

CLASSIFICATION

FROM PICTORIAL TO DEEPPFAKE PROPAGANDA: A STUDY OF VISUAL MANIPULATION ACROSS ERAS

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Abstract

As governments and citizens alike are facing the challenges posed by deepfake propaganda, policymakers and legislators are falling behind. However, propaganda is not a new concept, pictorial propaganda, for example, has been used by governments for centuries. This paper will analyse older pictorial propaganda and discuss whether deepfake propaganda is a continuation or a break from pictorial propaganda. The research question posed is, *To what extent does deepfake propaganda constitute a break or a continuation of pictorial propaganda?* It is answered through a content analysis where three cases are investigated. The cases are Stalin's pictorial propaganda regime, the Obama deepfake video and the Zelensky deepfake video. The cases are analysed through ATLAS.ti. The findings show that there is a continuation in roots and manipulative intent in both types of propaganda, as well as a break in the aspects of impact, publishing and reach. Therefore, this study shows that deepfake propaganda can neither be generalised as a break or continuation. It is dependent on the perspective taken by the researcher. This research provides valuable insights into the nature of deepfake propaganda and adds to the discussion of deepfake resilience and the future impact of deepfakes.

TABLE OF CONTENTS

1. Introduction.....	4
1.1 History.....	4
1.2 Scientific and Social Relevance	4
1.3 Research Questions.....	5
1.4 Research Approach	6
2. Theory.....	7
2.1 Introduction	7
2.2 The Concept of Propaganda.....	7
2.3 The Concept of Pictorial Propaganda.....	9
2.4 The Concept of Deepfake Propaganda	10
2.5 Pictorial Propaganda VS. Deepfake Propaganda.....	12
2.6 Conclusion.....	13
3. Methods.....	14
3.1 Introduction	14
3.2 Case Description.....	14
3.3 Method of Data Collection	15
3.4 Method of Data Analysis	16
3.5 Conclusion.....	19
4. Analysis.....	20
4.1 Introduction	20
4.2 Stalin’s Pictorial Propaganda Regime	20
4.3 The Obama Deepfake	23
4.4 The Zelensky Deepfake	25
4.5 Comparison of The Propaganda Cases	27
4.6 Conclusion.....	29
5. Conclusion.....	31
5.1 Key Insights.....	31
5.2 The Direction of Future Research.....	31
5.3 The Resilience To Deepfake Propaganda.....	33
6. References	34
7. Appendixes	37
7.1 The Thirteen Proposition.....	37
7.2 Comparison of Lasswell and Ellul	39
7.3 AI Acknowledgement.....	41

7.4	Overview of Amounts of Codes	42
7.5	Analyses With The Codes	43

1. INTRODUCTION

1.1 HISTORY

In an era where Artificial Intelligence (AI) blurs the lines between reality and fiction, deepfakes have emerged as a powerful and dangerous tool. The first deepfake video was published on Reddit (an online media platform) in 2017 (Masood, Nawaz, Malik, Javed, & Irtaza, 2021). Deepfakes have changed rapidly over the past years. They are today easily accessible and cheaper than in 2017. In addition, there is an increase in the spread and use of deepfakes on different social media platforms. But deepfakes are not merely an entertainment tool, they can create harmful situations and be used for political purposes. One research shows that in Germany 70% and in France 57% of its citizens are concerned with the threat deepfakes pose to democracy (Syvak, 2024). Although image manipulation is often seen as a new phenomenon because of the rise of deepfakes, it has a longer history in political propaganda. Nevertheless, a shift can be seen in the use of deepfakes in political and non-political influence (Masood et al., 2021). Deepfakes have already been used for political purposes for example in Belgium a political party produced a deepfake video of Trump seemingly meddling in the country's internal affairs (Galston, 2020). There is an increasing trend seen in the use of deepfakes in propaganda spheres.

As stated above, the manipulation of visual content for propaganda and political influence is not new and has been in practice for centuries. Where Stalin was one of the first to use it on a mass media scale to manipulate the population of the former Soviet Union (Blakemore, 2022). As Greengard (2019) says, "Deepfakes potentially represent the next frontier in propaganda wars." (p.2). So, the question arises if deepfake is the next frontier in propaganda wars, and what can be learned from the former frontier, image manipulation?

1.2 SCIENTIFIC AND SOCIAL RELEVANCE

The relationship between historical pictorial propaganda and modern deepfake propaganda is something that remains underexplored. While many studies do mention the history of deepfakes, few examine their continuity or break from older forms of visual manipulation used in propaganda (Albahar & Almalki, 2019; Greengard, 2019; Masood et al., 2021; Matthews, 2022; Westerlund, 2019). Some researchers do suggest an understanding of the historical influence of political decisions (Ghilani, Luminet, & Klein, 2022), highlighting the need to further investigate past propaganda so it may help us navigate the emerging challenges of modern society.

There is a lot of confusion and uncertainty around deepfakes and their potential harm. It affects citizens and governments all over the world through either increasing distrust in democracy or gaining control in a totalitarian regime (Syvak, 2024). According to the Guardian; Germany, the UK, France, Ireland,

and Italy have all seen deepfakes in political situations (Quinn, & Milmo, 2024). The question that arises is whether this deepfake phenomenon is something new or if it is the continuation of pictorial propaganda that has been used for centuries. And if it is a continuation, what could society learn from history, how is pictorial propaganda tackled, and what were the consequences? It is relevant to uncover this because of the growing uncertainty surrounding the deepfakes. In addition, the development of deepfakes is rapid, but the legislation is still behind (Owen, 2024 & Quirk, 2023).

This research analyses the use of old frontier pictorial propaganda and deepfake propaganda, providing the comparative angle that has yet been lacking to add a valuable angle to the current conversation on how to deal with deepfake propaganda. This paper seeks to understand the relationship and the specific manifestations of deepfake propaganda, which is crucial for addressing the potential societal impact of deepfake propaganda in the political sphere. The results of this research will, therefore, add to the resilience of governments and citizens to manipulation and distrust created by deepfakes.

1.3 RESEARCH QUESTIONS

To close the knowledge gap, the main question is, *“To what extent does deepfake propaganda constitute a break or a continuation of pictorial propaganda?”*.

To answer the main question, four sub-questions were formulated.

(1) *What is the origin and development of pictorial propaganda?*

This question is raised to gain a deeper understanding of pictorial propaganda. To evaluate whether deepfake propaganda constitutes a continuation or a break, it is essential to first trace the historical tendencies and key features of pictorial propaganda. By uncovering these patterns through the analysis of historical examples and theoretical discussions, this question helps establish a framework for interpreting how propaganda has evolved in different historical and political contexts. Additionally, understanding past continuations sheds light on the key features necessary to examine future developments, creating a context for the broader research question.

(2) *What is the meaning of deepfake propaganda as pursued by contemporary government?*

By answering this question, the tendencies of deepfake propaganda are uncovered. It will give a better understanding of the contemporary use of deepfake pictorial propaganda in modern society. Understanding how deepfake propaganda is used today establishes a foundation for comparing it with historical pictorial propaganda. By analysing its current applications, this research identifies key features and strategies that distinguish or align deepfake propaganda with its historical counterpart. This analysis

not only contextualizes the contemporary use of deepfakes but also allows for a more comprehensive comparison, shedding light on the evolution and potential future trajectories of propaganda practices.

(3) *In what ways does contemporary deepfake propaganda diverge from older pictorial propaganda cases in their political expressions?*

The focus of this question will be on understanding how contemporary political propaganda differs in its intent and political expression. By examining the tendencies and uses of both forms, this research aims to highlight the key distinctions in their objectives, methods, and impact. Analysing these differences provides deeper insight into how political expression in propaganda has evolved, offering a basis for understanding whether these changes signify a break or a continuation of historical practices.

(4) *In what ways does deepfake propaganda signify a new meaning of propaganda?*

This question aims to see if deepfake propaganda introduces a shift in how propaganda operates or is perceived. By comparing and analysing deepfake propaganda against historical examples, this research aims to uncover whether deepfakes introduce new dimensions to the meaning of propaganda, offering a deeper understanding of their implications in contrast with traditional forms.

1.4 RESEARCH APPROACH

To answer the main research question, an interpretative research approach is the most suitable method. It seeks to understand and interpret the manifestations of pictorial propaganda and deepfake propaganda. Through this interpretative lens, the aim is to analyse these phenomena and draw conclusions about their relationship.

This interpretative research puts emphasis on the interpretation of sources, such as pictures and videos, to uncover deeper insights into historical propaganda techniques and the contemporary use of deepfakes. In this research, a literature analysis is employed to explore how deepfake propaganda relates to pictorial propaganda. The study uses ATLAS.ti to code and analyse different sources systematically. These sources include scientific papers, historical articles, newspapers, and contemporary media. By interpreting these materials, this research aims to identify and evaluate how deepfake propaganda serves as manifestations of pictorial propaganda.

The content analysis facilitates the systematic exploration of these manifestations, allowing a nuanced interpretation of the data. Ultimately, this approach enables the research to draw meaningful conclusions about whether deepfake propaganda represents a continuation of or a break from traditional pictorial propaganda.

2. THEORY

2.1 INTRODUCTION

As mentioned in the introduction chapter, pictorial propaganda has long influenced society. This chapter delves deeper into its effects, discussing various theories and concepts of propaganda. Additionally exploring the theoretical framework and empirical findings that are analysed in both historical and contemporary manifestations of propaganda. By discussing the theory and concepts it establishes a foundation for determining whether deepfake propaganda represents a continuation or a break from historical pictorial propaganda.

It begins with the concepts of propaganda, its definitions, theories, history and political influence. Then it focuses on pictorial propaganda, its historical roots, and the evolution of pictorial propaganda as a tool for political influence, drawing on key theories, and scholars. Next, deepfake propaganda, introduces theories on digital manipulation, the rapid advancement of artificial intelligence, and their implications for modern political and societal structures. Finally, these perspectives are compared to highlight the differences and similarities. By developing this theoretical foundation, this chapter provides the interpretative lens necessary to analyse the manifestations and differences between deepfake propaganda and historical pictorial propaganda.

2.2 THE CONCEPT OF PROPAGANDA

The concept of propaganda has a lot of different meanings and can be researched in many ways. The Oxford Handbook of Propaganda provides thirteen propositions, see Appendix I (Auerbach & Castronovo, 2013). These thirteen propositions were made by Auerbach & Castronovo (2013) for the analysis of multiple papers on propaganda. The reason for choosing these propositions is because they are broad and help with keeping an open mind during this research, as they explain: “*These propositions are intended to be expansive and suggestive rather than definitive, helping to move forward a topic that all too often has been bogged down and narrowed by categorical and repetitious preconceptions.*” (Auerbach & Castronovo 2013, p.4). These propositions give a guideline for this research in propaganda and will be considered during the execution process of the research.

The Latin meaning of propaganda is: “*the propagation of a particular doctrine or practice*” (Independent, 2010). It is important to note that propaganda can be seen differently depending on the medium, the communication, the aim, and the context. Le Bon’s (cited in Auerbach, & Castronovo, 2013, p.9) research concluded that words and images could manipulate people into doing things as a group that as individuals they would never commit to.

The focus of this paper is on political propaganda. Two of the major researchers in the propaganda field are Harold Lasswell and Jacques Ellul, they had a different stance on the definition and the use of propaganda. Harold Lasswell is regarded as the founding father of propaganda theory; he first conceptualized propaganda in 1927 as *'The management of collective attitudes by the manipulation of significant symbols.'* (p.627). He distinguishes between general propaganda, which serves various purposes, and political propaganda, specifically aimed at shaping collective attitudes (Lasswell, 1927). Lasswell argues that the propagandist's intention determines the nature of the propaganda itself (Lasswell 1927, p. 629). Lasswell also believes that propaganda can be positive, fostering favourable attitudes toward certain subjects. For Lasswell, propaganda has become institutionalised in modern democratic systems, particularly through mass media and advertising, serving as a tool for elites to maintain social stability (Lasswell, 1927). Lasswell does acknowledge the interference of propaganda on the irreplaceable “dialogue” in society on which democracy depends, and the tensions this brings. However, he also argues that democracies heavily depend on propaganda. Furthermore, Lasswell believes that there would be no revolutions without any propaganda (Merelman, 1981. p.487).

Ellul opposes Lasswell by arguing that the elites-driven propaganda undermines personal autonomy, by embedding itself in myths that manipulate individuals, even educated intellectuals, without their awareness (Auerbach & Castronovo, 2013). Ellul further argues that there are different categories of propaganda. When thinking of political propaganda, one might think of (1) *political*, organised with a target; (2) *agitational*, people act on it; (3) *vertical*, top-bottom, the top decides the bottom is commanded; and (4) *irrational*, it appeals to myths and emotion (Ellul 1973, p.62 as cited in Auerbach & Castronovo, 2013, pp.351&352). There are also four less-known categories: (1) *sociological propaganda*, (2) *integration propaganda*, (3) *horizontal propaganda* and (4) *rational propaganda*. Ellul makes the distinction between propaganda and sub-propaganda, where the latter operates beneath the surface, shaping the public's consciousness over time (Auerbach & Castronovo, 2013, pp.351&352). To add, Ellul supposes that for propaganda to have an effect, there already needs to be a pre-existing narrative as a foundation.

Brown (2006) categorizes Ellul and Lasswell in two different categories from a propagandic perspective. He suggests that Ellul falls under the moralist perspective, which views propaganda as inherently misleading and ethically wrong. In this perspective, propaganda has the infernal power that lies in its ability to manipulate an entire population without their awareness. Lasswell, adopts a neutralist stance considering propaganda as a natural process of persuasion, inherent to human behaviour and communication. The neutralists question the measurable impact and what propaganda can realistically achieve, rather than viewing propaganda as inherently manipulative.

To summarize multiple different perspectives as to how propaganda is understood, two of them are the neutralist view and the moralist perspective. It is important to understand these perspectives to

understand propaganda and its nature. In Appendix II an overview is given of the differences and similarities between Ellul and Lasswell.

2.3 THE CONCEPT OF PICTORIAL PROPAGANDA

In the 19th century, newspapers and magazines started using illustrations in their weekly papers. The people in America accepted this medium with a lot of enthusiasm. The artist and publishers had a major effect on shaping public opinions with these illustrations (Thompson, 1962). From the 1980's the majority of the public relied on news by images. Later, these illustrations turned into photographs.

According to Rawls, (1993, as cited Walton, 1997) when a politician addresses a mass audience and tries to accept the view of the so-called politician, their speech should appeal to the form of reasoning of common sense. Rawls views this as a rational and useful discourse in mass communication (Walton, 1997). However, scholars like Le Bon (1896 cited in Walton 1997) are sceptical, arguing that the public is more impressed by images and thus is not influenced by the reasoning of common sense, highlighting the difference between image-based and speech-based propaganda (Le Bon, 1896 cited in Walton, 1997).

One of the first records of image manipulation in politics dates to 1852, when Abraham Lincoln's head was placed on the body of John C. Calhoun, creating an influential image that shaped public perception (Masood et al., 2021), see Figure 1. While pictorial propaganda, such as the picture of Abraham Lincoln, figure 1, has been in politics for a long time, it gained mass use during the rise of political posters in WWI, appearing in both totalitarian regimes, like Nazi Germany, and democratic regimes, such as the United States (Independent 2010). As Jowett & O'Donnell (2018) note, pictorial propaganda can either support or undermine democratic values. Pictorial propaganda is used in the political sphere for several different reasons such as the legitimisation of representation or delegitimise an enemy. Murphy (2019) highlights that picture manipulation, such as Photoshop, is seen as something common today, it can affect the public in the hands of someone powerful. He also noted that when adding something to a photograph, it creates a new reality, but removing something from a photograph removes the context in which the picture is taken. In addition, according to Dauber & Winkler (2014 p.219), humans do tend to look at photographs and tend to believe what they see is the truth.



Figure 1: Abraham Lincoln (Left) manipulated picture, with John C. Calhoun (Right) (Credit: The Library of Congress)

Pictorial propaganda, and image manipulation, have a long history. In the 1920s, during the Bolshevik Revolution, Leon Trotsky was removed from photographs after he was ousted from the party. This was done by skilled artists using tools like razors and airbrushes to alter historical records, a time-consuming process (Hofer & Swan, 2005, p.292).

In the modern digital age, humans are constantly showered with a vast array of visual stimuli. However, not all visual images are equal in our minds. While images can have powerful effects, as noted by Lasswell (1927), research warns against overgeneralizing their impact (Dauber & Winkler, 2014). The effects of images are often nuanced, depending on factors like audience and context (Dauber & Winkler, 2014). Still, images can have an all-powerful effect when for example, the key decision-makers act on an anticipation of the effect of the picture (Dauber & Winkler, 2014, p.221).

In summary, over the last couple of centuries, propaganda has changed and evolved in different mediums, one is pictorial propaganda. It started as illustrated pictorial propaganda but then changed to image (picture) pictorial propaganda, becoming the new propaganda medium. Earlier pictorial news was accepted by the public without much hesitation, however this has changed, and the overgeneralization of the impact also brings problems. Scholars like Le Bon (1896) highlight that visuals tend to impress audiences more than rational discourse, contrasting Rawls' emphasis on common-sense reasoning in communication. Pictorial propaganda has been historically used in political spheres, and it can shape public perception.

2.4 THE CONCEPT OF DEEPPFAKE PROPAGANDA

In the modern time of social media and the internet, people still consume propaganda however, the possibility to produce and packaging their own information and spin their own truths is possible. The 9th proposition in Appendix I states that people can actively use propaganda, and it does not necessarily

spread top-down. Nevertheless, there are different ways to look at deepfake propaganda. In this section, the different scholars will be discussed, and their views on deepfakes will be addressed.

Historically, photographs and films were considered the closest representation of reality humans could get. In the modern digital environment, it is often easy, cheap and efficient to Photoshop still images; it can be done by anyone (Hofer & Swan, 2005, p.292). Now, the rise of a new medium called deepfakes - hyperrealist synthetic videos that humans and AI make. Deepfake is an increasingly common medium in information warfare and as a propaganda tool (Waiuta & Wasiuta, 2019, cited in Dacka, 2022, p.39).

In modern society, one out of five internet users get their news information from internet platforms like YouTube, Reddit and Facebook (Anderson, 2018 cited in Westerlund, 2019). Westerlund (2019) calls this modern time a “post-truth” era; it is an era of digital disinformation and information warfare by manipulating the public. According to this research, the game-changing factors of deepfakes are the scope, the reach and the sophistication of deepfakes. The research mentions that anyone with a computer can make a deepfake video. According to Westerlund (2019), there are four types of deepfake producers, “1) the communities of deepfake hobbyists, 2) political players such as foreign governments and various activists, 3) other malevolent actors such as fraudsters and 4) legitimate actors such as television companies.” The first group is hard to track down. However, hobbyists and television companies mostly use deepfake in an entertainment role. But looking at the third and fourth groups, they use deepfakes as a way to manipulate and undermine the confidence of the public in the country's institutions.

Kietzmann et al. (2020) argues that deepfakes are successful due to their authenticity and accessibility. While deepfakes are not necessarily bad, they can be dangerous in the wrong hands, accelerating the spread and speed of propaganda and eroding trust in democratic institutions (Smith & Mansted, 2020). Smith & Mansted (2020, p.13) argue that “*Deepfake technology will be a particular value-add to the so-called Russian model of propaganda, which emphasises volume and rapidity of disinformation over plausibility and consistency to overwhelm, disorient and divide a target.*”.

According to Gregor & Mlejnková, (2021, p.63), deepfakes are a new disinformation technology however they argue that it is a gradual step in the information manipulation rather than a break from the information manipulation. With the improving quality and accessibility of deepfake videos, there is a growing concern about what the abuse of this tool will lead to. Deepfakes can have an impact on trust and democracy in the information media and social media landscape (Gregor & Mlejnková, 2021).

To conclude, deepfakes mark a significant shift in the landscape of propaganda and disinformation due to their realism, accessibility, and extensiveness. Deepfake propaganda continues to erode public trust in governmental institutions and political leaders. Additionally, deepfakes are seen as a new medium in image alteration, the danger lies in the use of social media platforms, which can have wide and quick

reach. It can seek to decrease trust or increase the legitimization of certain groups. However, some argue that deepfake propaganda does not have to be bad, it depends on who it uses.

2.5 PICTORIAL PROPAGANDA VS. DEEPPFAKE PROPAGANDA

This section examines various studies and theories to assess, through existing scientific research, whether deepfake propaganda represents a continuation of or a break from historical pictorial propaganda. To make this comparison, it is important to understand the evolution of propaganda techniques and their implications. First, different arguments that deepfake is a continuation of pictorial propaganda are discussed. Then, there will be a discussion that deepfake is a break.

Many main characteristics of deepfake propaganda are rooted in the historical practice of propaganda. There are shared objectives, one of them is that both practices aim to influence public perception, delegitimise opponents or legitimise their own goals, and manipulate emotions for political and social gain. Hägle (2022) notes that deepfakes can soon be a progression of “face swaps” where one face is swapped by another the only difference is that “face swaps” are static and turn deepfakes into a dynamic phenomenon.

Furthermore, the techniques of visual manipulation are something deepfake and pictorial propaganda rely on. The altering of visual content to present fake realities was at first just Photoshop tools, but now deepfakes use AI. The tool changed, but the underlying principle of convincing the audience through visual manipulation remains the same. And both play into the public that trusts visual evidence.

Another shared concept between deepfake and pictorial propaganda is to control and influence public opinions by either trust or distrust. It seeks to legitimise or delegitimise certain aspects of politics, such as institutions, political leaders or legislation.

For a long time, the person doing the manipulation was constrained by knowledge, tools and expenses, they needed specialists, but now it is almost fully automated with deepfakes (Hägle, 2022, p.207). Any hobbyist can make a deepfake quite easily (Westerlund, 2019). Not only has the technology to make manipulated images changed but also the reach and scale of impact of these deceptions has become increasingly more due to the global nature of modern society. It costs almost no effort to reach an infinite number of people. Anyone can make deepfakes and share them on social media with a big public while in pictorial propaganda the propagandist had to rely on different media outlets to spread propagandic manipulated pictures in order to reach an audience. In addition, it costs a lot of energy and time to change a picture with pictorial propaganda but not with deepfake, the need for excessive tools disappears. The threshold to make and publish a manipulated image or video has disappeared when comparing pictorial propaganda and deepfake propaganda. Next to this it is easier for a foreign government to insert deepfakes into an opposing country’s media system. As stated above according to Westerlund (2019)

political players such as foreign governments and various activists, are one of the major producers of deepfake. Foreign governments don't have to go to publishers who mostly work for their government but can now just post it on social media platforms used in that country. This changes the scale in which information warfare exists.

In summary, the aim of the propaganda has stayed the same, to manipulate and delegitimise certain political leaders or legislation. The roots of the medium are the same, the manipulation of images. What changed was the scale on which it was possible to spread these images and who could manipulate them.

2.6 CONCLUSION

This chapter generated the following theoretical insights;

- 1) The producers of pictorial propaganda and deepfake are different. Though, for both the following applies: who makes the propaganda decides the course of it, good or bad.
- 2) The aim and roots of pictorial propaganda are the same as deepfake propaganda. Both erode the public trust in the governmental institutions.
- 3) The spread of deepfakes is bigger than that of pictorial propaganda.
- 4) Both still have a similar effect on the public trust in the country's institutions.
- 5) Deepfake propaganda is a continuation of pictorial propaganda.

3. METHODS

3.1 INTRODUCTION

This chapter gives the methodological approach used to analyse both historical and contemporary propaganda practices.

The first section describes the selected cases: Stalin's pictorial propaganda, the Obama deepfake, and the Zelensky deepfake. These cases were chosen for their relevance in illustrating different dimensions of propaganda, from historical image manipulation to modern deepfake technologies. The second section explains the method of data collection, which includes sourcing relevant visual materials, scientific literature, historical documents, and media reports to ensure a diverse range of sources and provide a foundation for the analysis. The final section is the method of data analysis, emphasising the use of content analysis with the tool ATLAS.ti. This section explains the approach and provides a coding scheme derived from the theoretical framework. This methodology lays the foundation needed to uncover the patterns and distinctions in the use of propaganda, to see whether deepfake propaganda continues or breaks from historical pictorial propaganda.

3.2 CASE DESCRIPTION

To make a relevant comparison between deepfake and pictorial propaganda, three cases were selected to analyse. These three cases will provide this research insight into deepfake and pictorial propaganda, the uses and effects are discussed below.

The first case is Stalin's use of image manipulation during his regime (Blakemore, 2022). Stalin's case gives a broad view of how propaganda has developed into picture manipulation, and how it is used on a great scale. Keep in mind that this manipulation of pictures is something that was also used in other regimes like Mussolini and Hitler (Malm, 2017). However, Stalin specifically is a good example of the use of picture manipulation. In addition, Stalin's use of propaganda has been broadly researched thus there is sufficient data available and accessible. Stalin used the manipulated images to either gain support for himself and his regime or to delegitimise other political figures. This case provides the lens of historical pictorial propagandistic use and its work throughout this historical period. It shows image manipulation in propaganda long before AI and deepfakes were possible.

The second case is the 2019 deepfake video of Barack Obama. This deepfake was made by Jordan Peele in collaboration with BuzzFeed, for educational purposes on the danger of deepfakes (Mack, 2018). In Appendix I, the 13th proposition states that propaganda can be used unintendedly. The deepfake video of Obama shows this intent. In addition, it showcases that with some easy edits, an educational purpose

can be taken away and misused, as was researched by Vaccari & Chadwick (2020). This case also gives a deeper insight into the reaction of participants to deepfakes. Additionally, this case will provide a scope and the evolution deepfake has been through in recent years. Furthermore, this case gives a perspective on the dependence of propaganda on the propagandist. Lastly, in this case the producers are hobbyists and entertainment media.

The final case analysed is the deepfake video of President Zelensky during the ongoing Ukrainian-Russian war (Twomey et al., 2023). This case shows the use of deepfake propaganda in the context of modern information warfare, particularly during a time of conflict. It highlights how deepfake technology can be weaponised to spread disinformation, destabilise morale, and influence public opinion. Notably, this case demonstrates the use of deepfake to target political leaders by using strategic manipulation for propagandistic purposes. This deepfake case is an example of the use in information warfare of deepfake propaganda.

These cases provide a framework for analysing how propaganda has been utilised across different historical periods and technological contexts. They represent three distinct eras: the pre-deepfake, the emerging deepfake, and the current deepfake eras. With these cases, this research aims to explore answers to the research sub-questions. For example, the Zelensky deepfake case shows how contemporary governments react to deepfake propaganda, helping to understand its role in modern times. Additionally, analysing these cases allows for a comparison between traditional pictorial propaganda and deepfake propaganda, shedding light on their similarities and differences. This comparison helps uncover patterns and tendencies in both forms of propaganda and see if deepfakes bring a new meaning to pictorial propaganda.

3.3 METHOD OF DATA COLLECTION

The data collection involves analysing multiple secondary sources. As the researcher was not able to collect data on the cases themselves due to the historical nature of the Stalin case and the locational barriers concerning the Obama and Zelensky case, it opted to conduct a secondary source collection. These sources mainly consist of academic papers and online articles. Search engines like Google, Google Scholar and the University of Twente Library are used to find relevant sources. To research the cases, multiple sources have been found. The keywords used to search for articles and data involve, but are not limited to; “deepfakes, deepfake propaganda, propaganda, pictorial propaganda, Stalin’s propaganda regime, the Zelensky deepfake video, the Obama deepfake video”

As for the sources linked to Stalin's pictorial propaganda regime, this research collected six different sources. King (1997) provides a comprehensive 191-page analysis of various cases of image

manipulation during Stalin's rule. Rare Historical Photos (a) (2021) showcases eight examples of such manipulations, while Conquest (1998) details two specific instances of photo erasure by Stalin. Blakemore (2022) further explores manipulated images from this period, and Comrade Gallery (n.d.-b.) includes an example of a doctored photograph along its impact on citizens. Additionally, Rare Historical Photos (b) (2021) focuses on the Reichstag incident, offering a detailed case study of image manipulation.

The second case focuses on the deepfake of Obama, drawing on four sources. Mack (2018) presents the deepfake video and explains its purpose. Barari et al. (2021), in a 90-page study, examines the broader impact of deepfakes, including a case study analysing the detection rate of fake content. Vaccari and Chadwick (2020) contribute a 13-page research paper exploring the effects of the Obama deepfake when its educational context is removed, focusing on participant responses. Lastly, Greengard (2019) provides a concise three-page article discussing the Obama deepfake and its implications for society's epistemic trust.

The third case examines the deepfake of President Zelensky using five sources. Twomey et al. (2023) present a 22-page research article exploring epistemic trust in the era of deepfake videos. Boháček and Farid (2022) contribute an eight-page paper analysing the mechanisms of the Zelensky deepfake and assessing whether models can effectively detect such content. Akmeşe (2023) examines the search behaviour of individuals in Russia and Ukraine regarding deepfakes in a ten-page study. Simonite (2022) investigates the public response to the Zelensky deepfake video, while Byman et al. (2023) discuss deepfakes and international conflict in a foreign policy paper, dedicating approximately one page to the Zelensky case.

3.4 METHOD OF DATA ANALYSIS

This paper does qualitative research in which it interpreted text, papers, pictures and videos. More specifically this research conducts the method of content analysis. A content analysis is a form of interpretation and quantifying textual data, this research approach helps identify patterns, themes or biases and turn them into quantifiable variables so that further analysis can be done. Besides, content analysis is a tool that allows for longitudinal studies, as it gives the ability to analyse text and communication over a longer period of time (ATLAS.ti, 2024).

Certain criteria are linked to research using content analysis according to Neuendorf (2017). The first criteria is, the objectivity-intersubjectivity of the content analysis. A researcher should try to avoid any biases and aim to construct objective research. However objective research is socially agreed upon, and according to this, all human inquiries are subjective (Neuendorf, 2017). The second criteria is, that the

variables and measures have to be set well before starting the observation. Putting the research to such rules will help with the reliability of the research, and other researchers can then copy the method in content analysis. This research tries to use concepts which people agree upon to make sure the research is valid (Neuendorf, 2017). However, this research uses an inductive and deductive approach to the coding scheme. The general rules have been put down before coding, nevertheless while coding new coding keywords have been added make it more fitting to the subject it was coding to. Still, the coding scheme will be made available and can be copied to check the reliability of this research.

This research conducts a nomothetic approach; *“It seeks to generate generalisable conclusions”* (Neuendorf, p.15, 2017). In this content analysis, multiple cases are analysed in order to make a general conclusion of the continuation or a break on pictorial propaganda as a deepfake (Neuendorf, 2017).

Then, content analysis of the three cases, that are mentioned in the latter paragraph, will follow the following steps. First, as done in the chapters above, the theory is discussed. The content is examined, the context is explained, and the research questions are presented. Then, the conceptualisation is done: defining the variables that are studied. The next step is operationalisation, the measure in which the analyses will be done, that step will include a coding scheme. Then, via computer coding with an ATLAS.ti, the data will be examined. Then, codes will be assigned according to the coding scheme to see the frequency of the codes. Subsequently, a discussion of the findings is done. Lastly, a conclusion will be made. The content analysis allows for the qualitative data to stay in quality, but at the same time creates data for a quantitative analysis. In addition to that, this type of analysis can manage large volumes of (textual) data. Because a content analysis has clear methods, categories and coding, the research can therefore be reproduced to make it more reliable (ATLAS.ti, 2024).

A tool that will be used in this research for the content analysis is ATLAS.ti, which is where the papers will be uploaded and coded. The goal of coding a qualitative paper is to add to the interpreted meaning in order to later to detect the patterns or other analytical processes (Saldaña, 2021). The coding in ATLAS.ti is done with the coding scheme mentioned in Table 1.1. Furthermore, Charmaz (2001, as cited in Saldaña, 2021, p.3) argues that coding is a critical link for the data collection and understanding of their meaning. It is good to keep in mind that a pattern can have varying forms and can thus be characterised by similarity, differences, frequency, sequence, correspondences, and causation (Hatch 2002, p.155, as cited in Saldaña, 2021). One side of coding is that coding is a judgment call, a lot of things can influence a coding decision. When codifying, the attempt is to arrange words, text, pictures, etc., into a systematic order. Then, it is up to the researcher to interpret when to group certain codes (Saldaña, 2021). In the research, the coding scheme from below will be used to codify the sources, and conceptualize the variables that will be used in the study (Neuendorf, 2017). This coding scheme has been made inductively and deductively. In this coding scheme, deepfake propaganda and pictorial

propaganda are the categories, which are depicted in multiple characteristics. This will provide this research with adequate data to compare and analyse to answer the research questions.

Concept/ Category	Feature/ Code	Keywords/ Subcodes
Pictorial propaganda	Image Manipulation	Black ink deleting, glueing and cutting, staged, airbrushing cropping of picture deleting of object, adding, edited photo, erasure of people.
	Historical Context	Cold War, great purge , Stalin’s regime, WWII,
	Political propaganda	control, persuade, Delegitimizing, Legitimizing, glorifying, agitation, manipulation
	Publics Reaction	uncertainty, fear, paranoia, Symbolism.
	Publication	News paper, magazine, publishing houses, posters, Official publications, Stalin’s Biography, history of the USSR.
	Producers	Specialized artists, publishing houses, government, civilians
Deepfake propaganda	Deepfake video	Realistic, easier, synthetic, software applications, Artificial intelligence.
	Virality and uploaded platform	Ukrainian official website, VKontakte, Telegram, Went Viral, Online publication platforms, social media platforms.
	Impact	Uncertainty because of deepfakes, distrust, misled, polarization, deception, decrease uncertainty, increase trust, scepticism, negativity, worry, shock, confusion, the lairs dividend, fear of deepfakes, solutions.
	Producers Deepfake	Governments, non-state actors, professional actors, anonymous, skilled professionals.
	Propagandic feature	Delegitimizing, not political propaganda, goals was to educate, manipulation of the people

3.5 CONCLUSION

To determine whether deepfake propaganda is a continuation or a break from pictorial propaganda, three cases were selected to represent the pre-deepfake era, the emerging deepfake era, and the current deepfake era in politics. Using interpretative research, a coding scheme was developed to organise data and applied through ATLAS.ti to analyse text and visual materials. By coding these sources; patterns and features across cases were identified, such as public reactions: fear dominated Stalin's regime, while uncertainty prevailed in the deepfake cases. With the frequency of the codes, one can draw conclusions and make a comparison. Lastly, the research will compare the similarities or different features between historical pictorial propaganda and deepfake propaganda. By coding these sources with the coding scheme, an answer to the sub-questions, "*What is the meaning of deepfake propaganda as pursued by contemporary government? In what ways does contemporary deepfake propaganda diverge from older pictorial propaganda cases in their political expressions? In what ways does deepfake propaganda signify a new meaning of propaganda?*" can be formulated.

4. ANALYSIS

4.1 INTRODUCTION

This chapter analyses and compares the three cases to uncover how deepfake propaganda continues or breaks from pictorial propaganda, highlighting the key ambiguities and overlaps identified that are found throughout this study. To provide an answer to the research questions the chapter utilizes a systematic examination of each case individually, highlighting its key challenges and ambiguities in relation to the theoretical framework. Each case is analysed to identify its unique features, with a focus on pictorial manipulation, intention, production, publishing, and public reaction. Following this, the findings are compared across cases to draw out commonalities and divergences.

By situating the analysis within this comparative framework, the chapter aims to bridge the gap between theory and practice, demonstrating how the cases collectively inform the broader question of deepfake propaganda's role in contemporary political discourse.

4.2 STALIN'S PICTORIAL PROPAGANDA REGIME

This section discusses three main points that can be taken from Stalin's pictorial propaganda regime, firstly the use and intention of pictorial propaganda, secondly, the publishing and production of pictorial propaganda, thirdly the reactions of the people.

First, the use of pictorial propaganda in Stalin's regime. Propaganda during Stalin's regime was indicated to have multiple different purposes, which were supported by two main tools: adding and erasing. As Murphy (2019) highlights erasing something from a picture changes the context of this picture, however adding something creates a whole new reality, such as a companionship that never existed. In Stalin's regime, erasure was mostly utilized as a tool. However, the findings suggest the adding of certain scenarios and objects to pictures was mostly in link with the goal of legitimizing or glorify to exercise control over the population and to agitate and persuade the population. Thus, legitimising and glorifying were important for maintaining his image. Examples of this tool of adding are, the editing of pictures to improve his appearance and a picture with Lenin and Stalin, where they are sitting close and content-like companions. However, this companionship was not real, the picture was manipulated. Thus, creating a whole new reality displaying himself as a loved and admirable leader.

“At the same time, a parallel industry came into full swing, glorifying Stalin as the “great leader and teacher of the Soviet people” through socialist realist paintings, monumental sculpture, and falsified photographs representing him as the only true friend, comrade, and successor to Lenin, the leader of

the Bolshevik Revolution and founder of the USSR. The whole country was subjected to this charade of Stalin-worship” (King,1997, p.9).

However, the tasks of altering pictures varied a lot, from these described adding scenarios and objects to the erasure of people. Stalin’s propaganda utilised the erasure of individuals to delegitimize enemies, personal as well as official. Thus, delegitimization was a central part of the pictorial propagandistic use in Stalin’s regime. This practice went beyond just simply removing the person and his name; it went as far as removing the person from history and from all the pictures. By seamlessly filling in the gaps left by erased parts, Stalin’s propaganda machine modelled a new perfect picture. Individuals vanished entirely from group photographs; their absence replaced by the continuation of the background. Pictorial propaganda gained control over history and over the citizen’s knowledge. From removing a wristwatch on a soldier to making people completely vanish.

Second, the case of pictorial propaganda in Stalin’s regime displayed a unique way of producing and publishing. The propaganda was published by Soviet Union publishing houses. By utilizing such publishing houses, Stalin’s regime could spread the pictorial propaganda on a quick mass media scale. It was a tool to consolidate power. The producers of the pictorial manipulations in Stalin’s time mostly worked to maintain the state’s narrative. It created an atmosphere of control, where the state decides what could be posted and what not. According to King (1997, p.13) “*photographic manipulation worked very much on an ad hoc basis. Orders were followed, quietly.*” So, it was an ad hoc situation where an order was quietly given from someone in command about how, who or what needed to be altered in certain publications, and this made it hard to trace the order back to one person. As to be expected from the theory, there is a vertical, top-bottom, command where the government controls the publisher, as defined in the propaganda theory by Ellul.

The different publishing houses that were mentioned in the literature were newspapers like *Pravda* (the official communist party newspaper), magazines such as *Ogonjok* and *Projector*, official biographies of Stalin, official state documents and educational textbooks. It did not stop at text or printed papers, but it extended into postcards, posters and other visual mediums. This idealized version of the state’s narrative was distributed not only domestically but also internationally. Within the Soviet Union, every aspect of media was carefully curated to ensure the regime’s narrative remained unchallenged.

The producers of the pictorial propaganda in the Soviet Union during Stalin’s time were groups of specialised, skilled artists and designers who worked under the order of the regime. The Soviet regime used a big network of artists who could alter the photographs rapidly. As expected from the theory the skilled artist are the ones that physically altered the pictures, with razor and airbrushes, which is a time-consuming process (Hofer & Swan, 2005, p.292). As in the paper, Comrade (n.d.r) explained: “*Their*

methods were surprisingly sophisticated for the time, relying on a combination of darkroom techniques and physical alteration of negatives and prints.... These techniques required considerable skill and patience, often involving hours of painstaking work to achieve the desired result.”. Despite this time-consuming labour-intensive nature of creating the desired political narrative, it was an effective method of its time.

Third, citizens lived in fear and paranoia with no possible way to engage in dialogue, which was linked closely to the strict media landscape in the Soviet Union. As Lasswell acknowledges in his propaganda theory, propaganda interferes significantly with public dialogue. However, not only did the propaganda interfere in the dialogue during Stalin’s regime, but the censorship and fear, as the state was reliant on self-censorship if for example a book was already in personal belonging. To understand this self-censorship of the citizens there needs to be an understanding of the psyche of the soviet citizens. In the Soviet Union, an atmosphere of fear and paranoia was created among the citizens. The fear was mostly of being associated with one of the “enemies” of the government. If a picture was discovered there could be the risk of being associated with them.

“Such was the atmosphere of fear that families of those arrested and condemned were compelled to destroy even the image of their loved ones in their own personal records,” writes biographer Helen Rappaport.” (Blakemore, 2018)

This led to self-censorship of the citizens, often destroying or defacing their photos, books and magazines that contained images of the persons who had fallen out of favour with the government. This self-censorship was something the new generation grew up doing.

“In schools across the country, children were actively engaged by their teachers in the “creative” removal of the denounced from their textbooks.”

King (1997, p.10)

This fear and paranoia that stretched all over the country caused people to doubt their own memory, and over time the fear was intensified by all the violence ravaging the country. Paranoia lived within the people, there was confusion about what had really happened and how. The confusion and fear became deeply rooted in society. As the paper Comrade mentioned *“People became to question their own memories when confronted with contradictory “official” photographs, leading to a culture of self-censorship and paranoia”*. It was fear, doubt, and uncertainty that drove the citizens into self-censorship. This coincides with Le Bon’s observation that visuals tend to impress the audience more

than the rational discourse and it also aligns with the propaganda view of Ellul that propaganda is irrational and appeals to myths and emotions.

4.3 THE OBAMA DEEPFAKE

The goal of the Obama deepfake was intended as a public service announcement to raise awareness about the potential harm of deepfakes and the rise of misinformation. Unlike politically motivated deepfakes, this video was produced to educate the public about the risks of misinformation and the rise of deepfake technology. This deepfake created a significantly important insight in how deepfakes are produced and their deceptive nature. It provides a unique example and a perspective on the implications of deepfakes.

“The goal was to help educate the public about the potential dangers of deepfakes”

(Greengard, 2020).

Even though this video has been made to educate the public, its deceptive nature, before the disclaimer, sparked a wider discussion about the impacts of the deepfake. In the full video, the educational aspect was made clear, and Peele disclosed that it was a deepfake. Not only was the deepfake video misused by certain groups by removing the disclaimer at the end, but it was also used for academic studies to test the public’s reaction to deepfakes. This dual nature matches the described theories in the theoretical framework. While argued by Lasswell that propaganda is not inherently bad and thus can be used in a way such as education, Ellul points out that it is still misleading and ethically wrong. Thus, propaganda is always inherently bad. This contrast is also found in the Obama deepfake. The deepfake was not intended to harm, however it did use tools to mislead the public to think Obama said something.

The deepfake was produced not by a political party or a government but by Jordan Peele, in collaboration with BuzzFeed. As could be expected from the theory different groups of producers in deepfakes exist (Westerlund, 2019). In the Obama case, the producer group is entertainment media. The manipulation of the video was achieved by using different tools, as stated by the BuzzFeed director *“The fakery was built using Adobe After Effects, a readily available piece of video software, and FakeApp, an artificial intelligence program”* (Mack, 2018). These tools are widely available to anyone with a computer or phone and internet access. By highlighting the ease of access to these tools, the project revealed the potential for the widespread use and abuse of the deepfake technology. However, the Obama case furthermore shows the need for skilled producers. As the creators of the video of Obama explain *“Then we worked with Jared who used a combination of deep fake software down- loaded from Reddit and*

Adobe products we use to do video effects and post production work. It wasn't straightforward and required a combination of approaches and Jared's prodigious talents.” Barari, et al. (2021, p.6). In contrast to what could be expected from the theory, this points out that not just anyone could make a realistic deepfake. There is still a reliance on the mixture of these software tools and skills of a creative expert. The process was not straightforward and required significant technical skills. Nevertheless, deepfake technology is still developing and getting more efficient every day.

Second, deepfakes are not only getting more efficient, but the speed of their circulation is increasing rapidly. The Obama deepfake went viral in a short period of time, receiving shares all over the world. The video was published on social media platforms like YouTube, X (formerly known as Twitter), and Facebook. The video's original title: *“you won't believe what Obama says in this video □”* is an example of the use of clickbait to attract attention to the deepfake. The video was at a level of virality that demonstrates the power of deepfakes to capture the public's attention. The deepfake has reached millions of people.

“It notched up 5 million views and 83,000+ shares on Facebook, 5 million+ views on YouTube, and 4.75 million views and almost 52,000 retweets on Twitter” (Vaccari & Chadwick, 2020, p.1).

This shows that, on the one hand, it can be used to educate and inform a wide range of people in a short amount of time. On the other hand, the quick spread and wide reach also make them potentially even more harmful in a short amount of time.

Lastly, the public reaction to the deepfake suggests a heightened feeling of uncertainty. The research by Vaccari & Chadwick (2020) made two versions of the Obama deepfake, one where the educational ending was deleted (deceptive) and the other the original one (not deceptive). Their results show several outcomes on the participants' reaction to the deceptive and not deceptive deepfake of Obama. First, the participants found that the deepfake was quite realistic. Overall, around 50.8% of the participants were not deceived at all, which is as good as random guessing (Vaccari & Chadwick, 2020). This number shows that also around 50% of the participants were not sure about the truthfulness of the video. Therefore, this deepfake led to a heightened feeling of uncertainty among the participants who were asked about the authenticity of the video. Whilst less than 20% were not drastically misled, many did stress that they had doubts about the deepfake video. The participants who saw the deceptive version expressed even more feelings of uncertainty over participants who viewed the original educated deepfake, who felt a decrease in uncertainty and were prone to trust news on social media. Consequently, while deepfakes may not always directly mislead people, they can still erode trust in the news in digital media.

“We find that people are more likely to feel uncertain than to be misled by deepfakes, but this resulting uncertainty, in turn, reduces trust in news on social media.”

(Vaccari & Chadwick 2020, p.1)

As suggested by Gregor & Mlejnková (2020) who point out that deepfakes impact trust in information media and social media. However, the findings do not point to a distrust in democratic institutions as Smith and Mansted (2020) expected if deepfakes fell into the wrong hands.

4.4 THE ZELENSKY DEEPFAKE

The Zelensky deepfake video stands out as one of the first instances where a deepfake video was deployed as part of an information warfare situation in an ongoing armed conflict. Media manipulation has always been a tool in wartime, but it now can generate a video with audio of official leaders with the use of AI.

The Zelensky deepfake contradicts Westerlund’s theory of producer groups. This case doesn’t have a producer group, or at least it is unknown who made this deepfake which highlights a different producer group of deepfake, an anonymous group. As Simonite states (2022) *“That short-lived saga could be the first weaponised use of deepfakes during an armed conflict, although it is unclear who created and distributed the video and with what motive”*, it is thus hard to say who produced this deepfake. This shows one of the challenges associated with deepfakes, the anonymous nature of deepfakes. Deepfakes can be produced and distributed without leaving traces of how why and where they were made. In the case of this deepfake speculation about whether it was a deliberate act by Russian operatives or rogue hackers aiming to show the chaos circulating its spread. While no conclusive evidence points to a creator, the video did emerge during the beginning of the Ukraine-Russia war strongly suggesting that it was intended as a tool for psychological warfare. It is believed that the Zelensky deepfake tried to make people believe that the Ukrainian president is calling for a surrender, thus it is assumed to be aimed at the morale of the Ukrainian forces and citizens and undermine it.

By publishing the deepfake of president Zelensky on multiple different platforms, the video spread rapidly. At first, it appeared on the website of TV Channel 24, the website was hacked to display the deepfake message. This was a situation where a credible website was the target of the deepfake spread. The hacked website of channel 24 further displays the deepfake reinforcing its role as a tool in information warfare. This pattern of dissemination shows that deepfakes can be used to exploit existing information systems to increase visibility.

“As the aforementioned fake Zelenskyy video suggests, deepfakes are now being used in international conflicts, and their role is only likely to grow in the coming years” (Byman, et al. 2023, p.6).

Furthermore, the deepfake video was uploaded on Facebook, YouTube and the Russian social network VKontakte (Russia’s equivalent to Facebook), showing how easily deepfakes can reach such big audiences all over the world in a relatively short amount of time. There was a rapid spread of the deepfake on social media, hence highlighting the role of social media in the amplifying world of deepfakes.

The emotions that were detected after seeing the deepfake include confusion, negativity and worry. Interestingly, people were often not misled by the Zelensky deepfake, easily seeing that it was a fake video due to its poor quality of audio and video. As people were discussing the quality of the video online and its failure, it became apparent that the body movement was weird, blinking way too often, the voice was too deep and cracking, and his head was too big. Not only did citizens find it easy to find that it was a deepfake video, but many explained it to others, and in this way spreading information about deepfakes and deepfake analysis. In contradiction to what could be expected from the theory, the Zelensky deepfake shows that people did notice something was wrong early on, and they did not immediately accept it. Furthermore, the psychological impact of the deepfake could lead to epistemic harm, which creates a distrust in democracy and information given by the government.

“We found evidence for the epistemic harms of deepfakes in cases where people doubted the veracity of real videos and in cases of deepfake conspiracy theories.”.

Twomey et al (2023, p.15)

The deepfake created confusion about what was in fact reality. It highlights the risk of believing that a leader’s instruction is a potential deepfake and could give citizens a reason to ignore legitimate orders under the misguided notion that something is fake. This impact is known as the Liar’s dividend, as Byman, et al. (2023, p.7) explain: *“deepfakes creates a “liar’s dividend,” allowing political leaders to dispute the authenticity of their own genuine misbehaviour. In essence, this inadvertent confusion is a mirror image of false orders: instead of false instructions being followed, legitimate ones are discarded.”.* This highlights the risk as seen in the theory of distrust in democracy and information.

Lastly what is notable is the factor that mitigated the Zelensky deepfake impacts was the pre-emptive warning done by the Facebook account of The Ukrainian Land Forces that announced that Russia has potentially created and shall upload a deepfake video aimed at Ukraine. The public reacted to these posts

by trying to find information about deepfakes, showing that the warning was a success in the spread of information of deepfakes and the resilience of citizens.

4.5 COMPARISON OF THE PROPAGANDA CASES

This section will compare the different cases to highlight their differences and similarities. At the end a table is given with an overview of the findings.

Pictorial propaganda in Stalin's regime consists of a few features. Whilst it should be mentioned that there were incidents where Stalin added something to an image, he mainly utilized the erasure of people. As mentioned, Murphy (2019) stated that there is a difference in adding or removing something from an image. Removing something from a photograph does remove part of the context, adding to a photograph creates a whole new reality that did not exist. So when Stalin removed people from pictures, he rewrote the context of the photograph. However, this creation of a new reality is something deepfakes are now mostly used for. In both cases, Obama and Zelensky's deepfakes created a reality in which they said things that they never had said.

Furthermore, the Stalin case and the deepfake cases differ in their intention. Stalin's propaganda regime was mostly used to keep up with the state's narrative. It was used to gain control, legitimize, delegitimize, manipulate, persuade, agitate people or glorify his regime and himself. The deepfake Obama deepfake was not intended to be political propaganda but as an educational tool, however, its deceptive nature and use of political leaders did create a situation where people were first misled. In the Zelensky case, there is no data available on its intention. Yet, the findings suggest that with the deepfake cases, there are no glorifying or controlling elements.

The making of image manipulation between the two pictorial types depicted similarities and differences. From the theory, it could be expected that anyone can make deepfakes and are easy and accessible however, in the Obama case, skilled professionals were needed to make it believable. Additionally, when looking at the Zelensky deepfake there is a lack of realism; it was debunked quickly. This shows that people with the right set of skills are still needed to make a realistic deepfake. In contrary to what was expected from the theory. Whereas, during Stalin's regime it took a lot of time and manpower of skilled professionals. Nowadays with the deepfake cases there is less manpower needed due to technological advancements, but experience and skill is still necessary. Nonetheless, the software applications for creating a deepfake are widely available for anyone, which creates an anonymous atmosphere around deepfakes.

This anonymous nature of producing can also be seen in Stalin's propaganda regime. During Stalin's propaganda regime, the order for deleting a subject or adding an image came from someone in authority

but was quietly told the producers without a record of who gave the order. It was, however, known who published these manipulated images due to the media landscape then. The publishing houses were the ones that organised the news and papers and magazines, but due to censorship from the government, not just anyone could spread any picture. When compared with the Zelensky deepfake, it is unknown why, how or who created it. So, the producer and publisher remain anonymous. In both cases there is a certain anonymity as to who gave the orders. Nonetheless, the media landscape has changed, now it is possible for anyone anonymously without a reason to spread such deepfake videos. To add to the debate, the deepfake and pictorial propaganda cases could reach a large audience, yet in Stalin's regime was mostly national. Whilst with deepfakes in the modern media landscape, the reach is faster, broader and more international. Millions of people can see a deepfake in a matter of seconds, regardless of consequences, such deepfakes can go viral.

Lastly, what might be anticipated from the theory is that a shared concept would be to control and influence public opinions by either trust or distrust. That propaganda seek to legitimize or delegitimize. This is something that also was found in the analysis. While various emotions existed during the Stalin regime, it is important to note that these emotions were deeply rooted in society due to the propaganda regime of Stalin. This regime brought mostly fear to its citizens, as Soviet citizens feared what would happen if they went against the regime and the propaganda. Also, paranoia and agitation were feelings that arose. In addition, the emotions of uncertainty and paranoia marks this time; people began to doubt their own memory, and with the constant change of visual evidence, people didn't know what was real or fake anymore (comrade gallery, n.d.-b.). This highlights the intensity of the emotions, especially the fear and paranoia among citizens. Whereas, the findings point out that pictorial propaganda in Stalin's regime is deeply rooted in fear, deepfake propaganda is mainly rooted in uncertainty. In deepfake propaganda, multiple emotions were found such as, uncertainty, distrust, deception, misleading, scepticism, polarization, negativity and a fear of what deepfakes could bring. One feeling that stands out is uncertainty, and with this uncertainty, a feeling of increased distrust of online media arises. Moreover, with the modern media landscape, the solutions that can be seen in the deepfake threat is education and communication. Because of, for example, the educational purpose of the Obama deepfake, there is a feeling of a decrease in uncertainty and an increase in trust in media online after watching the whole video (Vaccari & Chadwick, 2020). The possibility of dialogue has opened nowadays whilst during Stalin's regime there was no possible dialogue, everything was strictly censored. The media during Stalin's regime was only spread the propaganda, while now the media can also create dialogue about deepfake propaganda.

	Stalin’s propaganda Regime	Obama Deepfake	Zelensky deepfake
Pictorial manipulation	Erasure and adding, with the focus on erasure to delegitimizing and adding to legitimize.	Adding, creating a whole new reality	
Intention	Keeping up with the state’s narrative. Glorifying, agitating, legitimizing and delegitimizing.	This intention was to educate.	Unknown due to its anonymous nature.
Production	A group of skilled professionals, order came from above (top-down) but anonymous about who exactly gave the order.	One or two skilled professionals needed to make it realistic, no top-down approach.	unknown
Publishing	Papers or magazines under governmental control, censorship plays a major role. Not everyone had access.	Internet without control from governments, anyone can upload it and reach a big public.	
Public reaction	Deeply rooted emotions of fear and paranoia. Due to the censorship, dialogue near impossible.	Uncertainty which leads to decrease trust. Dialogue is possible.	confusion, uncertainty, negativity, and education. Dialogue is possible

Table 4.1, the key differences and similarities between Stalin’s pictorial propaganda regime and the deepfake cases of Zelensky and Obama.

4.6 CONCLUSION

The theory and analysis have provided answers to the sub-questions, in this section these answers are discussed.

First, *What is the origin and development of pictorial propaganda?* Its origin dates to the early days of image-making. With one of the first records in 1852 pictorial propaganda has increased in popularity and developed over the past centuries. It became a tool used to manipulate the public perception, and further political agendas. Especially during Stalin's regime, pictorial propaganda was used on a great scale.

Second, *what is the meaning of deepfake propaganda as pursued by contemporary governments?* From the case studies discussed in this research the meaning of deepfake propaganda by contemporary governments remains unknown due to its anonymous nature. Notably, governments try to warn and educate citizens about the threat of deepfakes. This research reveals that deepfake propaganda is not exclusively government-driven, as other groups also create and disseminate it.

Third, *in what ways does contemporary deepfake propaganda diverge from older pictorial propaganda cases in their political expressions?* Contemporary deepfake propaganda differs in political expression. Unlike pictorial propaganda, which reinforced the state's narrative, deepfakes often lack a clear intent. Some aim to educate, others mock or delegitimize leaders, while many remain ambiguous. This anonymity creates uncertainty about their meaning, though differences emerge in aspects beyond political expression.

Fourth, *in what ways does deepfake propaganda signify a new meaning of propaganda?*

The roots of propaganda have stayed the same over time; deepfake propaganda is a way to change the public's perception of certain aspects through images. However, the manipulation, intent, producing, publishing and reaction have aspects that are different than in pictorial propaganda. Its anonymous nature of the media landscape brings a break from propaganda due to its unclear intent. It is seen that it still tries to legitimise or delegitimise certain political leaders or create uncertainty and distrust within the public.

5. CONCLUSION

5.1 KEY INSIGHTS

This thesis has aimed to explore the relation between deepfake propaganda and pictorial propaganda, by seeing if deepfake is a continuation or a break of pictorial propaganda.

The main research question posed was *“To what extent does deepfake propaganda constitute a break or a continuation of pictorial propaganda.”*

The comparison showed numerous differences and similarities between deepfake propaganda and older forms of pictorial propaganda. First, the continuation of the manipulative and deceptive intent is seen in both deepfake and pictorial propaganda by adding or erasing. Second, the production and spread of deepfake differ from older pictorial propaganda methods, mostly in size. Third, the shift of the public’s reaction, from deeply rooted fear and paranoia in Stalin’s regime, to uncertainty with deepfake propaganda. Fourth, the democratisation of media brings dialogue and trust but also implications of the power of anonymity.

The shifts in production and publishing methods are crucial. Publishing is so accessible that everyone can make and publish deepfake propaganda, enabling actors outside the traditional power structures to spread information. A downside of this is the anonymity and the large reach it has in a short time, whereas an upside is the opening of dialogue, where education and warnings can be seen as a solution to the threat of deepfake propaganda. The emotional impact of deepfake propaganda can alter how the public reacts and interacts with political discourse, as with the increase in uncertainty, there is a decrease in trust in online information media. Next to this, the lair’s dividend can potentially heighten trust issues in democratic societies.

In short, these findings suggest that deepfake propaganda, while innovative in its mechanisms and spread, retains the core manipulative intent of its historical counterparts. Nonetheless, its impact and way of spreading, producing and publishing are different. As for the answer to what extent deepfake propaganda constitutes a break or continuation of pictorial propaganda, it is both a break and a continuation of pictorial propaganda, conditional on the specific aspects the researcher chooses to examine. Continued research is needed to understand the evolving impact of deepfakes on political discourse and societal trust.

5.2 THE DIRECTION OF FUTURE RESEARCH

This research provides an understanding of the relation between pictorial propaganda and deepfake propaganda. Comparative studies of historical propaganda cases and modern propaganda, as deepfakes, have been lacking and the development of propaganda therefore unexplored. This research gives a much-needed historical lens to understand contemporary propaganda.

This research has aimed to address this knowledge gap and initiate an investigation in the relationship between pictorial propaganda and deepfake propaganda. It unfolds the similarities and differences between the two propaganda tools, as described in the summary above, and though this research may not have necessarily provided an answer to whether it is a break or a continuation, it has shown the importance of further research into this topic.

For this research scholars such as Lasswell and Ellul, and their definitions of propaganda are still relevant to discuss to identify the roots of propaganda. As for this comparative study, the historical definition of propaganda is necessary to take into consideration, to measure the extent of propaganda not only through modern standards but also standards of that time. This highlights the limitations of existing frameworks in addressing the modern phenomenon, this study challenges the traditional definition and prompts a rethinking of what propaganda means in an era where producers and intentions can be ambiguous and where dialogue is made possible in the public.

In addition to this, through the contrast between modern and historic sources this comparative case study has for example found that the scope on which deepfakes and pictorial propaganda can be produced, and spread is different. Whilst Westerlund (2019), mentions game-changing factors for deepfakes to differ from older forms of propaganda, such as the scope, reach and sophistication, deepfakes actually require skills and techniques from specialists to make them realistic and sophisticated, which is similar to older forms of pictorial propaganda.

Future research could explore these differences in impact and media landscapes in greater depth, examining how these differences might be leveraged to educate and inform the public more effectively. Moreover, future research should further explore the link between the two propaganda types and investigate what society can learn from its past. This study is limited by its focus on two contemporary cases, which, while illustrative, do not capture the full diversity of deepfake propaganda manifestations, so for the research design, this research would recommend future research on deepfake over some time instead of two specific cases. This could provide a comparison over multiple cases that mimic the Stalin regime as a period in time better. A potential next step in deepfake propaganda research would be to research the media landscape and the anonymity of deepfake propaganda. As mentioned in this research these points are the breaks from pictorial propaganda. It would be interesting to dive deep into the media landscape by analysing its content, interviewing professionals in digital sociology and social media, and analysing the development over time. By understanding this media landscape and its anonymous nature, policymakers can adequately adapt the policies to the challenges this brings.

In addition, future research could interview policymakers about the legislation made to anticipate the threat of deepfakes and conduct a survey among citizens to see if the effects of deepfakes which policymakers anticipate are felt in society. By comparing these results, the research can recommend the policy makers on the need for the policy.

5.3 THE RESILIENCE TO DEEPFAKE PROPAGANDA

Through the historical comparison, the findings of this research provide crucial insights into the nature of deepfake propaganda and can hence further support legislative developments and policymaking surrounding this innovation.

Firstly, deepfake propaganda is inherently misleading, similar to pictorial propaganda, as both are utilised to manipulate public opinion. There is a need to make society more resilient to this manipulation which could be done with policies protecting or educating citizens. To elaborate on the latter, though propaganda is inherently bad according to scholars, the concept of deepfakes could be of great relevance to help educate the public, like in the Obama case. However, the thin line between when it can be used as an education and when it turns into propaganda is something that future research could explore further. The main emotion felt with deepfakes is uncertainty, which could be reduced with education.

Secondly, this research has shown that due to the wide nature of the internet, it is easy to publish deepfake propaganda without a known intention or consequences. The risk of broad, anonymous production and publishing is something that needs further legislation. This legislation is necessary, especially now, because deepfakes are not yet at a point where anyone can make it; there is still a certain threshold. This makes it a pressing time to move forward with legislation, technology and policies on the matter before this threshold lowers even further. The public and private sector should, with a sense of urgency, invest in science and technology to be able to help debunk AI deepfakes.

Deepfake propaganda poses a challenge for the future, government and citizens alike. To be resilient education, information and warnings are as important as further research. Now is the time to protect governments and citizens alike from being manipulated by deepfakes.

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7. APPENDIXES

7.1 THE THIRTEEN PROPOSITION

	Proposition
1	<i>“Propaganda is not intrinsically evil or immoral.”</i>
2	<i>“Propaganda entails propagation, but not everything that propagates is necessarily propaganda.”</i>
3	<i>“The relation between propaganda and information is fluid, varying according to context and function.”</i>
4	<i>“Although propaganda is not an essential category with precise formal attributes, particular techniques of propagation can be studied with variable results.”</i>
5	<i>“Any given practice of propaganda must be understood in relation to culturally specific proximate institutions, such as education, religion, public diplomacy, advertising, and literature.”</i>
6	<i>“Propaganda changes according to specific media, but cannot entirely be defined by the attributes of a given medium.”</i>
7	<i>“Propaganda in its effects can be partial, and it need not be total.”</i>
8	<i>“Analyzing propaganda requires paying as much attention to networks of information flow (how) as the content (what).”</i>
9	<i>“People can actively use propaganda and are not simply passive dupes used by it. Propaganda does not necessarily spread from the top down.”</i>
10	<i>“Propaganda can produce unintended effects beyond the control of both producers and receivers.”</i>
11	<i>“To be effective, propaganda must harness a rich affective range beyond negative emotions such as</i>

	<i>hatred, fear, and envy to include more positive feelings such as pleasure, joy, belonging, and pride.”</i>
12	<i>“Propaganda is an integral feature of democratic societies.”</i>
13	<i>“The study of propaganda remains highly relevant and in all likelihood will continue to be a critical issue in the future.”</i>

The Thirteen *Propositions of propaganda research* by Auerbach, & Castronovo (2013)

7.2

COMPARISON OF LASSWELL AND ELLUL

Lasswell	Ellul	Similarities
Neutralist View	Moralist View.	
Distinguishes between general propaganda and political propaganda	Propaganda falls under different categories. (1) <i>political propaganda</i> , (2) <i>integration propaganda</i> , (3) <i>horizontal propaganda</i> and (4) <i>rational propaganda</i> .	Propaganda is not one definition. There are different types of propaganda.
The nature of propaganda is not necessarily evil.	Propaganda is inherently misleading and wrong.	Both agree that propaganda is used to influence the mass population.
Propaganda has become institutionalized in democratic systems.	“The communication universe of the modern urban society is propaganda” (Brow, 2006) elites-driven propaganda undermines personal autonomy.	Propaganda is seen in modern society.
It is a tool for the elite to remain social stability. But is not an Absolut tool.	Propaganda is total.	Propaganda is a powerful mean to shape society.
It is true that propagandas interference the irreplaceable “dialogue” in society on which	There is no individual thinking, propaganda makes sure the individual thinks in the same way as the other individuals,	There is no dialogue in propaganda.

democracy depends.	conformism and convention.	
Propaganda has its limits: It cannot completely mask real-world issues like military defeats or economic struggles.	The educated intellectual can be manipulated by propaganda without their awareness'. Ellul states that for propaganda to have an affect there already needs to be a preexisting narrative to build upon	Both believe propaganda has it limits.

Sources: (Auerbach & Castronovo, 2013, Lasswell 1927, Brown, 2006)

7.3 AI ACKNOWLEDGEMENT

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7.4 OVERVIEW OF AMOUNTS OF CODES

	Obama	Stalin	zelensky
Deepfake video	12	0	3
historical context	0	9	0
image manipulation	0	60	0
impact	18	0	27
political propaganda	0	43	0
producers	0	43	0
producers deepfake	3	0	2
propagandic feature	1	0	3
publication	0	13	0
publics reaction	0	13	0
time context	1	0	5
virality	3	0	5

7.5 ANALYSES WITH THE CODES

It is important to note that the downloading and copying of the codes occasionally rendered them in unreadable in this format.

document	quotation	codes
Twomey et all, (2023)	Fears of deepfakes being used to spread disinformation have been realised during the Russo-Ukrainian war	Ukrainian-Russian war
Twomey et all, (2023)	Deepfake of Putin announcing peace with Ukraine. In early March a deepfake of Russian president Vladimir Putin emerged, showing the Russian president announcing peace with Ukraine. The deepfake was first published online in the first week of March on the reddit r/ sfwdeepfakes and r/ukraine communities [37]. It was posted with an acknowledgment that it was fake and the user who submitted this video claimed to have found it on the social media site Telegram and added their own subtitles. The deepfake was then published on Twitter on the 18th of March. This is the version that was reported on by news agencies. The version posted on Twitter did not contain subtitles, suggesting it may have come from Telegram. This deepfake was unique out of the major examples of the technology in the conflict as it has been suggested that the audio was also generated using AI	Ukrainian-Russian war

Twomey et al, (2023)	Deepfake of Zelensky surrendering to Russia	Ukrainian-Russian war
Twomey et al, (2023)	surrendering to the Russian Government [39]. On the 14th of March 2022, a Ukrainian news website was hacked to display a deepfaked message of Zelensky surrenderin	not political propaganda, goals was to educate, delegitimizing, manipulation of the people
Twomey et al, (2023)	The quality of the deepfake was poor and quickly debunked by Zelensky himself. However, this incident highlights the potential harms of deepfak	poor quality
Twomey et al, (2023)	Educational deepfakes from the Ukrainian government and news media outlets. O	solutions
Twomey et al, (2023)	European mayors receive possible deepfake video call from the mayor of Kyiv	Ukrainian-Russian war
Twomey et al, (2023)	The largest number of tweets occurred between the 16th to the 18th of March, correlating broadly with the release of the fake Zelensky surrender video and news coverage of the supposed Putin deepfake	social media platforms
Twomey et al, (2023)	Users often emotionally reacted to the news about deepfakes with negativity (n = 29), worry (n = 27), shock (n = 6) and confusion (n = 6), mostly targeted towards news about the deepfake Zelensky surrende	negativity, worry, shock d, confusion

Twomey et al, (2023)	<p>Many tweets in the dataset reacted to the news of the deepfake as something that had been expected (n = 36), highlighting the many attempts of pre-bunking carried out by the Ukraine government.” Well this confirms the warning that Russia would use a deepfake of Zelensky sur- rendering”.</p>	solutions
Twomey et al, (2023)	<p>The reaction to deepfakes in the war was generally negative. “Deepfake tech has arrived, and it’s absolute madness”</p>	negativity
Twomey et al, (2023)	<p>Many tweets sought to explain deepfakes and deepfake news for other users, spreading information about their prevalence and defining the technology.</p>	solutions
Twomey et al, (2023)	<p>A significant portion revolved around the technical appraisal of the technology, often reflecting on their poor quality (n = 109). Specifically, many users criticised the quality of the Zelensky deepfake, which users felt didn’t live up to warnings of deepfakes or their own expectations of the technology. “You’ve seen the deepfake of Zelensky, now we’ve seen a deepfake Putin declare surrender. This is clearly better quality than the Zelensky cheapfake but it’s still poorly made. Unfortunately, the technology will get better with every advance of the technology”</p>	discussing its quality D

Twomey et al, (2023)	<p>One element of deepfakes that tweets seemed to engage in strongly was the potential of deepfakes in warfare. Deepfakes were seen as a new form of weapon (n = 28) or a new kind of propaganda (n = 10). “You’d think deepfakes are harmless, if you’ve only seen silly videos of deepfaked Keanu Reeves. Unfortunately deepfakes can be a new and vicious type of propaganda. We’ve seen it now with deepfakes of the Russian and Ukrainian leaders”</p>	worry
Twomey et al, (2023)	<p>In January and early February, people feared deepfakes would be used as a false flag to start the war (n = 22). “Russia have plans to use a deepfake video to justify an invasion of Ukraine. Before making a statement I need some time to process this”.</p>	Fear of Deepfakes
Twomey et al, (2023)	<p>This shows a worrying tolerance towards the production and distribution of deepfake disinformation when it fits one’s own political beliefs</p>	worry, polarization
Twomey et al, (2023)	<p>Many tweets in the dataset expressed a healthy scepticism towards deepfakes.</p>	scepticism
Twomey et al, (2023)	<p>Unfortunately, the majority of this type of Deepfake discourse during the war consisted of unhealthy scepticism fuelled by deepfakes.</p>	scepticism

Twomey et al, (2023)	Fears of deepfakes often undermined users trust in the footage they were receiving from the conflict (n = 85) to the point where they lost trust in any footage coming from the conflict.	distrust, scepticism, Fear of Deepfakes
Twomey et al, (2023)	This quote also highlights the scepticism of journalism and new media (n = 30) as an interpretive repertoire in the dataset.	scepticism, distrust
Twomey et al, (2023)	his highlights how deepfake discourse can be used in arguments which undermine the veracity and trustworthiness of news media	distrust, scepticism
Twomey et al, (2023)	Most emblematic of the epistemic impact of deepfakes were the deepfake accusations, particularly in situations where real media was accused of being deepfake.	distrust
Twomey et al, (2023)	In the most extreme cases of scepticism in the dataset, tweets contained conspiracy theories claiming real world events and individuals were deepfakes.	scepticism
Twomey et al, (2023)	More broadly, users suggested the war was not as it seems, referring to the entire conflict as a deepfake (n = 21).	distrust, scepticism, negativity
Twomey et al, (2023)	Despite the positive messages of these deepfakes it was felt that by showing people they had the capacities to create fake footage,	scepticism, distrust

	the Ukraine government undermined their own credibility	
Twomey et al, (2023)	In particular, the deepfake of the Ukrainian president undermines the idea that relying on reputable sources will prevent the harms of deepfakes [63], as the video was spread through the hack of a reputable Ukrainian news website	official Ukrainian news website
Twomey et al, (2023)	We found evidence for the epistemic harms of deep-fakes in cases where people doubted the veracity of real videos and in cases of deepfake conspiracy theories	distrust
Twomey et al, (2023)	We found that perceptions of deepfakes and deepfake news in the dataset were generally negative. Tweets generally focused on the harms of the technology, expressing fear and shock at the potential harms of the technology similar to the fears expressed in news articles and academic research on deepfakes [64, 65]	shock d, Fear of Deepfakes
Twomey et al, (2023)	The liar's dividend is the result of an information environment where real information can be easily discredited as fake [19]	the liar's dividend
Twomey et al, (2023)	Real video and images were decried as deepfake, people often mistook CGI for deepfakes and used deepfakes as a catch-all insult for information they did not like.	confusion

Twomey et al, (2023)	While the generally assumed threat of deepfakes is their believability, the labelling of real media as deepfakes shows the capability of deepfake discourse to undermine truth [22]	distrust
vaccari & chadwick (2020)	synthetic videos that closely resemble real videos	artificial intellegence, syntathic
vaccari & chadwick (2020)	. We find that people are more likely to feel uncertain than to be misled by deepfakes, but this resulting uncertainty, in turn, reduces trust in news on social media.	uncertainty because of deepfakes, distrust
vaccari & chadwick (2020)	This is not actually Obama speaking. A split screen appears showing Obama on the left while on the right is the renowned US actor, comedian, and director, Jordan Peele. Obama’s and Peele’s facial expressions and lip movements match perfectly. Using artificial intelligence (AI	artificial intellegence, 2018, skilled profesionals
vaccari & chadwick (2020)	The BuzzFeed video immediately went viral. Accompanied by the suitably clickbait tagline, “You Won’t Believe What Obama Says In this Video! ,” it notched up 5 million views and 83,000+ shares on Facebook, 5 million+ views on YouTube, and 4.75 million views and	went viral

vaccari & chadwick (2020)	<p>BuzzFeed created its video using increasingly common techniques known as “synthetic media” (Witness, 2018) or “deepfakes.” Relying on machine learning algorithms, software applications create highly convincing “face-graft” videos where the expressions of one person are carefully superimposed onto the head of another (GitHub, 2019a, 2019b).</p>	artificial intelligence, syntathic, software applications
vaccari & chadwick (2020)	<p>We ran an online experiment among a representative sam- ple (N = 2,005) to identify the extent to which editing out the all- important educational “big reveal” in the BuzzFeed Obama/Peele deepfake results in individuals being misled or becoming uncertain about whether the video was true or fals</p>	manipulation of the people
vaccari & chadwick (2020)	<p>And, in turn, we show that uncertainty of this kind results in lower levels of trust in news on social media. Based on these results, we argue that, if unchecked, the rise of political deepfakes will likely damage online civic culture by contributing to a cli- mate of indeterminacy about truth and falsity that, in turn, diminishes trust in online news</p>	uncertainty, distrust

<p>vaccari & chadwick (2020)</p>	<p>Deepfakes can be synthesized thanks to an AI technology called Generative Adversarial Networks (GANs; Goodfellow et al., 2014). The average person has a predictable range of jaw, lip, and head movements that correspond with the sounds they make when forming words. GANs use authentic video</p>	<p>artificial intelligence, software applications</p>
<p>vaccari & chadwick (2020)</p>	<p>However, even if viewers are not deceived by a deepfake, they may become uncertain about whether their content is true or false. Uncertainty is conceptually distinct from ambivalence. Ambivalence arises when individuals are faced with a choice on which they have conflicting opinions, so that “additional information only heightens the internalized conflict” (Alvarez & Brehm, 1997, p. 346).</p>	<p>uncertainty because of deepfakes</p>
<p>vaccari & chadwick (2020)</p>	<p>We have shown that political deepfakes may not necessarily deceive individuals, but they may sow uncertainty which may, in turn, reduce trust in news on social media</p>	<p>distrust</p>

<p>vaccari & chadwick (2020)</p>	<p>We ran an online experiment among a representative sample (N = 2,005) to identify the extent to which editing out the all-important educational “big reveal” in the BuzzFeed Obama/Peele deepfake results in individuals being misled or becoming uncertain about whether the video was true or false. In other words, our experiment reproduces the problem generated by the malicious fake kidnapping video that went viral in India.</p> <p>While we do not find evidence that deceptive political deepfakes misled our participants, they left many of them uncertain about the truthfulness of their content. And, in turn, we show that uncertainty of this kind results in lower levels of trust in news on social media.</p>	<p>deception, uncertainty because of deepfakes</p>
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<p>vaccari & chadwick (2020)</p>	<p>Theorizing Deepfakes' Impact: Deception, Uncertainty, and Trust</p> <p>Deepfakes are a new and unique form of video-based visual disinformation. At the time of this writing, there is no academic research on their effects. In this study, we assess whether deepfakes affect individuals' perceptions of truth and falsity but, just as importantly, whether they create uncertainty about the information they convey. Finally, we consider whether the uncertainty elicited by deepfakes may reduce people's trust in news on social media.</p> <p>Our initial focus is on cognitive outcomes. The obvious core of the problem is that deepfakes may deceive people. However, even if viewers are not deceived by a deepfake, they may become uncertain about whether their content is true or false.</p> <p>Uncertainty is conceptually distinct from ambivalence.</p>	<p>uncertainty because of deepfakes, distrust</p>
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<p>vaccari & chadwick (2020)</p>	<p>When used as training data for GANs (run by software that is also freely available), these materials enable users to create fabricated but realistic videos of public figures that may then be shared online without any obvious markers distinguishing them from genuine footage. AI is also being used to synthesize high quality audio mimicking human voices (Baidu Research, 2017; Gault, 2016).</p> <p>Most people may be poorly equipped to discern when they are being deceived by deepfakes. Rössler et al. (2018) found that people correctly identify fakes in only about 50% of cases—statistically as good as random guessing. Detection is especially poor when evaluating videos with the smearing and blockiness artifacts caused by the compression commonly used on social media. AI-based methods are marginally better than humans, but their effectiveness also declines when video compression is used.</p>	<p>synthetic, artificial intelligence, software applications</p>
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vaccari & chadwick (2020)	In the same month, BuzzFeed publishes a video showing former US President Barack Obama speaking directly to a camera, in what looks like the Oval Office. The first 35 seconds show only Obama’s face. Following a few mildly out-of-character statements, Obama drops a bombshell: “President Trump is a total and complete dipshit.” After a brief pause, he continues,	new realities (adding)
vaccari & chadwick (2020)	The results can be alarmingly convincing, especially with the low-resolution video that is common online.	misled
vaccari & chadwick (2020)	Political deepfakes are an important product of the Internet’s visual turn. They are at the leading edge of online, video-based disinformation and, if left unchallenged, could have profound implications for journalism, citizen competence, and the quality of democracy (Bennett & Livingston, 2018; Chadwick et al., 2018; Flynn et al., 2017; Rojecki & Meraz, 2016; Waisbord, 2018).	democracy
vaccari & chadwick (2020)	Images have stronger persuasive power than text and citizens have comparatively weak defenses against visual deception of this kind (misled

<p>vaccari & chadwick (2020)</p>	<p>Misleading visuals are more likely than misleading verbal content to generate false perceptions because, based on the “realism heuristic” (Frenda et al., 2013; Sundar, 2008), individuals treat audio and images as more likely than text to resemble “the real world” of everyday experience.</p> <p>When images and audi</p>	<p>misled</p>
<p>vaccari & chadwick (2020)</p>	<p>Social media users’ sharing behavior also matters. Video and still images are more likely than news and online petitions to spread on Twitter (Goel et al., 2015, p. 186).</p>	<p>social media platforms</p>
<p>vaccari & chadwick (2020)</p>	<p>In the long term, the general expectation that little of what is available online can be trusted may further contribute to an attitudinal spiral that “anything goes” online. This may then diminish individuals’ sense of responsibility for the information they share (Chadwick & Vaccari, 2019). It may also lead citizens to escape the news altogether, in order to avoid the stress resulting from uncertainty (Wenzel, 2019).</p>	<p>scepticism, distrust</p>
<p>vaccari & chadwick (2020)</p>	<p>In this scenario, meaningful public debate would become more difficult, as citizens struggle to reconcile the human tendency to believe visual content with the</p>	<p>distrust</p>

	need to maintain vigilance against manipulative deepfakes	
vaccari & chadwick (2020)	Widespread uncertainty may also enable deceitful politicians to deflect accusations of lying by claiming that nothing can be proved and believed	uncertainty because of deepfakes
vaccari & chadwick (2020)	On a more optimistic note, we have shown that an educational video about political deepfakes can succeed in reducing uncertainty, and in so doing can increase trust in news on social media, compared with deceptive deepfakes. However, the educational video did not reduce outright deception—a finding that chimes with an important strand of research showing the limited effects of fact-checking (e.g., Garrett et al., 2013).	decrease uncertainty,, increase trust
vaccari & chadwick (2020)	It is also possible that the reduction of trust in news on social media resulting from the uncertainty induced by deceptive deepfakes may not generate cynicism and alienation, but skepticism	scepticism
Rare Historical Photos.(b) (2021, November 19).	They asked Khaldei to remove one of the watches. Khaldei not only did so but also darkened the smoke in the background	adding, deleting of objects, edited photo

Rare Historical Photos.(b) (2021, November 19).	The resulting picture was published soon after in the magazine Ogonjok. It became the version that achieved worldwide fame.	Magazine
Rare Historical Photos.(b) (2021, November 19).	Soviets finally captured the Reichstag on 2 May 1945.	WWII, Stalin
Rare Historical Photos.(b) (2021, November 19).	The original photo (left) was altered (right) by editing the watch on the soldier's right wrist.	deleting of objects
Rare Historical Photos.(b) (2021, November 19).	The "Soviet flag over Reichstag" photograph is full of symbolism and represents a historic moment.	Symbolism,
Rare Historical Photos.(b) (2021, November 19).	Noting the publicity the Iwo Jima photo had received, Soviet officials (perhaps Stalin himself) ordered Khaldei to fly from Moscow to Berlin in order to take a similar photo that would symbolize the Soviet victory over Germany	government, specialized artists
Rare Historical Photos.(b) (2021, November 19).	On May 2, 1945, proceeded to recreate the scene	staged

<p>Rare Historical Photos.(b) (2021, November 19).</p>	<p>Back in Moscow, Soviet censors who examined the photo noticed that one of the soldiers had a wristwatch on each arm, indicating he had been looting. They did not want to impose that image on their countr</p>	<p>control</p>
<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>his skin is smooth, his hair and mustache silky</p>	<p>edited photo</p>
<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>Stalin could order written out of history such comrades he ultimately deemed disloyal (and who usually wound up executed as)</p>	<p>government</p>
<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>Nikolai Yezhov, pictured right of Stalin, was later removed from this photograph at the Moscow Canal.</p>	<p>erasure of people</p>
<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>Sometimes, photo doctoring meant going back to the past to change the historical record, as when Stalin ordered Leon Trotsky, who helped create Communism, eliminated from all photos.</p>	<p>legitimizing</p>

<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>Using tools that now seem impossibly primitive,</p> <p>Soviet proto-Photoshoppers made “once-famous personalities vanish” and crafted</p> <p>photographs representing Stalin “as the only true friend, comrade, and successor to</p> <p>Lenin, the leader of the Bolshevik Revolution and founder of the USSR.</p>	<p>specialized artists</p>
<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>During the purges, many of Stalin’s enemies simply vanished from their homes.</p> <p>Others were executed in public after show trials. And since Stalin knew the value of</p> <p>photographs in both the historical record and his use of mass media to influence the</p> <p>Soviet Union, they often disappeared from photos, too.</p>	<p>control, delegitimizing, government</p>
<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>This quasi-artisanal work, one of the more enjoyable tasks for the art department of</p> <p>publishing houses during those times, demanded serious dexterity with the scalpel,</p>	<p>specialized artists, Publishing houses</p>

	glue, paint, and airbrush	
Rare Historical Photos. (a) (2021, December 7).	his picture was taken in 1926 and portrays Stalin with party bosses Nikolai Antipov, Sergey Kirov, and Nikolai Shvernik (from left to right). One by one, all except Stalin disappeared from the picture	erasure of people
Rare Historical Photos. (a) (2021, December 7).	Alexander Malchenko (standing, on the left) was not so lucky: in 1930 he was accused of being a spy, executed, and replaced with a white spot.	erasure of people
Rare Historical Photos. (a) (2021, December 7).	Lenin was speaking to a crowd in 1920 but four years later, before publishing the image, the editors decided to make his audience bigger	adding
Rare Historical Photos. (a) (2021, December 7).	his group photo from 1920 contained so many “people’s enemies” (Grigory Zinoviev, Nikolai Bukharin, Karl Radek – all shot in the 1930s) that the authorities cut it down to just Lenin and	erasure of people, government

	<p>proletariat writer Maxim Gorky (behind Lenin, with the mustache)</p>	
<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>n this photo from 1920, Trotsky, in a cap, stands nearby Lenin who is giving a speech from a tribune. In the later version, Trotsky is nowhere to be seen.</p>	<p>erasure of people</p>
<p>Rare Historical Photos. (a) (2021, December 7).</p>	<p>or instance, this picture from a 1917 demonstration was not considered revolutionary enough by the powers that be: the shop sign on the left says “Clocks. Gold and silver” and the text on a tag is unreadable. But hey presto, a little bit of Bolshevik magic later and the sign reads “You’ll take what’s yours through struggle” and the tag – “Down with the monarchy!”</p>	<p>adding, edited photo, agitation, manipulation</p>
<p>COMRADE Gallery. (n.d.-b.)</p>	<p>his carefully crafted image gave the impression that Stalin and Lenin</p>	<p>legitimizing, manipulation</p>

	were close friends, when they were anything but.	
COMRADE Gallery. (n.d.-b.)	. They made it appear as if the two men were sitting side-by-side, implying that Stalin was Lenin's heir apparent. They also "smoothed Stalin's pockmarked complexion, lengthened his disfigured left arm, and increased his stature so that Lenin seems to recede benignly".	adding, edited photo
COMRADE Gallery. (n.d.-b.)	Stalin's photo technicians went to work, creating a new reality.	government, specialized artists

<p>COMRADE Gallery. (n.d.-b.)</p>	<p>Major website update in progress. Please excuse any issues or bugs. Need help?</p> <p>hello@comradekiev.com</p> <p>C O M R A D E</p> <p>The Art of Deception: Photo Manipulation in Stalin's Soviet Surveillance State</p> <p>In the shadows of Soviet power, a secret war was being waged - not with guns and bombs, but with brushes, chemicals, and darkroom tricks.</p> <p>Welcome to the world of Stalin's photo manipulators, where history was rewritten one snapshot at a time.</p> <p>Stalin's rise to power in the 1920s coincided with a period of intense political struggle within the Soviet Union. As he consolidated his control,</p> <p>Stalin recognized the power of visual propaganda in shaping public</p>	<p>legitimizing, delegitimizing, control, persuade</p>
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perception. In 1922, a pivotal moment in this propaganda war occurred

when a photograph of Stalin and Lenin sitting side-by-side appeared in

every newspaper across the Soviet Union. But everything wasn't as it

seemed. The photograph was a fake.

This carefully crafted image gave the impression that Stalin and Lenin

were close friends, when they were anything but. In reality, "Lenin

described Stalin as intolerably rude and capricious and recommended

that he be removed from his position as the Communist Party's

secretary general". Stalin's photo technicians went to work, creating a

new reality. They made it appear as if the two men were sitting side-by-

side, implying that Stalin was Lenin's heir apparent. They also "smoothed

Stalin's pockmarked complexion, lengthened his disfigured left arm, and

increased his stature so that Lenin seems to recede benignly". This

photograph is believed to be the first time Stalin used photo

manipulation to create his own version of reality, but it certainly

wouldn't be the last.

In the tightly controlled Soviet media landscape, photoshopped images

served many purposes. They reinforced Stalin's narrative of being Lenin's

chosen successor, erased political rivals from the history books, and

presented an idealised version of Soviet life to both domestic and

international audiences.

<p>COMRADE Gallery. (n.d.-b.)</p>	<p>he ubiquity of these manipulated images in newspapers, posters, and official publications helped create an alternate reality that millions of Soviet citizens were forced to accept as truth.</p>	<p>posters, Newspapers, Official publications</p>
<p>COMRADE Gallery. (n.d.-b.)</p>	<p>"In one photograph, Stalin is shown with a group of three of his deputies. As each deputy fell out of favour, they were snipped out of the photo until only Stalin remained."</p>	<p>erasure of people</p>
<p>COMRADE Gallery. (n.d.-b.)</p>	<p>By the 1940s, Stalin's army of retouchers had progressed from simple retouching to falsifying reality. Their methods were surprisingly sophisticated for the time, relying on a combination of darkroom techniques and physical alteration of negatives and prints. These included composite imaging, airbrushing, negative retouching, double exposure, and forced perspective.</p>	<p>specialized artists</p>

	<p>These techniques required</p> <p>considerable skill and patience, often involving hours of painstaking</p> <p>work to achieve the desired result.</p>	
<p>COMRADE Gallery. (n.d.-b.)</p>	<p>As Berlin fell in the closing days of WWII, Red Army photographer</p> <p>Yevgeny Khaldei staged a photo of several soldiers raising the Soviet</p> <p>flag on the roof of the Reichstag building.</p>	<p>staged</p>

<p>COMRADE Gallery. (n.d.-b.)</p>	<p>However, even this triumphant moment required editing. Khaldei's editor noticed that one of the soldiers was wearing a wristwatch on each arm, indicating that he had been looting. The photograph was edited to remove the extra watch, to appease Stalin and potentially save the soldier's life.</p>	<p>deleting of objects, edited photo</p>
<p>COMRADE Gallery. (n.d.-b.)</p>	<p>The constant manipulation of visual evidence had profound effects on the Soviet people. It created an atmosphere of uncertainty and fear, where citizens could never be sure of what was real and what was fabricated. People began to question their own memories when confronted with contradictory "official" photographs, leading to a culture of self-censorship and paranoia.</p>	<p>fear, paranoia, civillians, uncertainty</p>

<p>COMRADE Gallery. (n.d.-b.)</p>	<p>During the Great Purge, civilians even participated in their own form of photo editing. Fearing association with Stalin's enemies, many would deface or destroy photographs, magazines, or books containing images of those who had fallen out of favour.</p>	<p>civillians, fear</p>
<p>COMRADE Gallery. (n.d.-b.)</p>	<p>They also "smoothed Stalin's pockmarked complexion, lengthened his disfigured left arm, and increased his stature so that Lenin seems to recede benignly". This photograph is believed to be the first time Stalin used photo manipulation to create his own version of reality, but it certainly wouldn't be the last. In the tightly controlled Soviet media landscape, photoshopped images served many purposes. They</p>	<p>control, legitimizing</p>

reinforced Stalin's narrative of being Lenin's

chosen successor, erased political rivals from the history books, and

presented an idealised version of Soviet life to both domestic and

international audiences. The ubiquity of these manipulated images in

newspapers, posters, and official publications helped create an alternate

reality that millions of Soviet citizens were forced to accept as truth.

Photo editing became a powerful form of censorship, allowing Stalin to

rewrite the past.

<p>COMRADE Gallery. (n.d.-b.)</p>	<p>During the Great Purge,</p> <p>civilians even participated in their own form of photo editing.</p> <p>Fearing</p> <p>association with Stalin's enemies, many would deface or destroy</p> <p>photographs, magazines, or books containing images of those who had</p> <p>fallen out of favour.</p> <p>Soldiers raising the Soviet flag on the roof of the Reichstag building. Credit: Yevgeny Khaldei</p> <p>The act of erasing reality and truth through photo falsification under</p> <p>Stalin's rule means "that it is possible to tell the story of the Soviet era</p> <p>through retouched photographs". While Stalin's regime may have</p> <p>perfected the art of photo manipulation for political ends, the practice</p> <p>has evolved. Today, deep fakes and voice cloning make it easier than</p>	<p>delegitimizing, civilians</p>
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	<p>ever to alter reality.</p>	
<p>COMRADE Gallery. (n.d.-b.)</p>	<p>Their methods were surprisingly sophisticated for the time, relying on a combination of darkroom techniques and physical alteration of negatives and prints. These included composite imaging, airbrushing, negative retouching, double exposure, and forced perspective. These techniques required</p>	<p>airbrushing, cropping of picture, glueing and cutting</p>

	<p>considerable skill and patience, often involving hours of painstaking</p> <p>work to achieve the desired result</p>	
Blakemore, (2022)	<p>he disappeared from Soviet photographs, too, his existence blotted out by a retouched suit on another ocial from the original photo.</p> <p>Enukidze’s erasure was the product of a real conspiracy to change public perception in the USSR during Joseph Stalin’s dictatorship.</p>	Stalin, delegitimizing, erasure of people
Blakemore, (2022)	<p>Stalin’s commitment to censorship and photo doctoring was so strong that, at the height of the Soviet Union’s international power, he rewrote history using photo alteration. The stakes weren’t just historical: Each erasure meant a swing of Stalin’s loyalties, and most disappeared subjects also</p>	Stalin, manipulation, government

	disappeared (or were killed) in real life, too.	
Blakemore, (2022)	And since Stalin knew the value of photographs in both the historical record and his use of mass media to influence the Soviet Union, they often disappeared from photos, too.	Official publications
Blakemore, (2022)	Stalin used a large group of photo retouchers to cut his enemies out of supposedly documentary photographs.	government, specialized artists
Blakemore, (2022)	Stalin's censors then removed Yezhov from the photographic record, including cutting him from a photograph in which he smiled next to his former boss, Stalin, next to a waterway. The photo retouchers removed Yezhov from the photo and inserted new water to cover up the space where Yezhov would have been.	erasure of people, Stalin, control, delegitimizing, manipulation, government, specialized artists
Blakemore, (2022)	Sometimes, social censors had to retouch photos over and over again as the list of political enemies grew longer.	edited photo, erasure of people, government, specialized artists

Blakemore, (2022)	<p>t’s thought that Stalin’s obsession with photo doctoring constituted a mini industry in the USSR. Publishers were contacted by Stalin’s minions and told to eliminate the enemy du jour from upcoming photos—and they did. According to design historian David King, who uncovered thousands of doctored photos and their original versions, the work was not performed in one location or even through an ocial ministry</p>	publishing house, government
Blakemore, (2022)	<p>King writes, “photographic manipulation worked very much on an ad hoc basis. Orders were followed, quietly. A word in an editor’s ear or a discreet telephone conversation from a ‘higher authority’ was sucient to eliminate all further reference—visual or literal—to a victim, no matter how famous she or he had been.</p>	erasure of people, control, government, publishing house
Blakemore, (2022)	<p>ven citizens had to get in on the act. As Stalin’s purges became more and more widespread, civilians who feared being branded as his political enemies began to realize that owning photos of Stalin’s political enemies—even photos in books or magazines—was dangerous. They learned to deface their own materials with scissors or ink. “Such was the atmosphere of fear that families of those arrested and condemned were</p>	fear, civillians, erasure of people

	<p>compelled to destroy even the image of their loved ones in their own personal records,” writes biographer Helen Rappaport.</p>	
<p>Blakemore, (2022)</p>	<p>hen, the ocial portrait was reproduced and retouched over and over until it met with Stalin’s liking.</p>	<p>Stalin, edited photo, adding, legitimizing, government</p>
<p>Blakemore, (2022)</p>	<p>It was also altered specically to sidestep Stalin’s anger: The photographer concealed the wrists of the soldiers, which were covered in stolen wristwatches they had looted from German citizens on their way to the Reichstag. Stalin had ordered his soldiers not to loot—so the watches would have caused the soldiers to be disciplined and, perhaps, killed.</p>	<p>fear, erasure of people, edited photo, specialized artists</p>

<p>Blakemore, (2022)</p>	<p>n't stop with photos. As historian Jan Plamper notes, the omnipresent portraits of Stalin that were in every home and business were subject to maniacal oversight. The dictator commissioned an army of painters to create his official portraits, offering some artists massive amounts of money to paint him. Then, the official portrait was reproduced and retouched over and over until it met with Stalin's liking.</p> <p>“The amount and detail of documentation on retouching (and the entire reproduction process) is astounding,” writes Plamper.</p> <p>“This reflects a heightened concern to x upon paper clear responsibilities—and tremendous anxiety, lest something go awry.”</p> <p>As photo doctoring became more and more common in the USSR's propaganda effort, it als</p>	<p>fear</p>
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	<p>Orders were followed, quietly. A word in an editor’s ear or a discreet telephone conversation from a ‘higher authority’ was sufficient to eliminate all further reference—visual or literal—to a victim, no matter how famous she or he had been.”</p> <p>Sometimes, photo doctoring meant going back to the past to change the historical record, as when Stalin ordered Leon Trotsky, once a leading figure in the Communist Party, eliminated from all photos. After Trotsky was exiled by Stalin for mounting a failed opposition to his leadership, the revolutionary was snipped,</p> <p>10-12-2024, 17:51 How Photos Became a Weapon in Stalin’s Great Purge HISTORY</p> <p>https://www.history.com/news/joseph-stalin-great-purge-photo-retouching 2/5</p> <p>airbrushed and covered up in countless photographs.</p>	Publishing houses
Blakemore, (2022)	airbrushed and covered up in countless photographs.	airbrushing
King, (1997)	Joseph Stalin’s pockmarked face, in particular, demanded exceptional skills with the airbrush.	edited photo

King, (1997)	But it was during the Great Purges, which raged in the late 1930s,	Stalin, great purge
King, (1997)	Photographs for publication were retouched and restructured with airbrush and scalpel to make once famous personalities vanish.	erasure of people
King, (1997)	At the same time, a parallel industry came into full swing, glorifying Stalin as the “great leader and teacher of the Soviet people” through socialist realist paintings, monumental sculpture, and falsified photographs representing him as the only true friend, comrade, and successor to Lenin, the leader of the Bolshevik Revolution and founder of the USSR. The whole country was subjected to this charade of Stalin-worship.	legitimizing, manipulation, persuade
King, (1997)	Soviet citizens, fearful of the consequences of being caught in possession of material considered “anti-Soviet” or “counterrevolutionary,” were forced to deface their own copies of books and photographs, often savagely attacking them with scissors or disfiguring them with India ink. There is hardly a publication from the Stalinist period that does not bear the scars of this political van-	fear, civilians

King, (1997)	<p>The libraries of the former Soviet Union still bear these scars of “vigilant” political vandalism. Many volumes—political, cultural, or scientific—published in the first two decades of Soviet rule had whole chapters ripped out by the censors. Reproductions of photographs of future “enemies of the people” were attacked with disturbing violence. In schools across the country, children were actively engaged by their teachers in the “creative” removal of the denounced from their textbooks. A collective paranoia stretched right through the period of Soviet rule.</p>	civillians, control, paranoia, fear, government
King, (1997)	<p>A friend of mine, the manager of an antiquarian book- shop in Leningrad in the 1960s, told me that he remembered well the twice-monthly visits of a matronly lady from the censorship bureau, who spent hours rifling through the thousands of books on his shelves, checking them against her latest copy of the Summary List (which was always being updated). Those volumes found to be unacceptable were put in a special garbage can at the back of the store</p>	Stalin, control, government, cold war

<p>King, (1997)</p>	<p>Rather, photographic manipulation</p> <p>worked very much on an ad hoc basis. Orders were followed, quietly. A word in an editor's ear or a discreet telephone conversation from a “higher authority” was sufficient to eliminate all further reference—visual or literal—to a victim, no matter how famous she or he had been.</p>	<p>control, erasure of people, government, Publishing houses</p>
<p>King, (1997)</p>	<p>but in the</p> <p>Soviet Union cropping was also used with political objectives in mind.</p>	<p>control, manipulation, government, specialized artists</p>

<p>King, (1997)</p>	<p>addition—the addition of himself— was another. From the time of his birth in 1879 until he was appointed General Secretary in 1922, there probably exist fewer than a dozen photographs of him. For a man who claimed to be the standard-bearer of the Communist movement, this caused grave embarrassment, which could only be overcome by painting and sculpture. Impression-ism, expressionism, abstraction—for Stalin, none of these artistic movements was capable of showing his image properly. So he made realism—socialist realism— the central foundation of the Stalin cult. A whole art industry painted Stalin into places and events where he had never been, glorifying him, mythologizing him. Sculpture worked well for him, too.</p>	<p>publishing house, posters, legitimizing, persuade, glorifying, Newspapers, Official publications, specialized artists</p>
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King, (1997)	<p>For nearly thirty years, Malchenko was</p> <p>airbrushed out of the photograph whenever</p> <p>it was reproduced. He was rehabilitated in</p> <p>1958, at which point his presence was allowed to reappear.</p>	delegitimizing, erasure of people
King, (1997)	<p>In this version of the picture,</p> <p> Vladimir Bazarov was cut off and airbrushed which was published in 1960 by the out of the left-hand side of the photograph Moscow Institute of Marxism-Leninism,</p>	delegitimizing, control, manipulation, erasure of people, government, Official publications
King, (1997)	<p>Peshkov has been allowed to reappear.</p> <p>giant album entitled Lenin (Moscow 1939). Bazarov is still missing, his place taken by a ;</p> <p>rased was Zinovii Peshkov, who had ghostly pillar. There is no explanation for</p> <p>nding behind Maxim Gorky and the appearance, disappearance, and</p> <p>rdanova. reappearance of a womans skirted knee in the</p>	adding, erasure of people, edited photo

	foreground of the three versions of the photograph.	
King, (1997)	<p>pposite: Another version of this photograph</p> <p>Tae </p> <p>(top) was reproduced in the giant commemorative album Stalin published in 1939 to celebrate the tyrant's sixtieth birthday. T</p>	government
King, (1997)	his time five more members of the group have been replaced by vegetation, fencing, and a better view of the log cabin.	erasure of people

<p>King, (1997)</p>	<p>oldiers demonstrating in the Liteiny Prospekt during the first days of the February</p> <p> Revolution, Petrograd, 1917. Thousands of souvenir postcards like this one were published</p> <p>during the great upheavals of 1917. In the background can be seen a jeweler’s shop with its [he slogan on the soldier’s flag is almost illegible. Above: The same photogr: aph, also published as a postcard in the same year, but now the jeweler’s signboard has been crudely replaced with the slogan “Struggle for Your Rights!”</p> <p>signboard, “Watches—gold and silver.” ”</p> <p>The soldier’s flag has been transformed from black to white and reads “Down with ‘the Monarchy—Long Live the Republic!”</p>	<p>adding, agitation</p>
<p>King, (1997)</p>	<p>Opposite: A heavily cropped and airbrushed version (top) of the same picture published in USSR in Construction magazine in 1939</p> <p>shows only Kirov and Ordjonikidze</p>	<p>edited photo, erasure of people</p>

<p>King, (1997)</p>	<p>In another issue of the magazine (below right), the two commissars have now been</p> <p>joined by Mikoyan, who has been made to jump at least eight places from his position in the original photograph. The soldiers in the background of the original print</p> <p>have been upstaged by a backdrop</p> <p>drawing of a much more colorful band of stereotypes.</p>	<p>erasure of people, adding, legitimizing, control, Publishing houses</p>
<p>King, (1997)</p>	<p>He was expelled</p> <p>from the Communist Party on November 14, 1927. Subsequent</p> <p>versions (as shown right) have both Trotsky and Kamenev</p> <p>painted</p> <p>out and five wooden steps painted</p> <p>i</p>	<p>adding, erasure of people</p>
<p>King, (1997)</p>	<p>he photograph was being widely published heavily</p> <p>cropped to an upright (above) and retouched to</p> <p>exclude everyone but the writer and the dead leader.</p>	<p>erasure of people</p>

<p>King, (1997)</p>	<p>Right: As late as the 1980s, only this ø ropped version of the group on the</p> <p> previous page could be published,</p> <p>albeit slightly modified.</p>	<p>control, manipulation, erasure of people</p>
<p>King, (1997)</p>	<p>By the time the photograph was used in a memorial issue dedicated to Lenin</p> <p>published by Krasnaya Niva (Red Field) magazine on February 17, 1924, it must have been judged</p> <p>necessary to boost Lenin's popularity. In spite of the magazine's poor reproduction it can be seen (opposite, above) that the audience in front of Lenin in the first picture has been replaced by a much more dramatic crowd scene shot on another occasion (opposite, below).</p>	<p>adding, legitimizing</p>

King, (1997)	<p>Left: When the photograph was reproduced nineteen years later at the height of the purges, all the adults from the village and many of the children had been eliminated. The darkened, airbrushed background makes this version doubly sinister</p>	<p>erasure of people, great purge, manipulation, control</p>
King, (1997)	<p>above right: In a retouched version of the same photo, published in a portfolio of photographs celebrating Stalin's sixtieth birthday in 1939, there is no longer room for Petrovsky, and Ordjonikidze has been moved closer to his boss by the retoucher.</p>	<p>delegitimizing, erasure of people, edited photo, government, posters</p>
King, (1997)	<p>The photograph (above) of Lenin and Stalin in Gorki, near Moscow, in 1922 bears every sign of having been faked. But from the mid-1930s the Stalinist propaganda machine churned out thousands of sculptures, paintings, prints, and drawings to exaggerate the closeness of their relationship in ever more ridiculous degrees.</p>	<p>legitimizing, adding, government, sculptures, paintings, prints, drawings, specialized artists</p>

King, (1997)	<p>Republished in 1970 (above), the threat has become less critical, but a faint and sinister beam now radiates from the barrel toward Krupskaya.</p> <p>Left: At the close of Soviet rule at the end of the 1980s, the retouchers at last eradicated the threat, and calm was restored.</p>	glorifying, edited photo, government
King, (1997)	<p>When the same photograph was printed (opposite) in 1939 as part of a pictorial biography published to celebrate Stalin's sixtieth birthday, the retoucher's deft hand was there for all to see. Stalin's skin has been positively pancaked, his hair and mustache are now as smooth as a matinee idol's, and the glint in his eye is all that remains of the original</p>	edited photo, glorifying
King, (1997)	<p>same photograph biographies of Stalin appeared in 1939 and 1949, has been retouched and group to four.rearranged to reduce the</p> <p>oN</p> <p>= ne oO</p>	<p>erasure of people, edited photo, Stalin, legitimizing, delegitimizing, manipulation, government</p>

	<p>F UB} Se — od w =) cq vu Nn oO a [aw ov n ° ley =) Qo ° =) (ss vu O oVvQO. 33 WY >ll(a)Ww oes}</p>	
King, (1997)	<p>When the photograph above was published</p> <p>in the poorly printed History of the USSR</p> <p>(Moscow, 1940), Antipov and the chandelier</p> <p>had been deleted</p>	<p>history of the USSR, erasure of people</p>
King, (1997)	<p>Overleaf, left-hand page: It is unclear why Shvernik was also eclipsed from the picture,</p> <p>now heavily airbrushed, when it was used in Joseph Stalin—A Short Biography (Moscow, 1949).</p>	<p>Stalin's biography, control, erasure of people</p>

<p>King, (1997)</p>	<p>Stalin's contempt for the ordinary worker is shown clearly in two versions of the same picture taken at the time of the Sixteenth Party Congress in 1930. In the original photograph (above) an attendant is seen pointing his finger, helpfully directing the "Boss" (Vhozd), as he was often known. When the photograph was printed in Projector magazine (above right)</p>	<p>edited photo, erasure of people, Magazine</p>
<p>King, (1997)</p>	<p>Three years later, Popov and Tanev were condemned by a Soviet court on false charges. This accounts for their departure from this late-1930s retouched version (center). Knorin, a Latvian, was also dispensed with. He was later tortured with a hot iron to his neck for "nationalist deviations." In a Bulgarian homage to Stalin published in 1949 (/eft), Ordjonikidze and Manuilsky have also disappeared from view. Dimitrov became premier of Bulgaria in 1946, so perhaps it was on his orders that Manuilsky, a ruthless Stalinist, had to be ejected.</p>	<p>erasure of people, delegitimizing, manipulation</p>

King, (1997)	<p>pposite: When the photograph was printed in a mammoth volume honoring the exercise, some refinements had been made. The onlookers to the left have all disappeared. Lazar Kaganovich, the heavy-industry boss who was obscured by Voroshilov (second from the right in the original), has now been</p> <p>planted behind Kuibyshev (right). His waving hand (see original) has gone, but a lump of his shoulder has been left just behind Voroshilov's. Most thoughtfully, the retouchers have cleared up the litter under the commissar's boots.</p>	<p>erasure of people, edited photo, manipulation</p>
King, (1997)	<p>Right: Abel Yenukidze was expelled from the Party by the Central Committee in June 1935. Not surprisingly, therefore, in the edition of Pravda that broke the news of the decision,</p>	<p>erasure of people, Newspapers</p>
King, (1997)	<p>Many Party bosses photographed in Zen Years of Uzbekistan were liquidated. The album suddenly became illegal literature. Using thick black India ink, Rodchenko was compelled to deface his own book.</p>	<p>fear, control, government, black ink deleting</p>

King, (1997)	<p>Left: Almost exactly the same photograph was published shortly afterward in a portfolio about the congress, but Yenukidze’s presence was no longer acceptable, and he has been faded into the background.</p>	<p>erasure of people, delegitimizing, manipulation, government</p>
King, (1997)	<p>Opposite, above: The Uzbek edition of Zen Years of Uzbekistan appeared in 1935, after Yenukidze had been sacked from the Central Committee. The Uzbek Party apparatchiks and Molotov remain, but Yenukidze’s departure has necessitated major alterations to Tursun Kodzhayev’s suit.</p>	<p>erasure of people, government</p>
King, (1997)	<p>Pravda announced that “not one disorder, not one accident, should go unheeded.” In the factories, “there can be no breakdowns. . . . Look for an enemy.” The slightest mistake, miscalculation, or misprint was judged deliberate. Mass executions of workers, skilled and unskilled,</p>	<p>control, agitation, paranoia</p>

	followed. Top: Fyodor Antonoy's painting Disclosure	
King, (1997)	The photograph is heavily retouched, but when it was published fourteen years later (right), it was retouched even further: now Pyatnitsky has vanished.	erasure of people, delegitimizing, government
King, (1997)	op center: M. 1. Erbanoy, the first secretary, was also purged and deleted from the photograph when it was reproduced later.	control, delegitimizing, erasure of people, government
King, (1997)	Center: The same photograph published on Stalin's seventieth birthday in 1949. Yezhoy and the director of the Art Theater, Y. Boyarsky, have been spirited away by the retouchers, who have carefully extended the dark wooden paneling.	erasure of people, edited photo, delegitimizing, control, government

<p>King, (1997)</p>	<p>bove, left and right: Yezhoy's removal from his other post as commissar of water transport is clearly illustrated in this photograph of a gentle stroll along the banks of the Moscow- Volga canal. In the retouched version, only Voroshilov, Molotoy, and Stalin are left to pass the time of day. The canal had been constructed by forced labor at an enormous cost in human lives</p>	<p>erasure of people, delegitimizing, government</p>
<p>King, (1997)</p>	<p>Right: The same photograph, widely published four years later, shows the deletion of two officials between Antonoy and Gromyko. Admiral of the Fleet . Kuznetsov had been Supreme Commander of the</p>	<p>erasure of people, government</p>

<p>King, (1997)</p>	<p>For example, the notorious secret-police torturer Yakov Peters (page 133) had suffered an ethereal, Rothko-like extinction. The face of party functionary Akmal Ikramoy, veiled in ink, had become a terrifying apparition (page 129). And there, suffering a second death, was Isaak Zelensky, his face wiped out in one great blob and his name obliterated in the caption beneath.</p> <p>This defacing, forced upon Rodchenko, is only one example among thousands of similar actions from the Great Terror and beyond. The libraries of the former Soviet Union still bear these scars of “vigilant” political vandalism. Many volumes—political, cultural, or scientific—published in the first two decades of Soviet rule had whole chapters ripped out by the censors.</p>	<p>civillians, fear</p>
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<p>King, (1997)</p>	<p>y led the revolutionary party and new Soviet state. Thus, as David King shows us, were the commissars made to vanish. Why all this happened is still being passionately debated in Russia.</p> <p>Nor did the consequences end with Stalin. Generations of Soviet children, now Russian adults, were taught his versions of history well into the 1980s. In the 1950s and early 1960s, Nikita Khrushchev,</p> <p>the first post-Stalin leader, did reveal part of the historical truth, but even that was largely re-falsified during the long reign of his succes-</p> <p>sor, Leonid Brezhnev. Unlimited truth-telling began only in the late 1980s, when Mikhail Gorbachev unleashed a tidal wave of historical revelations in his attempt to de-Stalinize the Soviet system</p>	<p>fear</p>
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King, (1997)	<p>Photographs for publication were retouched and restructured with airbrush and scalpel to make once famous personalities van- ish. Paintings, too, were often withdrawn from museums and art galleries so that compromising faces could be blocked out of group portraits. Entire editions of works by denounced politicians and writers were banished to the closed sections of the state libraries and archives or simply destroyed. At the same time, a parallel industry came into full swing, glo- rifying Stalin as the “great leader and teacher of the Soviet people” through socialist realist paintings, monumental sculpture, and falsified photographs representing him as the only true friend, comrade, and successor to Lenin, the leader of the Bolshevik Revolution and founder of the USSR. The whole country was sub- jected to this charade of Stalin-worship.</p>	Symbolism,, glorifying
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GHOST TRAIN

Opposition (Throughout the (ivil

/:

War that followed the October

Revolution, propaganda trains

steamed across the embattled

countryside, trying to persuade

the local citizens to join the Reds
in

the struggle against the capitalist-

backed White armies. Powerfully
painted on the outside by

enthusiastic revolutionary
designers and caricaturists, the
carriages were

converted into movie theaters,

| libraries, telegraph offices,

printshops, and meeting rooms.

The latest news from the various
fronts was turned into type,
printed, and published in traveling
newspapers. In the cities agitprop
trams railed through the streets,

King, (1997)

agitation

and on the rivers there were even
agitprop ships.

<p>King, (1997)</p>	<p>A word in an editor's ear or a discreet telephone conversation from a “higher authority” was sufficient to eliminate all further reference—visual or literal—to a victim, no matter how famous she or he had been.</p> <p>Faking photographs was probably considered one of the more enjoyable tasks for the art department of publishing houses during those times. It was certainly much subtler than the “slash-and-burn” approach of the censors. For example, with a sharp scalpel, an incision could be made along the leading edge of the image of the person or object adjacent to the one who had to be removed. With the help of some glue, the first could simply be stuck down on top of the second. A little paint or ink was then carefully brushed around the cut edges and background of the picture to hide the joins.</p> <p>Likewise, two or more photographs could be cannibalized into one using the same method.</p>	<p>glueing and cutting, cropping of picture</p>
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King, (1997)	<p>Alternatively, an airbrush (an ink-jet gun powered by a cylinder of compressed air) could be used to spray clouds of ink or paint onto the unfortunate victim in the picture. The hazy edges achieved by the spray made the elimination of the subject less noticeable than crude knife- work.</p> <p>Many photographic deletions were not the result of retouching at all but of straightforward cropping. Art departments have</p> <p>Left: Embossed-metal cover for a 1939 biography of Stalin, based on Sergei</p> <p>Merkurov's 100-foot-tall granite sculpture, which stood at the entrance to the Moscow-Volga canal.</p> <p>always cropped photographs on aesthetic grounds, but in the Soviet Union cropping was also used with political objectives in mind.</p>	airbrushing, cropping of picture
Barari, et al. (2021).	In sum, our results show that while deepfakes may not be uniquely deceptive, they may still erode	polarization, distrust

	trust in media and increase partisan polarizatio	
Barari, et al. (2021).	In order to produce a high-quality deepfake, albeit demonstrative of current technological capabilities, we consulted Buzzfeed CEO Jonah Peretti, who produced the first viral deep- fake video in 2018 of Barack Obama telling the world that “President Trump is a complete and utter dipsh*t”. In the correspondence below, he explained how the deepfake, created via a professional actor’s expert impersonation and synthesized via face-swap, came to exist, emphasizing the need for a high-quality impersonator and post-production	profesional actors, new realities (adding)
Barari, et al. (2021).	The idea was shaped by Jordan’s ability to do a good Obama impersonation - so that part isn’t fancy tech. Jordan is just better at impressions than other people making deep fakes and he did Obama as a character on Key & Peele. Then we worked with Jared who used a combination of deep fake software down- loaded from Reddit and Adobe products we use to do video effects and post production work. It wasn’t straightforward and required a	artificial intellegence, software applications

	combination of approaches and Jared's prodigious talents.	
Barari, et al. (2021).	Barack Obama (fake news announcement)	deception
Mack, (2018)	Oscar-winning filmmaker Jordan Peele has a warning for viewers about trusting material they encounter online.	skilled professionals
Mack, (2018)	his lips moving in perfect sync with his words as they become increasingly bizarre. “	realistic, artificial intelligence
Mack, (2018)	The fakery was built using Adobe After Effects, a readily available piece of video software, and FakeApp, an artificial intelligence program that made headlines in January when it was used to transplant actor Nicolas Cage's face into several movies in which he hadn't appeared.	software applications

Mack, (2018)	a rendering that took more than 56 hours of automatic processing	software applications
Greengard, (2019)	For example, when Peel created the Obama deepfake video, he only had to manipulate the area around the mouth, and use his voice to impersonate the president's.	easier
Greengard, (2019)	Peele in conjunction with online publication BuzzFeed.	online publication platforms
Greengard, (2019)	The goal was to help educate the public about the potential dangers of deepfakes	solutions
2206.12043v1.pdf	Participants correctly identified 66% of the deep-fake videos, as compared to chance performance of 50% (pooled responses from all participants – so-called crowd wisdom	solutions
Akmeşe, (2023)	Image -2, Zelenskyy's real video is compared with the deepfake video and it is revealed that the video is a deepfake. In the image, it is noticeable that the face and body are larger than they are. The fact that the face and body move more than they do in the image and that Zelensky blinks very quickly suggests that the video is a deepfake	syntathic, artificial intellegence

Akmeşe, (2023)	<p>Following the announcement of the Ukrainian Land Forces on 2 March 2022 from its official Facebook account that Russia could publish a deepfake video aimed at Ukraine, it was determined that there was</p> <p>84</p> <p>a significant increase in searches. The increase in searches on YouTube for deepfakes is; It shows that the warnings made with the support of the state have been taken into consideration and have been successful.</p>	solutions
Simonite, (2022)	<p>The clip was also posted to Telegram and Russian social network VKontakte, according to the US think tank the Atlantic Council. TV Channel Ukraine 24 said hackers defaced its website with a still from the video and inserted a summary of the fake news into a broadcast's scrolling chyron.</p>	Vkontakte, online publication platforms, Telegram
Simonite, (2022)	<p>Minutes after the TV station posted about the hack, Zelensky himself posted a Facebook video denying that he had asked Ukrainians to lay down their arms and calling the fake a childish provocation</p>	solutions
Simonite, (2022)	<p>hat short-lived saga could be the first weaponized use of deepfakes during an armed conflict,</p>	anonymous

	although it is unclear who created and distributed the video and with what motiv	
Simonite, (2022)	A fake video emerged on Facebook and YouTube in which a strangely motionless version of Zelensky asked Ukrainian troops to lay down their weapons in a voice different from his usual tone	social media platforms, facebook d, youtube d
Byman, et all. (2023)	his iconic olive shirt, Zelenskyy's tone and attire matched his other messages of the time. Yet the message itself was altogether different: Rather than urging Ukrainians to carry on their fight, Zelenskyy instead implored them to lay down their arms and surrender. Not surprisingly, the video then quickly spread on VKontakte, Telegram, and other social media platforms, where it was picked up and reported on by global media.	Vkontakte, went viral, online publication platforms, social media platforms, Telegram
Byman, et all. (2023)	Deceit and media manipulation have always been a part of wartime communications, but never before has it been possible for nearly any actor in a conflict to generate realistic audio, video, and text of their opponent's political officials and military leaders. As artificial intelligence (AI) grows more sophisticated and the cost of computing continues to drop, the challenge deepfakes pose to	artificial intelligence, easier

	online information environments will only grow	
Byman, et al. (2023)	As the aforementioned fake Zelenskyy video suggests, deepfakes are now being used in international conflicts, and their role is only likely to grow in the coming years. ⁷	Ukrainian-Russian war
Byman, et al. (2023)	States and nonstate actors, particularly illiberal ones, can use deepfakes for many purposes.	anonymously, governments, non state actors
Byman, et al. (2023)	Russia’s video of Zelenskyy had him instructing Ukrainian soldiers to lay down their arms and surrender to invading Russian forces. S	manipulation of the people
Byman, et al. (2023)	Sowing confusion. When civilians and soldiers are instructed to ignore leaders’ instructions as potential fakes, they may also inadvertently ignore legitimate orders — creating confusion at a dangerous time.	manipulation of the people, confusion
Byman, et al. (2023)	deepfakes creates a “liar’s dividend,” allowing political leaders to dispute the authenticity of their own genuine misbehavior. ¹⁴ In essence, this inadvertent confusion is a mirror image of false orders: instead of false	the liar's dividend

instructions being followed,
legitimate ones are discarded.

Of course, deepfakes will often fail, and even when they are viewed as genuine, they will rarely be magic policy bullets for the United States or for its adversaries. As the Zelenskyy video shows, some deepfakes may be clumsy and easily dismissed. Even better produced ones may have only limited impact: Thomas Rid's work on the history of influence campaigns shows that influence operations are often hit or miss.²⁴ Also, as audiences' awareness of deep-fakes and disinformation in general grows, so too will their

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