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A strategy to counter propaganda in the digital era

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A strategy to counter propaganda in the digital era

Abstract: Until recently, the concept of Information Security (InfoSec) had been thought to apply primarily to threats against the information systems which monitor and control key aspects of public life. It is now clear that InfoSec also involves defending societies against efforts to distort and pervert public opinion. The ability of state and non-state actors to affect public opinion in open societies has been greatly enhanced by advances in the communications technologies of the 21st century. Social media in particular have proven to be effective in this regard, as has been demonstrated by the success of Islamic terrorist groups in recruiting unwitting citizens in the US and Europe. Traditional responses to propaganda such as refuting it or creating counter-narratives have proven thus far to be ineffective. Instead, this paper argues that open societies must inoculate their citizens against misinformation and disinformation by encouraging the development of their critical thinking skills.

Keywords: propaganda, misinformation, news literacy, social media.

Introduction

Information Security (InfoSec) has taken on increased importance as global interconnectivity continues to grow. First the Internet and, more recently, the Internet of Things have opened new vulnerabilities to the security of sovereign states with particular concerns about the ability of other state or non-state actors to access and even control key information systems. A common nightmare scenario is the hacking and degrading of a national power grid, water supply system or air control network by a hostile force. Since the beginning of recorded history, and probably before, hostile attacks have often also involved assaults on the knowledge and belief systems of both combatants and the public.

“(...) the aim of warfare is to subdue the hostile will of leaders and decision makers. This can be done directly by attacks aimed at influencing or manipulating the leader’s knowledge or beliefs or indirectly by attacking the knowledge or beliefs of those upon whom the leader depends for action.”¹

The objective of this paper is to revisit the key assumptions and views on InfoSec as they evolved over time in order to assess the challenges to InfoSec in the digital era and suggest ways of countering them. To this end the argument will be structured as follows.

First, the views of theorists on propaganda and public opinion will be used to provide a historical overview of the evolution of this indirect struggle to affect the knowledge and beliefs of the public. Then, the discussion will address the underappreciated role played by advances in communications technologies in enhancing the power to alter public opinion through misinformation and disinformation. Emphasis will be placed on the advances of the past decade, particularly with regard to the development of social media. Finally, it will be argued that traditional responses to external attacks on the beliefs and knowledge of a civil society are no longer sufficient. It is imperative to have a holistic view at this debate as it unfolded over time and space.

1 From Sun Tzu to Goebbels

● In ancient times the primary target of attacks on knowledge and belief systems involved primarily the political and military leadership and the combatants those leaders commanded. Hence, Sun Tzu advised to use loud noises and other distractions to unhinge the enemy. However, “[a]s societal institutions evolved, the ways in which societies fought evolved also. The terrorizing drums, banners, and gongs of Sun Tzu’s warfare, aided by information technology, became the sophisticated psychological operations of modern warfare.”²

Modern propaganda traces its history back to the turn of the last century when the British government concocted atrocity stories –

1 R. Szafranski, ‘A Theory of Information Warfare: Preparing For 2020’, *Airpower Journal*, Spring 1995, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj95/spr95_files/szfran.htm (2016-03-15).

2 Ibid.

most of which were later proven to be false – to build and maintain support among the British public for the War as well as to convince a steadfastly non-interventionist American electorate of the need to abandon neutrality and enter the War on Britain's side.³ It was in that same era that American communications theorists like George Creel, Walter Lippmann and Edward Bernays (a nephew of Sigmund Freud) first posited the existence of something called 'public opinion'. Bernays described a 'brave new world' in which perception could trump reality:

"The conscious and intelligent manipulation of the organized habits and opinions of the masses is an important element in democratic society. Those who manipulate this unseen mechanism of society constitute an invisible government which is the true ruling power of our country. We are governed, our minds molded, our tastes formed, our ideas suggested, largely by men we have never heard of. This is a logical result of the way in which our democratic society is organized."⁴

George Creel commanded an army of propagandists for the Committee on Public Information that was formed by President Woodrow Wilson a week after the United States entered World War I. After the war, Creel contended that "[i]t was in recognition of Public Opinion as a major force that the Great War differed most essentially from all previous conflicts. The trial of strength was not only between massed bodies of armed men but between opposed ideals; moral verdicts took on all the value of military decisions."⁵

In an irony of history, Adolph Hitler and Joseph Goebbels credited the success of British propaganda during World War I as their inspiration for the even more sophisticated and persuasive methods they deployed. As Hitler wrote in *Mein Kampf*:

"It was during the [First World] War, however, that we had the best chance of estimating the tremendous results which could be obtained by a propagandist system

3 For a useful overview of this period, cf. Mark Crispin Miller's 'Introduction' to a reprint of Bernays' *Propaganda*, New York: Ig Publishing, 2004.

4 E.L. Bernays, *Propaganda*, New York: Horace Liverwright, 1928, p. 9.

5 G. Creel, *How We Advertised America*, New York: Harper & Brothers, 1920, p. 3.

properly carried out. Here again, unfortunately, everything was left to the other side, the work done on our side being worse than insignificant.”⁶

Hitler and Goebbels took the theories of Bernays and Lippman about public opinion to a new extreme. As Hitler wrote in *Mein Kampf*:

“All this was inspired by the principle - which is quite true in itself - that in the big lie there is always a certain force of credibility; because the broad masses of a nation are always more easily corrupted in the deeper strata of their emotional nature than consciously or voluntarily; and thus in the primitive simplicity of their minds they more readily fall victims to the big lie than the small lie, since they themselves often tell small lies in little matters but would be ashamed to resort to large-scale falsehoods. It would never come into their heads to fabricate colossal untruths, and they would not believe that others could have the impudence to distort the truth so infamously.”⁷

2. Propaganda and the power of new technologies

The development of new theories on manipulating public opinion by Bernays and Lippmann in the early 20th century (later exploited by Hitler and Goebbels) coincided with the advent of new technologies that over the next 50 years increased the potential power of propaganda to persuade. The British used the recently invented cinema to spread their version of what was happening during the Boer War (1899-1902), an approach later advanced to unexpected heights for the Nazis by Leni Riefenstahl. Beginning in the 1950s, shortwave radio was the battlefield of choice for much of the Cold War as VOA, the BBC, Radio Moscow and Radio Peking each presented the global views of the contesting powers to each other’s citizens as well as to those of the developing world.

As is true for the other elements of InfoSec, the advent and explosive growth of the Internet and more recently of mobile-based social media have qualitatively – and perhaps even exponentially –

6 A. Hitler, *Mein Kampf*, translated by J. Murphy, London, New York, Melbourne: Hurst & Blackett, 1939, p. 145.

7 *Ibid.*, p. 185.

increased the power of propagandists to persuade people. This field has been largely ignored at least at the leadership level of modern societies. “Although IW focuses on computers and their use in warfare, only a small part of the literature in the burgeoning field deals with perception management.”⁸ This is particularly dangerous because the communications technology changes of the past decade have been qualitatively different from those of the previous century. The Gutenberg printing press launched a communications revolution that altered power relationships eventually around the world. But even the astonishing communications advances of the 20th century – cinema, radio and television – still largely left the power to broadcast information in the hands of corporations, established interest groups, governments and wealthy individuals.

The communications revolution of the 21st century has had an impact on society the magnitude of which had not been seen since the advent of the printing press. It has given almost limitless power to everyone with access to a computer or a smartphone to publish and disseminate information globally. It is a positive development that the public is now empowered to share their knowledge with others, but it also raises at least four challenges to civil societies: The *first* is simply the amount of information that floods over us each day which makes it difficult to sort out reliable from fabricated information. The *second* is that new technologies to create and share information also make it possible to create materials that look authoritative and then to spread them virally. The *third* is the exacerbation of the centuries old journalistic conflict between speed and accuracy. We all want information as quickly as possible, but the Digital Era in accelerating that process has also increased the chances that the information will be wrong. The *fourth* challenge is the human preference for information that supports our beliefs. The Internet and social media make it much easier to select only the information that supports our pre-existing ideas, reinforcing rather than challenging them.

These challenges have created an environment in which new threats to a society’s Information Security can arise and often flourish. Some

8 S. Macdonald, *Propaganda and Information Warfare in the Twenty-First Century: Altered Images and Deception Operations*, New York: Routledge, 2007, p. 179.

such threats take the form of disinformation and misinformation campaigns by traditional state actors. This has been seen in the past few years in states that were once part of the Soviet Union. The use of social media can amplify the power of propaganda and destabilize civil societies. Perhaps more worrisome, this latest communications revolution has enabled non-state actors such as the Islamic terrorist organizations to spread their message far wider and more effectively than would have been possible even a decade ago. In all cases, the basics of propaganda remain the same as those elucidated by Bernays a century ago and taken to their extreme by the Nazis. These basics of propaganda suggest that it be: simple (avoid getting lost in the details); emotional, not rational, in form and appeal; set at the intellectual level of the least intelligent in the audience; designed so that the bigger the audience, the lower the intellectual level of the material; limited to a few points, or slogans, repeated over and over.

New technologies always amplify the power of information and with it the ability to confuse the public about the authenticity of the information they receive. One of the most insidious aspects of the technological advances of the Digital Era is that they have made it possible to tailor misinformation and disinformation quite specifically to the individual beliefs and prejudices of societal groups. Discussions about the dangers of InfoSec, however, have focused, as MacDonald writes, “on ‘perception management’⁹ or ‘media warfare’¹⁰ to suggest the mass media, including the internet, can be used to disseminate propaganda or support deception operations. (...) little, if anything [has been said], about the possible use of altered images in the realms of propaganda and deception operations.”¹¹ Research exploring that challenge began in earnest after the Ukraine crisis made it clear just how much damage well-crafted propaganda can do in the Digital Era, but we are still groping for effective remedies.

9 R.C. Molander, A. Riddile, P.A. Wilson, S. Williamson, *Strategic Information Warfare: A New Face of War*, Santa Monica, CA: Rand Corporation, 1996, http://www.rand.org/content/dam/rand/pubs/monograph_reports/2005/MR661.pdf (2016-10-19).

10 M.D. Hayes, G.F. Wheatley (eds), *Interagency and Political-Military Dimensions of Peace Operations: Haiti – A Case Study*, Washington D.C.: Institute for National Strategic Studies, National Defense University, 1996, p. 3.

11 Macdonald, op. cit., p. 4.

3. The limitations of reacting to propaganda in the digital era

Governments and civil society organizations have sought to counter these attacks, primarily by trying to debunk them. For example, in Ukraine in March 2014, the faculty and alumni of The Mohyla School of Journalism and students from the Digital Future of Journalism programme for journalists and editors launched the fact-checking website Stopfake.org. Over time, journalists, marketing specialists, programmers, and translators joined forces to verify information, and refute verifiable disinformation about events in Ukraine covered in the media.¹² While Stopfake.org claims to be steadfastly non-governmental, the European Union's External Actions Service (EEAS) has launched the EEAS East StratCom Task Force, a network of over 450 journalists, civil society organizations, academics and public authorities in over 30 countries, which publishes weekly *The Disinformation Review* that collects examples of pro-Kremlin disinformation all around Europe and beyond.¹³

The problem with such debunking efforts is that some research indicates that the act of trying to disprove a false accusation can actually embed the propaganda more deeply into elements of the audience.¹⁴ As a result, a new approach has been developed stressing the importance of developing strong counter-narratives to lessen the impact of the propaganda of state and non-state actors. The Obama Administration has tried to enlist the aid of major technology, marketing and entertainment companies to combat the violent messages of extremists online. Its so-called 'Madison Valleywood Project' encourages social media firms to take down the accounts of suspected terrorists. More interestingly, entertainment firms have been asked by government officials, including Secretary of State John Kerry to help create "counter-narratives" to those spread by terrorists on social media

12 Stopfake.org, <http://www.stopfake.org/en/about-us/> (2016-10-19).

13 Euvdsdisinfo, <http://eeas.europa.eu/euvdsdisinfo/> (2016-10-19).

14 C.R. Sunstein, *On Rumors: How Falsehoods Spread, Why We Believe Them, and What Can Be Done*, Princeton: Princeton University Press, 2014, pp. 47-53. Another recent study concluded that during the 2012 US Presidential campaign "(...) Twitter helped rumor spreaders circulate false information within homophilous follower networks, but seldom functioned as a self-correcting marketplace of ideas." Cf. J. Shin, L. Jian, K. Driscoll, F. Bar, 'Political rumoring on Twitter during the 2012 US presidential election: Rumor diffusion and correction', *New Media & Society*, March 8, 2016, p. 2, doi: 10.1177/1461444816634054 (2016-10-23).

networks. According to Marc Raimondi, the Justice Department's national security spokesman, following offers of assistance by US NGOs, social media companies and content producers, the US government is exploring ways these groups could help counter the radicalization efforts of Islamic extremists.¹⁵

Although an interesting initiative, the attempt by the US government and cooperating companies to create counter-narratives has yet to demonstrate any impact. As reported by BuzzFeed correspondent Sheera Frenkel, who attended the meeting, the few Arabs who attended thought the project misguided:

"They wanted to figure out how to fight ISIS online, how to understand the psychology of those who support ISIS, and they invited almost no one who speaks for those of us in the Arab world, and from Arab communities, who have everything to lose from ISIS's growing popularity," said one Arab attendee, who estimated that less than 10% of the attendants were of Middle Eastern descent. "They don't understand this community. That has been proven time and time again with their tone deaf messages. Why hold an event like this where there are ten white men outnumbering every Arab?"¹⁶

Such criticisms, however, focus on the modalities of countering propaganda rather than on the fundamental question of whether it is even possible for institutions to succeed in the long run in blocking, debunking or countering seductive messages aimed at vulnerable populations. After all, propaganda is often in the eye of the beholder: "We must remember that in time of war what is said on the enemy's side of the front is always propaganda, and what is said on our side of the front is truth and righteousness, the cause of humanity and a crusade for peace."¹⁷ In a similar way, Macdonald argues:

15 C. Kang, M. Apuzzo, 'U.S. Asks Tech and Entertainment Industries Help in Fighting Terrorism', *New York Times*, February 24, 2016, http://www.nytimes.com/2016/02/25/technology/tech-and-media-firms-called-to-white-house-for-terrorism-meeting.html?_r=0 (2016-10-19).

16 S. Frenkel, 'Inside the Obama Administration's Attempt to Bring Tech Companies into the Fight Against ISIS', *BuzzFeedNews*, February 25, 2016, <http://www.buzzfeed.com/sheerafrenkel/inside-the-obama-administrations-attempt-to-bring-tech-compa> (2016-10-19).

17 W. Lippmann, 'Why Did Hanoi Grant a Visa to Salisbury?', *The Deseret News*, January 12, 1967.

"The most effective propaganda combines entertainment, education and persuasion. The entertainment elements attract the audience, while the educational aspect decreases the perception that the message is propaganda, even as it persuades. Unlike education, which seeks to present an objective view, propaganda is biased through the selective use of facts, although this bias is usually subtle. Sometimes the difference between propaganda and education is just a post hoc rationalization: if a persuasion attempt fails, it is called propaganda; if it succeeds, it is education."¹⁸

Instead of countering false information after the fact, some authors, including Macdonald, have posited the possibility of inoculating the citizenry in advance to be able to identify misinformation and disinformation, particularly in the form of manipulated images. Macdonald believes this challenge can be dealt with by developing a discipline devoted to something called Image Literacy:

"Image literacy should teach students about the power of images, and how images are emotion-based and not proposition-based. It should be stressed that images cannot prove something in the way words can prove a proposition. The influence of different typefaces, fonts, colours and visual styles, as well as the effect of accompanying music should be discussed so students understand their effects. Schools should teach students the standards different types of media have for the use of altered images so that they can better judge the validity of images."¹⁹

Although it provides a good start, the challenge of preventing the spread of rumours inimical to society requires more than the ability to spot altered images. In fact, most American students above the age of 12 are quite familiar with the issue of faked images because most have themselves used or seen their peers use software that makes it possible to create a believable, even if false, image.

4. A strategic response

● The challenges of the digital era have created a need for a new kind of literacy. A more strategic approach would be to give people

¹⁸ Macdonald, op. cit., p. 32.

¹⁹ Ibid., p. 173.

not just the skills *but more importantly* the inclination to detect and discard disinformation. A healthy civil society can exist only if the public is well-informed. If people can be easily led to believe rumours or gossip, the consequences can be dangerous. Because it is so difficult to combat the ill effects of misinformation and disinformation, it is essential to find ways to enhance their innate powers of critical thinking so that they reject such propaganda from the moment they first encounter it.

Stony Brook University's News Literacy curriculum has been demonstrated to enable students as young as 12 to judge for themselves the veracity and reliability of the information received regardless of the medium or platform. Although originally designed for American university students, the curriculum has demonstrated it can be adapted to different educational levels and cultural circumstances.²⁰ The News Literacy Stony Brook model uses heavily illustrated lectures followed by hands-on exercises to help students understand how journalism works and why information is such a powerful force for good and ill in modern societies. The logic behind this approach to teaching and learning is to help students to acquire a set of critical thinking skills, focused on developing the following key capabilities. These include: *First*, recognize the difference between journalism and other kinds of information and between journalists and other information purveyors. *Second*, in the context of journalism, recognize the difference between news and opinion. *Third*, in the context of news stories, examine the difference between assertion and verification and between evidence and inference. *Fourth*, evaluate and deconstruct news reports based on the quality of evidence presented and the reliability of sources; understand and apply these principles across all news media platforms. *Fifth*, distinguish between news media bias and audience bias.

Underlying these skills, the course presents and reinforces four key concepts, which include: *First*, the appreciation of the power of reliable information and the importance of a free flow of information in a healthy civil society. *Second*, understanding why news matters and

20 J. Fleming, 'What Do Facts Have to Do with It? A Case Study of News Literacy at Stony Brook University', *Doctoral dissertation*, Doctor of Philosophy in Education, Los Angeles: University of California, 2012.

why becoming a more discerning news consumer can change individual lives and the life of the country. *Third*, understanding of how journalists work and make decisions and why they make mistakes. *Fourth*, understanding how the digital revolution and the structural changes in the news media can affect news consumers; understand our new responsibilities as publishers as well as consumers.²¹

A three-wave longitudinal study was designed to assess its impact on that curriculum. The study concluded that compared to a control group, students who took the course increased their consumption of news media, demonstrated greater civic engagement, and, most importantly, showed greater ability to evaluate the veracity of information²². Although originally designed as a general education course in an American university, Stony Brook's news literacy curriculum has proven to be highly adaptable in the global context. Since 2012, more than 40 international educators have taken week-long, intensive training courses designed to enable them to identify and customize the key elements of the course best suited to furthering the goal of engendering critical thinking capabilities in their students. At present, elements of the course have been adopted by universities in Australia, China, Hong Kong, Israel, Japan, Malaysia, Myanmar, Poland, Russia and Vietnam. Anecdotally, the positive potential of the course was demonstrated in the autumn of 2014 by University of Hong Kong journalism students who had taken a version of the news literacy course developed by Stony Brook. Several students spontaneously launched a Facebook page in September 2014 to verify reports during the grave unrest that occurred during the so-called Umbrella Revolution. VerifiedHK²³,

21 Adapted from J. Fleming, 'Media Literacy, News Literacy, or News Appreciation? A Case Study of the News Literacy Program at Stony Brook University', *Journalism & Mass Communication Educator*, vol. XX, no. X, 2014, pp. 1-20.

22 Survey respondents were Stony Brook University students who were either enrolled in the news literacy course or were in the control group. The control group consisted of non class-taking students enrolled at Stony Brook University. The survey was administered by the Stony Brook University Center for Survey Research. It was administered three times; once at the beginning of the autumn 2010 semester, again at the end of the autumn 2010 semester, and one year later, at the end of the autumn 2011 semester. A total of 1,002 participants completed the study in the first wave. Five hundred and seven of these participants (51%) completed only the wave I survey, 303 (30%) completed both the wave I and wave II surveys, and 192 completed the wave I, II, and III surveys (20%), Ch. Weber, *News Literacy Assessment*, Center for News Literacy, June 12, 2012.

23 Facebook, <https://www.facebook.com/hkverified?fref=ts> (2016-10-19).

a bi-lingual site, provided reliable news reports, photos and logistics updates through Facebook and Twitter. Within a week of launching, the Facebook page had over 100,000 Likes.²⁴

Although more than 10,000 students have taken the course at Stony Brook since 2007, the primary challenge in the future will be scalability. In order to have a significant impact on civil society, millions of students will have to be exposed to the course. A promising development in that regard was the launching last year of the first news literacy Massive Online Open Course. Designed and produced by Dr. Masa-to Kajimoto at the University of Hong Kong and hosted on the edX platform, 'Making sense of the News' proved to be both popular and effective, so much so that it is being offered a second time this year.²⁵

Conclusions

Martin Buber said in 1979 that "[t]he real struggle is not between East and West, or capitalism and communism, but between education and propaganda."²⁶ The reach and power of a revolutionary communications innovation like social media makes the constant and universal struggle between education and propaganda far more pressing today than it was when he spoke those words. Propaganda cannot be combatted after its influence has been felt. The members of civil societies must be able to detect and reject misinformation and disinformation from the outset, and only societies with a citizenry empowered by critical thinking skills will have that power.

Just as the advent of the Guttenberg printing press led to an exponential increase in literacy rates in the 15th and 16th centuries, the Communications Revolution of the 21st century will require a new literacy that goes beyond the ability to recognize the meaning of printed words. A literate citizen today must be able to sort through the oceans of information that wash over each day and sort out that which is reliable

24 Center for News Literacy, <http://www.centerfornewsliteracy.org/overseas-partnership-program/> (2016-10-19).

25 Stony Brook and HKU will collaborate to create a more comprehensive version on the Coursera platform, which will offer teacher-training modules that could eventually be the template modules offered in other languages, EdX, <https://courses.edx.org/courses/course-v1:HKUx+HKU04x+1T2016/> (2016-10-19).

26 A. Lane, *Encounter with Martin Buber*, London: Aubrey Hodes, 1972, p. 135.

from that which is misleading or even poisonous. The development of this skillset is more important than ever because for the first time in history it is possible for practically anyone to publish information that can reach millions in the blink of an eye. This is a process that will take years, even decades. After all, it took several centuries to raise literacy rates in European nations to the levels necessary for them to become modern states.²⁷ Thus far there has been little discussion and much less agreement on how to address this challenge. All the more reason to begin the conversation now.

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