### Livestreaming Hate and Misinformation: The Societal Implications of Real-Time Access to Hate

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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The introduction of television across the world was extremely transformative and changed how individuals consumed content and entertainment. As time progressed, innovators introduced the concept of streaming live content through cable television and eventually overthe-top (OTT). OTT is a media service offered directly to viewers via the internet. Livestreaming today is the synchronous distribution of content through the internet which "allows for real-time shared viewership and interaction among consumers through live chats and instant messages," (Ang, 2018). As part of a technical consulting project with Facebook, my team was asked to explore ways Facebook could grow its top-line metric, watch time. Watch time is the aggregate number of hours viewers spend watching live videos on Facebook's platform. The team explored, modeled, and ideated new ways for the platform to increase its exposure. The analysis helped us realize the various social considerations to have when recommending options to the organization. As competitors grow and livestreaming platforms become more robust, there becomes a greater number of users creating content that existing governing bodies are not able to regulate. Reviewing the content of millions of videos per day has proved to be exponentially harder than hundreds per day. Since the inception of livestreaming, there have been several explicit contents broadcasted on social media. In today's environment, there are cases of targeted misinformation and hate speech on all livestreaming platforms. Although this type of content exists, there only exists surface-level regulation that puts video consumers at harm. There exists a knowledge gap in the context of what constitutes a "good" or "bad" video. This knowledge gap has the potential to provide a way for content creators to explicitly target hate and misinformation (Miškolci, 2020).

In this paper, I take the first steps towards understanding why explicit content thrives in the livestreaming environment. I argue that hate speech and misinformation thrive better because of the real-time, synchronous aspect that livestreaming gives users. As part of the paper, I also provide insights into how livestreaming disproportionally targets marginalized communities. Taking these first steps will be crucial in helping authorities (namely social media sites) to propose interventions and deal with this problem. To better understand the landscape, I explore explicit content such as high-profile and controversial live streams. These live streams have content that is usually tagged with "trigger warnings" in traditional videos. But, since they are live-streamed, users are not given a warning before they press on them. This paper will use precedent incidents such as the 2016 and 2020 US presidential elections as well as the livestreaming of racially charged police brutality in the United States. Additionally, this paper will use precedent regulation by livestreaming governing bodies as a basis for a better understanding of how these platforms promote the type of explicit content described above.

#### STS Topic: Exploring the Motive and Social Psychology Behind Explicit Content on Livestreaming Platforms

Livestreaming has brought a global audience together, allowing for friends and family to broadcast special events while interacting globally through features such as the like button or comments. Livestreaming appeals to individuals because it creates a social viewing experience that brings the "presence of others; and/or interactions with others" in real-time (Tyson, 3). This is not possible with the traditional means of streaming where content is pre-recorded, and users can only interact with the individuals in their circle. Livestreaming policies present many grey areas as to what may or may not be distributed synchronously. Although social media platforms like Facebook and Twitch allow for communication and an opportunity to express opinions, they also "act as a means of spreading hate speech online." This is because social media platforms

such as Facebook "distribute the content of hate speech, sensitive information, and disputed topics," (Mossie, 2020, pg. 2). In July of 2016, two fatal shootings drew national attention. The first murder was one of Philando Castile by police in Falcon Heights, and the second was a bloody shoot-out in Dallas between a civilian and police officers. What made them stand out was not solely the fact that people's lives were taken away, but because they were captured on onlookers' smartphones and live-streamed (Cooper, 2019). Although this helps to expose the racial disparities of policing in America, they can have negative impacts on watchers that are triggered by this type of content. Because this is live-streamed, viewers have less input on whether they want to view it. In 2018, a far-right personality, Ethan Ralph, launched a live stream on YouTube to discuss the mass shooting that claimed the lives of 11 people in the Tree of Life Synagogue massacre. In this event, Ethan Ralph attracted hundreds of individuals who contributed to the conversation by commenting on a variety of topics. These viewers donated a range of \$5 - \$20 to the streamer to have their comments featured on the Livestream (Koh, 2018). The donations allow users to gain a platform to express their opinions alongside the streamer. Additionally, in March of 2021, a commentator of an Oklahoma Secondary School Activities Association basketball game used racist slurs in a live stream as students took a political stance before the game started. The widespread reactions, as can be seen, represented in Figure 1, were of disgust and disappointment. The user in Figure 1 exclaims, "THIS IS WHY THEY KNEEL," to allude to the larger context of police brutality against minorities in America. These events have not occurred in a vacuum. These four separate and independent events are just a few of many. There exist thousands of precedents with a wide range of severity. Without the

correct oversight and regulation, these events will continue to dominate the livestreaming industry.



Figure 1: An Oklahoma women's basketball coach comments on the comments made by NFHSNetwork commentator during the OSSAA quarterfinals.

The logical next step is to consider what institutions are in place to prevent these types of interactions in the future. Currently, social media platforms that have livestreaming capabilities have guidelines that streamers are obligated to follow. These guidelines are put in place to reduce the legal liability placed on the platform in the event of inappropriate content surfacing on their platform. Some examples of these guidelines are illustrated by Facebook, "We remove content, disable accounts, and work with law enforcement when we believe there is a genuine risk of physical harm or direct threats to public safety." This guideline provides the public with guidance as to how the platform will respond to material that represents "Violence and Incitement". Regarding "False News", the platform tells the public that Facebook does not "remove false news from Facebook but instead, significantly reduces its distribution by showing it lower in the News Feed" (Facebook, 2020). On Twitch, the "Prohibited Conduct" in the terms and Terms of Services notes:

You agree that you will comply with these Terms of Service and Twitch's Community Guidelines and will not:

create, upload, transmit, distribute, or store any content that is inaccurate,
 unlawful, infringing, defamatory, obscene, pornographic, invasive of privacy or
 publicity rights, harassing, threatening, abusive, inflammatory, or otherwise
 objectionable (Twitch, 2020)

This guideline is vague in nature and serves as ambiguous to the public and individuals who are responsible for interpreting its meaning. Creators of explicit content can continue posting such content because of the ambiguity of terms such as "infringing, defamatory, and abusive."

Another perspective would be through the lens of social psychology. Social psychology is the branch of psychology that deals with social interactions, including their origins and their effects on people. In live streams, "the collective emotions perspective focuses on the roles that group identification and interactions with social others play on the experience of emotions." The community aspect that is brought by live streams encourages explicit content creators to post. The "group identification and the influence of being exposed to multiple people's emotions can lead to a stronger emotional intensity." (Lou, 2020). The social psychology lens helps to understand the motive of Ethan Ralph and his live streams. Having already conceived an opinion on controversial topics, Ralph was also enticed by the potential of having a community of likeminded individuals interact with his narrative through likes and comments. Other live streamers, like Ralph, "are endeavoring to engineer a presence effect: trying to transport their connections to where they are," (Mc Mahon, 2019). Some ideas and opinions are unique to the live streamer, but once they get those ideas out to the public, they enable a new community.

These events lead me to question: At what point do we retract an individual's ability to contribute freely to speech? There is intuition as to what is good content, but there continues to be a blurred line as to what goes "too far" and what is "inappropriate" for streaming. Additionally, live-streamed content has been at the forefront of misinformation. This misinformation "has been possible because of three things: ease of distribution/cost; the difficulty of regulation; and the decline of trust amongst the audience," (Cooper, 2019, pg. 168). Streamers can attract large crowds through large advertisements and manipulating algorithms to make sure that the right audience is attracted to their content. In a survey done by the Institute of Policy Research at Northwestern University, researchers found that "minorities, those with high levels of religiosity, and those with strong partisan identities across parties exhibit greater levels of misinformation than those with contrasting group affiliations," (Druckman, 2020, pg. 1). This misinformation has traditionally been carried out on traditional means of social media but livestreaming also serves as a medium to promote this type of action. The study goes on to say that, "minorities, particularly African-Americans, exhibit significantly higher levels of misinformation and lower levels of correct information, relative to Whites." This conclusion directly supports the initial claim of this paper. There exists data to confirm that some demographics are more at risk than others when it comes to misuse of livestreaming. If this type of content is continually streamed to large audiences, there is high probability people will be enticed to carry out hate and bigotry while also being incorrectly informed about major issues around the globe.

# Understanding the Difference in Hate Speech Caused by Livestreaming by Using Mesthene's Economic and Political Organization Framework

In "The Role of Technology in Society," by Emmanuel G. Mesthene, Mesthene develops a comprehensive framework for analyzing technology's impact on economic and political organizations. The introduction of advanced technology to existing systems "poses for society a number of problems that are ultimately political in nature," These political problems typically have to do with the allocation and distribution of power and wealth in society. Innovations that involve technology introduce a new element of life that no longer supports the existing power and wealth structures in society. The "society that undertakes to foster technology on a large scale commits itself to social complexity and to facing and dealing with recent problems as a normal feature of political life." Mesthene claims that there are additive aspects of large technology advancements, but the drawbacks are worth noting.

The first characteristic that demonstrates an advanced technology is the requirement of "large-scale, and complex social concentrations." These concentrations can be large cities, large corporations, big universities, or big government. In society today, we see those concentrations by large private corporations that can research and develop. The second characteristic is that advanced technologies "effects cover large distances... Both its positive and negative effects are more extensive." The result of these advanced technologies is that increased decisions that could once be left to private decision-makers must be taken on by society at large. Figure 2 demonstrates an illustrative view of technology advancement and its implication. The main takeaway that Mesthene leaves us with is that technology shifts the focus from the individual to the collective. This framework can be applied to various systems that have seen a rapid shift in responsibility due to technology.

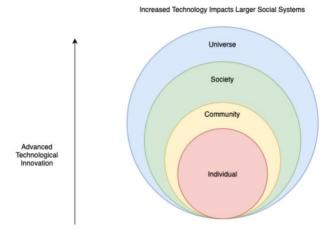


Figure 2: Illustration of the societal implications of technological advancement. As technology becomes more advanced and complex, it has the potential to impact a larger number of people. The most basic technology impacts just an individual while the most complex technology impacts the entire universe. This impact can be either negative or positive. (Created by Author)

Livestreaming issues can be explored in several ways. I will use the Economic and Political Organization framework developed by Mesthene and explained above to better understand the difference that livestreaming makes in the case of misinformation and targeted hate speech. This framework is most suitable for this research because there is an easily distinguishable period where we can see a transition into livestreaming. The issue of hate speech and targeted misinformation were already existing on social media platforms, but the introduction of livestreaming amplified the problem. The predecessor to all social media was face-to-face interaction, text messaging, emailing, and phone calls. These interactions were made in individual settings where people directly controlled the information and tone they wanted to convey to the individual(s) on the other side. As social media became introduced, individuals could now share communications and ideas with individuals in their community. This community was hand-selected because users had the right to choose who would be in their friend group and closed circle. I argue that the introduction of livestreaming is the "Advanced"

Technological Innovation" that starts to create an impact in society. The simultaneous nature of livestreaming makes for "increased density" and "extended distance" which have "increasingly wider ramifications," (Mesthene, 1969, pg. 508).

Before livestreaming, traditional social media means allowed for great reach to immediate family and community members. There were few cases where an individual's message or video reached a global audience because of its lack of reach. In a study done by Biteable, analysts concluded that Facebook Live videos were able to attract almost 3 times as many 3-second views, 16 times as many engagements, and 1.5 times as much reach as a traditional video. This means that the livestreaming capability expands the reach that content can travel throughout the world. Biteable recommends using "Live for building audiences." This allows for content creators to develop a following that may be already a part of their community but can also be from outside of their respective community. These findings help us understand that the introduction of livestreaming to social media platforms directly contributes to the type of activity described at the beginning of the paper.

Additionally, this framework helps us determine that livestreaming contributes to the targeted misinformation and hate speech because it has the second characteristic described by Mesthene. Livestreaming has effects that can cover large distances. Livestreaming makes an impact that has both positive and negative consequences. But the conversations that were once had by private decision-makers are now being taken on by society at large. In the examples described earlier, individuals displayed their interaction with police officers as violent, aggressive, and sometimes racially charged. These types of interactions were once left between the police officers and the suspects in question. With livestreaming, these interactions happen between police officers and the entire world. A large amount of people has insights into the

conversation and can even contribute to the conversation by leaving comments and reacting to the videos. Livestreaming has made a positive impact in this regard, but it has fueled the anger of individuals who have watched these videos. The decision-makers are no longer the people that are in the video, they are the people who are watching the videos. These live-streamed murders have pushed the public to start making decisions based on what they observe in the few minutes that the content owner lets them see. In the cases of racially charged murders by the police, livestreaming has a net positive impact. Society was able to take a stance on the interaction and make decisions that positively impacted the marginalized. Conversely, in the case where Ethan Ralph engaged with hundreds of users worldwide to rally up people to act in non-positive ways, society was impacted negatively. Events like the ones hosted by Ralph rallied individuals to act in anti-Semitic ways. This negative message empowered individuals to carry out hate and advance the conversation of bigotry. In this case, the decision was now being made by society at large. Jewish people were targeted, and they now had to decide how to protect themselves while the bigots were deciding how to disrupt the peace.

## Having Livestreaming Capabilities Means That Society Will Bear Greater Burden of Hate Speech and Misinformation

As stated earlier, Mesthene's framework states that when advanced technological innovation is introduced, society has the new responsibility of dealing with the consequences. These consequences can be both positive and negative. In the case of livestreaming, having the ability to stream content simultaneously to a global audience means that society will bear a greater burden of hate speech and misinformation. Mesthene's framework helped to structure the complexity of livestreaming into digestible portions to better understand its impacts.

By using the Economic and Political Organization framework, three findings were discovered. The first result from this analysis is that the reach that livestreaming gives users is much greater than traditional social media capabilities. The second result is that the increase reached caused by livestreaming shifts the responsibility to more stakeholders than before.

Livestreaming gives content creators greater reach and allows for more interaction than previous social media capabilities. Biteable conducted an experiment where they posted five videos on their group page and hosted five live broadcasts. In tracking 3-second video views, reach, and total engagements, the results were summarized in Figure 3. Biteable's findings give readers conviction that this extended reach is real and has the potential to both positively and negatively impact the audiences that it does reach. If inappropriate content was released by a content creator, there would be more eyes viewing a live broadcast than a regular video. This means that social media giants and other livestreaming platforms would have a harder time restricting the consumption of this inappropriate content. There would be approximately 2x more people watching the live broadcast in comparison to the number of people watching the traditional video.

Video type	3-second views	Engagements	Reach
Facebook Live	5,395	469	12,929
Video posts	1,414	28	6,729

Figure 3: Results from Biteable social media experiment showing that Facebook Live videos are more effective for reaching a large audience than regular videos. (Biteable, 2019)

The increased capabilities of livestreaming shift the responsibility to more stakeholders than before. These stakeholders represent society at large. The responsibility of informing others

shifts from the media to everyday citizens with the use of livestreaming. The responsibility of interacting with new live information distribution shifts from the local community to all of society. This is because this content reaches a wider range and people are essentially forced to respond to the new information in real-time. As xxx puts it, "these new technologies challenge the existing structure of a media landscape in which an elite trained individual is responsible for informing the citizens and thus allowing all citizens to become a part of the information process" (Bengtsson, 2013). As mentioned previously, this information process can include both positive and negative experiences depending on who decides to Livestream at which time.

Although these results give a better insight into the impact that livestreaming has on society today, there is still more to be done. Further investigation can be done to better understanding how to mitigate the risks of targeted misinformation and hate crimes. These investigations should primarily occur in the technical domain as researchers explore the technology needed to remove explicit content at the onset. This technical research can help these platforms to understand exactly when something inappropriate is being streamed via a live broadcast so that the content does not reach the global audience.

#### **Conclusion**

Social media platforms changed the way individuals communicated with one another. This technological advancement helped old friends, family members, and community members stay in contact with each other. Livestreaming amplified that experience by elevating the experience. The ability to stream simultaneously means that information travels faster. The simultaneous characteristic complicates the regulation of the content. To better understand the implications of livestreaming as a vehicle to spreading hate on a large scale, this paper used the Economic and Political Organization framework. As demonstrated in this paper, the advanced

technological innovation of livestreaming causes society to be more responsible for misinformation and targeted hate speech. Greater reach means greater impact. If the problems highlighted in this paper are not further addressed, there is a possibility that the world will see more hate crime and more misinformed people. This means that more people will be harmed because of livestreaming. The practical applications reside at the regulatory boards of these social media and livestreaming platforms. Only they have the power to remedy this potential reality. The limitations of this paper stem from a lack of data and responsiveness from regulatory boards. All in all, livestreaming has the potential to harm more people over a short period.

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