master United States Marine Corps Command and Staff College.

Gutmann, E. 2010. Hacker Nation: China's Cyber Assault. *World Affairs,* 173, 70-79.

Hassid, J. 2013. Cyber-Nationalism in China: Challenging Western Media Portrayals of Censorship In China. *Continuum,* 27, 936-938.

Henderson, S. 2008. Beijing's Rising Hacker Star How Does Mother China React? *Iosphere,* 4, 25-30.

Henderson, S. J. 2007. *The Dark Visitor: Inside the World of Chinese Hackers,* Illinois, Lulu.Com.

Hill,Suzanna, International Hacking Group Anonymous Attacks Official Government Sites In China In Protest At The Country's Internet Censorship, 6 April 2012, Read More: Http://Www.Dailymail.Co.Uk/News/Article-2125683/International-Hacking-Group-Anonymous-Attacks-Official-Government-Sites-China-Protest-Countrys-Internet-Censorship.Html#Ixzz3hypuvxqc, Accessed 28 October 2014.

Klimburg, A. 2011. Mobilising Cyber Power. *Survival,* 53, 41-60.

Krapp, P. 2005. Terror And Play, Or What Was Hacktivism? *Grey Room,* 70-93.

Kshetri, N. 2005. Pattern of Global Cyber War And Crime: A Conceptual Framework. *Journal of International Management,* 11.

Kshetri, N. 2010. *The Global Cybercrime Industry Economic, Institutional and Strategic Perspective,* New York, Springer.

Lerer, L. 2010. *China's `Patriotic Hackers' Attack U.S. Sites Including Google, Nyt Says* [Online]. Bloomberg. Available: Http://Www.Bloomberg.Com/News/2010-12-05/Chinese-Patriotic-Hackers-Hit-Google-U-S-Sites-New-York-Times-Reports.Html#Disqus_Thread [Accessed 5 August 2014 2014].

Levin, D. 2013. *Film Festival in the Cross Hairs* [Online]. Available: Http://Www.Nytimes.Com/2009/08/10/Movies/10festival.Html?Pagewanted=All&_R=0 [Accessed 20 September 2013].

Martin, Ricky, 2014, Hundreds of Vietnamese Websites Hacked After Island Dispute with China, Https://Www.Techinasia.Com/Vietnam-China-Hack/ Accessed, 28 October 2014 2013 Jan 31.

Mozur, P., Perlroth, N. & Chen, B. X. 2014. *Apple's Icloud Storage Service Is Aim of Attack in China* [Online]. New York Times. Available: Http://Www.Nytimes.Com/2014/10/22/Technology/China-Attack-Aims-At-Apple-Icloud-Storage-Service.Html?_R=0 [Accessed 28 October 2014].

Perlroth, N. 2013. Hackers In China Attacked The Times For Last 4 Months. *New York Times*, 01/31/ Available Online Http://Www.Nytimes.Com/2013/01/31/Technology/Chinese-Hackers-Infiltrate-New-York-Times-Computers.Html?Pagewanted=All&_R=0, Accessed, 28 October, 2014

Qiang, P. G. 2012. Th Twenty First Century War; Chinese

Perspectives. *In:* Lindleyfrench, J. & Boyer, Y. (Eds.) *the Oxford Handbook of War.* New York: Oup Oxford.

Rawnsley, G. D. 2005. Old Wine in New Bottles: China-Taiwan Computer-Based 'Information Warfare' and Propaganda. *International Affairs (Royal Institute of International Affairs),* 81**,** 1061-1078.

Samuel, A. W. 2004. *Hacktivism and the Future of Political Participation.* Doctoral, Hardvard University.

Segal, A. 2012. Chinese Computer Games Keeping Safe in Cyberspace. *Foreign Affaris,* 91**,** 14-21.

Si, C. 2011. *The Threat of China's Patriotic Hacker Army Thinking about China Opinion* [Online]. The Epoch Times Available: Http://Www.Theepochtimes.Com/N2/Opinion/The-Threat-Of-Chinas-Patriotic-Hacker-Army-60695-Page-2.Html [Accessed 5 August 2014 2014].

Singer, P. W. & Friedman, A. 2014. *Cybersecurity and Cyberwar: What Everyone Needs To Know* New York, Oxford University Press

Thanh Luan, Chinese Hack Some 750 Vietnamese Websites in a Week, Saturday, September 06, 2014, Http://Www.Thanhniennews.Com/Tech/Chinese-Hack-Some-750-Vietnamese-Websites-In-A-Week-30791.Html, Accessed, 28 October, 2014

The Economist Report, Masters of the Cyber-Universe China's State-Sponsored Hackers Are Ubiquitous—And Totally Unabashed, 6 April 2013,

Available Online At Http://Www.Economist.Com/News/Special-Report/21574636-Chinas-State-Sponsored-Hackers-Are-Ubiquitousand-Totally-Unabashed-Masters, Accessed, 28 October, 2014

Tran,Mark, Chinese Hack Melbourne Film Festival Site To Protest At Uighur Documentary The Guardian, Sunday 26 July 2009, Available Online At Http://Www.Theguardian.Com/World/2009/Jul/26/Rebiya-Kadeer-Melbourne-Film-China, Accessed 28 October 2014

Tuoi Tre, 2014, Chinese Hackers Attack 745 Vietnam Websites in A Week: Report Tuoitrenew Vietnam.Http://Tuoitrenews.Vn/Business/22202/Chinese-Hackers-Attack-745-Vietnam-Websites-In-A-Week-Report Accessed, 28 October 2014

Valigra, L. 2001. China-U.S. Aircraft Collision Incident of April 2001: Assessments and Policy Implications. Congressional Research Service.

Ventre, D. 2014. Discourse Regarding China: Cyberspace and Cybersecurity. *Chinese Cybersecurity and Cyber Defense.* London: Wiley.

Verma, B. 2013. *Threat from China,* United States, Lancer Publisher.

Vietnam Net,Chinese Hackers Infiltrate Vietnamese Websites,Http://English.Vietnamnet.Vn/Fms/Science-It/111353/Chinese-Hackers-Infiltrate-Vietnamese-Websites.Html, Accessed, 28 October 2014

Volland, N. 2008. Chinese Cyber Nationalism: Evolution, Characteristics, and Implications. *The China Journal*, 191-193.

Wark, M. 2006. Hackers. *Theory, Culture & Society,* 23**,** 320-322.

Wu, X. 2007. *Chinese Cyber Nationalism: Evolution, Characteristics, and Implications,* New York, Lexington Books.

Yip, M. & Webber, C. 2011. Hacktivism: A Theoretical and Empirical Exploration of China's Cyber Warriors. In, Acm Websci '11, Koblenz, Germany, 14 - 17 Jun 2011. *Web Science.* Koblenz, Germany: Acm Web Sci 2011.

Yuxiao, L. 2012. China and Cybersecurity: Political, Economic, and Strategic Dimensions. *In:* Team, S. O. I. O. T. C. (Ed.). San Diego: University Of California.