

Group 1: Hacking

by Matthew Tullo

Submission date: 01-Mar-2019 11:02PM (UTC-0500)

Submission ID: 1086361236

File name: Zero_Day_Analysis.docx (26.53K)

Word count: 5371

Character count: 29533

Cyber Warfare: Examining the Effects of Increasing Technology on War

Christopher Banvard, Yuqing Lin, Julia Tucker, Matthew Tullo

Binghamton University

Main Source

Magnolia Pictures (Producers), & Gibney, Alex (Director). (2016). *Zero Days* [Video File].

DL 2

<http://www.zerodaysfilm.com>

DL 3

Matthew Tullo

Zero Days, a documentary created by Magnolia Pictures, strongly argues the needs for boundaries and regulations in cybersecurity.

DL

SV

The interviewer questions many people involved in the Stuxnet attacks that took place in 2010. Stuxnet is sophisticated zero-day malware created by some nation-state with the capability to cause kinetic damage. It is the first example of code able to affect physical objects, and the most advanced malware to date. Able to operate completely on its own, Stuxnet caused thousands of uranium centrifuges to fail without alerting any of the safety protocols. The malware then infected millions of computers worldwide, lying dormant until the code found the desired hardware. No nation-state has yet taken responsibility for Stuxnet, however there is speculation of the possible culprit. Many cyber-security experts point towards the United States of America and Israel as the main contributors.

CA

Neither nation Repeat

has publicly come forward and taken ownership. There are few anonymous sources from the FBI and CIA claiming the United State's responsibility for the attacks. These sources also claim Israel played a large part in getting the code into the Natanz Uranium Enrichment Facility. The worm has to be manually uploaded because Natanz has an "air gap" (It is not connected to the Internet).

Repeat

and the U.S. NSA anonymous sources claim that Israel agents handle the implanting. Another issue is the lack of regulations in the cybersecurity field. Although the NSA cannot directly

attack any nation, there is a group known as the the United States Cyber Command that operates in the same office as the NSA that can launch attacks. The president must sign off on any cyber attacks before they are launched. The only other military motion that requires the president's

DL

consent is a nuclear missile launch. This proves that the U.S. acknowledges the dangers of cyber attacks but there are still very few regulations on such attacks.

XC

Christopher Banvard

This Documentary was given the Peabody Award for exposing the effects code can have in the physical world. As it turns out, malware can cause significant kinetic damage. The majority of this documentary narrates through interviews and presenting data on Stuxnet. Alex Gibney begins the documentary by interviewing several U.S. government employee's about Stuxnet. Each source either refuses to speak about Stuxnet or denies its existence. Their refusal shows just how classified Stuxnet is even years later. No country wants to take responsibility for Stuxnet because it was an international failure. It infected millions of machines worldwide and caused millions of dollars of damage in the middle east. This also shows how easy it is for a country to deny that they took part in the creation of malware targeted at other countries. Gibney also interviews an anonymous source, who claims to be a CIA agent, and they answer more questions about Stuxnet than any of the sources that show their faces.

For Gibney to show that the United States took part in the development of the Stuxnet virus, he brings in different government workers to interview about the incident. The film shows a dichotomy between two forms of his sources, known and anonymous individuals. Many of the government witnesses that show their faces refused to talk about information relating to the incident, as they do not want to be fired or charged for leaking information. Gibney was also unable to get an interview with anyone from the NSA who might have worked on the development of Stuxnet. However, the individuals that are anonymous end up divulging more information about the incident. This causes the viewer to realize how much of this information is

Repeat ↘

hidden from people that are not part of the government, and how much the government workers fear giving out classified information about cyber warfare.

Gibney tries to show that the United States and Israel were involved with Stuxnet by using various testimonies from different government officials. The government workers he interviews help prove this point, as the only individual that gave information about Stuxnet is anonymous, showing the viewer how classified this truly is. Gibney also mentions that the United States was infected with the Stuxnet virus it may have created. When the FBI went to investigate the causes behind the infection, agents could not pinpoint the exact cause due to the secrecy behind the malware.

Matthew Tullo

Throughout the film, Gibney utilizes various means to instill a sense of fear into his audience. The documentary has a ominous soundtrack and the editing is made to make every image look drab. Gibney also uses the facts of the situation to try and scare his viewers. The idea that code can cause kinetic damage is terrifying, so Gibney plays into this fact. He interviews seven cybersecurity experts to show just how damaging Stuxnet could be and the repercussions it had on the cyber world. Mr. Gibney also uses infographics to convey how horrifying Stuxnet was. One infographic demonstrates the catastrophic failure and destruction of nuclear centrifuges, which would spin out of control and eventually burst into pieces. All of this was happening while the monitors reported normal results, leaving the employees confused and helpless. While a centrifuge collapsing suddenly is a scary idea, Stuxnet did not cause cascading damage, rather one centrifuge failed every week. There were also multiple times in this documentary where the cyber security experts interviewed mentioned how they feared for their lives when working on figuring out Stuxnet.

Yuqing Lin

Zero Days' subject is the first cyber weapon, Stuxnet, which dramatically changed the^{DL} cyberspace and lead^{RW} to the beginning of cyberwarfare. This is the main connection to our sub sources. *Zero Days* is a documentary studying a topic with almost no written documents or studies supported by the government due to its classification. Instead, the details come from people who have worked on, or at least witnessed the development, maintenance, or discovery of Stuxnet^{PL}. In addition, this documentary was awarded the Golden Bear in the 66th Berlin international^{TC} Film Festival. We believe^{NM} *Zero Days* is reliable and objective in discovering a highly classified failure. The goal of this documentary is to bring to light the international danger of cyber warfare. Stuxnet and similar viruses could be considered international crises, possibly infecting thousands of computers globally, and yet still are highly classified with no one taking responsibility. Gibney hopes to raise awareness for possible incidents and attempts to figure out who was responsible for launching the virus. Moreover, he wants to point out^{wordy} the need for regulations and conventions on cyber space. This^{MP} is lacking in the world as shown by his interviews with private cyber security firms from both the U.S. and Germany. In both interviews, the interviewee stated that there are very little^{RW} regulations on government attacks via^{RW} cyberspace. In a world so reliant on technology, it is more than ever imperative to place larger restrictions on what countries can and cannot do to virtual infrastructure.

Matthew Tullo

Since Stuxnet was a slow acting virus, it was caught before it could do too much damage to Iranian nuclear development. If the creators wanted, they could have caused catastrophic failures to all of^{DL} Natanz centrifuges. This would cost the Iranian government millions of dollars, creating a massive deficit all caused by^{one} Gibney shows that if left unchecked, the^{DL}

dangers of codes can become as kinetic as the dangers of bombs. Technology gets increasingly sophisticated each year and if allowed to grow without any regulations, war will be fought through the internet which will put innocent people at risk. This is proved by the fact that Stuxnet infected thousands of civilian computers worldwide. The virus caused no damage to these machines because it was coded to have a specific target, but if someone chose to target certain operating systems it could be harmful to innocent people.

Julia Tucker

Alex Gibney is the writer, director, and producer of *Zero Days*. He is an alumni of both Yale and UCLA Film School. Gibney directed other well known documentaries such as *Taxi to the Dark Side* and *Ernest: The Smartest Guy in the Room*. These films are produced through his production company Jigsaw Productions, as well as with big companies like HBO and Sony. Gibney has received multiple awards for his work including the International Documentary Association's Career Achievement Award and the Writers Guild Award. *Zero Days* is accurate in retelling the events and background around Stuxnet. It also provides clear separation of facts and interviewee's answers through the use of visuals and tone. *Zero Days* was released in 2016 and focuses the Stuxnet event back 2010. Even though this documentary is a couple years old, the information it uncovers is still relevant today. Currency is an important part of cyber warfare, especially with rate at which technology advances. Stuxnet provides an important example of what shouldn't be done and what governments are trying to prevent. The source tries to stay objective throughout mostly providing information and letting people provide their own opinions and experience in the event. *Zero Days* covers the Stuxnet situation in great detail! It first gives context and facts of the event, then gains more detail by interviewing people who hold many different government positions.

20

Other Sources

21 [Christopher Banvard](#)

Goel, S. (2011, August). Cyberwarfare: Connecting the Dots in Cyber Intelligence

22

23 [Communications of the ACM](#) 24 132-140. Retrieved from

<https://dl.acm.org.proxy.binghamton.edu/citation.cfm?id=1978569>

This article focuses on the political reasons a country might attack another [using cyber warfare](#). The authors argue that the three major countries participating in cyber warfare are

China, [Russia](#), and the United States. The two major reasons the authors believe these countries are [committing cyber warfare](#) are for espionage and propaganda. The authors [explain how](#)

warfare can be used to expose people to propaganda and try to convince them to take part in negative ideologies, [such as terrorist groups](#). The authors also mention how

countries can take down other [countries' government web services](#), [in order](#) to cause panic during war times

Sanjay Goel:

- Associate Professor and Chair, Information Technology Department Director, B.S.

Digital Forensics Program at the University At Albany

- PL 27 D. from Rensselaer Polytechnic Institute, an M.S. from Rutgers and a B.S. from the

prestigious Indian Institute of Technology in New Delhi.

- Recent research includes media piracy, smart-grid behavioral analysis and flipped classrooms.

This article is important to the overall source because it shows the political side of why countries end up attacking other countries with computers. This article was released in 2011 and it mentions that cyber warfare could be used to influence the ideologies of people, something that is thought to have happened in the 2016 United States election. Zero Days [only focuses on the](#)

29

28

political impacts of cyber warfare, and this article helps to go more in-depth about the reason countries would attack other countries. The main reason Stuxnet was created was to target Iran's nuclear program³⁰ However knowing that there are many other political reasons why cyber warfare exists is also important

Greengard, S. (2010, December). The New Face of War³¹ Communications of the ACM,

³² 57(12):20-22. Retrieved from <https://dl-acm-org.proxy.binghamton.edu/citation.cfm?id=1859212>

Greengard writes about some of the different reasons cyberwarfare is carried out, in this article, he also mentions Stuxnet. This article also shows how there was little blame given to any countries after Stuxnet was discovered, mentioning that³³ experts could tell is that it was created by a well-funded entity. He mentions that gathering classified data, and attempting to deny services to opposing countries are two of the major reasons these attacks are made. One of the important things to note is that there are little to no laws internationally that clearly state that³⁴ cyber warfare is not allowed³⁵ Along with this, many countries do not feel that they have a chance to be caught while committing cyber attacks. Greengard mentions how China has been putting³⁶ capital into improving its cyber warfare capabilities, even going to the lengths of hiring hackers.

Samuel Greengard:

- Regular contributor to Communications of the ACM
- Past president of the American Society of Journalists and Authors
- ³⁷ PL³⁸oved numerous writing awards, including a Maggie in 1997 for best article in a trade magazine.

A major way that this article connects to Zero Days³⁹ is that it mentions Stuxnet. Since this article was written six years before the documentary came⁴⁰ it gives insight into how people

viewed Stuxnet while information was classified and no interviews had been done. This article shows how slow experts were to place blame on any country, for the creation of Stuxnet only mentioning that a well-funded group that could have been a nation must have created the worm.

Knowing that countries, such as China, have hired hackers in the past shows how much cyber warfare is valued by these nations.

Kshetri, N. (2014, February). Cyberwarfare: Western and Chinese Allegations. *IT Professional*,

41

39

40

16-19. Retrieved from <https://ieeexplore.ieee.org.proxy.binghamton.edu/document/6756767>

This article focuses on issues of cyber warfare going on between the United States and China. Kshetri argues that there are four types of hackers originated from China: ~~TC~~ ~~jotic~~ hackers, independent hackers, intelligence orientated hackers, and government hackers. Kshetri also argues about the main reasons he believes both countries are carrying out cyber attacks, those being to gain economic and political advantage over each other. Kshetri brings up different points from both sides, such as in 2005 where a trojan virus was found taking manufacturing information from United States-based companies and sending it to China. Another example that is brought up is how China found an “NSA Key” inside of Microsoft products which China caused China to accuse the United States of spying using a back-door. An important part of Kshetri’s argument stems from knowing that countries cannot easily prove if another country is carrying out an attack. He brings up that China does not want there to be a blame game, which could be seen as China saying “both countries understand we can not prove anything.”

Nir Kshetri:

- Professor at the University of North Carolina-Greensboro
- Research fellow at Kobe University.

- Ph.D. in Business Administration from the University of Rhode Island
- Published over 120 articles in various journals

This is an important source for our research paper because it mentions a variety of attacks

done by [WV] from multiple countries perspectives and the reasons why these countries have carried out

these attacks. [Zero Days] covers one attack, which is politically motivated, having an article

Repeat [45]

which mentions the economic gain is important to understand the full picture. It also shows how

[46]

countries end up blaming each other, without having sufficient enough proof, just like how the

United States and Israel both denied the claims that they created the Stuxnet virus.

Barlow, C. (November 2016). Where is cybercrime really coming from? [Video file]. F [47] ed

from https://www.ted.com/talks/caleb_barlow_where_is_cybercrime_really_coming_from

[48]

This Ted talk is about the major reasons criminals result in cyber crimes. Barlow brings

up that the United Nations believe that 80 percent of cyber attacks come from organized

[DL]

criminals, and not direct [49] attacks from a country. This presenter also brings up the total amount of

[QR]

money this illegal economy is worth, 445 billion dollars. A big reason Barlow believes that it is

difficult to figure out where these attacks are coming from is that companies, who are usually the

main target, hide information from other companies in an attempt to get ahead. If these

[WV]

companies were willing to share information with each other, there would be progress made with defenses against cyber attacks.

Caleb Barlow:

- Vice president at IBM Security
- Degrees include a Bachelor's in electrical engineering and a masters in manufacturing [TC] management and leadership

- Advised government officials on security practices, and strategies to mitigate cyber attacks

This is an important presentation to look into because it goes into detail about another component of cyber warfare that is not between countries but still has an impact on the economy on the country that is being attacked. This source can be used to give examples of how countries can not necessarily tell if they are being attacked by another country or just an independent group of hackers. The statistics that Barlow provides are also important to show the amount that this impacts the economy. Seeing that the United Nations believe that only 20 percent of cyber attacks are caused by other nations, is something that is important to understand the full scope of cyber warfare, and the overall reasons why nations might not go to blame others immediately.

Yuqing Lin

Berger, Ashley M. (2018). The End of the War As We Know It: How an Act of Cyber

50

Warfare Could Impact the U.S. Energy Grid. *Journal of Technology Law & Policy*, 22(1).

52

24
53 URL?

Cyber attacks are categorized into three different aspects on the national level. Ashley M.

54

Berger analyzes past cyber incidents and the Stuxnet worm, applies cyberattacks into traditional legal frameworks and current legislation, distinguishes the use of force and armed attack thresholds to determine that Stuxnet-like attack should legally be categorized into a true war between nations. Berger applies the traditional principles set forth by the United Nation charter, and points out that cyber warfare is a military problem but cyberattack cybercrime is an issue for the law. Cyber attacks that cause kinetic damage are military problems which could trigger national responses. However, cyber attacks that caused minimal damages, such as disabling a power grid, would not warrant a self defense response as outlined by the United Nations.

Although cyber attacks are a new national security issue and they are hard to regulate by law, the U.N charter has fit cyber-attacks into both domestic and international laws.

57

Ashley Berger:

58

- Associate at Ligris.
- Graduated at Suffolk University Law School as Juris Doctor

Ashley analyzes cyber incidents similar to Stuxnet in a legislature which supplements our main source by analyzing Stuxnet's impact. Throughout her paper, Ashley describes how cyber attacks apply to existing laws. She clarifies the legal differences between cyber attacks and RW cyber warfare which supports our claim that cyber attacks akin to Stuxnet are equivalent to physical warfare. In addition, Ashley points out national self-defence rights and military responses specify a nation's capability to deal with cyber war. This relates to another point, what governments should and should not accomplish.

Hoeksma, J. (2017). NHS cyber attack may prove to be a valuable wake up call. BMJ, 57, 62

J2818. DOI or URL

According to Jon Hoeksma, a series of cyber attacks toward National Health Service(NHS) in May 2017 was a wake up call to the world about cyber security. Long after Stuxnet attacks, another sophisticated network attack virus called WannaCry targets the NHS trust network in SH England. WannaCry encrypted files and asked for a \$300 ransom, doubling after 72 hours.

Meanwhile, through the trust network, WannaCry affected organizations across more than 100 countries, mainly in Europe. WannaCry broke into the trust network through EternalBlue which was developed by US National Security Agency and leaked into a hacking group called SV. Brother. All Windows machines were at risk of being infected due to WannaCry's ability to creating SV vulnerabilities in Microsoft software. WannaCry divided its attacks into a series waves.

65

In 2016, cyber attacks targeting the NHS trust network led to crashing systems for weeks. Even with a warning, the NHS responded poorly to WannaCry's main wave of attacks. In the past few years cyber security problems have been left behind. Today's digital systems have become interdependent. Poor defences in systems would cause multisystem failure which could lead to serious consequences. Therefore, improving system defences resilience and preparing for cyber attacks is urgently needed.

Jon Hoeksma:

- CEO and founder of Digital Health
- Former co-founder and editor of E-Health Media Ltd
- Publisher, editor and journalist, specializing in health IT and digital health.
- Creator of Digital Health Intelligence
- CCIO Leaders Network and Health CIO Network
- Creator of Clinical Digital Maturity Index benchmark - adopted by NHS England
- Established of EHI Live Expo
- Co-founder of EHealth Insider

Since Stuxnet attacks happened almost a decade ago, Jon talks about one of the newer viruses, which was partly developed by NSA. This makes his article a solid supplemental source toward our main source. After years of cyber attacks, articles and studies about cyber security trends become harder to find. Therefore, a "wake up call" in our presentation would support our claims toward the danger of cyber attacks as well as the urgency of regulations on the field.

(Jun 29, 2015). Amy Zegart: Cyberwar [Video file]. Retrieved from

<https://www.youtube.com/watch?v=JSWPoeBLFyQ>

Cyber threats and hackers have become the biggest issue to national security. Amy Zegart states in her TED Talks-*Cyberwar*, that there are three classes of cyber threats or attacks to the U.S today. These include: massive thefts of intellectual property from American corporations; massive attacks to the national basic infrastructures; and attacks may also disable national securities and put the country into physical unprotected. In addition, Amy Zegart also states that cyber threats are growing at an unbelievable speed, and the United States has become the world's most vulnerable nation in cyberspace with five reasons. First, the U.S is the most connected nation in the world. Since the nation relies on the internet in tremendous and wide-ranging ways, on this high level of connectivity, attacks would cause serious consequences. Secondly, nine private sectors run 85% of the national critical infrastructures the government can't protect these basic facilities in a sufficient way. Thirdly, The U.S. has a massive v=cyber space making it difficult to defend. Moreover, cyber attacks are hard to trace and leave no time to react. In short, cyber threats could affect anything in today's society.

Amy Zegart:

- Co-director of the Center for International Security and Cooperation (CISAC)
- Davies Family Senior Fellow at the Hoover Institution at Stanford University.
- One of the 10 most influential experts in intelligence reform (The National Journal).
- Foreign policy advisor for the Clinton administration's National Security Council staff
- Masters degree and doctorate in political science from Stanford.

Amy Zegart's TED talk helps us understand what cyber wars and threats are to today's society and national security. She explains why cyberwar is a serious battle to this nation in five reasons which gives us a solid foundation to support our thesis. In addition, she provides three

main methods that hackers use to attack nations, which helps us understand the danger of cyber warfare.

Julia Tucker

Chen-Yu, L., Chien-Cheng, H., Feipei, L., San-Liang, L., & Jingshown, W. (2018). A

76

Comprehensive Overview of Government Hacking Worldwide [PDF file]. *IEEE Access*.

6. 55053-55073. Retrieved from <https://ieeexplore.ieee.org.proxy.binghamton.edu/stamp/>

77

stamp.jsp?tp=&arnumber=8470931

The authors examine laws and practices of government hacking both nationally and internationally. They claim that government's hacking regulations are lacking. The authors suggest improvement by further researching methods and ethics of hacking as well as publicizing their intentions and results. They use a combination of facts in text as well as simplified tables to clearly define comparisons. They support their data by stating the current laws and regulations of government hacking in different nations. The authors list many examples of hacking events that have taken place recently to back their point that the current hacking legislation is not enough.

- Chen-Yu, M.S. in electronic and computer engineering, pursuing Ph.D. from Graduate Institute of Communication Engineering and Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan
- Chien-Cheng, M.S. and Ph.D. in information management, Department of Information Management, National Taiwan University, Taipei, Taiwan

This paper is helpful in showing the lack of hacking policies of nations as well as internationally. It provides examples and solutions as well, helping to further the argument that more regulations and dialogue are needed about this covert world of government hacking.

Nestoras, A.. (2018, Dec.). *Political Warfare: Competition in the Cyber Era* [PDF file]. Paper

presented at the International Conference on Big Data (Big Data), Seattle, WA, USA.

Retrieved from <https://ieeexplore-ieee-org.proxy.binghamton.edu/stamp/stamp.jsp?tp=&arnumber=8622490&tag=1>

Antonios Nestoras claims that hacking in political warfare is a new and constant battle. It is now a subtle art of war with few regulations behind it. Nestoras provides many real life examples when explaining different types of political attacks to show the legitimacy of this newer concept. He also gives some background to political warfare and how the definition has changed over time. The support provided seems effective under the assumptions that hacking is a major part in political warfare today. Governments are using more hidden and advanced techniques to sway the society and stability of other nation

- Adjunct Professor of international affairs, Vesalius College of Vrije Universiteit Brussel (VUB), Brussels, Belgium
- MA in International Relations and Diplomacy, Leiden Universiteit, Netherlands
- Ph.D. candidate in Political Science at the Institute for European Studies, VUB

This idea of hacking not only network systems but society's opinions to push an agenda is just one example of government hacking. The combination of political and cyber warfare can be used by governments to fight enemies from the inside by pushing their ideals onto a foreign society. This has helped me realize that government hacking can involve more than just

computer systems and massive destruction. These subtle but effective methods skew the ethics of hacking as well.

Greiman, V. A. (2016). *Cyber attacks: the fog of identity* [PDF file]. Paper presented at the 2016 International Conference on Cyber Conflict (CyCon U.S.), Washington, DC, USA.
Retrieved from <https://ieeexplore-ieee-org.proxy.binghamton.edu/stamp/stamp.jsp?tp=&arnumber=7836617>

Virginia Greiman claims that many laws created to govern war are to out of date for wordy □ today's methods of modern war. International laws are not equipped to govern cyber-attacks. She also goes through the framework of NATO's cybersecurity manual and the Tallinn Manual to cover the background of what international laws and principles currently cover. Greiman uses many examples of cyber threats and their outcomes to show the lack of regulations around them. This is under the assumption that as of now laws cannot do much to retaliate until there is a precedent of the connection of cyber-attacks to real world threats of harm or damage. □ 82

- Assistant Professor, Administrative Sciences, Boston University, USA
- LLM, Boston University School of Law
- MEd, Boston University

Greiman covers the current international laws and procedures with cyber attacks. It helps MP show the areas where the laws are old or lacking, with evidence from past hacking events. She also gives a greater background behind the different international principles around cyber warfare and where improvements can be made.

Matthew Tullo

Chen, H., Beaudoin, C., Wong, T. (March 23, 2016) Protecting Privacy: The Effects of Negative Privacy Experiences on Privacy Protective Behavior. *Journalism & Mass Communication Quarterly*, 91(1), 85-103. □ 84

Communication Quarterly, 93. 409 - 429

<http://journals.sagepub.com/doi/full/10.1177/1077699016640224> 86

This source outlines several negative internet experiences such as information theft and identity theft. By analyzing the negative effects internet security can have on an individual, the authors hope to instill fear into their readers. There use of pathos makes the argument that internet security needs to be changed more valid. The authors then talk about models to privacy online. The authors introduce a dichotomy to use online, approach setting/ avoidance settings. Approach settings is a proactive response to security breaches, whereas avoidance is reactive. By analyzing previous studies that only address one of these approaches, the authors are able to build a more effective model for privacy security which promotes privacy.

Hongliang Chen:

- Assistant Professor at Zhejiang University

Christopher Beaudoin:

- Chair, Department of Mass Communication, Advertising and Public Relations Professor at Boston University
- <http://www.bu.edu/com/profile/christopher-e-beaudoin/>

Traci Hong:

- Associate Professor at Boston University
- <http://www.bu.edu/com/profile/traci-hong/>

This source is relevant to our main source because it outlines ways to change the current state of the internet to allow for a more pleasurable browsing experience. This is completely lacking in our main source. By using a approach setting all over the internet, it should prevent thousands of data leaks before they occur. MP □

Landau, S. (2015) Control Use of Data to Protect Privacy. *Science*, 347, 504-506

<https://science.science.org/content/347/6221/504.full>

90

92

Susan Landau states that there should be no operation private operations for collecting data and collected data must only be used for the reason specified. Since data is collected everywhere on the internet, it has become very important for corporations. User data is collected for many uses including: creating personalized ads, improving policies, and tracking user information. Susan Landau argues that all of the data being collected should be announced to the public. The government and corporations should not be allowed to gather information about citizens without a warrant. Also she says that since the data belongs to citizens, they should know what the information is being used for. Organizations should not be permitted to collect data under false pretenses (saying it will be used for a and then using it for b). Landau thinks for the use of Fair Information Practices(FIPs) should be used online. Landau uses various government sources to back up her argument and uses logos and pathos to support her claim. The logos and pathos make the claims seem valid by appealing to the readers emotions. She tries to use logic and fear to get the readers to agree with her claims.

Susan Landau:

- Distinguished Professor at Worcester Polytechnic Institute

This source is useful because it outlines a method of improving the internet, which is lacking in the main source. Landau encourages the use of Fair Internet Practices to make the internet a safer place. These practices include Users knowing what their data is being used for and making secret collection of data illegal. Also it would make it so data being collected could only be used for the specified use. "Zero Days" states nothing about how to make the internet a safer place so this source fills in a gap.

Snowden, E. (March 2014) [Here's how we take back the Internet \[Video\]](#)  

https://www.ted.com/talks/edward_snowden_here_s_how_we_take_back_the_internet

This source explains how citizens can protect themselves online. After the NSA leaks in 2013, Edward Snowden spoke about how the NSA and similar agencies were breaking laws; and how to protect yourself from being spied on. Mr. Snowden's evidence is the information that he leaked in 2013. Snowden's testimonial explains not only what type of information was being gathered by intelligence agencies, but also how the government forced companies to comply to increasing surveillance. Agencies were using wiretaps without a warrant which has been illegal since 1986.  One misconception Snowden touches upon is the PRISM. PRISM is an online surveillance system that records data such as who people are talking to, where they commute everyday and where they go on vacation. The software collects large amount of data on citizens in the United States. While not all citizens are targets, there is no limit to the types of people that may be spied on. This system is used by many different internet companies who then send the data to the NSA for processing. Another claim of Snowden's that the NSA violated not only U.S. laws, but also  their own guidelines. They were infringing on rules they had made for themselves in attempt to gather more data. Lastly, Snowden claims that the NSA has a program called "Bullrun" which is designed to degrade the United States own infrastructure. This program would install backdoors into many corporations and government agencies that the NSA could later exploit. Snowden believes that the first step to establishing a safer internet is developing an internet Magna Carta.

Edward Snowden:

- Studied at Anne Arundel Community College 2004-2005
- Former NSA contractor

- Whistle Blower

RW □

This source helps to prove that the NSA is surveying its citizens and offers a first step to protecting privacy for internet users. Snowden lists some NSA projects that are in place to watch citizens and talks about what they do. This compares to the Stuxnet attacks in that the government denies their existence; but there is proof that they exist. Snowden also states that a bill making everyone subject to the same law on the internet would be useful in protecting privacy. This would mean that governments, citizens, and corporations are all subject to the same laws online.

MP

Group 1: Hacking

GRADEMARK REPORT

FINAL GRADE

GENERAL COMMENTS

Instructor

87 /100

PAGE 1

PAGE 2



Comment 1

sentence case



Comment 2

A.



Comment 3

Retrieved from



DL

delete



SV

Subject/Verb Agreement: Make certain that your verb matches your subject in terms of number (singular or plural).

Additional Comment

need



wordy

Wordy: Trim your phrasing down to the necessary words so that your reader expends the minimum of effort to puzzle out your meaning

Additional Comment

of

QM

SH

Shift: Do not shift tense (jump, jumps, jumped, has jumped), number (him, them), person (you, one, it), voice (active or passive), or mood (is, can, could, would) in a single sentence or even within a single paragraph. Be consistent unless you have prepared your reader by explaining why you are making the shift.

Additional Comment

Took place in 2010 is past tense. Keep tenses consistent. Stuxnet was a sophisticated ..



Comment 4

I understand that it's not known who created it. Maybe say something like "an unknown nation-state"

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

Not sure what this word means in this context

QM

PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

QM

wordy

Wordy: Trim your phrasing down to the necessary words so that your reader expends the minimum of effort to puzzle out your meaning

Additional Comment

independently

QM

CA

Conjunctive Adverb: Conjunctive adverbs (however, also, then) should usually follow semicolons (when the independent clause in which the conjunctive adverb appears follows another independent clause), though sometimes the conjunctive adverb can appear further away from the semicolon. Here are a few examples: "I love cats; also, I love dogs." "I love cats; I, however, do not love dogs." "I love cats; I do not love dogs, however." These rules are also true for transitional expressions (in other words, thirdly). A conjunctive adverb may begin a second sentence ("However, the students realized . . ."), or may be merely surrounded by commas when the second clause is a separate sentence ("The students, however, realized . . .").

QM

Repeat

Do not repeat a word or use any two words of the same root (user, used) in the same sentence

Additional Comment

Said this two sentences ago



Comment 5

this summary reads as a play-by-play of the source. How is the argument structured?



Comment 6

a few? Saying "there are few" makes it sound as though there aren't many. "There are a few" sounds like there are some.

QM

WV

avoid weak verbs like "to get," "to do," "to go," and "to be"



Comment 7

Explain without parenthesis



Comment 8

Israeli or Israel's

QM

SH

Shift: Do not shift tense (jump, jumps, jumped, has jumped), number (him, them), person (you, one, it), voice (active or passive), or mood (is, can, could, would) in a single sentence or even within a single paragraph. Be consistent unless you have prepared your reader by explaining why you are making the shift.

Additional Comment

handled?



Comment 9

Not clear what the first issue was, so far it seems to have just discussed history of the field.

QM

DL

delete

QM

XC

Excessive Coordination: When using coordinating conjunctions (and, but, or, for, so, nor, yet) to combine sentences, be certain not to use too many in the same sentence. Any more than

one used in a single sentence to combine independent clauses confuses the reader.

QM

DL

delete



Comment 10

Please define this term, it has been used twice.

QM

SH

Shift: Do not shift tense (jump, jumps, jumped, has jumped), number (him, them), person (you, one, it), voice (active or passive), or mood (is, can, could, would) in a single sentence or even within a single paragraph. Be consistent unless you have prepared your reader by explaining why you are making the shift.

Additional Comment

Should agree with narrates

narrates and presents

'

Contractions: Avoid contractions. These are inappropriately informal.

Additional Comment

Improper use of a '

This is not supposed to be possessive.

Employees

QM

BO

Borrowed Organization: Use your own organization. Do not rely on the sequence of ideas as they appear in your sources to provide structure for your essay – this practice lulls writers into unnecessary summary of a source. This kind of borrowing may also lead to a form of illegitimate paraphrase or plagiarism.

QM

SV

Subject/Verb Agreement: Make certain that your verb matches your subject in terms of number (singular or plural).

Additional Comment

denies

QM

SV

Subject/Verb Agreement: Make certain that your verb matches your subject in terms of number (singular or plural).

Additional Comment

refuses

QM

QR

Empty Qualifier: Empty qualifier (rather, quite, certain, very). This exaggerated word has no impact when read. Describe instead.

QM

MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use "this," follow with a noun.



Comment 11

no analysis here

QM

Repeat

Do not repeat a word or use any two words of the same root (user, used) in the same sentence

QM

MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use "this," follow with a noun.

QM

wordy

Wordy: Trim your phrasing down to the necessary words so that your reader expends the minimum of effort to puzzle out your meaning

Additional Comment

"interviews different government workers" is more concise



Comment 12

witnesses

QM

WV

avoid weak verbs like "to get," "to do," "to go," and "to be"

QM

wordy

Wordy: Trim your phrasing down to the necessary words so that your reader expends the minimum of effort to puzzle out your meaning

Additional Comment

anonymous individuals

QM

Repeat

Do not repeat a word or use any two words of the same root (user, used) in the same sentence



Comment 13

more discussion of the methods of argumentation needed



DL

delete



Comment 14

Just said "causes" - should be consistent



PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

Additional Comment

ominous soundtrack -> drab imagery



Comment 15

Define this term



QR

Empty Qualifier: Empty qualifier (rather, quite, certain, very). This exaggerated word has no impact when read. Describe instead.



SH

Shift: Do not shift tense (jump, jumps, jumped, has jumped), number (him, them), person (you, one, it), voice (active or passive), or mood (is, can, could, would) in a single sentence or even within a single paragraph. Be consistent unless you have prepared your reader by explaining why you are making the shift.

Additional Comment

How damaging it could be is future tense -> had is past



2B

Excessive Reliance upon "To Be" Verbs: Avoid excessive reliance upon "to be" verbs (am, is, are, was, were, and any phrase using be, been, or being). Strive to use descriptive verbs instead.



DL

delete

QM**DL**

delete

QM**RW**

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

led

QM**PL**

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

QM**TC**

Title Capitalization: Capitalize your title according to Standard English conventions (first letter of first and last words, all nouns, adjective, verbs and adverbs, and any preposition with more than five letters).

Additional Comment

International

QM**NM**

No Mention: Do not mention your essay or the assignment, except in an abstract, before the text of your work.

QM**2B**

Excessive Reliance upon "To Be" Verbs: Avoid excessive reliance upon "to be" verbs (am, is, are, was, were, and any phrase using be, been, or being). Strive to use descriptive verbs instead.

QM**wordy**

Wordy: Trim your phrasing down to the necessary words so that your reader expends the minimum of effort to puzzle out your meaning

Additional Comment

highlights?

QM**MP**

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use "this," follow with a noun.

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

in

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

few

QM

QR

Empty Qualifier: Empty qualifier (rather, quite, certain, very). This exaggerated word has no impact when read. Describe instead.

QM

DL

delete

QM

DL

delete



Comment 16

deficit,

PAGE 6

QM

wordy

Wordy: Trim your phrasing down to the necessary words so that your reader expends the minimum of effort to puzzle out your meaning

Additional Comment

Break into two sentences

QM

SV

Subject/Verb Agreement: Make certain that your verb matches your subject in terms of number (singular or plural).

Additional Comment

caused

QM

MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use

"this," follow with a noun.

Additional Comment

Second "it" is unclear because you've introduced operating systems

QM

2B

Excessive Reliance upon "To Be" Verbs: Avoid excessive reliance upon "to be" verbs (am, is, are, was, were, and any phrase using be, been, or being). Strive to use descriptive verbs instead.

QM

PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

Additional Comment

Facts -> opinions



Comment 17

back in



Comment 18

couple of years



Comment 19

Clarify this point - doesn't explain why currency is important



'

Contractions: Avoid contractions. These are inappropriately informal.



DL

delete



Repeat

Do not repeat a word or use any two words of the same root (user, used) in the same sentence

Additional Comment

This point has been made



Comment 20

confused analysis in this paper. needs clear organization and removal of mere summary



Comment 21

penalty for lacking peer-reviewed sources assessed separately



Comment 22

sentence case



Comment 23

NOT a peer-reviewed source - a magazine



Comment 24

italics



WV

avoid weak verbs like "to get," "to do," "to go," and "to be"

Additional Comment

engaging in?



RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

One does not "commit warfare"



Comment 25

How is the argument structured?



MC

Mixed Construction: Mixed constructions, or "subject shifts," are formed when two overlapping structures compete in the same sentence for some of the same words; for example, in "I like milk is my favorite drink," the word "milk" is used for two separate sentence structures, "I like milk" and "Milk is my favorite drink." (Note that the subject shifts from "I" to "Milk".) The words "when," "how," "where," and "why" can also cause mixed constructions when misused (ex. In "A party is where friends get together to have a good time," a party is a "what," not a "where.")

Additional Comment

Sentence is structured to sound like terrorist groups are negative ideologies. I get what you are trying to say, but groups are groups, not ideologies.



Comment 26

How is the argument structured?



Comment 27

countries'



DL

delete



DL

delete



PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

Additional Comment

Sentences



WY

A writer should not use any more than one of the following in the same sentence: "reason," "why," and "because"; otherwise, the resulting redundant sentence becomes a mixed construction.



Comment 28

Italicize



Comment 29

I assume you're referring to the presidential election, specify that

PAGE 8



WY

A writer should not use any more than one of the following in the same sentence: "reason," "why," and "because"; otherwise, the resulting redundant sentence becomes a mixed construction.



Comment 30

program,



Comment 31

sentence case



Comment 32

again, not a peer-reviewed source



Comment 33

italics



Comment 34

that all? There is a word missing in this sentence



Comment 35

How is the argument structured?



Negative

Negatives: Positive sentence constructions are easier to read. Convert negative statements using "not" to positive statements using words and phrases that contain the negative; ex., "not honest" --> "dishonest" or "never on time" --> "always late"



WV

avoid weak verbs like "to get," "to do," "to go," and "to be"



Comment 36

How is the argument structured?



PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

Additional Comment

This is a full sentence, other two are not



Comment 37

Zero Days



Comment 38

out

PAGE 9

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

conducted

QM

RO

Watch out for sentence level errors: Run-ons, two independent clauses (IC's – full sentences) side by side without a period in between (either as a Fused Sentence, two independent clauses with nothing between them, or as a Comma Splice, two IC's with a comma between them) corrupt intelligibility. For example, "One plus one is two, two plus two is five." is unclear: should we place an "and" or an "or" after the comma? Without such a connector, the sentence is nonsensical and incomprehensible.



Comment 39

sentence case



Comment 40

italis



Comment 41

NOT a peer-reviewed source - a magazine

QM

WV

avoid weak verbs like "to get," "to do," "to go," and "to be"

QM

TC

Title Capitalization: Capitalize your title according to Standard English conventions (first letter of first and last words, all nouns, adjective, verbs and adverbs, and any preposition with more than five letters).



Comment 42

How is the argument structured?



Comment 43

Consider defining this term



Comment 44

"

QM

PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

Additional Comment

This has a period

PAGE 10

QM

WV

avoid weak verbs like "to get," "to do," "to go," and "to be"

QM

Repeat

Do not repeat a word or use any two words of the same root (user, used) in the same sentence



Comment 45

Zero Days



Comment 46

Redundant



Comment 47

TED.



Comment 48

This does not make sense

QM

DL

delete

QM

QR

Empty Qualifier: Empty qualifier (rather, quite, certain, very). This exaggerated word has no impact when read. Describe instead.



Comment 49

directly

QM

WV

avoid weak verbs like "to get," "to do," "to go," and "to be"

QM

TC

Title Capitalization: Capitalize your title according to Standard English conventions (first letter of first and last words, all nouns, adjective, verbs and adverbs, and any preposition with more than five letters).

PAGE 11

QM

RO

Watch out for sentence level errors: Run-ons, two independent clauses (IC's – full sentences) side by side without a period in between (either as a Fused Sentence, two independent clauses with nothing between them, or as a Comma Splice, two IC's with a comma between them) corrupt intelligibility. For example, "One plus one is two, two plus two is five." is unclear: should we place an "and" or an "or" after the comma? Without such a connector, the sentence is nonsensical and incomprehensible.

QM

MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use "this," follow with a noun.

QM

wordy

Wordy: Trim your phrasing down to the necessary words so that your reader expends the minimum of effort to puzzle out your meaning

QM

WY

A writer should not use any more than one of the following in the same sentence: "reason," "why," and "because"; otherwise, the resulting redundant sentence becomes a mixed construction.

QM

HI

Hanging Indents: Use hanging indents on an APA References page. Select the option within the paragraphing dialog box (under Format in Word 2003 or under Page Layout in Word 2007 or later versions)



Comment 50

A.



Comment 51

sentence case



Comment 52

space

QM

DOI or URL?

url or doi required



Comment 53

only one page?



Comment 54

three level: first, second and third. Essay is set up so that the reader expects the levels to follow



Comment 55

cyber attacks



Comment 56

How is the argument structured?

QM

PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

QM

SH

Shift: Do not shift tense (jump, jumps, jumped, has jumped), number (him, them), person (you, one, it), voice (active or passive), or mood (is, can, could, would) in a single sentence or even within a single paragraph. Be consistent unless you have prepared your reader by explaining why you are making the shift.

PAGE 12



Comment 57

U.N.



Comment 58

sentence / PL



Comment 59

Not sure what this means

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

similar



Comment 60

How is the argument structured?



Comment 61

nation's



Comment 62

spell it out

QM

DOI or URL?

url or doi required

QM

RT

Article Error: Definite articles (the) are used to refer to particulars with which the reader is already familiar; demonstrative pronouns (this, these) are used in much the same way. Indefinite articles (a, an, some, any) precede unspecified items. The absence of an article implies the notion of a thing.

QM

SH

Shift: Do not shift tense (jump, jumps, jumped, has jumped), number (him, them), person (you, one, it), voice (active or passive), or mood (is, can, could, would) in a single sentence or even within a single paragraph. Be consistent unless you have prepared your reader by explaining why you are making the shift.

Additional Comment

Stick to past tense



Comment 63

doubling the amount / doubling the ransom



Comment 64

Grammatically fine but they were called "Shadow Brokers"

QM

RT

Article Error: Definite articles (the) are used to refer to particulars with which the reader is already familiar; demonstrative pronouns (this, these) are used in much the same way. Indefinite articles (a, an, some, any) precede unspecified items. The absence of an article implies the notion of a thing.

Additional Comment

the US ...

QM

SV

Subject/Verb Agreement: Make certain that your verb matches your subject in terms of number (singular or plural).



Comment 65

series of waves

PAGE 13



Comment 66

systems crashing

QM

QR

Empty Qualifier: Empty qualifier (rather, quite, certain, very). This exaggerated word has no impact when read. Describe instead.

QM

PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

QM

RT

Article Error: Definite articles (the) are used to refer to particulars with which the reader is already familiar; demonstrative pronouns (this, these) are used in much the same way. Indefinite articles (a, an, some, any) precede unspecified items. The absence of an article implies the notion of a thing.

Additional Comment

the Stuxnet

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).



Comment 67

Zegart, A.



Comment 68

TED.



Comment 69

delete

PAGE 14



Comment 70

separate with commas



DL

delete



Comment 71

world's



Comment 72

U.S.



RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

for



MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use "this," follow with a noun.



PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").

Additional Comment

First -> Second

QM

'

Contractions: Avoid contractions. These are inappropriately informal.



Comment 73

an



Comment 74

Fix

QM

PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").



Comment 75

Zegart's

QM

MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use "this," follow with a noun.

PAGE 15



Comment 76

sentence case



Comment 77

indent?



Comment 78

governments'

QM

SV

Subject/Verb Agreement: Make certain that your verb matches your subject in terms of number (singular or plural).

QM

QR

Empty Qualifier: Empty qualifier (rather, quite, certain, very). This exaggerated word has no impact when read. Describe instead.



Comment 79

Redundant

PAGE 16



P/V

Passive voice:

Passive voice constructions do not tell your reader as much as the corresponding active version would. For instance, in the phrase "it is understood," a reader cannot know who or what is doing the understanding. A more active version requires that you tell your reader who is performing the action: "Students understand." While there are rare occasions when a writer cannot avoid the passive voice, the more informative active version is almost always a better choice. Changing passive constructions to active always makes writing more lively and accessible.



PL

Parallelism Problem: Be sure to use parallel structures when creating lists (even of two elements, such as when using "and"). Items need to be grammatically parallel (of the same part of speech: ex. "coming and going") and categorically parallel (operating at the same level: "fruits and vegetables," not "apples, bananas, and vegetables").



Comment 80

sentence case



QR

Empty Qualifier: Empty qualifier (rather, quite, certain, very). This exaggerated word has no impact when read. Describe instead.



Comment 81

good summaries in this section



P/V

Passive voice:

Passive voice constructions do not tell your reader as much as the corresponding active version would. For instance, in the phrase "it is understood," a reader cannot know who or what is doing the understanding. A more active version requires that you tell your reader who is performing the action: "Students understand." While there are rare occasions when a writer cannot avoid the passive voice, the more informative active version is almost always a better choice. Changing passive constructions to active always makes writing more lively and accessible.



DL

delete

QM

NM

No Mention: Do not mention your essay or the assignment, except in an abstract, before the text of your work.

PAGE 17

QM

wordy

Wordy: Trim your phrasing down to the necessary words so that your reader expends the minimum of effort to puzzle out your meaning

Additional Comment

Not needed - implied by "out of date"



Comment 82

Laws don't retaliate - clarify this sentence



Comment 83

Connected to

OR

Connected with

QM

MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use "this," follow with a noun.



Comment 84

&



Comment 85

sentence case

PAGE 18



Comment 86

Retrieved from



Comment 87

a lack of internet security



Comment 88

Their



DM

Dangling Modifiers and Misplaced Modifiers: Beware of “dangling modifiers.” A modifying word or phrase should always be placed adjacent to what it modifies. In the following example, “Entering the room, the chairs were in disarray,” it sounds like the chairs entered the room. The thing that enters the room must immediately follow that phrase: “Entering the room, the students found the chairs in disarray.” Also, be wary of “misplaced modifiers,” qualifiers that are not next to their referents: “I ate just my cake.” and “I just ate my cake.” mean two different things.



Comment 89

good summaries here



TC

Title Capitalization: Capitalize your title according to Standard English conventions (first letter of first and last words, all nouns, adjective, verbs and adverbs, and any preposition with more than five letters).



MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use “this,” follow with a noun.

Additional Comment

Could probably be removed and rewritten:

Using an approach setting online would prevent ...

PAGE 19



Comment 90

sentence case



Comment 91

Retrieved from



Comment 92

not a peer-reviewed source - a magazine



Comment 93

Fix

QM

QR

Empty Qualifier: Empty qualifier (rather, quite, certain, very). This exaggerated word has no impact when read. Describe instead.

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

site



Comment 94

She also



Comment 95

This point has been made



Comment 96

Explain this without using parenthesis

QM

'

Contractions: Avoid contractions. These are inappropriately informal.



Comment 97

users



Comment 98

Zero Days

PAGE 20



Comment 99

TED.



Comment 100

italics



Comment 101

Expand on this detail

QM

SV

Subject/Verb Agreement: Make certain that your verb matches your subject in terms of number (singular or plural).

Additional Comment

is -> singular

Are the misconceptions



Comment 102

their

PAGE 21

QM

RW

Wrong Word: Do not let your thesaurus take you off course. Word variety is good, but words have connotations (subjective implications) as well as denotations (objective meanings).

Additional Comment

surveilling

QM

MP

Ambiguous Pronoun: Avoid ambiguous pronouns (this, it) wherever possible. If you must use "this," follow with a noun.

CITATIONS (15%)

90 / 100

Is there a complete APA-formatted citation for the source? Does the source appear to be scholarly and/or reliable?

SCALE 1

(0)

SCALE 2

(25)

SCALE 3

(50)

SCALE 4

(60)

SCALE 5

(65)

SCALE 6

(70)

SCALE 7

(75)

SCALE 8

(80)

SCALE 9

(85)

SCALE 10

(90)

SCALE 11

(95)

SCALE 12

(100)

SUMMARIES (20%)

85 / 100

Is there a first paragraph which identifies the thesis and explains what evidence the author give in support of that thesis? Is there sufficient explanation of the value of this evidence?

SCALE 1

(0)

SCALE 2

(25)

SCALE 3

(50)

SCALE 4

(60)

SCALE 5

(65)

SCALE 6

(70)

SCALE 7

(75)

SCALE 8

(80)

SCALE 9

(85)

SCALE 10

(90)

SCALE 11

(95)

SCALE 12

(100)

CREDENTIALS (15%)

90 / 100

Is there a list of credentials or credibility review of the source? (bulleted, cut-and-pasted is fine)

SCALE 1

(0)

SCALE 2

(25)

SCALE 3

(50)

SCALE 4

(60)

SCALE 5

(65)

SCALE 6

(70)

SCALE 7

(75)

SCALE 8

(80)

SCALE 9

(85)

SCALE 10

(90)

SCALE 11

(95)

SCALE 12

(100)

RELEVANCE (15%)

90 / 100

Is there in the second paragraph a discussion of the relevance of this article/text to the student's subtopic
AND to the group thesis for the entire project?

SCALE 1

(0)

SCALE 2

(25)

SCALE 3

(50)

SCALE 4

(60)

SCALE 5

(65)

SCALE 6

(70)

SCALE 7

(75)

SCALE 8

(80)

SCALE 9

(85)

SCALE 10

(90)

SCALE 11

(95)

SCALE 12

(100)

MECHANICS (15%)

80 / 100

Is the grammar and formatting (consistency) of the annotations correct?

SCALE 1

(0)

SCALE 2

(25)

SCALE 3

(50)

SCALE 4

(60)

SCALE 5

(65)

SCALE 6

(70)

SCALE 7

(75)

SCALE 8

(80)

SCALE 9

(85)

SCALE 10

(90)

SCALE 11

(95)

SCALE 12

(100)

MN SRC ANALYS (20%)

85 / 100

bias, credibility, and argumentative analysis

SCALE 1

(0)

SCALE 2

(25)

SCALE 3

(50)

SCALE 4

(60)

SCALE 5
(65)

SCALE 6
(70)

SCALE 7
(75)

SCALE 8
(80)

SCALE 9
(85)

SCALE 10
(90)

SCALE 11
(95)

SCALE 12
(100)