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ONLINE NEWS DISTRIBUTION METHODS AND CHANGING JOURNALISM PRACTICES: DIGITAL INFLUENCES, AUTHORITY, TRUSTWORTHINESS AND TRANSMISSION

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1. Overview

Mass media or mass communication has developed vastly over the years. Today the Internet has brought radical changes to communication. New technologies have changed communication practices by making them more pervasive and this transformation has created alternate ways and digital media forms for people to communicate with each other by e-mail, text message, blogs and via social medias, for example. With the continued growth of Internet audiences, online journalism and online news sources have begun to grow. However today, simply giving information out is not enough for the public. Consumers expect that news sources will allow them to pick and choose what they want to read, and many also believe that there should be a way for the readers to express their opinions about the information they read. Because of these changes, new journalism practices, such as "Citizen Journalism" and "Collaborative Journalism" have emerged and have transformed journalism in important ways. For instance, digital media and digital media outlets have given the opportunity for virtually everyone to be a "journalist" (or at least an "amateur" one) and the journalism has been moved from been a form of one-way communication to a conversation among many, with many able to contribute their opinions and voices. The changes have challenged journalistic authority as well as the identity (of both the journalist and the news source). This essay refers to "amateur journalists" as reporters who have not been paid for anything they have written or published in either print or in online, and it refers to "professional journalists" as the ones who have been paid for their work and their publishing either in print or online. Another new innovative effect of digital media influences on journalism is a new form called "Data Journalism." This form of journalism offers journalists ways to analyze and filter data sets from open data resources to create news stories, bringing journalism one step further, which moves journalistic practices from man-made contexts to machine-made ones.

In this thesis I analyze how open data and social media (such as blogging and Twitter for example) have changed the news industry and its practices and I explore whether these practices compliment or displace the traditional news distribution methods. Further I illustrate how digital culture has influenced the journalist's role and also the authority of traditional journalists on the news industry, with participatory, collaborating journalistic methods and also with machine-made journalistic methods.

This study will also attempt to answer the following questions:

1.   How has digital culture transformed traditional news distribution and journalism practices in regards to flexibility, trustworthiness, authority and the role of the journalist?

1.   How have participatory and machine-made journalism methods affected traditional journalism practices?

2. Literature Review

2.1 Complimenting or Displacing Traditional News Methods

Many theorists of digital media and culture discuss the shift of traditional mass communication methods such as newspapers to digital ways of news reporting. Jay David Bolter states in his book *Writing Space* that "although print remains indispensable, it no longer seems indispensable: that is its curious condition in the late age of print" (2). He points out that many attractive features of digital media, such as interactivity and flexibility makes it hard for printed text to compete with. Even though this does not really mean that printed materials might disappear, they are certainly challenged.

One of the main points that illustrate that computer technology seems to rival traditional printed media is the massive consumption of the Internet and the information it provides by the younger generation. Richard van der Wurff offers his ideas on the changing nature of readership: "Newspapers

see their readership declining. They are not able to attract sufficient numbers of new, young readers to compensate for the natural decline in older readers" (107). According to Rupert Murdoch's speech to the American Society of Newspaper Editors in April 2005, "we need to realize that the next generation of people accessing news and information, whether from newspapers or any other source, have a different set of expectations about the kind of news they will get, including when and how they will get it, where they will get it from, and who they will get it from" (qtd. "theguardian"). In his speech, he further explains that this will be because the today's young generations are digital natives. This means they have been born into a digital culture and do not have to learn how to adapt to it. A report issued by the Carnegie Corporation in spring 2005 supports the claims of Murdoch and Van der Wurff and states that "the future of the U.S. news industry is seriously threatened by the seemingly irrevocable move by young people away from traditional sources of news"(Brown M). One of the reasons that the printed newspapers could not attract the younger generation may be that they think it is nonsensical to pay to read yesterday's news, when they could read the very moment's news online for free, and also can read on demand when they want. *In Journalism in the Face of Developments in Digital Production*, Pavlik explains the behavior of today's digital savvy generation and states, "Audiences are not willing to wait for the evening news or the next day's paper for developments in a breaking story. They want to know right now, and they want their information as current as possible" (124).

The question is whether online news methods are replacing traditional news media, particularly with today's young generation who are more attracted to digital news services. Many theorists suggest this is true. For example Nguyen and Western quote McCombs ideas on the function of media in their article:

Most studies of media competition have been based on the medium-centered perspective, which assumes that different media serve the same functions for users so that new media will eventually drive old media out of existence (qtd. in Nguyen and Western).

They further explain, following McCombs, that during the period where TV was introduced to American households, the intrusion of television was made at the expense of older medias such as movies. After having the TV in the market for five years, McCombs has also examined that the motion picture values have reduced from $1.5 billion to $1.17 billion. Therefore he assumes that in the long run, the new media would replace old media that has similar functions.

However, when one looks back at mass communication history, speech has not become obsolete due to writing, and newspapers have not gone away because of radio, and radio didn't die because of television. New medias are evolving, and they influence one another. For example, TV has become very popular since it was initially introduced to culture and people now prefer watching sports on TV rather than listen to it on the radio. However that does not mean that TV has replaced radio. Likewise even though blogs are popular today, their existence does not automatically end the existence of printed magazines or books. They merely provide alternate outlets with new considerations for how they are used, and how they impact culture. According to Stempel et al, the Internet provides surprising and innovative changes for contemporary culture:

> The Internet has arrived as a major mass medium, but it is not playing the role that many have assumed. . . . they seek the substantial information these media provide, attend to breaking news by monitoring radio while online, and ignore the less substantial headlines offered on local and national TV news. In any case, there is a complementary rather than competitive relationship among Internet news, newspapers, and radio news (77).

2.2 Flexibility and Trustworthiness

With today's young generation who are moving away from the traditional news industry, media organizations have considered how they could use social medias to attract their audience. To understand how an audience consumes news today and how they think about the industry, will require looking back and considering where the traditional news organizations stand today.

The Pew Research Center had conducted a lot of research in order to understand the thoughts of the public considering their use of media. They have noticed that the proportion of Americans who read news in printed newspapers or magazines are continually declining. In September 2012, it was only 23% of the population who had read a print newspaper, where it was 26% in 2010, and it was about twice in 2000, which was 47%. Further, the proportions of reading printed magazines have also declined according to The Pew Research Center, from 26% in 2000 to 18% in 2012. However the research center shows that even though the print sources have faced a loss in readership in recent years, television news viewership was more stable. Further the research shows that currently 55% watch news on television. However from people who are younger than 30 years old, only a third (34%) of them seems to watch television news today. In 2006, however it was nearly a half of young people (49%) who had watched television news. This demonstrates that even though the television news viewership seems to be stable today, there is likelihood that these numbers will change soon with the young generation. ("Pew Research: Online Papers Modestly Boost Newspaper Readership" 1-7)

One of the Pew Research surveys shows that the public has less confidence than they had a few years ago concerning how news organizations report news accurately and in a politically-unbiased way. The Pew research shows that issues of accuracy and bias are reflected in the viewing patterns:

In the past decade, the percentage of people who say they regularly watch local news has slipped from nearly two out of every three to slightly more than one out two. At the same time, the number of viewers who say they believe all or most of what they see on their local

newscast has dropped significantly in recent years. ("Pew Research: Local TV in

Transition")

These viewing patterns show that the public's confidence in local television news has reached a much

lower level. Even though the television censorship is enforced to protect children from being exposed to

harmful visuals, most people tend to believe that this censorship could be used by the governments to

hide propaganda from the public. With the Internet and with online journalism, today there is hope for

this issue of government censorship news in television. According to Skoler's ideas in Nieman Reports

(2009), today people have the power to choose their information source:

> As discontent grew among the audience, the Internet arrived. Now people had choices. If the
>
> local paper and stations weren't considered trustworthy and journalists seemed detached from
>
> what really mattered to them, people could find what they wanted elsewhere. What's more, they
>
> could stop being passive recipients. They could dig deeply into topics, follow their interests, and
>
> share their knowledge and passions with others who cared about similar things (Skoler).

He explains that readers have the ability to find news and inform people about choices, in different ways

today other than TV or newspapers, with the growth of new media technologies. On the Internet, readers

do not have to be only a news receiver, they can also be a news distributor at the same time, by sharing

their findings with others who have the same interests: "Readers, listeners and viewers all become

"users"; they have many more options in deciding when, where and how they consume journalists'

products" (Heinonen 36)

The vast number of consumers available via the Internet creates a new genre of journalism. It

makes the news more interesting with multimedia and more interactivity for the audience. This also

allows readers not only to read, but also to participate in discussions anytime and from anywhere in the

world:

Journalists now need to think about a global audience that not only reads what they write and report but can comment, provide perspective, and offer new insight into the complexities of an increasingly global society (Pavlik 126).

In newspapers or broadcast journalism, journalists have a sense of their audience and their responses for certain aspects, such as political and religious views. However it is different from Internet-based journalism; anyone can participate in internet based dialogues that have open access. In some cases this also makes it difficult to anticipate the accuracy or the trustworthiness of the statements, which could be one of the weaknesses in the online journalism. As Domingo (2011) states, "User generated content, unlike material from official sources, is wildly diverse as well as uneven in quality, focus and reliability" (77). Singer also questions the accuracy of user generated contents and states, "You don't know where the story really originated. There is no way to know that this person who brought us a story didn't steal it from somewhere. How can we know for sure?" (129).

2.3 Changing Authority and the Role of the Journalist

The survival of traditional journalism lies with the readers or the audience it has: "If the audience is inspired to move away from traditional information providers toward emerging alternative channels, the foundations on which journalism rests are challenged" (Heinonem 37). This move of the readers towards digital news distribution alternatives, places the power or the authority of Gatekeepers at risk. Journalistic authority is not something that the journalists have received automatically. In order to gain this authority journalists must be recognized by the news audiences. Therefore the traditional journalists have been working on keeping their authority by ensuring that only the relevant information, the information that their audience would like to read is released to the public, as Axle Bruns also reflects on the importance of gatekeeping and authority in his discussion of changing practices in *Gatewatching, not Gatekeeping: Collaborative Online News*:

The practice of gatekeeping evolved largely in response to the scarcity of existing news channels. The 'gates' this metaphor refers to are the publishing technologies controlled by the media organizations; gatekeepers police these gates to ensure that only suitable information is allowed through to be transferred to the audience (35).

However, online journalism and social networking sites today make available information to consumers in seemingly unlimited ways. These platforms contain information that is not filtered by traditional gatekeepers, as it was earlier. Today every blogger or online news provider has the ability or the authority to decide which information should be shared with their readers. The new media technologies now share the authority that once only traditional professional journalists had, with everyone: "Online interactivity changes these dynamics. The press is no longer a singular gatekeeping institution, rather a collaborative platform for constructing the news, and thus collective memory" (Robinson 796).

Considering that anyone can perform journalistic acts and have authority over the information that they are willing to distribute among the readers, the traditional journalist's role will no longer be as a gatekeeper. However these journalists still have a responsibility towards the news consumers to bring reliable, trustworthy information. They have the responsibility to be an authenticator of information that citizen journalists have published in journalist's news distribution platforms: "Journalists feel responsible not simply for how much information they provide to the public but for how good, especially how truthful that information is"(Singer 121). Even though the bloggers could publish unlimited information, the journalists have the responsibility to verify such details and to see what is news, and what is not. Since the information spreads faster today, validation is really an important activity. They should be able to verify whether "will it harm innocent people? Is it defamatory or a form of hate speech, or a violation of copyright?"(Singer 122). Therefore, the roles have not disappeared, but become more complex, and it is important to acknowledge these changing roles and practices.

2.4 Participatory Media

With a participatory audience in the online news sector, and with the help of social media such as Twitter, Facebook and also with blogs, new journalism paths, such as "citizen journalism" and "collaborative journalism" have emerged as important mediums for change:

> Today, with commenting opportunities available on almost any kind of content website, and with Facebook and Twitter empowering new forms of interpersonal communication online, it's hard to find a news organization that's not trying to tap into what we once would have called "online communities" and now more typically refer to as "social media. (Gordon R)

The new online news trend is to not only have a website where users browse through your content. It is to reach out to the audience via different social media sites and deliver the news. Not only journalists, but nearly everyone is able to report what is happening around them in social media sites. These sites have helped in giving individuals a way to get in touch with others as well as to express their thinking to the world. These new kind of access also make the role of journalists particularly complex, as indicated in the bombing of the London subway in 2005 and as reviewed by Sambrook in his article (Nieman Reports: Citizen Journalism and the BBC) :

> On July 7th, when terrorist bombs exploded on London subway trains and a bus, it was a day of intense pressure for our news teams to get things first, but more importantly to get things right...Within six hours we received more than 1,000 photographs, 20 pieces of amateur video, 4,000 text messages, and 20,000 e-mails. People were participating in our coverage in a way we had never seen before. By the next day, our main evening TV newscast began with a package edited entirely from video sent in by viewers (Sambrook R).

With citizen journalism the public has the ability to alert the media about many different kinds of news stories that the professional journalists do not have the capacity to cover. A Croatian editor claims

that this is a time that "users are where events are happening" (qtd. in Heinonen 38). Citizen journalists could, therefore, be a great help in providing photographs or videos of breaking news in real-time. For example, Sambrook relates that the bomb explosion in London subway was captured first, and in detail, by citizen journalists. The mainstream media could not cover this in detail, or be in the place when the incident happened, as could "ordinary" citizens. The popular use of smart phones and new media such as blogs and social network sites allow the amateur reporters from the public to participate in such journalistic moments and publish their point of view without difficulty. Goode (2009) also supports this claim and, states that "citizen journalism' refers to a range of web-based practices whereby 'ordinary' users engage in journalistic practices. Citizen Journalism includes practices such as current affairs-based blogging, photo and video sharing, and posting eyewitness commentary on current events"(128). With these journalism practices, as Bruns notes in his article *Wikinews: The Next Generation of Online News,* the role of producer and consumer is changing:

> Overall, it is notable that most alternative online news sites rely heavily on their user communities for their coverage of news and current events. In contrast to a traditional producer/consumer dichotomy, on most of these sites users are able to participate directly as producers of content (Bruns).

With the Internet and the arrival of blogging, Bruns points out, another concept called "collaborative Journalism" was made possible. It is a process of amalgamating research and reporting by both professional and amateur volunteers in order to develop a news story or to critically review an existing story from the mainstream media. He also claims that Wikinews is one of the examples of this concept: "One of the most recent significant additions to collaborative, alternative online news production is Wikinews, a project of the Wikipedia Foundation which also runs the massively successful Wikipedia".

2.5 Machine-Made Journalism

For many years, humans have been developing different types of machines to improve their lifestyles with the help of technology. Today the digital age has brought a life-changing moment that is even greater than the revolution caused by the printing press, an era with networked information and cybernetic organism. Burdick and Drucker (2012) claim that our age "is an era in which the humanities have the potential to pay a vastly expanded creative role in public life" (vii). This change means that it helps to bring historical materials to online society and use technologies such as geo-location mapping and optical character recognition to enrich information or to discover new information; this is the age of digital humanities. It is also an age where wearable technologies are more popular, an era where humans have become partly machines or cyborgs.

One specifically interesting moment of wearable technologies or cybernetic organism in news industry is the Google Glass that can be used by the journalists. In *How Google Glass Can Change Journalism*, the author claims that these glasses have the potential to modernize and enhance journalistic practices: "Though it might be a stretch to say that Glass will revolutionize journalism as we know it, it certainly has the potential to enhance journalists' abilities and modernize journalism."(Bergman K). Voice of America, (VOA) one of the external broadcast institutions of U S federal government has started a project exploring this new wearable technology. In February 2014 VOA managed to record a concert through Google glasses that was held to celebrate Beatles 50th anniversary since they first arrived in America. Carolyn Presutti quotes Frederic Lardinois and explains the easy use of glasses. He claims that "unlike cellphones, you can tape a concert and watch it at the same time" (qtd. in Presutti). It gives the consumer the true first person experience. With the ability to capture moments instantly and without any difficulty, this technology certainly gives great potential to citizen journalism.

Because human lives have become increasingly absorbed in technologies, people tend to use technological assistance for a variety of tasks, in order to make everyday life easier. With the rapid

change of new technologies and with the availability of open data sources, journalists have also found

another new journalism genre, which emerges with the help of machines: Data Driven Journalism. The

Guardian quotes Tim Berners-Lee as he explains this newly emerging concept:

> Journalists need to be data-savvy. It used to be that you would get stories by chatting to people
>
> in bars, and it still might be that you'll do it that way some times. But now it's also going to be
>
> about poring over data and equipping yourself with the tools to analyze it and picking out what's
>
> interesting. And keeping it in perspective, helping people out by really seeing where it all fits
>
> together, and what's going on in the country (qtd. in Arthur C).

According to Tim Berners-Lee, now the journalist's job is not only to interview people, but also

to develop their skills to analyze and to pick upon the interesting data from data- bases. The Internet

makes it possible for information to transfer between computers or mobile devices. Today most of the

governments have also gone digital, making the access of their information easier. This process helps

the journalists to inform the public what is actually going on in a country. The British MP's expenses

scandal, which happened due to the misuse of the permitted allowances and over-claiming of expenses

by Members of Parliament, could introduce as an attempt to educate the public about the reality which

revealed due to data analysis of the journalist Heather Brooke (which would have been a much easier

job if data were available as open data files). Heather used the "*Freedom of Information Act*" firmly for

five years to bring out details of the MP's expenses. As the authors of *Data Journalism Handbook* (2011)

claims, "Using data the job of journalists shifts its main focus from being the first ones to report to being

the ones telling us what a certain development might actually mean" (Bounegru, Chambers and Gray),

as reveling the secrets of the British MP's.

In my research I analyze how digital culture has transformed traditional news distribution

methods in regard to flexibility, trustworthiness, authority and also the role of the journalist. I also

analyze how Participatory and machine made journalism methods have affected traditional journalism

practices and whether these new ways of news distribution practices are complimenting or displacing the traditional news distribution methods.

3 Changing Authority in New Media Outlets

3.1 The Advantage of Flexibility in Online News

As we know the modern world had many transformations and revolutions, influenced by technologies and technological developments. The invention of the computer is one of the major revolutions of the world. This, with some other developments in information technology, led to the development of a huge network that connected people across the world to a variety of information sources: the Internet. This according to the famous claims of Marshall Mcluhan and his book *The Gutenberg Galaxy: The Making of Typographic Man*, has made the world a "global village." This is the idea of people developing a social network, which connects people with common interests, ideologies and sometimes values, making the world a seemingly smaller place. Technological developments have continually stretched the abilities of our communication methods. With the improvement of smartphone technology and the Internet, any individual with such access can interact with someone who is from a different culture or in a different geographical location without any difficulty. All these transformations have had a great impact on the media industry too. Print media has been especially influenced to a greater extent, with news being available on the Internet. It has impact on decreasing traditional newspaper readership. The Pew research center has shown a 21% decline in print newspaper readers from the year 2000 to 2012. However the percentage of Americans watched news or headlines on a social networking site has doubled from 2010 to 2012 from 9% to 19% (Caumont). This shows that there is another new trend in online news consumption, which are social media sites. These sites provide easy access from anywhere at any time, with the use of popular technologies such as smart phones and tablets. With online news distribution channels, the reader does not have to wait until the next morning to read the newspapers. They have the ability of receiving news immediately and also regardless of the

time, as noted by Heinonen. He claims that consumers "have many more options in deciding when, where and how they consume journalists' products" (36), since the Internet is flexible and ubiquitous. There is little to contradict the claim of the impact that the social media has on news distribution. Today people read, follow, and most importantly share news instantly using smart phones and tablets with their Facebook and Twitter accounts. The new generation of today's journalists has been inspired to record, write and share events that they witness, due to high resolution cameras in their smart phones and also easy and quick access to the Internet as well as to social media sites.

Another major benefit that online news distribution has brought to the reader is the ability to switch between different news sites, while reading news easily and quickly. Interactive feature, such as hyperlinks, lead the reader to have more control over what he/she reads, by giving the opportunity to find more definitive information. It also allows the reader to get more information in a short time period. In the digital world, with more colorful graphics, videos and links attract the reader's attention. Forums and discussion boards also give the reader the ability to contribute to discussions. Often the information that is in newspapers are limited due to limited space availability. However the online reader does not come across this issue. It also allows the reader to pick and choose what they want to read and select from a number of news media outlets around the globe, creating a global audience: "Journalists now need to think about a global audience that not only reads what they write and report but can comment, provide perspective, and offer new insight into the complexities of an increasingly global society" (Pavlik 126). Social media also has the power to rally the public and influence changes. For example the Egyptian revolution which was calling for an end to President Mubarak's ruling, could be introduced as a result of easy access of information, ability to share information with a large audience and also the flexibility of the online news distribution methods and social network sites. In this revolution, social networks such as Twitter, Facebook, helped in breaking the barriers of psychological fear many people had, and helped connect them with others and share information very quickly. It helped to speed up the movement of information and news by helping communicate their message with the whole world. These

networks have also given the Arab people the knowledge that they are not alone in this revolution and that the whole world is following them and supporting them.

In the traditional news industry there are often critics of governments having political bias, and censorship of information in order to hide or promote governmental propaganda. However today if the reader thinks there is censorship on television news or on newspapers, or if the reader does not trust the news provider, they have many other sources to receive their news in the online journalism sector. This way they can demand information and about the latest events that have happened around. These online platforms and the ability to publish user-generated content also has the power to bring revolutions, democratization and also support protests for some nations, such as so-called Arab Spring. However, the question as to whether the information on the Internet can be fully trusted emerges, and one must still consider the unknown and amateur reporters on the Internet and the potential impacts this could have on the accuracy and authority of the news one receives.

3.2 Credibility in Social Media and Online News

The definition of journalism and the ways journalism is expanding is primarily due to the Internet and new technologies. Today, many Web sites maintain platforms where the general public or ordinary people can post news. One such site is iReport.com, owned by CNN. This site does not do editing or fact-checking on the materials that are uploaded by the citizens nor do they make any guarantees about the accuracy of the information. In the recent past a report mentioning that the founder and CEO of Apple, Steve Jobs had suffered a heart attack conducted a strong agitation in the stock market. The rumor that was published on the above mentioned CNN's iReport site by a citizen journalist caused Apple's stock to drop and lose billions of dollars. It also made CNN to face many critiques regarding their iReport site. According to Apple Insider, the incident reported that "Steve Jobs was rushed to the ER just a few hours ago after suffering a major heart attack". The report further stated, "I have an insider who tells me that paramedics were called after Steve claimed to be suffering from severe

chest pains and shortness of breath. My source has opted to remain anonymous, but he is quite reliable"

(qtr. in Lane). Even though this report was removed, it continued to spread all over the Internet in other

similar sites and on blogs. There were many discussions over this incident and about what it means

about the credibility and the validity of user generated content. In the forum, *MacRumors,* a user with

the user name *carfare* contributes to one of such discussions and states, "This is what happens when you

let amateurs "try" and be reporters…. As you can see, the stakes are just too high to let beginners (and

bloggers) pretend to be journalists" (*carfac*). A blogger, Mimi Adachi also criticize the situation and

states that "the downside of letting everyone and anyone have a say is, as the fake Steve Jobs heart-

attack news showed, how do we know if we can trust what they say?"(Adachi), in her blog post, Citizen

Journalism: Proceed with evaluation. This incident also shows that people act on and also re-publish

unverified information without even knowing or checking the validity. The irony is that in this case, the

journalist insisted on the reliability of his source and yet published a fake statement.

The Fort Hood attack in 2009 was another incident that questions the credibility of user-

generated content in news. In this case a U S army major who is a psychiatrist, started shooting at others

in Fort Hood, one of the military posts in United States, on November 5th, 2009. According to the Los

Angeles Times (November 6, 2009), 13 were killed and another 30 were wounded during the shooting.

The report also stated that the base was locked down for about six hours, due to the incident (Abcarian,

Meyer and Powers). However some soldiers had the privilege of communicating with the world via

Tweeter and blog posts during this lock down time and could inform about the situation that was inside

the base. Tearah Moore, a soldier who had just returned from Iraq and a number of other Twitter users

and bloggers posted eyewitness statements from inside the base, which were then included in some of

the mainstream outlet's online coverage as well. However, during this event some false information was

also transmitted to the public. The eye-witness reports claimed that there were two or three shooters in

the attack and one of them was killed during the incident. However, there was only one shooter, Mr

Hasan and he was apprehended alive. By the time this false information was corrected, they were

reported in both mainstream press and on social media sites. Paul Carr at Tec Crunch (2009) highly criticizes some acts of citizen journalists in a report he published about the Fort Hood incident. He states that "citizen journalism once again did nothing but spread misinformation at a time when thousands people with family at the base would have been freaking out already, and breach the privacy of those who had been killed or wounded."He further decried the act of Ms. Moore explaining that "rather than offering to help the wounded, or getting the hell out of the way of those trying to do their jobs, Moore actually pointed a cell-phone at a wounded soldier, uploaded it to twitpic and added a caption saying that the victim "got shot in the balls""(Carr P). His article well supports the fact that often one's ego comes well before one's humanity in this social media addicted society.

According to many critics of social media, the way that humanity is fading away due to our current social media addicted generation also shows in the gang rape incident in Pitt Meadows, British Columbia, where a 16 year-old teenage girl was drugged and raped by several men in September 2010 at a rave party. The bystanders took photographs of the incident. In this tragedy, this group of young men who were responsible for the crime let the world know about their sexual assault, by publishing the images on Facebook. The photos went viral on the Internet, allowing thousands of people to watch the brutal attack. This happened with no regard for how the photos would traumatize the victim and her family. Even though Facebook eventually removed them from their site, copies had already been downloaded and circulated on the Internet sites. This problematic and frightening incident shows us that many in our media generation are witnessing and living in a world with an advanced communication technology, that nonetheless threatens many moral values in society, in particular ones based on privacy. It reveals that the Internet can quickly transform and transmit personal and criminal information regardless of the credibility, moral or ethical values of the people involved.

These incidents raise the question of the credibility and quality of user-generated content as Domingo states: "User generated content, unlike material from official sources, is wildly diverse as well as uneven in quality, focus and reliability" (77). Singer also states, "You don't know where the story

really originated. There is no way to know that this person who brought us a story didn't steal it from somewhere. How can we know for sure?"(129). These claims raise questions about how much traditional media outlets should grasp such formats. However I would argue that, on the other hand, even though user-generated content is obviously not a perfect way to provide access to media, it can also result in a lot of news-worthy and credible stories as well. Credibility is a quality that is assigned to the source of a message by the recipients during an information exchange, provided that the information is trustworthy. Despite the above incidents in online news, today most of the news consumers receive news through online news sources and trust the sources. According to the Pew Research Center (2013) nearly 8% of the USA general population received their news through Twitter, 10% through YouTube and 30% through Facebook (Gottfried, Holcomb and Mitchell).

3.3 Influences in Gatekeeping and Authority

One of the major changes in modern journalism is the networking or the linking nature of the Internet and the rise of the blogger. Blogging has first begun as online journals and as online diaries. However with the advent of social media, blogging also has been on the rise. These online platforms have made it amazingly easy to share information with a larger audience and have been the foundation for participatory media with user-generated journalism practice. In Nieman reports Picard claims, "For users, social media and blogs offer anyone the opportunity to express themselves and to connect with persons of like-minded interests". Further, blogs are normally seen as reader-driven, which the blogger tends to write about what the readers want to read rather than what the reader needs to read, (Heinonen 47-49), these blogs have allowed even for the amateur writers to become journalists and share their opinions or information with others. Until recently news is identified by many theorists as a sort of "lecture" format or as one-way communication mode, where traditional media outlets inform the passive consumers what the news is. However now news can be seen as more of a "conversation," which boundaries between news-producers and news-consumers are blurred. Smart phones and other mobile devices have turned nearly anyone into eye witness reporters. In this process at the receiving end, the

technology has given the consumers the ability to customize what they receive based on their own interest and also re-publish or tag these news items with others. In the current digital age, news broadcasting tends to happen without any assistance from mass media.

The online news distribution methods do not involve the traditional gatekeeping process, where gatekeepers had the authority over which information passed through the "gates" (forms of fact- and credibility-checking) to the readers. The new online journalism method has demolished the authority and influence what traditional journalists had over news distribution and it has allowed the writers to freely express their ideas. Traditionally, the newspaper editors' job was deciding what news or information was most important for the general public to know. They were the ones who decided which information should be on the first page and what information gets removed due to space limitations. In contrast, today because of digital formats, space isn't a limited resource, as it is with paper, for example. Instead of keeping faith and trusting the traditional news paper's editorial board, the Internet users have the ability to receive their news through the media according to their own choice. They can access a favorite blogger, Google News generated by machines, social media sites, and many other forms of news. These changes are freeing the news business. Like any other profession, the news industry has developed its own set of rules over the years as to what type of information should be published and what should be ignored. Without any doubt those rules are deeply transformed, when the information is published to the Internet. In other words, the authority that the traditional journalists once had no longer exists in the digital world. As a result today scholars introduce journalists as "Gatewatchers" (Bruns) instead of gatekeepers. Bruns describes this new term as, "gatewatchers fundamentally publicise news (bypointing to sources) rather than publish it (by compiling an apparently complete report from the available sources)" (38), in his *Gatewatching, Not Gatekeeping: Collaborative Online News* article.

3.4 Revised Roles

The introduction of the Internet and digital culture has challenged traditional forms of news distribution methods and traditional journalism, as the world has shifted to reporting events online and in real-time. Social media and blogging have unlocked a new door in journalism, where peers, associates and colleagues have the power to decide what valuable or important news is. This change has demolished the traditional journalistic practice of Gatekeeping. In this new age, news is delivered in a particular manner, which has entirely changed the journalist's working environment. The digital era has transformed journalism's language and its practices. Journalism is not about "press runs," "columns," "readers," or "reporters" anymore. It is about "content creators,"" RSS feeds," "search options," or "page views." Although the language has changed, the way of telling the story has not changed. It requires observation, interpretation and informing others. However today, it seems that *anyone* can be a journalist and one does not need to be a professional in the media sector in order to make their news popular. Facebook news feed show articles shared by a Facebook user's friends. Google+ highlights the search information that is shared with the user's Google circle. When an article gets more shares, it gets popular, and it gets more circulated in the network. Many social media sites use such algorithms to make news popular.

Journalists have traditionally been the sole provider of information and the general public has been only the audience or the consumers have changed with digital culture. Due to changes in this traditional gatekeeping process and the journalist's authority, both the journalists and the audience's roles seem to have changed. The Internet also has made it possible to have many-to many-communications (instead of "lecture-style"). This nonlinear structure of communication is also crucial in redefining the role of the journalist. Considering that the general public can perform this journalistic act and also have the ability to spread information to a vast audience, as well as have authority over the information that they are willing to distribute among the readers, Bill Kovach and Tom Rosenstiel suggest that the traditional journalist's role will no longer be that of a gatekeeper. However, as

professional journalists, they still have a responsibility towards the news industry to bring reliable and trustworthy information. They have a responsibility to act as an authenticator for the information that citizen journalists publish in news distribution platforms (171-175). Traditional journalists have a responsibility to verify the facts in the reports and also be transparent in gathering evidence, sources, and the methods they use. In the current digital information age, the readers can no longer assume that the information they read are reliable. Therefore a news authenticator will be a demanding role in newsrooms. Today this role has a bigger priority due to the nature of fast spreading information and the awful impact that false information could have. For example the rumor about Steve Jobs having a heart attack spread all over the Internet in no time, and it made a dreadful negative impact on the stock market. This situation occurred due to the lack of verifying the facts before transmission.

In an information overloaded era as today, the journalist's role also shifts from messenger to a sense-maker. When there is a huge supply of information, it becomes more and more difficult to create knowledge, because the reader has to examine so much data to arrive at it. Through this process confusion and uncertainty about information is more likely to happen. The sense makers' role is to work as a filter for this information-overload situation. They work to find patterns and connections in data streams: "Gatekeeping in this world is not about keeping an item out of circulation; it is about vetting items for their veracity and placing them within the broader context that is easily lost under the daily tidal wave of "new" information" (Friend and Singer 218). Today's journalists do not make decisions about what information people should receive; instead journalists help the public to understand and make sense of the information. They verify the information and place it in a form that the general public can more easily understand. The society relies upon the journalists to be surrogates to filter the massive volume of information that are available by verifying the accuracy.

The way the online news sector has developed, the way it has impacted on the role of the journalist and his authority and also the declining patterns of traditional newspaper readership, support the question about whether online journalism practices can replace the traditional journalism. Many

theorists, including Bolter, Murdoch and van der Wurff also have stated their opinions about the Internet, the influence of digital publishing, and the declining audience for traditional newspapers. Many fear that the Internet will replace the traditional forms of news publications, newspapers, considering that today's younger generations are digital natives. It is a well-known factor that in the media history whenever a new technology comes along, the old technology triggers the fear that the new technology will replace or supersede it. Matt Mullenweg, an American online social media entrepreneur and developer of WordPress, has also explained his opinion on whether new media will replace the old media in an interview on *old media being displaced by new media.* He states, "I think there is always a space for both. Whenever there's a new form of media we always think it's going to replace the old thing and it never does. We still have radio, however long after TV was introduced"(qtd.in Hadden D).

Looking back to the history of journalism, we can see that the major shift in journalism started in the 15th century with the invention of the printing press by Johannes Gutenberg. This invention, according to Bolter, who quotes Victor Hugo's idea, caused the priests to fear that the printed book might destroy the church's authority and also change human thoughts:

> Then with a sigh he stretched his right hand toward the printed book that lay open on his table and his left hand toward Notre Dame and turned a sad eye from the book to the church, "Alas!" He said, "This will destroy that" (qtd. in Bolter 1).

However, the print era did not destroy the church; people continued their religious believes, even though the power church had once was no longer there today. The use of pen and paper also continued even until today for some purposes. After the printing press and its revolution, broadcasting journalism was popular among the public, and it was a faster method of delivering news than the traditional newspapers. According to McCombs's data, he suspected that this new broadcasting media would replace the old medium that has similar functions in the long run. Despite his findings, today we witness that the newspapers are still around even though radio or television was more popular among the public. This

proves that a new media would not likely t replace an old medium entirely, but rather supplement them in some ways. I agree with Bolter in this regard and it is not likely that social media and blogs are trying to replace traditional journalism entirely; however these platforms tend to add another new layer of information on to the prevailing news organizations. This participatory journalism method is helping the news organizations to collect more news stories and providing eyewitnesses immediately.

4. Participatory and New Machine News journalism

4.1 Examples of the Rise of Participatory Media

September 11, 2001 was the day that a series of suicide attacks happened in United States. Terrorists have hijacked four passenger planes, two of which were deliberately crashed in to the north and south towers of the World Trade Center complex, where the third plane was crashed into the pentagon, the headquarters of the United States Department of Defense. Terrorists targeted the fourth plane to the United States Capitol Building; however it crashed in to a field near Pennsylvania after passengers tried to defeat the hijackers. BBC news reports, that due to this tragedy "nearly 3,000 people from all over the world died in the attacks on the World Trade Centre and the Pentagon. They Included 67 British people and around 300 New York fire-fighters. About 260 passengers and crew on board the four crashed airplanes were also killed" ("How many people were killed on 9/11?"). The Pew Research Centre documents that in history the biggest web traffic for traditional news sites was generated by these terrorist attacks. It also states that "many non-news sites were turned into conduits for information, commentary, and action related to 9/11 events" (Fox, Rainie and Madden), showing that people turned to e-mails and blog forums to receive information. This action has helped to develop the concept of "do-it-yourself journalism" or the so called "citizen journalism." It has helped people to grasp the anger, loss, confusion they felt due to the attack collectively from the perspective of many directly involved. This happened because of witnesses and family members sharing photos, personal stories and eyewitness reports for example.

Most of the people considered that these attacks are the key to the rise of citizen journalism and also for the digital age. Dr. Janet Johnson states in her blog (How the Internet Changed after 9/11– Citizen Journalism, Social Media and Mobility) that "September 11 was a wakeup call to us all on how we should be getting information. September 11 changed the Internet and the way we search and need information. People were reaching out and posting their own stories on web sites that we now would call a blog." At the time of this tragic event in 2001 and much before that, citizen journalism, camera phones or social media were not very popular or even evident in society. To make a video to a news event or upload a video to a website required specialist skills. However today mostly anyone, even those with few technical skills, can use social media, create a website or can own a blog. People prefer to get their news information from social networking sites that are posted by their friends or known sources. Stuart Allen and Barbie Zelizer explain this practice in their book: *Journalism after 9/11*:

> This invitation to "be the media," and thus to challenge traditional definitions of what counted as "news" as well as who qualified as a "journalist," was very much consistent with the animat ing ethos of the Internet. Hundreds of refashioned websites began to appear over the course of September 11, making publicly available eyewitness accounts, personal photographs, and in some cases video footage of the unfolding disasters (127).

However, on July 7, 2005 when a group of terrorists exploded passenger buses and subway trains in London the situation was much different. The technology was much developed and camera phones were much more popular by then. Therefore some of the trapped victims on these trains turned to their phones. The chaos was captured by the passengers using their mobile phones and they could provide the only on-scene photos of the incident. *The Independent* on July 10, 2005 states, "Onlookers and those actually caught up in the carnage took photographs and video footage of mangled wreckage, evacuations and scenes of mayhem, thanks to mobile phones and pocket-sized electronic cameras" (Barnes A). In

Nieman reports, Sambrook noted that within six hours after the explosion, BBC has received more than 1,000 photographs, 20 pieces of amateur video, 4,000 text messages, and 20,000 e-mails regarding the tragedy.

The traditional news media outlets started to report the tragedy using eyewitnesses and survivors. The news outlets also relied on user-generated videos and images, since the professional photographers were unable to approach the sites. Images and videos of exploded buses and dark subway tunnels which were taken by the victims of the explosions started to display on news events: "Sitting safely at home it was hard to remember what had happened to me that morning. At some points I'd even convinced myself that I simply hadn't been there. And then I saw my film. There on the TV"(Pulman), says Liza Pulman one of the surviving victims in her report "Me and my bad karma*" in *The Guardian.* Pulman's video clip that she took using her mobile phone, ended up in many broadcast outlets, making her a citizen journalist, even though her intention of making the video was to share her experience with her husband. She further explains her thoughts at that moment: "David will kill me if I don't take a picture of this." Allowing my thoughts for the first time to turn to my husband, I pulled out my phone and began to film us as we shuffled through the darkness, holding it high above my head" (Pulman). Alexander Chadwick is another survivor in London explosion, who used his camera phone to capture the situation. His photo with pale yellow light that comes into the tunnel was selected among many images for publication on the BBC homepage. BBC seems to have played a major role in reporting the London bombing, with their online platform that allowed submissions of user-generated content. In their "*London explosions: Your accounts*", people could share thoughts, experiences and photos regarding the explosion with others.

Over the years social media sites, blogs, as well as citizen journalism have developed and by the year 2011 these digital communication methods are very popular among general public. Social media sites were one of the main factors that brought success to Egyptian revolution or the January 25th Revo-

lution, as locals call it. This was a protest by millions of protesters of many social, economic and reli-

gious backgrounds, demanding to overthrow the President Mubarak's regime, who ruled the country for

30 years under a strict dictatorship. With this revolution we have already witnessed digital medias' abil-

ity to bring and promote democracy. Perhaps the most symbolic fact about using social media in this

revolution is that it has introduced speed and interactivity, which was lacking in traditional methods

such as posters or leaflets. Social media has also enabled both local and international activists to follow

the events happening in Egypt during the protest, engage in discussions, advices as well as to educate

each other.

Many activists used Twitter and Facebook in order to get the international attention to the

revolution, by posting pictures and videos of the events and also information about police torture

towards the protesters. The article *"Protests in Egypt and unrest in Middle East – as it happened"* by

Gabbett, Owen and Siddique, in *The Guardian* cites one Mohamed Abdelfattah's tweets, during the

protest allowing the world to witness the true situation:

@mfatta7 Tear gas

@mfatta7 I'm suffocating

@mfatta7 We r trapped inside a building

@mfatta7 Armored vehicles outside

@mfatta7 Help we r suffocating

@mfatta7 I will be arrested

@mfatta7 Help !!!

@mfatta7 Arrested

@mfatta7 Ikve [I've] been beaten a lot   (qtd. in Gabbett, Owen and Siddique)

Another activist uploaded a video to YouTube with the narration, "Egyptians gathered in Tahrir Square

pushing away from oncoming police and tear gas on Jan 25th around 6pm during the "Day of Anger" "

(AhramOnline), allowing the world to actually see the terror. One Twitter user with user name

@Isabelleedlund tweeted, "URGENT: REQUEST to ALL EUROPE & US tweeps on #Jan25 PLEASE

ASK YOUR MEDIA TO COVER #EGYPT NOW'', asking support and attention from Europe and U S

to their protest. In *UN Dispatch News* Chris Albon states, "I am not an expert on Egypt. I have never

been to the country and never had many personal connections there"(Albon). However he has managed

to publish an online article named "10 must-follow Twitter feeds for Egyptian protests" after following

the protest via social media.

This kind of participation shows that the digital communication methods such as Twitter have

introduced a powerful way for the protesters collectively to address the world and use media and news

outlets. It was not the reporters or professional journalists who published the pictures, videos or

information, but the citizens themselves. In this situation as well, social media technologies have

enabled the protesters to become citizen journalists, and educate the world about the Egyptian revolution.

4.2 Examples of New Machine-Made Journalism

The development of new technologies has changed many journalism practices. Apart from new

journalism genres such as citizen journalism, a quite recent development in the field is automatically

produced content, which can be introduced as a "robot journalism" or "machine-made journalism." Data

is the source for this new genre of journalism, which is also known as "data driven journalism" among

the journalists. The earthquake that took place in Los Angeles in March 2014, and the fact that the *LA

Times* could report the incident within three minutes, is a recent example of data-driven journalism or

robot journalism. It was a predawn earthquake that went across the Los Angeles while most of the

people were still sleeping. According to a BBC News article, "*Robot writes LA Times earthquake

breaking news article,*" Ken Schwencke (a journalist and a programmer) has created an algorithm that

could generate a short article when an earthquake occurs. This algorithm is called *Quakebot,* and it takes

data from trusted sources such as the US Geological Survey and places them into a pre-written template,

reporting the event. Ken Schwencke states that by the time he got up after the disturbances of the earthquake, the software has already written the short news report, and he only had to click "publish." However, he also says that *Quakebot's task* is not to write a compelling story, but to "get the basic information out as quickly as possible" (Oremus W).

Apart from the *LA Times*, Narrative Science, is one of the companies based in Chicago that works with computer-written news stories. Narrative Science delivers news stories to its customers on demand or according to a schedule, such as hourly, daily or weekly, which they generate with the software that they call Quill. For example, according to robotergesetze.com (German), Forbes.com has a page created by Quill, which shares news from real time financial data around the clock. *The Wired* online journal references the sports reports which Narrative Science's Quill has done providing an example:

> Friona fell 10-8 to Boys Ranch in five innings on Monday at Friona despite racking up seven hits and eight runs. Friona was led by a flawless day at the dish by Hunter Sundre, who went 2-2 against Boys Ranch pitching. Sundre singled in the third inning and tripled in the fourth inning … Friona piled up the steals, swiping eight bags in all (Levy).

The algorithm has created this article from the data from an iPhone app called GameChanger. Levy mentions in the article that the summary which was created by the Quill was up on the Internet even before the teams finished shaking hands, and yet the summary does not sound as though it is machine-written.

Another company that works with this robot journalism is Automated Insights. According to "Robot Writers and the Digital Age*"* in *American Journalism Review*, the company first started creating automated sports stories and they expanded and started producing narrative content for business, real estate, health care and other kinds of companies (Goldberg S). The company also does robotic social

media posting. For example it generates tweets for athletes and sports teams, which contains facts about

wining probability or some interesting facts about players. The article also mentions that "the company

has access to more than 2,000 Twitter accounts to help generate tweets" (Goldberg). Apart from these

developments, in Germany a company called Aexea has now launched the very first German-language

"news-machine" that could generate news documents by itself, and in their own language, spreading the

technology to other parts of the world other than in US ("The robot journalism is coming to Germany").

With these examples the question as to whether this new robot journalism will pose a threat to

journalists occurs. However the Narrative Sciences co-founder Kristian Hammond does not agree that

this technology will replace the journalists. He insists that "it will not wash away the remaining human

reporters who still collect paychecks. Instead the universe of news-writing will expand dramatically, as

computers mine vast troves of data to produce ultra-cheap, totally readable accounts of events, trends,

and developments that no journalist is currently covering" (Levy S). The prototype designer of the

German company, Frank Feulner states that "there are limits to the technology. Quakebot can neither

take a picture of the destruction, ask for expert opinions or seek out witness reports"("The Hindu

Businessline"), pointing out that this technology will not replace the jobs of journalists (at least not yet).

A lecturer in journalism studies at University of Sussex, Monika Metykova believes that the journalist's

job might be much easier with robotic rivals. She also claims, "I don't think that it is threatened by

'robots' or algorithms" (Bull H). According to these words, this technology is a positive development. It

is also a complementary development in journalism, since algorithms have the ability to scan thousands

of data at the speed of light and can come up with interesting facts that a human could take days to

search. While automated reports taking care of facts and calculations, journalists will have much time in

making investigations and in-depth reporting. The machine-generated news would also fulfill the needs

of demanding consumers by reporting news instantly as well as reporting unbiased information.

At an interview with Knowledge@Wharton, Noam Latar states that machine-written reports are without errors or bias. He claims, "As you know, most journalists are biased about their stories. But the robot journalist, if you program it correctly, can be completely unbiased" (Latar). However, sometimes these algorithms create stories with the data from facts that are posted online by humans. These facts can be accurate or perhaps not, making the machine-written story unreliable at times. On March 24th 2014, nypost.com reported that Quinton Ross, former Nets basketball player has found dead. However, after few minutes the report was corrected as the victim was another man. However by the time it was corrected, the news has been transmitted by some other news sources as well as the Wikipedia Live Monitor, a robot developed in order to identify breaking news. This bot monitors the edits of *Wikipedia* pages to detect breaking news. After detecting this particular story, the machine sent a tweet. However, even though the Wikipedia pages were edited back the erroneously reported death, the machine has not reacted (Diakopoulos N). This shows that new journalism practices can be both successes and failures at times.

5. Conclusion

It is clear that today digital culture has transformed traditional news distribution methods and practices in many ways, with the continued growth of Internet audiences. With the increasing number of new technologies used and with the easy access to the internet, today's general public has been involved in the process of informing about events that are unfolding, to the world, like never before. With smart phones, web publishing tools that are easy to use, and also with the ability to connect with others at any time through the internet, these changes make it easy for *anyone* to be a journalist. Amateurs and Professionals are not distinct within journalism. This process has made it possible to access news on demand instantly, whenever and from where ever the consumers want, making the world a global village, according to McLuhan's vision.

This new journalism genre has blurred the boundaries between news-producer and news-receiver, by allowing anyone to share information and participate in discussions. While there are many ways that today's citizens inform about news online, Twitter, Facebook and blogs are among the popular methods. These social media sites give the user the opportunity to share information, images as well as videos of the events happening all over the world. In many occasions citizen-journalists can inform the world about tragedies as well as other special events, acting as eyewitnesses in real time through these sites, where as professional journalists, who are not there and unable to cover the events are excluded. With the development of technology, human have also developed many digital tools to assist journalism, such as Google Glasses, journalism robots, and also software that can write automated news reports. Google Glass allows the recording of every moment of one's life, without having the problems of taking out the phone for recording. This is a great asset for citizen journalists. It also helps in giving first-person experiences to others. The technology has even gone one step further by developing software to write automated news reports, which makes the information circulate faster than ever, helping to supply breaking news instantly for the demanding consumers without bias. Many theorists believe that these technologies are complementing and improving traditional journalism methods and citizen journalism, for example by adding another new layer of information on to the prevailing news organizations, making the journalist's job much easier.

However, with the increasing number of user-generated content and citizen journalists, traditional journalism, a respected profession, has come to a strange juncture in history. After many years, for the first time, its authority as the gatekeeper of news has been challenged not only by new technologies, but also by the audience it served, and it has found itself in a very vulnerable position. Today the general public tends to trust information that is circulated via social media and published by the people they know, rather than the information published on traditional news media outlets. However, since anyone can publish information online, there is also a question about the credibility of the information. In this regard, the traditional journalist also has a responsibility to act as information authenticators, to guide the consumers on the correct path. Since the traditional journalist's role as the

sole distributor of information has changed, now *anyone*, amateurs and professionals, have the authority

to publish information on the Internet. This means that the journalist's role has also shifted from that of

a "gatekeeper" to a "gatewatcher."

Works Cited

Abcarian, Robin. Ashley Powers and Josh Meyer. "Suspect in Fort Hood shooting faced Iraq

deployment" *Los Angeles Times*. 06 Nov. 2009. Web. 16 April. 2014.

Adachi, Mimi. "Citizen Journalism: Proceed with evaluation." Web log post. We Spread it:

Exploring the Social Media world. 04 May. 2009. Web. 16 April. 2014.

AhramOnline. "Cairo protesters call for democracy" *YouTube,* 25 Jan. 2011. Web. 16 April. 2014.

Albon, Chris R. "10 Must-Follow Twitter Feeds for Egyptian Protests" *UN Dispatch: United Nations

News & Comentary Global News-Forum.* 31 Jan. 2011: n.pag. Web. 16 April. 2014.

Allen, Stuart and Barbie Zelizer. *Journalism after September 11*. London: Routledge, 2002. Print.

Arthur, Charles. "Analysing data is the future for journalists, says Tim Berners-Lee : Inventor of the

world wide web says reporters should be hunting for stories in datasets." *The guardian.* 22 Nov.

2010. n.pag. Web. 16 April. 2014.

Barnes, Anthony. "Attack on London; How 3G phone technology created instant history," *The inde-

pendent.* July 10, 2005. Web. 05 Feb. 2014.

Bergman, Kristin. "Cyborg Journalists: How Google Glass Can Change Journalism." *Digital Media

Law Project.* 19 Nov. 2013 Web. 30 Mar. 2014.

Bolter, Jay David. *The Writing Space.* New Jersey: Lawrence Erlbam Associates publishers, 2001. Print.

Bounegru, Liliana. Lucy Chambers and Jonathan Gray. *The Data Journalism Handbook.* London: Open

Knowledge Foundation, 2011. n.pag. Web. 16 April. 2014.

Brown, Merrill. "Abandoning the news." *Carnegie Corporation of New York* 3.2 (2005) : n. pag.

Web. 02 March. 2014.

Bruns, Axel. "Gatewatching, not Gatekeeping: Collaborative Online News" *Media International Aus

tralia Incorporating Culture and Policy: quarterly journal of media research and resources 107*

(2003) : 31-44. Web. 13 March. 2014

… "Wikinews: The Next Generation of Online News?" *Scan Journal* 3.1 (2006) : n. pag. Web.

13 March. 2014

Bull, Henry. "Robots in the newsroom: are computers the future of journalism?" *wannabehacks.* 29

April. 2014. n. pag. Web. 05 May. 2014

Burdick, Johanna Drucker, et al. *Digital Humanities*. Cambridge: MIT, 2012. Print.

Carfac. "Fake Rumors of Steve Jobs Heart Attack Circulate" macrumors.com 03 Oct. 2008. Web. 16

April. 2014

Carr, Paul. "NSFW: After Fort Hood, another example of how 'citizen journalists' can't handle the truth"

Techcrunch 7 Nov. 2009: n.pag. Web. 23 Apr. 2014.

Caumont, Andrea. "12 trends shaping digital news" *Pew Research Center*. 16 Oct. 2013. Web. 16 April.

2014

Diakopoulos, Nicholas. "Bots on the Beat : How can we instill journalistic ethics in robot reporters?"

Future Tense. 2 April 2014. Web. 02 May. 2014

Domingo, David. "Managing Audience Participation: Practices, Work flows and Strategies." *Participat*

ory Journalism: Guarding Open Gates at Online Newspapers. West Sussex: Wiley-Blackwell,

2011. Print.

Fox, Susannah. Lee Rainie and Mary Madden. "One year later: September 11 and the   Internet : Part 3.

The Rise of Do-it-yourself Journalism After September 11" *Pew Research Internet Project.* 5

Sep. 2002. Web. 16 April. 2014.

Friend, Cecilia and Jane B Singer. *Online Journalism Ethics: Traditions and Transitions*. New York :

M   E Sharp, 2007. Print.

Gabbett, Adam. Paul Owen and Haroon Siddique. "Protests in Egypt and unrest in Middle East - as it

happened" *The Guardian.* 25 Jan. 2011. Web. 17 April. 2014.

Goldberg, Samantha. "Robot Writers and the Digital Age" *American Journalism Review.* 25 Nov. 2013.

Web. 16 April. 2014

Goode, Luke. "Social news, citizen journalism and democracy." *New Media and Society*

11.08 (2009) 1287-1305. Web. 02 March. 2014.

Gordon, Richard. "Social Media: The Ground Shifts" *Nieman Reports* Fall 2009 : n. pag. Web. 17 April.

2014.

Gottfried, Jeffrey. Jesse Holcomb and Amy Mitchell. "News Use Across Social Media Platforms" *Pew*

Research Journalism Project. 14 Nov. 2013 Web. 16 April. 2014

Hadden, Doug. "Does New Media Replace the Old?" Web log post. Sustainable Public Financial Man

agement. 14 Sep. 2013. Web. 17 April. 2014.

Heinonen, Ari. "The Journalist's Relationship with Users: New Demensions to Conventional Roles."

Participatory Journalism: Guarding Open Gates at Online Newspapers. West Sussex: Wiley-

Blackwell, 2011. Print.

"How many people were killed on 9/11?" *BBC*. 9 Sep. 2011. Web. 16 April. 2014.

Isabelleedlund. "URGENT: REQUEST to ALL EUROPE & US tweeps on #Jan25 PLEASE ASK

YOUR MEDIA TO COVER #EGYPT NOW " 25 Jan. 2011, 11:29 p.m Tweet.

Johnson, Janet. "How the Internet Changed after 9/11–Citizen Journalism, Social Media and Mobility"

Web log post. mediarhetoric.com. 11 Sep. 2011. Web. 30 Mar. 2014.

Kovach, Bill and Tom Rosenstiel. *Blur: How to Know What's True In The Age Of Information Over*

load. New York: Bloomsbury, 2010. Print.

Lane, Slash. "Apple denies CNN iReport of Steve Jobs heart attack" *appleinsider*. 03 Oct. 2008. n.pag.

Web. 18 April. 2014.

Latar, Noam. "Will Robot Journalists will replace Human ones?" Interview by Knowledge @ Wharton.

28 March. 2014. Web.

Levy, Steven. "Can an Algorithm Write a Better News Story Than a Human Reporter?" *Wired*. 24 April.

2012: n.pag. Web. 18 April. 2014.

"Local TV in Transition" *Pew Research Centre for People and Press.* 07 Aug. 2006. Web. 16

April. 2014

McLuhan, Marchall. *The Gutenberg Galaxy: The Making of Typographic Man.* Toronto: University of

    Toronto, 1962. Print.

"Murdoch's speech: full text:Rupert Murdoch's speech to the American Society of Newspaper Editors,

    Washington DC, April 13 2005 (text from the News Corp website)" *Theguardian.* 14 April. 2005.

    n.pag. Web. 16 April. 2014.

Nguyen, An. And Mark Western. "The Complementary Relationship Between the Internet and Tradi

    tional mass media: The case of Online News and Information." *Information Research* 11.3

    (2006) : n. pag. Web. 23 Feb. 2014.

Oremus, Will. "The First News Report on the L.A. Earthquake Was Written by a Robot." Future Tense:

    The Citizens Guide to the Future. 17 March. 2014. Web. 17 April. 2014.

"Online Papers Modestly Boost Newspaper Readership: Maturing Internet News Audience Broader

    Than Deep" *Pew Research Centre for People and Press*. 30 July. 2006. Web. 16 April. 2014

Pavlik, John. "Journalism in the Face of Developments in Digital Production." *E-Merging   Me-

dia:Communication and the Media Economy of the Future*. Berlin: Springer, 2005. Print.

Picard, Robert G. "Blogs, Tweets, Social Media, and the News Business." *Nieman Reports*. Fall 2009.

    n.pag. Web. 17 April. 2014

Presutti, Carolyn. "VOA Uses Google Glass at Concert." *Voice of America*. 12 Feb. 2014. Web. 17

April. 2014

Pulman, Liza. "Me and my bad karma" *The Guardian* 12 July. 2005: n.pag Web. 17 April. 2014

Robinson, Sue. "If you had been with us': mainstream press and citizen journalists jockey for authority

    over the collective memory of Hurricane Katrina." *New media & society* 11.5 (2009) : 795–814.

    Web. 02 March. 2014.

"Robot journalism dawns as computers start writing stories." *The Hindu Business Line*. 30 April. 2014.

    Web. 02 May. 2014.

"Robot writes LA Times earthquake breaking news article." *BBC News Technology. 1*8 March 2014.

    Web. 17 April. 2014

Sambrook, Richard. "Citizen Journalism and the BBC." *Nieman Reports* Winter 2005 : n. pag Web. 17

    April. 2014.

Singer, Jane B. "Taking Responsibility: Legal and Ethical Issues in Participatory Journalism." *Parti*

    cipatory Journalism: Guarding Open Gates at Online Newspapers. West Sussex: Wiley-Black

    well, 2011. Print.

Skoler, Michael. "Why the News Media Became Irrelevant-And How Social Media Can Help" *Nieman*

    Reports Fall 2009 : n. pag. Web. 17 April. 2014.

Stempel, Guido H III, Thomas Hargrove and Joseph P Bernt. "Relation of Growth of Use of the Internet

    to Changes in Media Use from 1995 to 1999." *Journalism and Mass Communication Quarterly*

    77.1 (2000) : 71-79. Web. 23 Feb. 2014.

"The robot journalism is coming to Germany (Der Roboterjournalismus kommt nach Deutschland)" ro

    botergesetze.com 10 April 2014. Web. 16 April 2014.

van der Wurff, Richard. "Impacts of the Internet on Newspapers in Europe: Conclusions. " *Gazette* 67.1

    (2005) : 107-120. Web. 18 Feb. 2014.