### Federal or State Statutes: Which is the Better Legislative Measure to Combat Deepfake Pornography?

A Research Paper submitted to the Department of Engineering and Society

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science, School of Engineering

**Timothy Cha** 

Fall 2022

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

Advisor

Kathryn A. Neeley, Associate Professor of STS, Department of Engineering and Society

### Federal or State Statutes: Which is the Better Legislative Measure to Combat Deepfake Pornography?

#### I. Introduction

People started sending me WhatsApp messages asking me for my rates for sex. I was sent to the hospital with heart palpitations and anxiety, [sic] the doctor gave me medicine. But I was vomiting, my blood pressure shot up, [sic] my body had reacted so violently to the stress... the entire country was watching a porn video that claimed to be me and I just couldn't bring myself to do anything.

- Rana Ayyub (2018), I Was the Victim of a Deepfake Porn Plot Intended to Silence Me

Rana Ayyub is only one of the countless numbers of women who have suffered the destructive implications of the rampantly evolving phenomenon of deepfake pornography. Ayyub herself, for example, was not only hospitalized following the publication of her pornographic video; she also faced doxing and rape threats, and ultimately "has not been the same person" since (Ayyub, 2018). Noelle Martin's personal information, such as her home address, was released alongside a throng of porn videos with her face imposed in a reverse Google image search (Gieseke, 2020). Mary, a victim of image-based sexual abuse from the United Kingdom, described her experience, stating that "for [my partner] it was a laugh or a good time, but for me it was [sic] this could ruin my job, [sic] this could make me the black sheep of the family..." (Henry et. al., 2020). The testimonies of these women epitomize the severity that the ramifications of deepfake pornography can reach. And given that deepfake pornography continues to propagate on online platforms, it is crucial that action is taken to deter its publication, effectively beginning with legislative measures.

In fact, many legal experts address the pressing need for a new solid legislative measure that can both adequately provide recompense for deepfake porn victims and prevent the distribution of deepfake videos to online platforms. However, current statutes have shortcomings that prevent them from successfully accomplishing both of those objectives. In response, legal experts have proposed varying statutory solutions to this issue. Some experts such as Anne Pechenik Gieseke (2020) suggest a new federal law that prohibits publishing deepfakes entirely, while others like Vasileia Karasavva and Aalia Noorbhai (2021) believe that expanding current laws to accommodate for deepfake pornography can have potential, and still others like David Greene (2018) believe that no new statute needs to be created as long as current statutes are used properly to address the issue. The question then becomes whether one method or the other is more effective in providing deepfake victims adequate redress and prohibiting the publication of deepfakes entirely in the long run. In this paper, I compare the different arguments of legal experts to determine which avenue is more optimal for remedying this issue of deepfake pornography. By using Schwarz-Plaschg's Analogy framework using landmark Supreme Court decisions for women's rights, I demonstrate that federal statutes are more powerful than state statutes in giving women's rights. I argue that a federal statute regulating the production of deepfake pornography that holds both the perpetrator and platform accountable is the more effective legal remedy.

#### II. A Closer Look into Deepfake Pornography and its Current Legal Solutions

The Origins and Effects of Deepfake Pornography

Deepfakes are defined as "a specific kind of synthetic media where a person in an image or video is swapped with another person's likeness." (Somers, 2020). Even though such media is commonplace in the political sphere as well as satirical videos and parodies, the coinage of the term "deepfakes" has pornographic origins (Somers, 2020). In 2017, a Redditor under the pseudonym "u/deepfakes" used Google-given machine learning software to superimpose celebrities' faces on the bodies of pornography stars, initiating a movement where users could distribute deepfake pornographic material of close people such as friends or even family members onto online forums such as Reddit and Discord (Harris, 2019). Granting that those platforms, along with several others such as Twitter and Pornhub, have banned these videos, these videos continue to exist on the Internet largely thanks to Section 230 of the 1996 Communications Decency Act (Harris, 2019), which "immunizes online platforms from civil liability for third party posts on their sites and for efforts taken to screen the content posted on their sites" (Gieseke, 2020). Despite the fact that pornographic deepfakes are not the first instance of fake pornography, as photoshopped pornographic images of women have previously existed (Burkell and Gosse, 2019), pornographic deepfakes have become more popular than other fake porn mediums for a few reasons. According to Jacquelyn Burkell and Chantel Gosse (2019), faculty members of Western University's Department of Information and Media Studies, one of the largest factors in the popularity of deepfake porn videos is the increased accessibility of deepfake production software (n.p.). In addition, deepfake creation does not require much skill (Burkell and Gosse, 2019), and deepfake technology advances so rapidly that they may soon reach a point where they are virtually indistinguishable from original material (Gieseke, 2020). The high accessibility of deepfake creation tools plus the availability of

several Internet platforms to upload such videos only inflicts more and more damage upon innumerable women.

In fact, according to Anne Pechenik Gieseke (2020) of Vanderbilt Law, out of the pornographic deepfakes which compose 96% of all deepfake videos, 100% of those pornographic deepfakes victims are women. As per the introduction, the damage that deepfake pornography inflicts upon women is vast. Rana Ayyub's story vividly demonstrates that a deepfake video can severely undermine a woman's mental, and even physical, health (Ayyub, 2018). According to Nicola Henry's interview with Mary (2020), a deepfake video can also mar a woman's relationships with friends and family. Moreover, given that they have some form of permanence on the Internet, a deepfake video can severely hinder a woman's chances of attaining a job (Gieseke, 2020). Worse, because of deepfakes, women could face rape threats from many men online (Ayyub, 2018). Given the multitude of evidence of deepfake porn's damage to a woman's well-being, one may think that quantifying such harm, especially when creating a statute combatting deepfake porn, should be trivial. However, there are subject experts who agree that identifying the harm precisely in deepfake porn can prove to be easier said than done, as explained in the next section.

Defining the Harm from Pornographic Deepfakes

Burkell and Gosse (2019) argue that the cultural definition of harm in fake porn is not as well-defined, making it challenging to characterize the harm in deepfake porn (n.p.). To demonstrate the variability in harm towards victims of deepfake porn, Nicola Henry, et. al. (2020) conducted a survey among several participants to gauge responses on their

feelings and harms about their most significant experience being a victim of image-based sexual abuse, as shown in the figures below. Image-based sexual abuse in this context is an umbrella term that encompasses deepfake pornography (Henry et. al., 2020). The figures below show that "the nature and extent of harm" inflicted upon victims of image-based sexual abuse "vary among different demographic groups" (Henry et. al., 2020).

Table 3.1 Feelings and concerns regarding the most significant victimisation experience (n=585)

	Negative feelings % (n)	Reputational concerns % (n)	Safety concerns % (n)
Country			
Australia	88.8 (167)	79.3 (149)	71.8 (135)
New Zealand	82.2 (162)	76.5 (150)	63.8 (125)
United Kingdom	87.5 (175)	80.5 (161)	70 (140)
Gender			
Female	92.1 (340)*	82.7 (305)*	74 (273)*
Male	75.9 (164)	72.1 (155)	59.1 (127)
Sexuality			
Heterosexual	86.2 (388)	77.6 (349)	66.7 (300)
LGB+	85.9 (116)	82.8 (111)	74.6 (100)
Age			
16-19	85.7 (42)	77.6 (38)	73.5 (36)
20-29	87.6 (190)	82.5 (179)	71.4 (155)
30-39	87.3 (145)	78.3 (130)	69.9 (116)
40-49	81.6 (71)	73.6 (64)	62.1 (54)
50-64	84.8 (56)	75.4 (49)	60 (39)
Race/Ethnicity			
White, European or Pākehā	88.9 (376)*	80.9 (342)	69 (292)
Indigenous & BAME	79 (128)	73.3 (118)	67.1 (108)

**Figure 1:** Results from a survey of respondents who indicated neutral or negative feelings about their most significant experience of image-based sexual abuse (585 respondents). According to Henry et. al. (2020), image-based sexual abuse is an umbrella term that encompasses deepfake pornography. (Henry et. al., 2020)

Table 3.2 Harms as a consequence of the most significant victimisation experience (n=585)

	Health harms % (n)	Relational harms % (n)	Harassment % (n)
Country			-
Australia	58 (109)	56.9 (107)	42.6 (80)
New Zealand	50 (98)	57.7 (113)	37.2 (73)
United Kingdom	57.5 (115)	52.5 (105)	39.5 (79)
Gender			
Female	61 (225)*	59.6 (220)*	37.7 (139)
Male	45.ì (97)	48.8 (105)	43.3 (93)
Sexuality			
Heterosexual	52.9 (238)	52.9 (238)*	37.8 (170)
LGB+	62.7 (84)	64.9 (87)	46.3 (62)
Age			
16-19	51 (25)	57.1 (28)	57.1 (28)*
20-29	56.7 (123)	59.9 (130)	42.9 (93)
30-39	59 (98)	51.8 (86)	41 (68)
40-49	50.6 (44)	54 (47)	35.6 (31)
50-64	49.2 (32)	52.3 (34)	18.5 (12)
Race/Ethnicity			
White, European or Pākehā	56.7 (240)	54.1 (229)	35.7 (151)*
Indigenous & BAME	50.9 (82)	59.6 (96)	50.3 (81)

**Figure 2:** Results from the same group of respondents who indicated which harms were inflicted upon them as a result of their most significant experience of image-based sexual abuse (585 respondents). (Henry et. al., 2020)

Burkell and Gosse (2019) further elaborate on the ambiguity in defining the harm in deepfake porn by highlighting its dual nature of "both being and not being the individual in question" and noting that such damage imposed upon pornographic deepfake victims is "metaphysical and ontological in nature, inflicted on important facets of the self." (n.p.) However, Danielle Keats Citron (2018) of the University of Virginia's School of Law proposes the concept of "sexual privacy" as a source of harm for pornographic deepfakes. Citron (2018) defines sexual privacy as "concerning the social norms governing the management of boundaries around intimate life," and comments that deepfake sex videos "exercise dominion over people's sexuality... reducing individuals to genitalia, creating a sexual identity not of the individual's own making." (Citron, 2018) While sexual privacy provides a better definition for the harm in deepfake pornography, how effective can it be

when a victim of a fake porn video makes a case against the video's creator, given the stipulations that current statutes necessitate from the victim to make her case successful? Indeed, several legal experts argue that the limitations that current statutes place on the victim, as will be explained in the next section, render them an ineffective legal remedy.

Tort Laws, Defamation, and Copyright Infringement

Numerous legal experts reach a consensus that a victim of deepfake pornography who makes a claim through tort law will virtually not succeed. The tort of Intentional Infliction of Emotional Distress (IIED), or Intentional Infliction of Mental Suffering in Canadian Law (IIMS), fails because not all victims of deepfake pornography may meet the criteria that IIED necessitates: "the defendant intended to cause stress/harm to the victim, the conduct of the material is extreme, and the victim suffered severe emotional distress" (Harris, 2019). As demonstrated in the survey by Henry et al. (2020), different women experience varying degrees of harm from the publication of a deepfake, so it may not always be that the victim manifests severe emotional distress to successfully meet the criteria for IIED (Harris, 2019). Furthermore, the producer of the deepfake may not have intended to create the deepfake to cause psychological harm to the victim (Harris, 2019), but instead may claim that they "did so for artistic purposes, satire, or even for their own private pleasure." (Karasavva and Noorbhai, 2021) Similarly, the tort of Negligent Infliction of Emotional Distress fails because a successful case made using NIED is contingent upon the state's tort laws and the deepfake's context; many states warrant, however, that physical symptoms of NIED are necessary for such a case to be successful (Harris, 2019).

Likewise, a pornographic deepfake victim who makes a defamation suit would end up not seeking recompense from the creator of the deepfake, but instead, only from the platform that hosts it (Inglesh, 2020). However, because Section 230 of the Communications Decency Act exists, which protects platforms from liability for user-created content (Gieseke, 2020), a defamation suit would be effectively rendered moot. A victim who rather decides to make a copyright infringement claim will also be as likely not to succeed for two reasons: 1) the creator is making fair use of the images used to generate the deepfake, and 2) deepfakes are transformative and not intended for commercial purposes (Inglesh, 2020).

#### Nonconsensual Pornography Laws

Most states in the US have established nonconsensual pornography statutes which currently have the most potential in remedying deepfake porn successfully. Gieseke (2020) argues, however, that deepfakes are not "real" by nature and thus do not constitute a privacy violation. Douglas Harris (2019) takes a somewhat different approach to this, stating that the producer of the deepfake "will argue that the plaintiff did not have any reasonable expectation of privacy to a fake video". He responds to this claim by stating that the Court, in making the decision, should abide by the definition of privacy according to the victim. Even though it seems that a general nonconsensual pornography statute may be the most effective route to seeking redress, only two states, Virginia and California, include deepfake pornography in their revenge pornography statutes (Gieseke, 2020). California's AB 730 "prohibits the use of deepfakes to influence political campaigns within sixty days of an election," and AB 602 states that "a depicted individual in a pornographic deepfake

video has a cause of action against the person who creates and discloses sexually explicit material of this kind." (Inglesh, 2020) Similarly, Virginia bill HB 2678, passed in 2019, states that the "unlawful [and/or nonconsensual] dissemination or sale of certain images of another person depicted nude or in certain states of undress" (Maggard, 2022) constitutes a Class 1 misdemeanor which warrants up to a year of jail or a fine of up to \$2,500 (Maggard, 2022).

#### First Amendment Rights

As repeatedly demonstrated by several authors, First Amendment rights can demonstrate to be a huge impediment to whether a pornographic deepfake victim can successfully create a claim against the perpetrator. Although it is well-defined that the First Amendment does not protect obscene material, whether or not courts define deepfake pornography as obscene is ambiguous, particularly because of its more recent nature (Gieseke, 2020). Moreover, Harris (2019) states that because an individual deepfake "does not inform the community of public concern," but is rather a more private video, it is likely that such deepfake creators may have protection under First Amendment rights.

#### **Proposed Solutions**

Douglas Harris (2019) and Anne Gieseke (2020) notably argue that a federal law that prohibits the publication of deepfakes is most effective. Harris (2019) proposes that the statute "prohibits the online publication of deepfakes and would not require an intent to harm." He further suggests that online platforms of private individuals that are victims of pornographic deepfakes should be held liable in addition to the perpetrator, and that "a civil action should be brought against a producer who violates [this] statute." (Harris,

2019). Gieseke (2020) takes a slightly different angle and states that in addition to a statute that holds both the perpetrator and platform liable, Section 230 of the Communications Decency Act should be modified to "allow victims to sue platforms that refuse to take down videos or that engage in activities that would otherwise be illegal." (Gieseke, 2020). Both authors acknowledge that the statutes must be made cautiously to avoid infringing the First Amendment. Kareem Gibson (2020) mentions Loyola Law School professor Rebecca Delfino, who states that a federal solution may be inadequate for three factors: "1) overbreadth, 2) its condition of facilitating criminal or tortious conduct, and 4) its focus on solely the consequences of political deepfakes." (Gibson, 2020) Gibson himself, however, states that while current torts have potential in providing sufficient redress to a deepfake porn victim, creating a custom statute guided by current revenge porn laws which fill in the gaps of certain torts would be more ideal (Gibson, 2020). Gibson agrees with Gieseke (2020) and Harris (2019) that a federal statute would be more effective than state statutes because the latter would "likely result in a very slow implementation as [demonstrated] with the enacting of revenge porn statutes." (Gibson, 2020) Nevertheless, Gibson states that it is ultimately up to time that decides which legal approach is more appropriate (Gibson, 2020). Other authors such as Karasavva and Noorbhai (2021) suggest expanding current statutes to accommodate cases for deepfake pornography, while David Greene (2018) argues that current torts such as IIED and false light can be used for civil deepfake porn cases and that extortion and harassment laws would apply for criminal cases (Greene, 2018).

Evidently, most proposed solutions favor amending a federal statute for deepfake porn, though the authors do not elaborate on what makes instituting a federal statute more

effective than expanding state nonconsensual pornography laws to include deepfake material or even creating new deepfake porn laws per each state. Although Gibson (2020) does mention the slower nature of states implementing such statutes, and Harris (2019) does state that a federal statute "ensures uniformity" (p. 127), these authors do not thoroughly contextualize how state statute implementation is less effective. Similarly, the authors who favor modifying current nonconsensual pornography laws to include deepfakes, or creating new state statutes for deepfake porn, also do not elaborate on why or how those solutions are preferred over creating a new federal statute, let alone not mention creating a new federal statute at all. Consequently, it is important to establish a context on the efficacy of historical statutes central to women's rights, both federal and state, to understand why one method is more effective than the other. The following sections of this paper will use Claudia Schwarz-Plaschg's framework of the Power of Analogies to establish such context, comparing a variety of previous landmark statutes for women's rights to justify the effectiveness of federal over state statutes in legislating the prevention of deepfake pornography publication.

## III. A Background on Schwarz-Plaschg's Framework of The Power of Analogies and its Application to Deepfake Pornography Statutes

In her 2018 work, "The Power of Analogies for Imagining and Governing Emerging Technologies," Claudia Schwarz-Plaschg underlines the potential of using analogical reasoning to shape government decisions on emerging technologies (Schwarz-Plaschg, 2018). Schwarz-Plaschg highlights three key tenets one ought to abide by when creating analogies:

1) Analogical imagination highlights the anticipatory potential of analogies.

Schwarz-Plaschg introduces the concept of "analogical imagination," in which its main goal is not to obtain concrete results but instead "develop a contextual understanding" of a particular case or technology (Schwarz-Plaschg, 2018). She further elaborates that analogical imagination "helps to understand the relation of new, emerging technologies to other technologies or cases." (Schwarz-Plaschg, 2018). Schwarz-Plaschg highlights two important points when using analogical imagination to create a framework for how to regulate a new technology: drawing from one analogy is insufficient, and analogies are "situationally constructed for specific purposes" (Schwarz-Plaschg, 2018). She claims that regarding the former point, one should instead draw from multiple analogies because the latter can provide innovative perspectives (Schwarz-Plaschg, 2018). Figure 3 below demonstrates how analogical imagination can be used in public engagement settings.

Analogy with	Issue	Line of discussion and argumentation
Nuclear energy	Mistrust in expert opinions	Reference to the debate about nuclear energy in the 1970s and how experts made inconsistent predictions concerning the decomposition of radioactive material
GM food	Consumer sovereignty	$\label{lem:condition} \begin{tabular}{ll} Critique of how genetically modified (GM) foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ and $$ (GM)$ foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ foods were sold ("it is good for you"); argument that such promises would also not be acceptable with nanotechnology $$ (GM)$ foods were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"); argument that such promises were sold ("it is good for you"). The such promises were sold ("it is good for you") argument that such promises were sold ("$
Asbestos	Risk anticipation and regulation	Long-term consequences were unknown with asbestos and it could be similar with nanotechnology; demands for regulation
Medicine	Regulation	Nanotechnology should be as strictly regulated as medicine
GM food	Industry benefits	Comparison with GM food to argue that only producers will benefit from nanotechnology
Functional food	Societal acceptance	Not only discussion of potential consumer benefits of nanofood but also questioning of the promised benefits as "just marketing"; the analogy also suggested that nanofood might sell as well as existing functional food products
GM food	Societal acceptance and labelling	If nanofood were labelled like GM food, it would not be accepted by consumers
Mobile phones	Risk anticipation and societal acceptance	With certain new technologies (mobile phones), long-term risks are not properly studied; distinction between nanotechnological domains: in some (e.g. electronics), nanotechnology is more acceptable than in others (e.g. food)
X-rays	Hypes and risk anticipation	X-rays as an example for a new technology that was hyped and entailed collateral damage

**Figure 3:** This table highlights several analogies used during a public engagement setting on nanofoods in Austria. Schwarz-Plaschg claims that these analogies "enabled the group to address a broad variety of issues... [including] regulatory possibilities of nanofood."

(Schwarz-Plaschg, 2018)

- 2) Analogical sensibility conveys the persuasive and rhetorical power of analogies.

  Analogies, according to Schwarz-Plaschg, not only have the power of promoting imagination but also "restrict imagination" in the sense that they can be used as rhetorical, argumentative devices (Schwarz-Plaschg, 2018). Schwarz-Plaschg coins the term "analogical sensibility" to describe this. She demonstrates through four case studies in her work that analogies are "never simply drawn to learn from the past for mere imaginative reasons" and again reinforces the idea that "they are constructed for specific purposes and are used to legitimate... governance approaches." (Schwarz-Plaschg, 2018)
- 3) <u>Analogical imagination and analogical sensibility, when combined, can contribute to</u> efforts toward responsible research and innovation.

Schwarz-Plaschg posits that by combining analogical imagination and analogical sensibility, one can "contribute to efforts towards responsible research and innovation (RRI)." (Schwarz-Plaschg, 2018). Using analogies towards RRI strengthens four core capacities – anticipation, inclusivity, reflexivity, and responsiveness – when making regulatory decisions on emerging technologies (Schwarz-Plaschg, 2018).

Applying Schwarz-Plaschg's Analogy Framework to Deepfake Pornography Using Other Issues
Central to Women's Rights

The first objective of this paper is to develop a contextual understanding of creating a statute for deepfake pornography through historical and current legislation, both federal and state, that is central to women's rights. I will use Schwarz-Plaschg's tenet of "analogical imagination" to accomplish this. To visualize the "analogical imagination," I will use a table to compare landmark statutes for women's rights.

Once a contextual understanding of this paper is established, I will use evidence from the table to compare and contrast the effects of these statutes on women currently. I will elaborate on how these statutes, if instituted at a different level, would have affected women differently. This completes the second objective of this paper, which uses Schwarz-Plaschg's second tenet of "analogical sensibility."

Finally, I will present my own recommendations for essential elements that a new statute for deepfake pornography should contain. These recommendations will be based on current nonconsensual pornography statutes as well as the research of legal experts who advocate the need for a federal statute.

# IV. A Justification of Federal Over State Statutes for Prohibiting Deepfake Pornography

Following Schwarz-Plaschg's principle of analogical imagination, below is a table of a few Constitutional Amendments, Supreme Court cases, and federal and state statutes which are central to women's rights. The table's structure is inspired by Schwarz-Plaschg's own table when she herself used analogical imagination to compare analogical technologies to nanofoods.

Case/Statute/Bill	Relevant Right	Federal or state	Status quo
(First amended or		regulation?	
introduced)			
Nineteenth	Right to vote	Federal	In effect
Amendment of the			
US Constitution			
(1920)			
Equal Pay Act (1963)	Right to equal pay	Federal	In effect
Reed v. Reed, 404 US	Right to equal	Federal	In effect
71 (1971)	protection under the		
	law per 14 <sup>th</sup>		
	Amendment		
Roe v. Wade, 410 US	Right to have an	Federal	Overturned
113 (1973)	abortion/right to		
	choose		
Family and Medical	Right to retain job	Federal	In effect
Leave Act (1993)	while on maternity		
	leave		
State revenge	Right to sexual	State	In effect in 46 states
pornography laws	privacy		
(various)			

**Figure 4:** A table of some landmark Supreme Courts/United States Federal or State statutes integral to women's rights using Schwarz-Plaschg's framework of analogical imagination. The table lists the statute, its pertinent right, its historical background, and whether it is federally regulated or regulated by state. Information in this table comes from Bavis (n.d.), Spiggle (2019), ACLU Women's Rights Project (n.d.), and Gieseke (2020).

As shown in the table above, many crucial women's rights are protected by federal statutes. Women's suffrage rights, for example, were solely contingent on state legislation prior to the introduction of the Nineteenth Amendment in 1920, with Wyoming being the first state to pass such legislation in 1869 (Bavis, n.d.). Although New Jersey's 1776 constitution technically allowed specific women to vote, that right was revoked in 1844 for all women. Until the Nineteenth Amendment was successfully established, women continued advocating for uniform suffrage rights regardless of their state of residence, some even filing court cases to propel the momentum of the women's suffrage movement (Bavis, n.d.). Similarly, in the case of Roe v. Wade and its overturn in mid-2022, access to an abortion fell into the hands of state legislation once again, damaging the physical and mental health of many women across the nation (Sun, 2022). These cases demonstrate the independent operability of state legislatures.

Similarly, in the case of current nonconsensual pornography laws, 46 states have nonconsensual pornography statutes (Gieseke, 2020). While this number may seem promising at an initial glance, four states still do not penalize distributors of revenge porn videos, meaning that women in these states will not find redress at all. In addition, the penalties that a perpetrator may receive for releasing nonconsensual porn videos vary by state. Kansas, for example, punishes second offenses for revenge porn distribution by up to six years in prison, while in Maine, one is only punished by up to one year in jail and/or a fine of up to \$2000 (FindLaw, 2022). In addition, as noted earlier, only Virginia and California's revenge porn laws include deepfake porn. The faster legislation prohibiting deepfakes in these states may be in relation to the fact that these states are more advocative of women's rights given their trend of having more democratic legislatures.

Using this framework with instrumental statutes/Supreme Court cases for women's rights highlights two critical things: 1) state laws on women's rights vary and federal law guarantees uniform treatment, and 2) because states implement statutes for a particular women's right at different times, it will take longer for women across the nation to have the same rights as everyone else. This evidence necessitates the need for a federal statute as a solution to deepfake pornography.

Necessary Elements of a New Federal Statute for Pornographic Deepfakes

The application of Schwarz-Plaschg's Analogy framework on other federal statutes central to women's rights exemplifies the importance of creating a federal statute over expanding state statutes to address deepfake pornography. Based on the recommendations from other legal experts, as well as Virginia's current nonconsensual pornography law, I recommend that the statute should include the following:

- The publication of deepfake pornographic material on any platform shall be prohibited.
- 2) Anyone who publishes a pornographic deepfake of a private individual shall be subject to either a minimum \$2,500 fine or a minimum of 9 months in jail.

  Subsequent offenses should incur more penalties. If the perpetrator can demonstrate that they did not have the *mens rea* when creating the deepfake, they may be subject to a lighter sentence.
- 3) The victim is eligible to seek compensation from the perpetrator.
- 4) Platforms, in addition to the producer, shall be held liable if they do not take immediate action to remove the pornographic video from their website.

#### V. Conclusion

Deepfake pornography will only continue to disseminate across the Internet, and its rampaging damage on women vindicates the need for a statute to address this issue. To determine whether implementing a federal or state statute is more effective, Applying Schwartz-Plaschg's Framework of Analogies to a variety of landmark statutes central to women's rights illustrates that the most significant women's rights are better secured by federal statutes. In the long term, federal statutes are more effective than state statutes in remedying deepfake pornography.

Despite the findings of this paper pointing in the same direction as those of many other authors, such as Anne Gieseke (2020), Douglas Harris (2019), and Kareem Gibson (2020), these findings are unique in that they are based on analogical reasoning founded upon other significant statutes for women's rights, which should only reinforce the need to create a federal statute for deepfake porn.

This paper may potentially be used as evidence in future legislation sessions when amending a statute to mitigate deepfake porn. Because of its distinctive perspective of the issue from an analogical framework, this paper may facilitate discourse in legal sessions because it encourages the reader to think about deepfake porn more contextually, rather than those of other legal experts who only argue why current statutes are insufficient.

Ultimately, while a legislative solution is a good initial step, raising societal awareness of the dangers of deepfakes and the harms of nonconsensual porn would be much more effective. By educating the public on this issue, our society can reach a point in time where women feel safer and more protected with their sexual privacies.

#### VI. References

- ACLU Women's Rights Project. Timeline of Major Supreme Court Decisions on Women's Rights. (n.d.). American Civil Liberties Union. Retrieved from <a href="https://www.aclu.org/other/timeline-major-supreme-court-decisions-womens-rights">https://www.aclu.org/other/timeline-major-supreme-court-decisions-womens-rights</a>
- Ayyub, R. (2018, November 21). I was the victim of a deepfake porn plot intended to silence me. HuffPost UK. Retrieved from <a href="https://www.huffingtonpost.co.uk/entry/deepfake-porn\_uk\_5bf2c126e4b0f32bd58ba316">https://www.huffingtonpost.co.uk/entry/deepfake-porn\_uk\_5bf2c126e4b0f32bd58ba316</a>
- Bavis, B. (n.d.). Research Guides: American Women: Resources from the Law Library: State Law Resources [Research guide]. Retrieved from <a href="https://guides.loc.gov/american-women-law/state-laws">https://guides.loc.gov/american-women-law/state-laws</a>
- Burkell, J., & Gosse, C. (December 2, 2019). Nothing new here: Emphasizing the social and cultural context of deepfakes. First Monday. https://doi.org/10.5210/fm.v24i12.10287
- Citron, D. K. (2018). Sexual Privacy. Yale Law Journal, 128(7), 1870–1961.
- FindLaw Staff (2022). State Revenge Porn Laws. FindLaw. Retrieved from <a href="https://www.findlaw.com/criminal/criminal-charges/revenge-porn-laws-by-state.html">https://www.findlaw.com/criminal/criminal-charges/revenge-porn-laws-by-state.html</a>
- Gibson, K. (2020). Deepfakes and Involuntary Pornography: Can Our Current Legal Framework Address This Technology? Notes. Wayne Law Review, 66(1), 259–290.
- Gieseke, A. (2020). "The New Weapon of Choice": Law's Current Inability to Properly Address Deepfake Pornography. Vanderbilt Law Review, 73(5), 1479-1516.
- Greene, D. (2018, February 13). We Don't Need New Laws for Faked Videos, We Already Have Them. Electronic Frontier Foundation. https://www.eff.org/deeplinks/2018/02/we-dont-need-new-laws-faked-videos-we-already-have-them
- Harris, D. (2018-2019). Deepfakes: False Pornography Is Here and the Law Cannot Protect You. Duke Law & Technology Review, 17, 99-128.
- Henry, N., McGlynn, C., Flynn, A., Johnson, K., Powell, A., & Scott, A. J. (2020). Image-based Sexual Abuse: A Study on the Causes and Consequences of Non-consensual Nude or Sexual Imagery. Routledge. <a href="https://doi.org/10.4324/9781351135153">https://doi.org/10.4324/9781351135153</a>
- Inglesh, A. (2020). Deepfakes May be in Deep Trouble: How the Law Has and Should Respond to the Rise of the AI Assisted Technology of Deepfake Videos. AELJ Blog. https://larc.cardozo.yu.edu/aelj-blog/216

- Karasavva, V., & Noorbhai, A. (2021). The real threat of deepfake pornography: a review of Canadian policy. Cyberpsychology, Behavior, and Social Networking, 24(3), 203209. https://doi.org/10.1089/cyber.2020.0272
- Maggard, K. (2022). A Course to Incorporate Ethics in Computing in Early Undergraduate Computer Science Studies; A Case For Anticipatory Technology Ethics: The Social Construction of Deepfake Nonconsensual Sexual Media [University of Virginia]. <a href="https://doi.org/10.18130/VSBF-Y041">https://doi.org/10.18130/VSBF-Y041</a>
- Schwarz-Plaschg, C. (2018). The Power of Analogies for Imagining and Governing Emerging Technologies. Nanoethics, 12(2), 139–153. <a href="https://doi.org/10.1007/s11569-018-0315-z">https://doi.org/10.1007/s11569-018-0315-z</a>
- Somers, M. (2020, July 21). Deepfakes, explained. MIT Sloan. Retrieved from <a href="https://mitsloan.mit.edu/ideas-made-to-matter/deepfakes-explained">https://mitsloan.mit.edu/ideas-made-to-matter/deepfakes-explained</a>
- Spiggle, T. (2019, March 13). Eight laws that helped women make history in the workforce. Forbes. Retrieved from <a href="https://www.forbes.com/sites/tomspiggle/2019/03/13/8-laws-that-helped-women-make-history-in-the-workforce/">https://www.forbes.com/sites/tomspiggle/2019/03/13/8-laws-that-helped-women-make-history-in-the-workforce/</a>
- Sun, N. (2022). Overturning Roe v Wade: Reproducing injustice. BMJ, 377, o1588. https://doi.org/10.1136/bmj.o1588