

2018

# 'Fake News Hysteria': How an analysis of Orson Welles' War of the Worlds broadcast can inform the issue of 'fake news'

Mirella Kami Ntahonsigaye

*University of Windsor*, [ntahons@uwindsor.ca](mailto:ntahons@uwindsor.ca)

Follow this and additional works at: <https://scholar.uwindsor.ca/major-papers>



Part of the [Other Film and Media Studies Commons](#)

---

## Recommended Citation

Ntahonsigaye, Mirella Kami, "'Fake News Hysteria': How an analysis of Orson Welles' War of the Worlds broadcast can inform the issue of 'fake news'" (2018). *Major Papers*. 61.

<https://scholar.uwindsor.ca/major-papers/61>

This Major Research Paper is brought to you for free and open access by the Theses, Dissertations, and Major Papers at Scholarship at UWindsor. It has been accepted for inclusion in Major Papers by an authorized administrator of Scholarship at UWindsor. For more information, please contact [scholarship@uwindsor.ca](mailto:scholarship@uwindsor.ca).

**‘Fake News Hysteria’:**

**How an analysis of Orson Welles’ *War of the Worlds* broadcast can inform  
the issue of ‘fake news’**

By

**Mirella Kami Ntahonsigaye**

A Major Research Paper  
Submitted to the Faculty of Graduate Studies  
through Communication, Media and Film  
in Partial Fulfillment of the Requirements for  
the Degree of Master of Arts  
at the University of Windsor

Windsor, Ontario, Canada

2018

© 2018 Mirella Kami Ntahonsigaye

**‘Fake News Hysteria’: How an analysis of Orson Welles’ *War of the Worlds*  
broadcast can inform the issue of ‘fake news’**

by

**Mirella Kami Ntahonsigaye**

APPROVED BY:

---

V. Manzerolle  
Communication, Media and Film

---

M. Darroch, Advisor  
School of Creative Arts

September 19, 2018

## DECLARATION OF ORIGINALITY

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication.

I certify that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis and have included copies of such copyright clearances to my appendix.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.

## ABSTRACT

Since the 2016 United States election the topic of ‘fake news’ has been an ongoing public concern, creating anxiety around the reliability of information circulating the Internet and appearing on our social media. There is difficulty in defining exactly what ‘fake news’ is, much less devising methods to help people identify truthful content. There are even fewer discussions revolving around similar past instances that might be able to offer some valuable insight on understanding, not just ‘fake news, but also our contemporary relationship with our media. I argue in this paper that the historical War of the Worlds radio broadcast — popularly remembered as the broadcast that caused ‘hysteria’ across America—orchestrated by Orson Wells in 1938, bears semblance to our present-day trepidations surrounding fake news. In my research, I triangulate the following theoretical frameworks: discourse networks theory, the social genesis of sound fidelity, and media publics, and investigate whether War of the Worlds can be a useful case study in providing a more solid perspective on today’s issue of ‘fake news’ and what it might say about our current relationship with our media environment.

## DEDICATION

This paper is dedicated to my parents, who have sacrificed so much for me to pursue my academic career.

To my mother, Rose-Marie Nzitunga, who has inspired me to work tirelessly towards my passions. Watching you earn your degree while raising me practically by yourself – with dad on the road during night shifts – is something I will never forget. You were and always will be my first best friend. Thank you for being my greatest cheerleader and for your unfailing support.

To my father, Nestor Ntahonsigaye, who has shown me the utmost importance of self-confidence. I hope to continue to believe in myself the way you believe in me. Witnessing you navigate the unknown with an undeterred faith in yourself and your abilities, is a quality I hope to wield as effortlessly as you do some day.

I love you both very dearly.

And for Milou, who I will forever miss.

## ACKNOWLEDGEMENTS

I would like to thank my MA cohorts, who have made this academic experience far less lonely and isolating. I will never forget our shared moments both in the classrooms and at the bar!

To my wonderful friend, Jack. I cannot imagine enduring these past two years without your friendship. You have been there for me during my most trying times. You're a brilliant and wonderful person and I can't wait to witness all of the amazing things you will do in this world.

I could not have completed this MRP without the support of the CMF department. A big thank you to Dr. Vincent Manzerolle for indulging in all of my random ideas. Thank you for supporting my curiosity within this field of research, and for taking on this project; you're truly an incredible instructor and an inspiration to many.

The biggest thank you goes to my supervisor, Dr. Michael Darroch. It was your course that I took during my first year as an undergrad in CMF that sparked my interest in media and communication theory. It seems so serendipitous to me that it's all coming back full circle, with you now as my MRP supervisor. I cannot explain how important it is for me to have a brilliant and kind instructor such as yourself, believe in my abilities to conceive and create inspiring academic work, even when I don't believe in myself. From the bottom of my heart, thank you.

## TABLE OF CONTENTS

<b>DECLARATION OF ORIGINALITY</b>	<b>III</b>
<b>ABSTRACT</b>	<b>IV</b>
<b>DEDICATION</b>	<b>V</b>
<b>ACKNOWLEDGEMENTS</b>	<b>VI</b>
<b>CHAPTER ONE</b>	<b>1</b>
INTRODUCTION	1
“YOU ARE FAKE NEWS!” – WHAT EXACTLY IS FAKE NEWS?	6
RADIO IN THE 30S	16
“OH, THE HUMANITY!” - WHY WAR OF THE WORLDS?	23
A CRITIQUE OF A. BRAD SCHWARTZ’S BROADCAST HYSTERIA	29
<b>CHAPTER TWO</b>	<b>31</b>
THEORETICAL FRAMEWORK	31
KITTLER’S THEORY OF ‘DISCOURSE NETWORKS’	32
STERNE’S THEORY OF “SOCIAL GENESIS OF FIDELITY”	37
GITELMAN’S THEORY OF ‘MEDIA PUBLICS’	41
<b>CHAPTER THREE</b>	<b>44</b>
ANALYSIS	44
USE OF ‘AUTHENTICITY MARKERS’	44
MEDIA NETWORKS AS PART OF THE PLOT	48
CHALLENGES AND LIMITATIONS	55
CONCLUSION	56
<b>WORK CITED</b>	<b>59</b>
<b>VITA AUCTORIS</b>	<b>64</b>



## CHAPTER ONE

### INTRODUCTION

On September 20<sup>th</sup>, 2017, CBC news reported the launch of a news media literacy program available for Canadian students aged nine to nineteen years old – a program funded by Google Canada no less.<sup>1</sup> “Fake News” has prominently headlined many stories for news outlets like that of the CBC and the New York Times to Fox News and Breitbart. News reports and opinion pieces have been flooded with the term in attempts to solve the problem and hold those accountable for its distribution. Hoaxes, false tips and other similar issues alike have become a primary concern for a diverse array of people not least politicians and journalists. Yet the issue remains an incredibly confusing one despite the public consensus around its implications. Had someone asked me what ‘fake news’ is or are prior to completing my research, I am certain I would not have been able to give a definitive answer, let alone a clear cause and/or solution. However, in that predicament I would not have been alone, as there are a number of news articles<sup>2</sup> demonstrating a similar struggle to answer that question. What exactly is or are ‘fake news’ and have we ever dealt with something like this before? It is my goal is to explore these two questions, with a particular emphasis on the second.

Part of what I think is causing confusion around ‘fake news’ is our inability to compare it to other previous issues or events. Retrospect aids in providing

---

<sup>1</sup> Users must now subscribe to *NewsWise* in order to access their media literacy curriculum

<sup>2</sup> See the Guardian article titled “What is fake news? How to spot it and what can you do to stop it” by Elle Hunt (17 Dec. 2017). And Global News article “Canadians can’t agree on what ‘fake news’ really is: Ipsos poll” by Josh K. Elliot (5 Sept. 2018)

perspective and context, equipping people with a certain level of aptitude to approach new issues. What I have come to recognize through my research is that media technologies encourage us to view affairs as isolated events. It may seem misguided to compare older media technologies to newer ones. However, with the support of the theories applied to my research, I argue older media technologies and their specific media environments –the concept that views media “[...] as enviroining and invisibly shaping human life.” (Chandler and Munday) – can provide useful commentary on our contemporary media-related trepidations. The confusion around ‘fake news’ alone is both an interesting and important factor to this research, indicating the value in providing a type of retrospective analysis. The reflective example I believe is valuable to my inquiry on ‘fake news’ today is none other than one of the most historically notable examples of deceptive information: the 1938 radio broadcast of H.G Wells’ *War of the Worlds*, conducted by the decorated radio artist, theatre and film director, Orson Welles. Approximately two weeks before the aforementioned CBC report on the news media literacy program, an article in *The New Yorker* titled “Fake-News Fallacy” was written by journalist Adrian Chen. The piece introduced the 1938 broadcast as a case for how “old fights about radio have lessons for new fights about the Internet” (1). In its time, the broadcast was said to have caused many to fear the invasion of aliens, occupying news headlines and stirring the conversation around the power of media technology at the time: radio. Similar to a number of studies conducted on the topic, Chen described the historical event as a prompt for discussions around the power of media and the need to control its effects. He drew parallels between the

way policy decisions from the Federal Communications Commission were implemented based on their felt responsibility to “[...] protect people from the malicious tricksters like Welles.” (2), with the way Facebook and Google – the platforms that “[...] now define the experience of the Internet for most people...” (4)—declared their desire to resolving the ‘fake news’ problem. In my research, I draw parallels between the concerns around the dated broadcast with today’s questions around ‘fake news’. However, rather than asking who is responsible for ‘fake news’, or how to reinstate the authority of news distribution to previously established institutions, I ask the question: To what extent can an analysis of the 1938 *War of the Worlds* radio broadcast as a case study of ‘fake news’ contribute to our more comprehensive perspective of today’s issue of ‘fake news’ and our current relationship with our media environment? Or in other words: do we understand the nature of our current media ecosystem and our involvement in it?

The research paper is divided into two major chapters. The first chapter addresses the ambiguity around the term ‘fake news’ in today’s public conversation. It uses the support of recent and previously conducted research in order to make sense of both the contemporary use of the term and the social conditions that surround it. I also introduce and briefly analyse *NewsWise*, the Canadian media literacy program formed by the collaboration between CIVIX and the Canadian Journalism foundation, funded by Google Canada. The latter half of the chapter conducts a summary of the history of Orson Welles and *War of the Worlds*, while additionally discussing the socio-political and media conditions around radio in the 1930s. This section focusses on the relevance of using the 1938

broadcast as a case study and potentially as a basis to further our understanding of what ‘fake news’ means in our current media environment. Finally, I conclude this section by analyzing whether or not Schwartz’s documented historical research on the 1938 broadcast lacks a media analysis lens. It is important to analyse Schwartz’s study because a critique on a media event without a media theoretical lens, can create a gap in clarity on the media’s influential abilities on incidents like the ‘broadcast hysteria’. The effects of media are relegated to just being an element to the overall phenomenon of the WOTW broadcast, despite the actual gravity of said media effects.

Chapter two introduces the theoretical framework of the study broadly based on concepts of media materialities – a concept that re-orientates an interest to media’s material effects caused by media “[...] techniques, technologies [...] and procedures [...] [as well as] the joint impact of institutions [...]” (Pfeiffer 6). To this end, I draw upon three core theoretical perspectives: the notion of discourse networks through the work of Friedrich Kittler, the social genesis of fidelity as examined by Jonathan Sterne, and Lisa Gitelman’s approach to media publics. The three media theoretical perspectives complement each other in generating a richer understanding of both the media technological and social-cultural processes that influence the condition of our media environment. A Kittlerian approach provides insight on the innate effects of media technologies, where people are subjects to their overall media environment. Sterne’s approach analyses the production of the authentic or real, critiquing the socially-constructed process that goes into the legitimization of mediated content. Gitelman’s theory analyzes how media

audiences learn to evaluate information based on ‘shared cultural hierarchies.’ The chapter will briefly introduce the basic concepts of the three theories. The final chapter of the Major Research Paper will be the results of the analysis. The analysis itself synthesises these theories to deconstruct the 1938 audio broadcast with some support from the research found in A. Brad Schwartz’s book, *Broadcast Hysteria: Orson Welles’ War of the Worlds and The Art of Fake News*.

This research aims to make these media technological effects acknowledgeable, combatting media technologies’ ability to make the environment they induce go undetected and normalized. I argue that these three theories provide a research method particularly suited to analysing ‘fake news’ today, providing assessments that are alternative to the normalization of a potentially problematic media environment. With all the questions surrounding ‘fake news’ today, it is vital to assess the ecosystem that breeds it. Figuring out where to start with this issue can be challenging without having a blueprint to guide our solutions. The similarities between ‘fake news’ today and the ‘hysteria’ caused by the 1938 broadcast, can help inform our conception of our media environment and the conditions that influence it. I hope that my study will inspire research that will continue to question and provoke our current standards of information production, distribution, and consumption, inspiring ideas around what a different media environment might be like.

## **“You Are Fake News!” – What Exactly Is Fake News?**

*“No I’m not gonna give you a question, you are fake news”*

- *[Donald J. Trump at his first press conference after election day] (cnbc.com)*

The above quotation and others like these by Donald J. Trump since the 2016 election and onward have thrust the public conversation into questioning which news content floating across numerous platforms—including mainstream news providers—are dependable. Headlines concerning the authenticity of information circulating on the Internet tend to find their way back to Donald Trump, who at one point reportedly aired the idea that he invented the phrase ‘fake news’ (Cillizza, CNN.com). Academics also perceive the 2016 election as the catalyst to this public concern, as researchers like law professor Nathan Persily conceive of the entire election as having shifted the traditional methods of choosing a president with quotations such as this: “Fake news, social-media bots...and propaganda from inside and outside the United States – alongside revolutionary uses of new media by the winning campaign – combined to upset established paradigms of how to run for president” (1). Persily continued to describe the elements of such a paradigm, including earned media and advertising. In our present conversation around ‘fake news’, there seems to be difficulty around providing a succinct and clear definition of what it actually is. When discussing ‘fake news’, many terms tend to follow such as ‘propaganda’ or ‘hoax’. The overlapping histories of news media and propaganda serve as an obstacle to a more pressing question: does ‘fake news’ represent and thrive from overlooked elements of our media environment? Later in this chapter, we learn that we are not only deterred from asking this question, but the solutions suggested to fix the problems caused by ‘fake news’ only encourage the re-legitimization of dominant information production and distribution paradigms.

As I developed my research, I was invited to introduce my topic to a media literacy class where I presented different slides of examples of what could be considered as ‘fake news’ to the students. From World War II propaganda posters, to satire late night shows like the Colbert Report, the results yielded a nearly 50/50 split in opinion. Although the presentation was never meant to be a data collection session, it did present to me an interesting dilemma: what exactly is ‘fake news’? Aside from Donald Trump’s very liberal use of the phrase, as something that has become a public concern how do we define it? Scholars are and have been wrestling with the term and concepts akin to it; concepts such as *post-truth* have become popular according to thinkers like Stefanie Bluemle who, in accordance with the *Oxford Dictionary*, has observed the popularity of the concept resurge during the EU referendum in the U.K. and the U.S. presidential election (267). Bluemle recognized the complexities of such a term, further exploring the concept of *post-fact*, as it is understood as the root term for *post-truth* (267). However, in exploring the German term *postfaktisch*, Bluemle identified a key difference with the English definition wherein a “resentment against elites” plays a role in emotions influencing public opinion over facts (267). Here alone, we witness an entanglement of public opinion with the rejection of a type of ‘elite’ or ‘establishment’, something more complicated than binary definitions of ‘real’ and ‘fake’.

Even before entering the complexities of truth and power dynamics, authors like Caroline Jack recognized the importance of clarifying the terms that seem to be used interchangeably for ‘fake news’. In her guide, “Lexicon of Lies: Terms for Problematic Information” released by the *Data & Society Research Institute*, Jack interprets ‘fake news’ as an umbrella term for what she calls ‘problematic information’ (1). The purpose

of the guide, similar to my argument in this chapter, is to make as clear as possible not only the issue of using language to describe what is actually an umbrella term for inaccurate information, but also to make clear the “challenges of describing problematic information [...]”, as the familiar terms we associate with ‘fake news’ are too filled with complexity and do not offer “mutually exclusive definitions” (1). In recognizing this in my research, I attempt to avoid getting anchored by the chaos surrounding the term ‘fake news’, in exchange for exploring the broader questions that the term raises. The guide breaks down as clearly and as approachable as possible the different iterations of ‘problematic information’, such as **misinformation** – “information whose inaccuracy is unintentional (2) – versus **disinformation** – “information that is deliberately false or misleading” (3). But even in these clear distinctions, “the intentions behind any given piece of media content are rarely clear...misinformation or disinformation can depend as much on an actor’s intent as on the professional standards of the person evaluating it” (Jack 4). As much as it is important to recognize the very real circumstances the issue of ‘fake news’ causes, it is equally important to demystify the term and acknowledge the problems it might cause in allowing for it to be a catch-all word, doing so ignores the grey-area of what ‘inaccurate information’ could mean.

What is additionally important in demystifying ‘fake news’ is rejecting it as something new. Despite the reports of Donald Trump claiming to have invented the term (or even the word ‘fake’ in general?), the term and even the problems surrounding it are not completely unfamiliar. Just as it is valuable to call out the iterations of ‘fake news’, we need to look at ‘fake news’ from a broader historical perspective. Doing so takes away the mystery from the issue, making its impact more comprehensible and less like a



standalone phenomenon. In “Caveat Lector: Fake News as Folklore”, Frank Russell states that according to journalist ethicists, “‘fake news’ refers to promotional material disguised as news” (316). Considering the year this research was published, the 2016 election was not the catalyst to the term. This research specifically deconstructed intentionally false reports, as opposed to misinformation. It included different variations of false reports, from satire to hoax. Just as much as ‘fake news’ can refer to a variety of examples for the term, intentionally false reports, according to Russell, also carry a spectrum of definitions. In his study, the author divided intentionally false reports into different platforms based on precise categories. Categories include “**Generators**” and “**Cloners**”, both platforms that allow for the creation or the imitation of ‘legitimate’ news platforms; “**Wishful Thinkers**” and “**The Citizen Satirists**”, both platforms that create satire to either convey a message merely for satire sake; and lastly “**The Enablers**”, sites that are intentionally designed to be a platform for hoaxers (317-318). The very introduction of the computer, Russell notably remarks, has created a blur between what used to be undoubtedly distinguished as ‘professional’ and ‘amateur’: “[...] it is interesting that the computer has become as much as a toy as it is a business machine” (317). We later see an iteration of this analysis in my breakdown of the broadcast, particularly with my application of Kittler’s notion of discourse networks. With such a shift, the very process of journalism alone has changed as well “[...] dominated by a post-now, correct later ethos [...]” (Russell 328). In the “Lexicon of Lies” guide, Jack also uses the example of the alleged report of a gunman outside of a local English hospital following the bombing attack at the Arianna Grande concert on May 22<sup>nd</sup>, 2017. The news about the gunman turned out to be false but was still picked up by the *Express*

out of hastiness (Jack 2). Russell does not spend time in his research to explain why digital content is or is not folklore; he brings notice to the wealth of research arguing for the consideration of digital content as folklore. Similarly, my goal is not to determine whether journalism has or has not changed drastically since the sophistication of the Internet and social media: there already exists a body of work that recognizes journalism's significant transformations<sup>3</sup>. There is also, to emphasize, no question that 'fake news' has been the cause of some real consequences whether it is a new issue or not. 'Fake News' as defined in Frank Russell's research, caused the Dow Jones Average to drop a severe number of points when the phony news tweet by the Associated Press stated that the White House had been attacked with a bomb, injuring the now former President Obama (327). In the case today, Persily notes the introduction of "automated social-media bots" in our current zeitgeist that present the threat of making viral certain inaccurate or completely false forms of information (70). Situations like these influence inaccurate stances and opinions, while also making "adversaries out to be more powerful than they actually are" (Jack 13). All of these arguments are genuine things to be concerned about when pertaining to the consequence of an uninformed greater public. Therefore, I can sympathize with solutions that aim to ensure that people learn and practice methods to navigate the influx of information in the most cognizant way possible. However, this conclusion assumes that there are objective systems in place that grant this ability, reinstating authority to those systems and practices that determine the legitimacy of information. This will only have the potential to re-organize our media environment and does not deal with the conditions of it. On the contrary, I argue that the

---

<sup>3</sup> see McChesney's *The Death and Life of American Journalism: The Media Revolution That Will Begin the World Again* (2009)

situation requires challenging the nature of our media environment, which works in conjunction with our media tools.

On February 1<sup>st</sup>, 2017 The Globe and Mail published an online article by Evan Annette titled “What is ‘fake news’ and how can you spot it? Try our quiz”. Along with the publication explaining its own understanding of fake news, it concluded with a quiz testing its readers on how to spot certain signs of an illegitimate online news article or site. Although that may seem like a quantifiable and reasonable approach, coming up with a method of identifying ‘fake news’ is more complicated than catching typos in URLs. The very essence of what is ‘real’ and ‘fake’ comes into question, not to mention how one is held accountable for propagating what could be deemed as ‘fake news’:

“Those who espouse ideas and actions far outside the mainstream can always claim their actions were ‘satire’ in the face of blowback or criticism. The defence of ‘it was just a joke!’ mobilizes plausible deniability and frames who objects as intolerant of free speech” (Jack 12). Many issues are entangled with the question of ‘fake news’ that require more than just a quiz, and even more than just a media literacy program that “restores legitimacy to institutions” as Jack’s guide would suggest. In fact, I argue that part of looking into ‘fake news’ consists of understanding the nature of ‘legitimate sources’ or in other words, the authority of legitimate media content – news or otherwise. To return to Bluemle’s research, the concept of *post-truth* deals with the distrust of authoritative information (268). If this is the case, reinstating trust into institutions that have endured as the primary source of information is not the end-all solution to the many questions that arise from the issue of ‘fake news’. However, even media literacy programs following the rise of this concern return to the aforementioned suggestion as

the main solution. Bluemle analysed the Association of College and Research Libraries' (ACRL) approach to navigating 'fake news', with a framework titled "Framework for Information Literacy for Higher Education" (271). In Bluemle's analysis, the framework consists of a section under the title "Authority is Constructed and Contextual", a section that "[...] addresses the question of how learners evaluate sources of information, recognize degrees of authority, and determine which sources are appropriate to particular circumstance." (269). What Bluemle found was that despite the framework's inclusion of authority as a concept, "[...] it simultaneously posits certain elements of authority as innate. In doing so, it gives insufficient attention to where authority comes from and to how the construction of authority occurs." (271). By innate authority, Bluemle refers to academic culture; sources produced by academic institutions. The solution suggesting better media and information literacy for both students and non-students does not ensure that users who employ 'credible' sources sincerely trust its authority: "[...] students [or people in general] may be influenced by unreliable sources even though they recognize that others are more credible and worthier of their attention" (274). Just as the 'Framework for Information Literacy for Higher Education' is "interested in learner's self-orientation to existing forms of cognitive authority..." (276), I argue that the highly anticipated Google Canada funded *NewsWise* program instructs in the same way.

As the CBC news article on the *NewsWise* program tagline states: "Building a relationship between journalism and the next generation is really critical, says Google", the Canadian news literacy program designed for primary and secondary students and formulated primarily around the concepts of fact-checking and source credibility. The program is a product of a collaboration between CIVIX and the Canadian Journalism

Foundation, supported by Google with the Charitable Giving Fund of Tides Foundation (newswise.ca; sec. 'About'). The program itself is available to anyone who can access the website and is intended to stay available for teachers and non-instructors all year. The 'About' section states that it will continue to "refine and develop..." its material, therefore changes might occur despite the following critique. The program is divided into seven different modules titled as the following:

- Lesson 1: Journalism and Democracy
- Lesson 2: Journalistic Standards
- Lesson 3: What is News?
- Lesson 4: News and the Editorial Process
- Lesson 5 & 6: The Internet and Social Media
- Lesson 7: Fake News and Verification

Bluemle's analysis of the "Framework for Information Literacy for Higher Education" can be applied to the *NewsWise* program. From 'Lesson 1' to 'Lesson 4', the program introduces to students in great detail the different structures of journalism, including the editorial process and the process in which news is considered to be 'real news'. The first lesson emphasises the importance of students being able to identify "who produced [the content] and why" (newswise.ca; 'Lesson 1' par.6). The importance of informed citizenry and the role journalism plays as a medium between government and the people is detailed through 'Lesson 1' and 'Lesson 2', from differentiating between 'fact-based news coverage' and 'opinion journalism' (Lesson 1; sec. "Action" par.4), wherein 'fact-based' news is defined as "reporting on events...and is intended to inform. While it may include analysis or assessment, it is based on fact not opinion" (par. 4). 'Lesson 2' introduces journalistic standards, while 'Lesson 3' illuminates the way standards of journalism and financial endeavour can sometimes influence the ability to produce good journalism. More interestingly, Lesson 3 brings up the ability of news media to set agendas on what

is or isn't newsworthy information: "The news media are said to have agenda-setting power because the process of story selection and priority...set the terms of public discussion and debate. This was truer before the growth of social media, when these media outlets were the only sources of news and information, but even today major news organizations maintain substantial influence" (Lesson 3; par.4). This section – again much like "Framework for Information Literacy for Higher Education"—introduces the concept of authority making. However, the activity is followed by students placing themselves in the position of an editor responsible for choosing stories to run based on news values: current, important, famous people, unique, close, competing views ('Lesson 3'; sec. "Action" par.1). It once again reinstates the authority behind valuable news, not addressing any distrust towards these methods or questioning what they entail. 'Lesson 5' to 'Lesson 7' are what intrigued me the most, as it prompted my initial research question. The aforementioned lessons deal with the Internet and Social Media as platforms for information consumption and distribution. 'Lessons' 5' and '6' (Lesson 5 designed for primary students, and Lesson 6 for secondary students) discuss the significant changes in news and information production/consumption, from the destabilisation of top-down editorial methods to the rise of algorithms tracking online behaviour designed to present users with stimulating content to prolong exposure to the online platform, in turn creating more eyes for advertisers. The module provides students the opportunity to keep track of their online activity and to notice how platforms like Google match content to users' online behaviour, such as with targeted advertisements. Far more interesting is 'Lesson 7'—the module that introduces 'fake news' – which opens with the statement: "Fake news is not new." (par.1). As I similarly argued in the beginning, this lesson also presents the

factors in which ‘fake news’ is more of an umbrella term rather than a single definition, including the difference between misinformation and disinformation. The most intriguing section of this module are the last two paragraphs:

There are many people working on solutions to these problems, but the issue is also getting more complex, as technology becomes more sophisticated. This evolving issue must be addressed from many angles. Being able to determine what is fact or fiction online has become an essential skill of citizenship in the digital age. We need to think critically about what we see online, learn the tools to fact-check information, develop the habits to verify stories and claims, and establish a trusted list of sources. (par.14-15)

The authors of the module recognize the complexity of ‘fake news’ by stating it’s necessary to “address [it] from many angles.” The module concludes once again by adhering to fact-checking or source credibility as a primary solution. The lesson, as many of the rest, is accompanied by videos with spokespeople on the particular topic. ‘Lesson 7’ includes videos with BuzzFeed journalists and other individuals advising us on fact-checking, including how to verify images and videos with the use of Google Images, as well as how to verify social media accounts.

This section was particularly interesting, because it nearly addressed what I argue is the most pressing question regarding ‘fake news’: what does this say about our media environment? Media literacy methods that restore the legitimacy to news media institutions, or even academic institutions, are only creating a method acquiescing to the ever-changing media environment this all occurs within. Therefore, in my research I would like to explore the question of how the issue of ‘fake news’ might reflect on our current media environment, and what that means exactly? As repeated, ‘fake news’ is not new: not the issue nor the phrase. In order consider these many issues today, I would like to return to a case older than the examples mentioned earlier, an example older than the

Internet itself. The example of which I speak of is also my chosen case study for my research question: The 1938 “War of the Worlds” radio broadcast.

### **Radio in the 30s**

*“A humped shape is rising out of the pit. I can make out a small beam of light against a mirror. What’s that? There’s a jet of flame springing from that mirror, and it leaps right at the advancing men. It strikes them head on! Good Lord, they’re turning into flame...It’s coming this way. About twenty yards to my right... (crash of microphone...then dead silence)*

- [segment for *The War of the Worlds* recording] (<http://www.mercurytheatre.info/>)

Halloween night, 1938, marks the night Orson Welles’ Mercury Theatre on CBS radio aired what is known today as the broadcast that caused mayhem and panic; panic of an alien invasion attack, that some suggest people presumed was attacks from Nazi Germany as “Americans had grown accustomed [...] to hearing radio programs regularly interrupted by distressing news from Europe as Nazi Germany [...]” (Schwartz 7). The broadcast, an interpretation and dramatization of H.G. Wells’ 1897 novel *The War of the Worlds*, was among many of Welles’ re-interpreted literary dramas. He began with a multi-series dramatization of *Les Misérables* in 1937 (Heyer 3), followed by Stoker’s *Dracula* in the summer of 1938 (4). Known best for the famous picture film *Citizen Kane* released in 1941, Orson Welles at a young brimming age – while directing crowd-pleasing theatre plays – was also responsible for many well received radio drama broadcasts. According to Paul Heyer, also author of the book on Orson Welles titled *The Medium and the Magician*, Welles called radio the “theatre of the imagination” (3). A. Brad Schwartz’s *Broadcast Hysteria: Orson Welles’s War of the Worlds and the Art of Fake News* is a comprehensive account of the broadcast including Orson Welles’ biography and background, alongside a collection of archived letters written by listeners



to CBS, Mercury Theatre on the Air and the Federal Communications Commission. In his work, he introduces Orson Welles in his beginning stages, as a very young man not yet twenty years of age, but with a remarkable speaking voice that John Housman – theatrical producer and soon working partner (29)—scouted to play a “fifty-something tycoon named McGafferty” from a play titled *Panic*, to air on *The March of the Time* broadcast in 1935. *March of the Times*, according to Schwartz, was the most popular news broadcasting program in 1937, a program that re-staged and re-enacted news events with actors and theatrics. It is important to note that Welles regularly appeared on the program “impersonating everyone from Fiorello La Guardia to Sigmund Freud” and sometimes even babbling quintuplet babies (Heyer 3).

Orson Welles’ fervor for theatrics led him to many accolades for his renditions of Shakespearean literature and other famous plays, changing them to inform settings and ideas that related to their contemporary time. From his production of *Julius Caesar* – with characters and settings mimicking fascist Italy and Germany for criticism (Schwartz 38)– to a re-telling of *Macbeth* – set in Haiti and replacing instances of magic with voodoo – with an all African-American cast, as part of the push for diversity in theatre (33). His ability to take classic literature and have it match the contemporary setting and more importantly, the medium, were skills Welles would yield in his own radio productions as well. His fondness for radio grew over time and radio audiences received him and his voice just as amicably. By spring of 1938, while still running his theatre production (39), CBS had noticed his success and offered him a time slot to produce productions sans direction from the network (39-40). His techniques of first-person narratives (hence the original name of his production: “First Person Singular”) and

meticulous script writing, and re-writing earned him many successful productions. When Houseman and Welles decided to do H.G. Wells' *War of the Worlds*, according to Schwartz, Welles was intrigued by the book not because it was necessarily a piece of literature that was of interest to him, but in Welles' words: "[he] conceived the idea of doing a radio broadcast in such a manner that a crisis would actually seem to be happening[...]" (45). This initiative to make the production as compelling as possible, was not anything new.

As previously revealed, *March of the Times* was a production which re-enacted news events with dramatic emphasis, transporting listeners back to the *Hindenburg* explosion (Schwartz 20) and bringing the re-enacted voices of figures such as Mahatma Gandhi (21) into American homes. However, it was *The War of the Worlds* broadcast that struck a chord the most with the American public. After the production ended, according to Heyer, "the CBS building was inundated with police and press." (8), as a reaction to the calls of panic concerning the broadcast. Press covered this event as the broadcast that caused panic to a large population. The beginning of Schwartz's book re-imagines the story of John and Estelle Paultz who fled their homes to avoid alien attacks, only to find out it was simply a Mercury Theatre on the Air production, which according to Schwartz, was a pleasant surprise for at least Estelle (1-7). These many other stories, based on the aforesaid archived letters, were examples of people who were either pleasantly thrilled or utterly shocked. In 1940, Hadley Cantril, with a significant amount of help from researchers Hazel Gaudet and Herta Herzog – who were rarely credited – published *The Invasion from Mars: A Study in the Psychology of Panic*, which thrust the broadcast even further as a moment of upheaval into the imagination of the public caused by the

potential abilities of radio to deceive and possibly control. However, today we have research that offers many new perspectives on the event, particularly surrounding the legitimacy of the panic the broadcast allegedly caused.

Researchers like Neil Verma observed that the audience of the broadcast was “often exaggerated” (80), whereas Jefferson Pooley and Michael J. Socolow in both a Slate article post, and in a detailed report on the making of Cantril’s *The Invasion from Mars*, further suggest that the panic was not only “[...] so tiny as to be practically immeasurable”, but it was also radio’s predecessor – the newspaper – that caused the story of the panic to erupt (Pooley & Socolow). As important as that is to note, similar to Schwartz’s argument in the beginning chapters of the book, despite how small the panic might have been, for those that it did impact it was certainly real to them. And despite the immeasurable number of listeners, the broadcast demonstrated qualities that still reveal significant findings about media, networks, the authentication of media content and the practices around media consumption; all points that coincide with my interests surrounding ‘fake news’ today. It is important to discuss in-depth the relevance of the WOTW program and its media environment, hopefully revealing key elements that stimulated the effectiveness of the broadcast. Such findings have the potential to uncover affinities with our own current media environment for future research. Once again, this research endeavours to provide a method to understanding the media environment that supplements the existence of ‘fake news’, as opposed to adhering to said media environment. Beginning with contextualizing radio in its prime, chiefly during the 1930s, I will further suggest the semblance between conversations around radio with today’s conversations about the Internet. This will be followed by a brief introduction around the

theories and techniques of dramatized radio productions that were developed and finally wielded by Orson Welles, as someone we will come to learn as an individual with a strong “media sense”: “[someone who] sought the most effective way of adapting a narrative, given the constraints and possibilities of his chosen medium” (Heyer 2).

So why bother with radio as a case study, let alone WOTW? Radio has been a significant subject of research. Its characteristics, despite seeming to be elementary, have changed the way speech, culture, narrative and many other socially constructed elements are consumed and standardized. Michele Hilmes’ research on “Radio and the Imagined Community” conceives of this as something that was far beyond the “makers’ intentions and the momentary pleasures of the audience” (351). By overcoming space in reporting news happening far beyond the span of an individual’s community, and in manipulating time with things such as pre-recorded programs, radio had the ability to restructure things such as cultural standards around concepts such as race and class. As emphasized by Hilmes: “Radio’s ‘immateriality’ allowed it to cross over these boundaries: allowed ‘race’ music to invade the white middle-class home, vaudeville to compete with opera in the living room, risqué city humour to raise rural eyebrows, [and] salesmen and entertainers to find a place in the family circle.” (355). Standards of speech specifically in the English language, which soon filled “[...] kitchens and living rooms of several-generation native but only marginally acculturated U.S. citizens [...]” became affirmed but were also disputed by popular demand from listeners who wanted to hear “[l]ocal announcers and hosts [bring] regional and personal variations to the mike [...]” (357). Not only that, but the immateriality of radio allowed for “Women [to] masquerade as men, more often, men as women...men could enter the home to entertain the woman of

the house...women had the potential to enter the public sphere and assume the voice of authority..." re-shaping social boundaries and expectations (359). Radio's ability to bridge time and space – creating a homogenizing effect over things like cultural identity – gestures towards Benedict Anderson's idea of the 'imagined community' among newspaper readers; except, according to Hilmes, the theory seems to pertain more to radio audiences (353).

The abilities of radio were at first difficult to understand, let alone its capacities to create national networks and targeted audiences. Dr. Matelski addressed radio's industry as "vague..." prior to the formation of The National Broadcasting Company [NBC] in 1926 and the Columbia Broadcasting System [CBS] in 1928 (7). It was in the 20s that the concept of regulation came to fruition, particularly with the emergence of the Federal Communications Commission, an institution which also received letters regarding the WOTW broadcast of 1938. Like WOTW, many radio broadcasts responded to the tensions of the era, whether in "[...] music, comedy, and narrative drama, [making] those tensions the subject of [their] constructed symbolic universe" (Hilmes 352). With the then dominant media at the time – print—radio helped shape a new network of media, followed by the introduction of television. The Great Depression played a significant role in the popularity of radio; just as it was recorded by Schwartz who introduced the Paultz's as having "...exactly six dollars to their name" during the time of the WOTW broadcast (1), the average American was out of work due to the troubling economy of the 30s. Radio was affordable, and due to the fact that "[...] one-fifth of the U.S. workforce [was] – out of work", people had the time to sit and listen to entertaining content on their radios (Matelski 8) , as opposed to going out to expensive stage plays (which in the end

could just be heard over the air!). With radio as a burgeoning medium, and with the high dependency by a large population of American listeners for enthralling entertainment, different creative content emerged ranging from “first-rate comedy routines” (like *Amos n’ Andy*), to “[...] soap operas, action thrillers and variety shows [...]” (8). Additionally, radio connected “[...] Americans to their political leaders [...]” in ways unimagined before (9). Schwartz addressed the speech by Franklin D. Roosevelt on March 4<sup>th</sup>, 1933, wherein he restored trust in the American banking system that nearly collapsed, forcing numerous banks to shut down and the population to rely on “pocket change [or] the barter system [...]” (15). By addressing all Americans in the intimate way radio permitted, he delivered an inspiring speech that implored people to overcome the “phantom of fear” and to “reunite in banishing...” it (15). The ability to reach the nation as though he were right across the street, arguably brought a sense of national mobilisation that aided in revitalizing the banking system.

As acclaimed radio host Diane Rehm cleverly compares, radio was so intimate as though someone was “talking over America’s electronic backyard fence” (1). This is especially true with the emergence of talk radio, whether listeners sent in letters or made phone calls. The participatory nature of the format allowed for people’s voices to be heard by their community and even politicians. Diane Rehm of the esteemed, former “Diane Rehm Show”, observed this with her program: “[...] the talk show mike does provide a forum for public opinion that no one in the administration, Congress or the news media can miss” (70). Much of this is familiar to what we understand the Internet to be: a platform for participatory culture that is also ubiquitous. To briefly return to Matelski, radio was once considered to be the most ubiquitous medium, one that was

(some might argue still somewhat is) “[...] pervasive in people’s lives” (5). We consider some people who still drive to work to listen to AM radio to learn about traffic, although perhaps not as much as before with the introduction of Google Maps and such applications. Former president of the Radio-Television News Directors Association, David Barlett, discussed political candidates’ desire to appear on talk radio shows such as that of Rush Limbaugh and Larry King— “[...] candidates fell all over themselves to appear on both shows; Ross Perot chose the Larry King Show to announce his intention to run for president – twice!” (40) – just as former candidate/now American president made social media presence a priority; as did former president Obama and former candidate Hilary Clinton. Just as there were questions around radio as a platform for public affairs, so too are there questions around the Internet as a public platform used to discuss social, cultural and political issues. This Major Research Paper will not spend too much time discussing questions about the Internet as public forum for social issues. Like the topic of the transformation of journalism in the information age, so too are their countless research projects on how the Internet and social media have changed the way we address regional, national and even international social-political issues.

### **“Oh, the humanity!” - Why War of the Worlds?**

*“This is terrible, this is one of the worst catastrophes in the world...It’s a terrific crash, ladies and gentlemen. It’s smoke and it’s flames now...Oh, the humanity... Listen, folks, I’m gonna have to stop for a minute because I’ve lost my voice. This is the worst thing I’ve ever witnessed”*

- Herb Morrison report of the Hindenburg explosion on March 6<sup>th</sup>, 1937.  
(<http://www.otr.com/hindenburg.shtml>)

To return to the question of why WOTW is a good case study for the topic of ‘fake news’: despite the amount of attention it garnered within academia, it was not the first of

its kind to do much of what it delivered and how. The Hindenburg explosion of 1937 made history in providing a horrific experience in the kitchens and living-rooms of families in America. The terror in Morrison's voice was exceptional, making the phrase "Oh, the humanity!" a famous one for years to come. The 'on-the-scene' reporting was re-staged by *March of the Times* a few hours after it happened, before people heard the actual recording (Schwartz 20). This style of narration throughout the event, 'on-the-scene' reporting, became replicated, not only in the re-staging of news events, but in dramatizations of stories like WOTW. But before Orson Welles' production, there was Archibald MacLeish's *Air Raid*. Like Welles and other radio artists, MacLeish (who Welles worked with for the first time in 1933), used the tension of the era to fuel the drama of their narratives. 'On-the-scene' reporting, as Lisa Jackson-Schebetta observed, "...transported listeners to the sites where the events were happening..." (39). *Air Raid* aired just three days before Mercury Theatre on Air did WOTW. Listeners had been exposed to methods that were designed to make them "...feel they were existing simultaneously with the action of the play...Listeners' imaginations were actively engaged through a heightened self-awareness" (40). For MacLeish, it was personifying the women and children who were victims of the air raid in the "southeastern Europe" village: "If it was 2:00 AM on the East Coast of the United States, it was around 8:00 AM in southeastern Europe." (40). Sound cues and different intricacies had to be factored in, so that American listeners would presume the events that had an effect on home soil too. Technical difficulties were mimicked, just like in WOTW, where connections were interrupted, or technical complications were experienced in effort to bring listeners closer



to the scene. Both broadcasts were inspired by print/non-transmission media: for Welles it was H.G. Wells' novel, and for MacLeish it was Picasso's 1937 mural *Guernica* (33).

Even programs that were not necessarily war related, used techniques to suggest things for the listeners' imagination, especially with horror/thriller programs. Katherine Echols' "The Monster's Transformation on American Radio (1930s-50)" explores the many popular radio programs that were categorized as horror/thriller. Once again, Welles' WOTW was not the only program to use techniques to cue the imaginations of the listeners. Welles's previous work, Stokes' *Dracula*, had its own methods to create vivid mental pictures of the horrors occurring in the scenes: "The setting might be described as a cemetery, but the sound of the wind, a hooting owl, thunder, and rain help them see the 'lurking shadows, the tombstones and...bats...radio's power of suggestion was capable of triggering 'fear and horror' " (Echols 45). Capturing the nuance within the "abstract of sound" was done by proper blending and cueing of sound effects practiced by radio artists like Welles (46). In his production of *Dracula*, to mimic the sound of a stake being driven into the chest cavity of a vampire to strike its heart, "Welles used a watermelon and a hammer to achieve the sound [...]" (47). Just as Heyer described, Welles utilized the style of "first person singular [...]to create intimacy between the narrator and the listener" (51). Much like how Herb Morrison describe everything he could see in a way he could transport his listeners to the Hindenburg event, Welles' transported listeners to the happenings of the Martian invasion, with the help of story narration and the personification of news anchors and reporters with the chosen actors; most of which were casted based on their past performances on *March of the Times* (Schwartz 4).

Therefore, innovativeness per se, is not what makes WOTW and interesting case study for me. Nor is the ‘panic’ the point of interest, considering the previous, briefly discussed arguments. The ‘panic’ itself has been over-emphasized and Socolow and Pooley would argue that authors and academics Hadley Cantril and Paul F. Lazarsfeld were responsible for the ‘misremembering’ of the event. The two authors illustrated Cantril and Lazarsfeld’s experience leading up to the news about WOTW, and that their less-than-pleasant relationship as partners in research was “responsible for distorting the memory” of the broadcast. Even more importantly, Lazarsfeld and Cantril’s dispute over credit played a significant role in overshadowing researchers’ Herta Herzog and “Project staffer [...]” Hazel Gaudet’s profound contribution in collecting and drafting memos based on the conducted interviews, which *Invasion from Mars* echoed greatly (and with some inaccuracies, as we come to find) (Pooley & Socolow 1931). The interest in the event was primarily fueled by Cantril and Lazarsfeld’s belief that it would “[...] shore up the Princeton Project’s shaky case for [a grant] renewal”, the Princeton Project being the product of the “Rockefeller Foundation’s investment in radio research” (Pooley & Socolow 1921), directed by Lazarsfeld. Moreover, the “dramatic prose” of the chapters and structure “exaggerated the extent of the panic”, matching the tone of the event itself as a “mystery-adventure story of the American people” (Pooley & Socolow 1940). The so-called ‘panic’ or ‘hysteria’ made the research compelling, alongside the news reports of the time, making the broadcast notorious for the chaos it never completely brought upon the nation. If WOTW is not exactly compelling for its complete uniqueness or for its panic, what exactly makes the event so profoundly interesting for my research? To clarify, there were components of the broadcast that were particular in method that other

programs did not exactly mimic. However, as presented earlier, the very nature of ‘on-the-scene’ reporting and the application of events of the time were not unique. And even if the panic was as profound as reports made it to be, it still shocked the small population that were convinced it was real. Nevertheless, what makes the broadcast so profoundly interesting is its ability to garner attention despite the abovementioned points having been strongly proven by the number of academics I cited.

The broadcast is a great example of how we make things into a phenomenon, notwithstanding the evidence of its preceding occurrence with other events akin to it: “scholars have fetishized the broadcast and reactions to it, both in terms of the unique attributes of the broadcast itself and in terms of its power to influence a mass audience.” (Hayes & Battles 52). Researchers Joy Hayes and Kathleen Battles sought to bring a new way of understanding the significance of the broadcast with their work titled “Exchange and interconnection in US network radio: A reinterpretation of the 1938 *War of the Worlds* broadcast. Similar to Schwartz, they provided a new way of looking at the event, one that introduces something alternative to the current arguments on “radio [being] an intrusive yet intimate authority that invaded the private sphere with an ultimately threatening public presence” (54). Hayes & Battles, quoting Michele Hilmes as well, recognized that “*Mercury Theatre of the Air* productions reflexively and critically played with radio conventions and techniques in order to draw listeners into the ‘reality’ of the play’ (54) – or in other words, the production practiced techniques that compelled listeners with its use of ‘on-the-scene’ reporting, specific social cues and sound production methods, as previously discussed. But like when Hilmes made her assessment of the broadcast event as “an illustrative example of the gendered distinction between the

networks' evening 'prestige' programmes and daytime popular (lowbrow) offerings." (54), Hayes and Battles offer an alternative point of interest in the WOTW broadcast which still recognizes the event as something of importance in our discussion around media, communication and society. According to Schwartz, Hazel Gaudet questioned Cantril's findings, and suggested that he "[...] broaden his view and look at the larger forces at play [...]" (188).

Both Socolow and Pooley, and Hayes and Battles make substantial note of this as Gaudet and Herzog's contributions and collaboration on the event provided a more noteworthy analysis than just panic: "The published book's most celebrated finding was its linkage of some listeners' 'critical ability' with their tendency to seek out and confirm the broadcast's fantastic nature against other evidence" (Socolow & Pooley 1931). Hayes and Battles go further in acknowledging Herzog and Gaudet's ability to recognize listeners' ability to reach out to their "social contacts and local authorities" (55), by taking into account listeners' desire to talk back to the networks and authorities they were listening to by calling the network, police stations and news broadcasters to confirm if the chaotic events were happening: "[...] the play explored the interactive, dialogical possibilities of radio through its interweaving of one-way transmission and two-way intercommunication throughout the play." (60). To merely put, in contrast to the conception of radio as strictly a one-way transmission medium, listeners used what they could to essentially transform their experience of radio programs into a two-way communicative experience, whether in leisure or in panic. Battles and Hayes' ability to look at the broadcast from a different angle is quite precisely what I intend to do when looking at 'fake news' today. One of the many angles include observing what is

happening to the media environment that is either creating the circumstances for ‘fake news’ to happen, or if users within the media environment are implementing tools and methods that they know with their current media environment to create an alternative way of interacting with the content presented to them. These are the types of questions, I argue, that will make our understanding of ‘fake news’ today richer and more robust. In the following section, I take a similar initiative as Herzog and Gaudet, as well as Hayes and Battles, to implement a method that will allow for me to look at WOTW with a more “broaden[ed] view [to look at] the larger forces at play” (Schwartz 188). In order to achieve this, I will introduce three theories that I will triangulate to present a new way of observing WOTW’s impact, and in turn today’s issue of ‘fake news’ as well.

#### **A critique of A. Brad Schwartz’s Broadcast Hysteria**

Schwartz’s research on *War of the Worlds* is persuasive and very well written. The book is divided into several chapters including one on Orson Welles’ back story, and two chapters dedicated to the listener’s reactions to the broadcast based on their written letters, presented alongside with each segment of the broadcast as though re-create the moments listeners reacted to. What is interesting about the book is that it is written in a historical narrative style, almost story like. The research makes for a good read and offers a wealth of information, but it is not chiefly written with a media theoretical lens. At times, Schwartz puts forward media theoretical ideas, such as when he referenced Theodore Adorno on the use of classical music for radio dramas: “As Theodore Adorno once noted, radio listeners had been trained to take that piece [of classical music used at the top of radio shows] as a banner of high culture; it made them think, ‘Aha, serious music’” (65). Aside from instances such as this, as well as quoting media researchers like Joy Elizabeth Hayes and Kathleen Battles (whose research is referenced in the first

chapter of this paper), he made a number of interesting observations that could have been better grounded by a media theoretical approach, such as with arguments like this:

In the age of the Internet, media producers and consumers are much more tightly connected, accelerating and amplifying this communication. In such an environment, the kinds of that *War of the Worlds* created can get out of hand very quickly. Anyone can say whatever he or she wants online and watch a claim, true nor not, ricochet around the world faster than a bolt of lightning. (223-224)

Schwartz's conclusion was also very compelling:

The idea of the open Internet, that all online content should be treated equally, hold providers accountable to the public interest. If users give that power up, as Americans did with early radio, then the Internet will inevitably become another medium that speaks *to* the people, instead of *for* the people. [...] The broadcast may have been fake news, but its story carries a great deal of truth. (229)

Arguments such as these are certainly quite thought-provoking; what would make them more robust would be if they were supported by a media theoretical approach, prioritizing an understanding of our relationship with our devices that work to create an ecosystem that becomes normalized, something that Schwartz suggests the American people should remain vigilant against.

## CHAPTER TWO

### THEORETICAL FRAMEWORK

Given the significance of the ‘War of the Worlds’ broadcast as a media and communication research topic, I first believed that my own contribution to the infamous event would be redundant. To me, the 1938 broadcast is a fascinating research topic not only for the alleged hysteria that it caused, but for its timing as well, as the 1930s was a tumultuous era. Today, new but comparable public concerns over ‘fake news’ phenomena, took shape during (and some have argued instigated by) the tumultuous candidacy and presidency of Donald Trump. In both cases, prevalent media technologies are at stake. Then, it was the relatively new medium of the radio; today it is the Internet. With such interesting parallels, I could not overlook the necessity of drawing comparisons from the ‘broadcast panic’ as a case study for considering what is happening today. In this section, I intend to elaborate Kittler’s notion of discourse networks, in conjunction with Sterne’s study of the social genesis of sound fidelity, along with Gitelman’s research on the formation of media publics. In doing so, I will demonstrate how the three theoretical perspectives can provide us with the insight needed to understand the media environment of the 1938 broadcast. I draw upon Kittler’s notion of discourse networks as the cornerstone to my theoretical framework, whereas Sterne and Gitelman’s theories work as both supplemental and validating theories to approach the case study with a well-rounded framework. Where Kittler’s theory –foundational to contemporary media theoretical approaches to the questions ‘what are media? /what do media do?’ – can be seen as regarding people as only one element within a larger media technological process, Sterne’s concept of the social-construction of sound fidelity, and Gitelman’s concept of learned media protocols, play just as a significant a role in both

understanding media technologies' effects, as well as how to deconstruct the process that goes into making their effects both impactful and unidentifiable. In addition to all three theorists writing in unique ways about sound media, Sterne and Gitelman's theories work together to reveal the processes that occur with the role that people play as subjects within Kittler's concept of media environments, demonstrating the promise around their triangulation in analysing the WOTW broadcast. Before doing so, the following section will provide a summary of the important points from each theory and how they interact with one another.

### **Kittler's Theory of 'Discourse Networks'**

"The phonograph does not hear as do ears that have been trained immediately to filter voices, words, and sounds out of noise; it registers acoustic events as such" (Kittler 23). Kittler's most notable piece, *Gramophone, Film, Typewriter*, is one of his many works that redefined media research to attend more to the "mediality" of media as opposed to the mediated content exclusively (xiv). The structure and tendencies of media technology is what is pertinent to Kittler when pursuing the question of 'what are media?' or 'what do media do?' In Kittler's reinterpretation of Lacanian theory, sound recording devices stood in the place of the 'Real'. As noted in the quote, sound storage acts as a non-discriminatory medium, where the message is not transformed into symbols of any kind; the mediated content is registered as is and is consumed, according to this argument, in a more direct fashion than when we read. In *Gramophone, Film, Typewriter*, Kittler thoroughly illustrates the relationship between media and the technicalities of meaning-making. This concept stems from Kittler's larger thesis of 'discourse networks': "... 'discourse networks' designates the network of technologies and institutions that allow a given culture to select, store, and produce relevant data" (xxiii). Literature,



according to Kittler, replaced and/or extended the nervous system in order to achieve communicative capacities; the poem about technology is a technology on its own. But where the primary tool in communication was once solely oral and symbol-based, the emergence of storage and transmission technologies redefined the discourse networks even further, developing more intricate meaning-making methods and the comprehension skills required to grasp the information. Technical media made it possible to capture what was once obscure information occurring in the immediate physical world.

The Kittlerian approach to media as a question of “mediality [...] to explain how and why media do what they do” (xiv) is apropos for my research. In an effort to question the media environment surrounding both the WOTW broadcast and today’s version of ‘fake news’, it is important to understand the conditions brought forth by the physical technology responsible for mediating the content in question of causing the disturbance. Kittler also explored what he termed “time axis manipulation” (35). The ability to register, store, and transmit sound, indicates that information that was once ephemeral can not only be understood, but can also be manipulated. This is particularly important because radio as a medium was especially notable for its ability to transmit information that would have once only been experienced in its immediate time and space: “The ‘sound of music in my ear’ can exist only once mouthpieces and microphones are capable of recording any whisper. As if there were no distance between the recorded voice and listening ears, [...] the hallucinations become real” (37). As noted by Sybille Krämer in “The Cultural Techniques of Time Axis Manipulation: On Friedrich Kittler’s Conception of Media”, the distinction between the once dominant written media versus technological media is that technological media “produce data that no longer refer to the symbolic

world but rather to the material universe, or in other words, which cannot be encoded and fixed in writing in the symbolic network” (98). Information that was inaccessible to our senses are now graspable without the symbolism needed to capture it; to further argue the shift in surpassing ephemerality is this quote found in Kittler’s “The Lightning Series”:

In order to know what something is, we need time to recognize it, thus we always miss when it happened [...] But just as the gods confined us to finite lives in the temporal domain, our bodies restrict us to a limited spectrum in the immeasurable range of frequencies. We are completely dependent on the quantities that enable our filters (eyes, ears and so on) to tell the difference between quantity and quality (71).

Information that once fell victim to ephemerality no longer had fit into the “bottleneck of syntactical regimentation [...]” (“Light Ser” 94), affording access to a wealth of information and contributing to the discourse networks evolving from what was once monopolized by writing. To achieve this, sound had to become a subject of interest – the sounds that Romanticism once “[...] simultaneously celebrat[ed] as the language of the soul...” had to become removed from its aura and stripped down to an object of study. Sound media thus conform to the ‘Real’, according to Kittler, because of their ability to capture what was difficult or impossible to notate and was left to the imagination; for him, acoustic media made it possible for the subtle details to become a part of the discourse network.

Kittler separated different media technologies into the following types: the acoustic, optics, and the written, respectively conforming to the ‘Real’, the ‘Imaginary’ and the ‘Symbolic’, once again stemming from Lacanian theory. Different technological media permitted different types of media techniques to overlap and interweave: “Media-technological differences opened up the possibility for media links” (*Grm Film Typwrt*

170). In the case of acoustic media technology, such as radio, image media and sound media influenced one another, such as in the case of dramatized radio programming: “...the earlier radio play ‘consciously transferred film technology to radio’ (173). As mentioned in the previous chapter, radio artists sought to create an image using certain narration and sound effects to stimulate a type of ‘sound imagination’. This observation by Kittler would then seem to serve well in analysing the 1938 broadcast, as his theory could unpack what transpired from a ‘technological a priori’ perspective – the more or less inherent outcomes caused by the technology of radio. I believe Kittler would perceive the ‘War of the Worlds’ hysteria to be a technical media event rather than social phenomenon, and possibly a consequence of a disrupted discourse network. In Kittler’s research on acoustic media and psychoanalysis, he analyses even further the ability for acoustic media to capture the ‘real’; particularly to record and store the complex and abstract thoughts shared in a therapy session: “For the first time a machine in a patient’s hand has replaced case studies, that is, essays from the doctor’s hands...in the end are recorded...data that Freud, orally or on paper, was unable to imitate” (*Grm Film Typwrt* 93). Jefferey Sconce’s “On the Origins of the Origins of the Influencing Machine”, introduces the “first-ranking symptom” of the schizophrenic diagnosis (71), “thought broadcasting”. In this instance, patients relayed “electronic media... [to provide] ‘technical’ explanation[s] as to how their thoughts might become implanted or removed” (71). I offer this point and all of the abovementioned arguments to reinforce my analysis through a Kittlerian framework; technological media have the ability to play a significant role in how we consume and think about information. Every shift in their technical

capacities has the potential to affect the way we perceive the information given to us, and sometimes by extension, ourselves and the world around us.

In Kittler's research, media technology and society are in a constant feedback loop, a respond and receive relationship consisting of technology, people and everything in between that together shape the discourse network of a given period. And for Kittler, the transformation and/or advancement of technology do not "arise out of human needs...they follow each other in a rhythm of escalating strategic answers" (*Lit Med Info* 121). I would argue that developments in media techniques, including radiophonic techniques, also follow a rhythm of escalating strategic answers. In the case of WOTW, the strategic answers to the question of, how to entice *Mercury Theatre on Air's* listenership in way that would convince them that a crisis was actually happening, played a factor in how convincing the broadcast was. We recall Heyer's definition of media sense – the ability to effectively adapt a narrative "[...] given the constraints and possibilities of [the] chosen media" (2) – and how he attributed Welles with this skill set. Given the circumstances of the task – how to take a dated piece of literature and make it interesting for his contemporary audience – Welles and his staff needed to strategize their approach to creating a riveting broadcast. But it is not enough to look at the broadcast from just the perspective of technologies' inherent abilities and their effects. To gain a fuller understanding of the broadcast's impact, we must consider the process behind the authentication of mediated content. Despite sound technology's ability to record or transmit the real, we must question how the content becomes qualified as 'real'; it is just as valuable to question technological networks and how authenticity is built. In some instances, Jonathan Sterne's approach engages a Kittlerian method of analysis. But his

emphasis on the social conditions behind sound fidelity and authenticity, offer an additional angle useful to an analysis of the WOTW broadcast.

### **Sterne's Theory of "Social Genesis of Fidelity"**

According to Geoffrey Winthrop-Young and Michael Wutz (English translators of *Gramophone Film Typewriter*), Kittler's research was criticized for its 'antihumanist' perspectives, where people are reduced to tools or accessories within a "scenario of technological apocalypse..." (*Grm Film Typwrt* xxxiii). Despite disagreements, the de-centering of the "so-called human"<sup>4</sup> is more so a re-orientation of our focus on understanding our role within our media environment: "[...] it is not only a question of so-called Man disappearing *now*; He was never there to begin with, except as a figment of cultural imagination based on media-specific historical underpinnings." (xxxiv).

Kittler's research did consider the systematic factors behind technologies' influence, as noted in his unpublished introduction to *Discourse Networks 1800/1900*: "It is helpful to make use of the systematic comparisons when dealing with standardized functions that commonly are approached by way of proper names and biographies" (93). Kittler recognized that the process of standardization has a role in what media do. Though not Kittler's primary thesis as he viewed human subject formation as simply a factor within the discourse network, there is an argument to be made for a different focus on the socio-cultural influence on said discourse networks. Sterne places such an emphasis on socio-cultural factors and human performance, rather than primarily on technological conditions. Their theories part ways in Sterne's observations on sound fidelity and his

---

<sup>4</sup> Media theorist Jussi Parikka's interpretation of this term: "[...] humans' in the age of technical media [are] less [...] self-governing subjects than [they are] subjected to processes of quantification, data gathering, and other procedures of technical media in emerging [...] cultures" (3)

concept of the original versus the copy. Kittlerian theory remains consistently focused on acoustic media as capturing the 'real'. What is at stake with this approach is that the factors used to determine what classifies something as authentic, are overlooked. Sterne's approach questions the very idea of the 'real'.

Sterne argues that the ability for acoustic media to record or transmit audio, has allowed us to think about the very idea of 'liveness', or even 'realness' and 'authenticity'. This shares some semblance to a Kittlerian approach of the technological a priori, until we approach Sterne's argument on the 'social genesis of sound fidelity'. For Sterne, the question of "sound fidelity is much more about the faith in the social function and organization of machines than it is about the relation of a sound to its 'source'" (219). Once again, the difference in theories is that, for Kittler, the 'real' is accessible by the media technology, while for Sterne the 'real' is being questioned as an overall concept. When read further, one could argue that Sterne is bringing attention to a part of the discourse networks that Kittler chose not to focus on. The faith in the social function of the machines was by criteria of 'realism', according to Sterne, and not reality itself: "the point of the artifice is to connote the denotation, to construct a realism that holds the place of reality without being it[...] [A] live radio broadcast [does] not so much capture the event as it [is] an event itself." (245). Sterne's argument observes that our conceptualization of 'originality' followed the invention of reproduction, and additionally transmission: "[...] the discourse of fidelity is a key part of the history of sound reproduction" (222). How good sound is defined plays a role in what should be listened to or not. Despite the quotation by Kittler regarding the phonographs' ability to not filter

what it registers, Sterne argues that what both the listener and what the person recording conceives as 'realistic' remains important.

For Sterne performativity acts as key to the establishment of high fidelity/good quality sound reproduction and transmission. On the part of the broadcaster (the person being recorded) the person is not only performing, but is performing to the network, and not to the listener: "the medium does not mediate the relation between the singer and listener, original and copy. It is the nature of the connection. Without the medium, there would be no connection, no copy...no original..." (226). The two theories seem to intersect here, where media play a primary role in determining an 'original' or a 'copy'; they contrast when Sterne's argument proceeds to the topic of performance on the part of the human to the apparatus. In stark contrast to the theory of the machine indiscriminately capturing the 'real', Sterne suggests that the audio emanated from the person is performed to the machine, rather than simply picked up by the machine. Much like Sterne, Auslander argues that a relationship exists between the live and the mediatized. Although it will not be used directly in the analysis, Auslander's text, *Liveness: Performance in a Mediatized Culture*, takes the argument even further so as to even state that this relationship between the supposed binaries is what makes the idea of 'liveness' possible to be mediatized. Both are acts of representation, which is where performance happens. Auslander uses the example of nonmatrixed performance representation, where the theatre performer "does not embody a fictional character but...carries out certain actions...that can have referential or representational significance." (32). Similar to the meaning given to liveness, nonmatrixed performance assumes itself to be something outside of fabrication. But, according to Auslander, in order for the nonmatrixed

representation to be conveyed via its “referential elements” (32), it must be mediated to have meaning. In the case for radio – and in some ways the WOTW broadcast – in order for live radio news reports to establish their liveness, they must be mediated via the radio. In this very instance, live or not, performance occurs. When using the machine to capture sound, whether in a controlled studio or ‘spontaneously’, for desirable results considerable attention to technique is required of the subject, the operator and/or both. Studio spaces especially, like that of the radio station, “...offered a peculiar...configuration of bodies and spaces” (*Audible Past* 239). One adapted and manipulated their space to conduct a desirable output for listeners to consume, so much so that radio performers experienced nervousness like that of ‘stage fright’, a type of performance anxiety (238).

Where consumption and impact on the part of the consumer are not the primary focus of a technological a priori theory, the question of audience participation in terms of etiquette and procedure – and how we come to learn them – are, I argue, vital to understanding media technologies’ impacting abilities. Theories like that of Gitelman’s theory of ‘media publics’ take this into consideration. Before her thesis on media and the audience, Gitelman states that media: 1) play an integral role in defining representation and 2) play an integral role in our sense of ‘pastness’ (4-5), a point similar to Kittler’s theory of ‘time axis manipulation’. The following section argues that Gitelman’s theory of ‘media publics’ offers an additional, pertinent, focus on the role of the audience and learned participation that benefits our understanding the impacting abilities of media technologies, that helps put the WOTW broadcast in context.



### **Gitelman's Theory of 'Media Publics'**

“...the success of all media depends at some level on inattention or ‘blindness to the media technologies themselves (and all of their supporting protocols)” (6). We could argue that Gitelman’s notion of protocols – “norms about how and where one uses [an instrument] [...]” (5)— emphasises the consumption [component of discourse networks (the production, distribution, and consumption of data). Inability to follow protocol in the consumption of media technology is a result of an inability to participate in the discourse network. The quotation continues with this argument: when protocols – or what Kittler might term as ‘pattern recognition’ in *Literature, Media, Information Systems* (130) – are interrupted by reasons such as unfamiliarity towards a new, or conversely, an aged media device, questions about what media are return to primary focus. Once again, this is akin to Kittler’s theory of discourse networks, and what Gitelman argues can be seen as another perspective within the discourse networks argument that Kittler did not primarily focus on. Gitelman criticizes the Kittlerian theoretical approach for seeing the techniques required for the use of media technology as “inherent [...] once [the media technologies were] already invented” (10). Although an arguably fair criticism, according to Young and Wutz, Kittler’s theory of discourse networks recognizes that in order for media to work, techniques are taught to consumers in order to normalize media technology within the process of information acquisition. The translators refer to Kittler’s example of the “Mother’s Mouth” to explain such a procedure, wherein alphabetization came to be associated with mothers and femininity, both in the sense that literature used women as muses for poetic endeavours, and that mothers were considered children’s first source of education (xxiv-xxv). Both Gitelman and Sterne explore components of media technological protocols around acoustic/transmission media. Sterne presents the term

“audience etiquette” (267), as a case for audience protocol: “Listeners had to be trained to use sound reproduction technologies ‘correctly’... This etiquette training suggests that transparency could be accomplished only after a set of ground rules had been established and a set of practices had become routine” (266-267).

Gitelman’s thesis similarly presented the idea of etiquette and practice when she introduced Edison’s exhibitions in pursuit of integrating the phonograph for public use. The concept of a device capable of capturing what was once fleeting, required a formal introduction into the daily zeitgeist of the respected era: “...phonograph exhibitions all shared a similar form and content. Their structure was self-fulfilling, interactive, and based on a familiar rhetoric of educational merit” (*Sound Studies Reader* 289).

Gitelman’s research regards ways in which public life surrounds recorded media, when writing and print media was the former monopoly. According to her research, recorded sound in its inception was based around communal consumption and a sense of “us and our” (284). When exhibitions featured recordings that were “[...] well-known from both Shakespeare and Mother Goose” (290), the people who attended participated in a shared knowledge of their, what Gitelman calls, “shared cultural hierarchy” (290). When Kittler notes Edison’s use of his invention in the beginning of the “Gramophone” chapter, (“‘Hullo!’ screamed Edison into the telephone mouthpiece... Edison once again screamed into the mouthpiece—this time a nursery rhyme ‘Mary Had a Little Lamb’” (*Gram Film Typwrt* 21)) he does not offer an analysis of why Edison could determine the functionability of the acoustic media technology around a socio-culturally established set of words and rhymes – words and rhymes that are recognizable and not necessarily audible.

But where Gitelman and Kittler slightly part ways, they intersect once again when Gitelman theorizes the introduction of sound reproduction/transmission as the de-authorization of the print monopoly, or as Gitelman terms it “the artificiality of print” (*Sound Studies Reader* 295); she even quotes Edison’s endeavour to render books, the once highly esteemed media-technology which ruled the discourse networks, obsolete: “Edison boasted to newspapers that his invention would ruin the market for books [...]” (296). The history of sound recording, according to Gitelman, can be an important marker for when new media began to effect how people perceived information about and around them in a public and private sense, simultaneously. This conception indicates that WOTW can prove to be a strong case study for understanding our contemporary media environment how the broadcast media and the specific media technology (the radio) formed an important midpoint for how people understood “[...] public memory, public knowledge, and public life” (287). This argument recalls Battles and Hayes’ thesis on Herzog and Gaudet’s research. We recall Herzog and Gaudet’s theory of the WOTW listenership’s attempt to create and access two-way communication – either with the broadcasters, the station, their immediate family or peers, and their larger community – in order to confirm the legitimacy of the alien invasion.

## CHAPTER THREE

### ANALYSIS

The analysis for this paper was conducted by listening to the audio broadcast while following the script. The first time, I listened to the broadcast in full before making any distinct remarks or taking notes. I wanted to experience the broadcast uninterrupted, as though I was a listener in 1938. I was admittedly taken in by the suspense and the use of sound cues, as well as the enthralling flow of the broadcast. The second time I listened I began to conceive of the broadcast through with the lens of the aforementioned theories: discourse networks, the social genesis of sound fidelity, and media publics. The following findings are based on the first half of the program before the intermission. This is because the crucial part of the broadcast that caused the supposed panic transpires during the first half of the program; the second half consists entirely of a monologue performed by Orson Welles with only one other actor for a brief dialogue exchange. Welles ends the broadcast with a speech to the listeners, assuring them that they were listening to another *Mercury Theatre on Air* program: “The Mercury Theatre’s own radio version of dressing up in a sheet and jumping out of a bush and saying Boo!” (Welles 57:49-57:54)

#### Use of ‘authenticity markers’

After Orson Welles’s opening monologue, the show starts with a fake weather report on the uneventful “atmospheric disturbance of undetermined origin [...] reported over Nova Scotia” (2:24-2:27). From invented titles such as the “Government Weather Bureau”, “The Princeton Observatory”, “The Intercontinental Radio News”, to the use of real city names and places such as the ‘Meridian Room’, ‘Grovers Mill’ and ‘New York City’ (the last two places where the aliens are alleged to be conducting their destruction),

listeners are drawn in by these markers of authenticity despite it being a dramatization. From a discourse networks perspective, we are becoming aware of the designated institutions that are responsible for the flow of important information. In the broadcast, authoritative figures, such as commanders of state militias and “The Secretary of the Interior” – embodied by voice actors – deliver compelling speeches and announce plans for defensive actions against the alien intruders. These important figures are in charge of selecting and announcing information that the listeners are acculturated to recognize as significant. Schwartz makes a similar analysis: “With its many markers of authenticity, anyone who tuned in on the broadcast at the right time could have been taken in, no matter how well educated or sensible people felt they were” (79).

From a ‘media publics’ component, listeners are drawn in by the familiarity of the program, as they pay relatively close attention to the figures of a ‘shared cultural hierarchy’. We recall from previous sections the central role radio played during this time; along with listeners acknowledging central authority figures, they also recognized radio’s authority as the central technology to the selection, production and dissemination of culturally prevalent information. This information, as we will see later, ranges from news bulletins to state speeches. Radio was the central source for a wide range of information, from entertainment:

“ANNOUNCER: We take you now to the Meridian Room in the Hotel Park Plaza in downtown New York, where you will be entertained by the music of Ramón Raquello and his orchestra.” (2:43-2:50)

to emergency announcements declaring regions placed under martial law:

“BRIGADIER GEN. MONTGOMERY SMITH: I have been requested by the governor of New Jersey to place the counties of Mercer and Middlesex as far west as Princeton,

and west to Jamesburg, under martial law. No one will be permitted to enter this area except by special pass issued by state or military authorities” (19:45-20:06).

Kittler’s theory of discourse networks in this case – which helps us see radio as the primary media technological source for all immediate information – converges with Gitelman’s perspective on media audiences, who are actively processing the information with their attention on culturally prevalent cues. People were gathered around their radios for both pleasure and news, which required audiences to pay attention to particular cues that differentiated what they were hearing. The sense of ‘us’ and ‘our’, to take from Gitelman, and all of the socio-cultural conventionalized words that are immediately recognizable within the broadcast, can be perceived as having been useful in garnering attention in a way that is not only distinguishable but significant. Audience participation is not only invited, but in some ways commanded with the extensive use of authentic markers, especially with the use of news bulletins. The command for attention by using conventionalized cues is no more evident than in this technique. On several occasions, listeners are inundated with news bulletins, each with information worse and more gripping than the last. However, far more than just a technique for suspenseful storytelling, whether audiences are aware of the broadcast as being a radio drama or not, radio listeners who were able to tune in – separately within their homes or offices, and yet simultaneously as members of the larger radio community – are being told to pay attention to the upcoming information according to the conventions of news bulletin interruptions; or to paraphrase Gitelman once again, people who are aware of the norms about the how’s and when’s of their instruments and the content it distributes. The audiences that participated in the phonograph exhibitions, who were a part of the “[...] impersonal public sphere comprised of similarly private subjects.” (*Sound Studies Rdr*

290), became a part of an “up-to-date recordable community, an ‘us’ [...]” (*Sound Studies Rdr* 290). In tandem with this theory, I argue that radio listeners – especially during news bulletins – were connected to both an up-to-date community and their institutions, who’s culturally valuable information were being transmitted to the listeners directly into the privacy of their homes. With this simultaneously personal and communal communication, listeners are being directly addressed as both individuals and collectives. We hear this with bulletins such as the following:

ANNOUNCER: “Ladies and Gentlemen, we interrupt our program of dance music to bring you a special bulletin from the Intercontinental Radio News [...]” (3:38-3:43)

The announcer speaks to the listeners as both the collective (“Ladies and Gentlemen”) and as individuals (“[...] to bring you a special bulleting [...]”). At the same time, this line tells the listeners that the station and its programmers featured in the broadcast are the conveyors of prevalent information (“we interrupt our program of dance music to bring you a special bulletin [...]” [my emphasis]). In this example, Kittler’s notion of the designated institutions – an element to the comprisal of a discourse network – converges with Gitelman’s theory of media publics, who form around a radio broadcast that utilizes cues familiar to said audiences.

The broadcast’s use of rhetoric was compelling; in the story, the last announcer survives only just before the climax of the alien invasion, providing commentary just before his demise:

ANNOUNCER: “This is the end now. Smoke comes out...black smoke, drifting over the city. People in the streets see it now. They’re running towards the East River...thousands of them, dropping in like rats. Now the smoke’s spreading faster. It’s reached Time Square. People are trying to run away from it, but it’s no use... they’re falling like flies.” (38:39-39:05)

The broadcast utilizes very strong expressions, describing the invading aliens as “dropping in like rats”, and the death of the civilians fleeing the poisonous black smoke as “falling like flies”. All throughout the show, there are a number of cues to socio-culturally conventionalized rhetoric. Sterne’s theory of sound fidelity works in tandem with Gitelman’s when pertaining to “audience etiquette” (267); Sterne would argue that the potency of the authentic markers relies also on the learned norms of how to listen to news bulletins and other named examples. Once again, we can apply Kittler’s discourse networks here. First, we can imagine the audience’s ability to recognize both the authority of their technology (radio and radiophonic communication) and the institutions it networks. Secondly, we can also assume that the audience can imagine the alien forces’ ability to understand the significance of radio technology to their victim’s society. They can also assume that the aliens connect with one another through a type of radio-like communication, as the aliens are somehow able to inform each other of their locations and targets – the community and military communication lines. Listeners begin to recognize the significance of their media infrastructure and the importance of radio’s ability to sustain their communication. We see more of this example in the following section.

### **Media networks as part of the plot**

What was profoundly interesting about Welles’ *War of the Worlds*, was how the radio-play based the crux of its plotline around the falling out of technological and communication capacities. It is here where we can see Kittler, Sterne and Gitelman’s theories converge on the subsequent points: First, the plotline tells the story about their media infrastructures and what happens when it is targeted. Secondly, the radio artists deliver the lines and cues either very clearly or faintly into the microphone/ their



network, explaining how the broadcast manages to sound authentic. Lastly, we begin to understand how audiences who are practicing radio-listening protocols (similarly to the previous argument) can forget about the presence of their radio, making the program seem real rather than a mediation. Schwartz similarly remarks upon this point as he stated that audiences were listening to a broadcast about a broadcast (66). However, I argue even further that audiences were listening to their communication networks –based on their actual communication networks of the time – fall apart before their very ears. Therefore, to rephrase Schwartz’s quotation: audiences were more specifically listening to a broadcast broadcasting the devastation of their broadcast. According to Kittler, the invention of the typewriter created a feedback loop, allowing for the use of the typewriter to affect the way we think about both writing machines and writing practices:

“ [quoting Angelo Beyerlen] [...] ‘In writing by hand, the eye must constantly watch the written line and only that. It must attend to the creation of each sign, must measure, direct, and, in short, guide the hand through each movement.’ A media-technological basis of classical authorship that typewriting simply liquidates: ‘By contrast, after one briefly presses down on a key, the typewriter creates in the proper position on the paper a complete letter, [...] untouched by the writer’s hand but also located in a place entirely apart from where the hands work.’” (*Grm Film Typwrt* 203).

Similarly, not only were listeners able to use their radios to participate in their discourse network– which was bound and sustained by the dominant technology and institutions forming their media infrastructure – but radio allowed them to think about the gravity of what it would mean for their communication systems to be completely annihilated.

Orson Welles’ opening monologue sets the tone of the broadcast, closing the monologue with this:

ORSON WELLES: “[...] It was near the end of October. Business was better. The war scare was over. More men were back at work. Sales were picking up. On this particular

evening. October 30, the Crosley service estimated that thirty-two million people were listening in on radios.” (1:59-2:20)

From the very beginning, Welles’ presents the listeners an environment akin to the that of their real lives, including the war and the weight of radio in people’s everyday society. This was followed by a weather announcement, a few new bulletins and symphony music performances until the interview with an astronomer, Prof. Pierson, also voiced by Welles. Prof. Pierson’s interview is interrupted by a wire informing of seismic activity later confirmed by Pierson as a meteor landing on earth. Here alone, audiences are witnessing a communication flow passed down from one institution to another, trading data. Carl Phillips, the first announcer in the broadcast, explicitly announces this flow of communication into his microphone for the folks at home to hear, but who are told that they are objectively listening to Phillip and Pierson’s interview and the information from the wire as it is happening – not that they were listening to information being **networked to them**, made only possible by microphones, recorders and transmission technology in general, as Sterne would argue. Audiences became flies on the wall to radio technology networks and institutions at play. The radio program is both about the network and is a part of it; the radio becomes an apparatus mediating this information, and making radio disappear into the protocols of listening practices, as Gitelman would argue. Phillips continues to paint for audiences “[...] a word picture of the strange scene...” in front of him (11:25-11:30). Sounds of a noisy and curious crowd being told to move onto one side by police authorities is heard very clearly into the microphone for the effect of realism, stirring listeners’ ‘sound imagination’. This method is continued all throughout the program – as Sterne would argue – for the sake of achieving authenticity, such as with the part of the program where the listeners are taken

to the battery of a field artillery. Listeners can hear, with absolute clarity, the leading ‘Officer’ giving the ‘Gunner’ subordinate orders to fire at the Martians, as well as the gun fire itself. The sounds of New York City, (cars, boat whistles and bells ringing from a chapel) are all unmistakably heard as the last news announcer is foreboding the ultimate destruction by the Martians:

ANNOUNCER: “This may be the last broadcast. We’ll stay here to the end [...] Now I look down the harbor. All manner of boats, overloaded with the fleeing population, pulling out from the docks [boat whistle sound]” (37:04-37:28).

Things that are meant to be happening in real time are embodied through cued sound, giving the impression that it is spontaneous and authentic. But what becomes striking is when the network established in the story is targeted and falls apart.

We recall in the previous section in the first chapter, “Radio in the 30s”, how radio played such a significant role in people’s lives. We need only to remember how just a single announcement transmitted through radio into thousands of American homes, delivering a powerful speech by Franklin D. Roosevelt saved the banking systems from completely collapsing, just five years before this broadcast. Roosevelt’s compelling speech would have made comparably little to not effect without the aid of radio, and the designated infrastructures that made it possible to influence so many Americans. The media infrastructure in conjunction with the dominant figures and institutions, made it possible to revitalize the American banking system in 1933. Whether audiences understood it this way or not, they at least knew that radio kept them, and the institutions in place, together; whether it was to save the banking system threatened by the Great Depression or surviving an alien invasion. It was not notably the newspapers that were responsible for saving the banking system, nor was it the telegraph. These older media

systems are also relegated to a secondary role in the broadcast, as bulletins and phone calls were significant only when they were being announced into the airwaves. In this case, news bulletins are deemed as ‘special’ when they are being announced, arriving to the station ‘just a moment ago’ or labeled as the ‘latest’ information. Once again, from the very beginning of the broadcast, the program is interrupted by a ‘special bulletin’ regarding strange but insignificant changes in weather patterns (3:38-3:43). The broadcast increases in special bulletins containing breaking news. These bulletins delivered by telegraph, or information passed via telephone, all become valuable through the immediacy and mass transmission of radio; older media become significant so long as they are converged with newer media and the information is transferred through the dominant media system – sourced and accessible by radio. Furthermore, listeners are also able to be transported from one location to another, in a matter of just seconds to a few minutes. We see this with announcements such as the following:

- ANNOUNCER: “We are ready now to take you to the Princeton Observatory at Princeton where Carl Phillips, our commentator, will interview Prof. Richardson Pierson [...]” (6:05-6:12)
- ANNOUNCER: “We take you now to Grovers Mill, New Jersey” (11:04-11:08)
- ANNOUNCER: “We take you now to the field headquarters of the state militia near Grovers Mill, New Jersey” (23:27-23:33)
- ANNOUNCER: “At this time we take you to Washington for a special broadcast on the national emergency [...]” (26:50-26:55)

Each announcement declares that listeners are being transported from the station to Grovers Mill ‘now’, in real time. They take listeners ‘now’ to the field headquarters, then Washington to hear an emergency announcement by the ‘Secretary of Interior’. To repeat a quotation by Kittler: “‘The sound of music in my ear’ can only exist once mouthpieces and microphones are capable of recording any whisper. As if there were no distance between the recorded voice and listening ears [...]” (*Grm Film Typ* 37). With radio

transmission, everything is not only real, but happening in real-time, not excluding the obliteration of communication lines between all military and broadcast personnel.

A Kittlerian approach would make note of the program's ability to capture, not only the discourse networks of the real lives of audiences listening to the program, but what it would mean for the media infrastructures – that make it possible for people to participate in their media environment – to be under attack. From the moment that Carl Phillips is attacked, and his microphone is cut out, audiences experience dead silence for approximately 5 seconds. That is 5 seconds of a destroyed communication line until an announcer takes over and reveals the death of Phillips. One announcer shares with its listeners that the Martians are intentionally attacking communication lines:

ANNOUNCER: “[...] they stop to uproot power lines, bridges, and railroad tracks. Their apparent objective it to crush resistance, paralyze communication, and disorganize human society” (29:06-29:20).

The interruptions and communication cut-offs continue. Communications are extended to a captain at a state militia headquarters. Just before this, the listeners are put in touch with the ‘vice-president in charge of operations, who declares “[...] that radio has a responsibility to serve in the public interest at all times [...]” (23:07-23:25), once again nodding at the central role radio plays within the listeners’ media environment. The Martians are assumed to have cut-off the transmission of Captain Lansing located at the state militia headquarters:

CPT. LANSING: “Wait, that wasn’t a shadow! It’s something moving...solid metal...kind of shield-like affair rising up out of the cylinder...It’s going higher and higher. Why, it’s standing on legs...actually rearing up on a sort of metal framework! Now it’s reaching above the trees and the searchlights are on it. Hold on!” (SILENCE). (25:00-25:23).

Afterwards, a fighter pilot's plane crashes into one of the Martians, destroying the plane, the radio in it, and the presumably killing the pilot:

FIGHTER PILOT: (SOUND OF HEAT RAY) "Green Flash! They're spraying us with flame! Two thousand feet! Engines are giving out! No chance to release bombs! Only one thing left drop on them, plan and all! We're diving on the first one! Now the engine's gone! Eight..." (SILENCE) (34:10- 34:38)

The death of characters in the program are represented by cut-off communications, particularly when listeners experience dead silence. After the death of the last announcer before the program moves into its latter half (marked by the second official program disclaimer and a brief intermission), an operator cues the ending of the first half with these lines:

OPERATOR: "2X2L calling in CQ...2X2L calling in CQ...2X2L calling in CQ...New York. Isn't there anyone on the air? Isn't there anyone on the air? Isn't there anyone...2X2L—" (39:50-40:20).

This bone-chilling conclusion to the first half of the program is not only grim, but is a revelation of the fear, anxiety and chaos that would be triggered should the listeners' networks be destroyed. A Kittlerian approach would see this representation of death through the destruction communication lines, as an example of media's almost visceral relationship with the human body: "A reproduction authenticated by the object itself is one of physical precision. It refers to the bodily real, which of necessity escapes all symbolic grids" (12). If the 'authentic reproduction' of broadcasters and military personnel, refers to the 'bodily real', then the obliteration of the systems designed to convey said reproduction equates to the obliteration of the real itself. If "[the] realm of the dead is as extensive as the storage and transmission capabilities of a given culture." (13), then absolute disconnection marked by total silence, ultimately means that the life

represented no longer exists. It is not until we hear complete silence after the very last announcer drops his microphone, that we can confidently assume that he is deceased:

ANNOUNCER: “Now the smoke’s crossing Sixth Avenue...Fifth Avenue...Ah...A hundred yards away... it’s...it’s fifty feet... (BODY FALLS TO THE GROUND) (CITY BACKGROUND SOUND) (COMPLETE SILENCE) (39:06-39:49)

### **Challenges and Limitations**

Although my approach resulted in interesting findings, it was difficult to apply Gitelman’s theoretical perspective without having more direct access to the listeners’ experiences. My application of this theory had to be based on Schwartz’s documentation of audiences’ letters to the station, the F.C.C. and the press, as well as my supported theory of the radio environment in the 1930s. Having first-hand access to information on how people listened to the program and radio in general, would have made for a more in-depth and dependable analysis that is not solely reliant on theory and secondary resources. I felt that this reduced the strength of the triangulated theory, giving precedence to the Sterneian and Kittlerian approach, over Gitelman’s. In the future, having access to archival information of audiences’ letters and other primary resources would provide me, or any other researcher interested in this topic, a stronger foundation to develop a clearer and dependable theory.

## CONCLUSION

By analysing the 1938 *War of the Worlds* broadcast from a media analysis lens, we can understand the techniques that assisted the program in becoming so richly compelling. Paul Heyer and A. Brad Schwartz were certainly correct in making clear how well Orson Welles knew his medium; his insight resulted in the evocative use of the relatively new medium and an in-depth take on his media environment that may not have been as easily available to the wider population. ‘Fake news’ today has the potential to provide commentary on our contemporary media environment, an environment that makes ‘fake news’ so successful in causing the concerns that it does. I argue that *War of the Worlds* can indeed be a helpful case study, provoking researchers to ask the right questions around ‘fake news’ today, along with offering solutions that challenge potential issues with our contemporary media environment. Should I or future researchers decide to extend this case study, we would benefit from having access to archival and other primary resources, that would allow for more extensive and thorough review.

The Internet and radio, despite their similarities, possess noteworthy differences as well. Part of what makes the Internet, and the nature of ‘fake news’ today, so starkly different from preceding media systems are their versions of time manipulation. We experience ephemerality in today’s patterns of media consumption in a way that is different from radio, due to the nature of how information circulates. Yesterday’s and today’s news conflate and out-trend one another, as oceans of information – compared to what was accessible by radio – circulate and promise to be breaking at a level that is inconceivable to the 1930s radio environment. Therefore, a question to consider is: how do audiences experience ‘real-time’ today, compared to audiences in the 1930s – whether they were listening to a radio-drama or to a news report? Although it can be said that



1930s audiences' experience of 'real-time' does not quite compare to today's, it is only just one factor to consider when exploring 'fake news' within our media environment.

Wendy Hui Kyong Chun researches the concept of ephemerality within a Web 2.0 context, challenging the way the newness of media is conceived based on speed and, in her words, an 'always there-ness':

The slipperiness of new media – the difficulty of engaging them in the present – is also linked to the speed of their dissemination. Neither the aging nor the speed of the digital, however, explains how or why it has become the new or why the yesterday and tomorrow of new media are often the same thing [...] Also key to the newness of the digital is a conflation of memory and storage that both underlies and undermines digital media's archival promise. (Kyong Chun 184)

In this quotation, we see a different angle on what contributes to the newness of new media content, that is different from radio and the experience of 'real-time' it once offered. In today's media environment, what was once old information can become new again, while new information can immediately become irrelevant due to the way our current media environment elicits us to experience both a sense of the present and the past. Information no longer circulates using a top-down method, and our sense of newness or pastness are influenced by factors like predictive algorithms. Concepts such as the one found in Chun's quotation – with the aid of a media materialities lens—are needed to produce a better understanding of our media environment, which is both sustained and experienced with our media tools. To return to my previous insight, if part of what made Welles' broadcast so compelling came from his sophisticated understanding of his medium, what can that say about the producers of 'fake news' today? Whether intentional or not, can the success of 'fake news' be the result of its effectiveness within its given network? In other words: In what ways does it conform to

the conditions of its designated technology and institutions? Do the producers of it practice a type of performance to their given network(s)? And lastly, do contemporary media consumption protocols intersect with the previous questions, allowing for content – whether truthful or not – to enter audiences’ lives and impact their perception of what is happening in their physical world? The three theories: discourse networks, the social genesis of sound fidelity, and media publics – work together to highlight findings that can embolden more progressive conclusions. Although having access to primary resources would have supported a more detailed-oriented analysis, the research conducted on Welles’ feature of *War of the Worlds* showed us how much valuable information we can extract from examining its media environment, revealing how media content like the 1938 broadcast can circulate in such an impactful way. Examining the media environment surrounding ‘fake news’ can not only help us understand its ability to misguide public opinion, but it can potentially provide solutions on how to properly confront it. In the future, I hope that this kind of research can aid in creating a trajectory towards a media environment that discourages the production and dissemination of problematic information and content like ‘fake news’, interrupting people’s ability to have access to a healthy media experience.

## WORK CITED

- “About.” *NewsWise*, <http://newswise.ca/about/>. Accessed 27 Jul. 2018
- Auslander, Philip. *Liveness: Performance in a Mediatized Culture*. Routledge. 1999.
- Bartlett, David. “News Radio – More Than Masters of Disaster” *Radio: The Forgotten Medium*, Edited by Edward C. Pease and Everette E. Dennis, Transaction Publishers, 1995, pp.31-44.
- Bluemle, Stefanie.R. “Post-Facts: Information Literacy and Authority after the 2016 Election.” *Portal: Libraries and the Academy*, vol.18, no.2, 2018, pp.265-282.
- Chandler, Daniel and Munday, Rod. *A Dictionary of Media and Communication*. 2<sup>nd</sup> ed., Oxford University Press. 2016. DOI:10.1093/acref/9780191800986.001.0001
- Chen, Adrien. “The Fake News Fallacy: Old fights about radio have lessons for new fights about the Internet”. *The New Yorker*, 4 Sep. 2017, <https://www.newyorker.com/magazine/2017/09/04/the-fake-news-fallacy>. Accessed 17 Nov. 2017
- Chun, Wendy Hui Kyong. “The Enduring Ephemeral, or the Future Is a Memory”. *Media Archaeology: Approaches, Applications, and Implications*, Edited by Jussi Parikka, University of California Press, 2011, pp.184-203
- Cillizza, Chris. “Donald Trump just claimed he invented ‘fake news’.” *CNNPolitics*, 26 Oct. 2017, <https://www.cnn.com/2017/10/08/politics/trump-huckabee-fake/index.html>. Accessed 10 May 2018.

- Echols, Katherine Barnes Echols. "The Monster's Transformation on American Radio (1930s-50s)." *University of Toronto Quarterly*, vol.87, no.1, 2018, pp.42-61.
- Frank, Russell. "Caveat Lector: Fake News as Folklore." *Journal of American Folklore*, vol.128, no.509, 2015, pp.315-332.
- Gitelman, Lisa. *Always Already New: Media, History, and the Date of Culture*. The MIT Press. 2006
- Gitelman, Lisa. "The Phonograph's New Media" *The Sound Studies Reader*, Edited by Jonathan Sterne, Routledge, 2012, pp.283-303.
- Hayes, Joy Elizabeth & Battles, Kathleen. "Exchange and interconnection in US network radio: A reinterpretation of the 1938 *War of the Worlds* broadcast." *The Radio Journal: International Studies in Broadcast and Audio Media*, vol.9, no.1, 2011, pp.51-62.
- Heyer, Paul. "America under attack I: a reassessment of Orson Welles' 1938 war of the worlds broadcast." *Canadian Journal of Communication*, vol.28, no.2, 2003, pp.1-13. <https://doi.org/10.22230/cjc.2003v28n2a1356>. PDF.
- Hilmes, Michele. "Radio and the Imagined Community." *The Sound Studies Reader*, Edited by Jonathan Sterne, Routledge, 2012. pp.351-362.
- Jack, Caroline. "Lexicon of Lies: Terms for Problematic Information". *Data & Society Research Institute*, 9 Aug. 2017, <https://datasociety.net/output/lexicon-of-lies/>. Accessed 10 Sept 2017.

Krämer, Sybille. “The Cultural Techniques of Time Axis Manipulation: On Friedrich Kittler’s Conception of Media”. *Theory, Culture & Society*, vol.23, no.7-8, 2006, pp.93-109.

Kittler, Friedrich. “Unpublished Preface to *Discourse Networks*”. *Grey Room*, vol.63, 2016, pp.90-107.

Kittler, Friedrich. *Gramophone, Film, Typewriter*. Stanford University Press. 1982.

Kittler, Friedrich. *Literature, Media, Information Systems*. Overseas Publishers. 1997.

Kittler, Friedrich. “Lightning and Series – Event and Thunder”. *Theory, Culture & Society*, vol.23, no.7-8, 2006, pp.63-74.

“Lesson 1: Journalism and Democracy.” *NewsWise*,  
<http://newswise.ca/module/journalism/>. PDF.

“Lesson 2: Journalistic Standards.” *NewsWise*,  
<http://newswise.ca/module/journalism/>. PDF.

“Lesson 3: What Is News?” *NewsWise*, <http://newswise.ca/module/thenews/>. PDF.

“Lesson 4: News and the Editorial Process”, *NewsWise*,  
<http://newswise.ca/module/thenews/>. PDF.

“Lesson 5: The Internet and Social Media (elementary).” *NewsWise*,  
<http://newswise.ca/module/internet/>. PDF.

“Lesson 6: The Internet and Social Media (secondary).” *NewsWise*,  
<http://newswise.ca/module/internet/>. PDF.

“Lesson 7: Fake News & Verification.” *NewsWise*, <http://newswise.ca/module/fakenews/>.  
PDF.

Matelski, Marilyn. J. “Resilient Radio.” *Radio: The Forgotten Medium*, Edited by Edward C. Pease and Everette E. Dennis, Transaction Publishers, 1995, pp.31-44.

Parikka, Jussi. “Friedrich Kittler – a media anthropology without the Man?” *The Media Anthropology Network, European Association of Social Anthropologists*, [http://www.media-anthropology.net/file/parikka\\_kittler.pdf](http://www.media-anthropology.net/file/parikka_kittler.pdf). Accessed 20 Jul. 2018. PDF

Persily, Nathaniel. “The 2016 U.S. Election: Can Democracy Survive the Internet?” *Journal of Democracy*, vol.28, no.2, 2017, pp.63-76.

Pfeiffer, K. Ludwig. “The Materiality of Communication.” *Materialities of Communication*, Edited by Hans Ulrich Gumbrecht and K. Ludwig Pfeiffer, Stanford University Press, 1994, pp. 3-12.

Pooley, Jefferson & Socolow, Michael J. “The Myth of the *War of the Worlds* Panic” *Slate.com*, 28 Oct. 2013, Accessed 27 Nov. 2017.

Pooley, Jefferson & Socolow, Michael J. “Checking Up on *The Invasion from Mars*: Hadley Cantril, Paul F. Lazarsfeld, and the Making of a Misremembered Classic.” *International Journal of Communication*, vol.7, 2013, pp.1920-1948.

Rehm, Diane. “Talking Over America’s Electronic Backyard Fence”. *Radio: The Forgotten Medium*, Edited by Edward C. Pease and Everette E. Dennis, Transaction Publishers, 1995, pp.31-44.

- Schebetta-Jackson, Lisa. "Companies to Keep: Air-Raid Dramas and International Ethical Responsibility in America, 1936-1939." *Theatre History Studies*, vol.32, 2012, pp.33-52.
- Schwartz, A. Brad. *Broadcast Hysteria: Orson Welles's War of the Worlds and The Art of Fake News*. Hill and Wang, 2015.
- Sconce, Jefferey. "On the Origins of the Origins of the Influencing Machine". *Media Archaeology: Approaches, Applications, and Implications*, Edited by Jussi Parikka, University of California Press, 2011, pp.70-94.
- "Trump to CNN reporter: You are fake news." *CNBC*, 11 Jan. 2017, <https://www.cnn.com/video/2017/01/11/trump-to-cnn-reporter-you-are-fake-news.html>. Accessed 10 May 2018.
- Verma, Neil. "#WOTW75." *The Velvet Light Trap*, no.74, 2014, pp.80-89.
- Welles, Orson. *War of the Worlds*. The Mercury Theatre on Air, 1938. <http://sounds.mercurytheatre.info/mercury/381030.mp3>. Accessed 5 Sept. 2017

## VITA AUCTORIS

NAME: Mirella-Kami Ntahonsigaye

PLACE OF BIRTH: Windsor, ON

YEAR OF BIRTH: 1994

EDUCATION: St Joseph Catholic High School, Windsor, ON, 2008

University of Windsor, BA., Windsor, ON, 2012

University of Windsor, M.A, Windsor, ON, 2018