You're Only Mostly Dead: Protecting Your Digital Ghost from Unauthorized Resurrection

Rebecca J. Roberts*

TABLE OF CONTENTS

I.	INTRODUCTION	274
II.	BACKGROUND	
	A. Artificial Intelligence Capabilities Have Advan Lifelike Synthetic Media, like Digital Cloning.	-
	B. Digital Cloning Is Not Limited to the Living	
	C. Current Law Does Not Provide Adequate Supp Unauthorized Creation of Digital Clones	-
	 Privacy Law Trademark and Copyright Law Criminal Law 	
III.	ANALYSIS	
	<i>A. Lackluster Solutions to Curb Deepfakes and D</i> <i>Cloning</i>	•
	B. The Solution to Unauthorized Post-Mortem Du the Legal Mechanisms Controlling Property T Law	Through Probate
	C. Digital Assets Are Already Included in Existin Law	0
	D. The Media Used to Create Digital Clones Sho Digital Assets, and RUFADAA Should Be Exp Against Their Unauthorized Use	anded to Protect
IV.	CONCLUSION	

^{*} J.D., May 2023, The George Washington University Law School. Senior Managing Editor, Federal Communications Law Journal, Volume 75. B.A., 2018, Pyschology and Performance Studies, Texas A&M University. I want to thank my parents for their constant support. I would also like to thank the entire Cardozo Inn for being such a fun and encouraging community.

I. INTRODUCTION

"You married the most, most, most, most, most genius man in the whole world, Kanye West," said the Robert Kardashian hologram custom ordered by Kanye West.¹ In 2020, a production company holographically resurrected the deceased Robert Kardashian using artificial intelligence.² This lifelike hologram was programmed to say and do things that the real Robert Kardashian never said or did while still alive—including high praise of his daughter's then-husband, Kanye West, who purchased the hologram for his then-wife's birthday.³

Artificial intelligence ("AI") is a constantly evolving field that plays a substantial role in the manufacture of synthetic media.⁴ As AI technology improves and expands, advanced synthetic media known as "digital clones" and "deepfakes" have started to emerge.⁵ This synthetic media is created using photos, videos, and audio of a person, which can then be programmed to do and say anything the programmer wishes.⁶ They manifest as chatbots, audio clips, videos, holograms, and other varieties of audio-visual media.⁷ Production of these digital clones varies from glitchy videos that individuals can create for free on an easily accessible app, to highly expensive holograms like that of Robert Kardashian.⁸ These digital clones in some cases are so incredibly lifelike that they seem real—tricking viewers into believing they are seeing something truly authentic—when they are actually just AI-created synthetic media.⁹

9. *Id.* at 3.

^{1.} Alyx Gorman, *Kim Kardashian's Father Resurrected as Hologram in Birthday Present from Kanye West*, GUARDIAN (Oct. 29, 2020, 11:18 PM), https://www.theguardian.com/lifeandstyle/2020/oct/30/robert-kardashian-resurrected-as-ahologram-for-kim-kardashian-wests-birthday [https://perma.cc/G5ZB-URQM].

^{2.} See id.; see also The Synthetic Reality Co., KALEIDA, https://www.wearekaleida.com/synthetic-reality [https://perma.cc/56YD-AA7L] (last visited Apr. 12, 2022).

^{3.} See Gorman, supra note 1.

^{4.} See Craig S. Smith, *A.I. Here, There, Everywhere*, N.Y. TIMES (Mar. 9, 2021), https://www.nytimes.com/2021/02/23/technology/ai-innovation-privacy-seniors-education.html [https://perma.cc/3SVT-KSMA].

^{5.} See U.S. DEP'T HOMELAND SEC., INCREASING THREAT OF DEEPFAKE IDENTITIES 3 (2021),

https://www.dhs.gov/sites/default/files/publications/increasing_threats_of_deepfake_identitie s_0.pdf [https://perma.cc/DK6T-62HZ]; *see also* Jon Truby & Rafael Brown, *Human Digital Thought Clones: The* Holy Grail *of Artificial Intelligence for Big Data*, 30 INFO. & COMM. TECH. L. 140, 140-41 (2021).

^{6.} See INCREASING THREAT OF DEEPFAKE IDENTITIES, supra note 5, at 3, 5, 27.

^{7.} *See id.* at 5.

^{8.} See id. at 9.

Due to the high volume of digital media created during one's lifetime,¹⁰ digital clones can be produced post-mortem.¹¹ Digital cloning technology allows for the creation of holograms, audio messages, videos, etc. of a dead person doing or saying something they never said or did while still alive.¹² This type of technology can be useful in the world of entertainment, for example, as it provides opportunities to reanimate actors who passed before their film finished shooting.¹³ However, synthetic media also presents several ethical concerns. After someone dies, a video could emerge of their digital clone saying something deplorable going against everything they believed in while still alive. If such synthetic media is truly indistinguishable from authentic media, a person's voice, life, and legacy is put at risk, and there is nothing that can be done because they are no longer alive to refute it.

Through the years, courts have consistently held that people have no personal rights after death¹⁴ and that reputation and dignity are not maintained after death.¹⁵ While some states have post-mortem privacy laws protecting against the commercial use of a deceased celebrity's likeness,¹⁶ this would not protect private figures from unauthorized digital clone creation and use, nor would it protect against noncommercial unauthorized creation and use. Because current legislation and common law are inconsistent and almost entirely hypothetical, and because they do not go further than protecting certain situations in which post-mortem digital clones may be created and used, this issue requires a novel approach.¹⁷ Through probate law and estate planning, the deceased have an atypical right to control how their property is distributed and used.¹⁸ This Note will argue that there should be an explicit safeguard within probate law protecting against the unauthorized creation and use of a deceased person's digital clone.

The Background section will explain how artificial intelligence has enabled the production of synthetic media depicting real people. There are some ethical and legal concerns that arise from both existing and impending post-mortem synthetic technology. This section will also assess untested

^{10.} Bernard Marr, *How Much Data Do We Create Every Day? The Mind-Blowing Stats Everyone Should Read*, FORBES (May 21, 2018, 12:42 AM), https://www.forbes.com/sites/bernardmarr/2018/05/21/how-much-data-do-we-create-every-day-the-mind-blowing-stats-everyone-should-read/ [https://perma.cc/3XU4-TLH5].

^{11.} See Shannon Flynn Smith, Comment, *If It Looks like Tupac, Walks like Tupac, and Raps like Tupac, It's Probably Tupac: Virtual Cloning and Postmortem Right-of-Publicity Implications*, 2013 MICH. ST. L. REV. 1719, 1725 (2013).

^{12.} See id.

^{13.} See Joel Anderson, Comment, What's Wrong with This Picture? Dead or Alive: Protecting Actors in the Age of Virtual Reanimation, 25 LOY. L.A. ENT. L. REV. 155, 157 (2005).

^{14.} See Natalie M. Banta, Death and Privacy in the Digital Age, 94 N.C. L. REV. 927, 935-36 (2016).

^{15.} See id. at 938-39.

^{16.} See RIGHT OF PUBLICITY COMMITTEE, INT'L TRADEMARK ASSOC., RIGHT OF PUBLICITY STATE OF THE LAW SURVEY (2019) [hereinafter RIGHT OF PUBLICITY SURVEY], https://www.inta.org/wp-content/uploads/public-files/advocacy/committee-

reports/INTA_2019_rop_survey.pdf [https://perma.cc/N7WM-9XLM%22].

^{17.} See infra Section II.C.

^{18.} See Banta, supra note 14, at 936.

solutions that could potentially protect against digital cloning and synthetic media in different fields of the law. Post-mortem privacy rights are only extended to celebrities under existing privacy law.¹⁹ Although there may be copyrightable and trademarkable elements within the field of artificial intelligence, there are no proven or guaranteed protections against unauthorized digital cloning.²⁰ Criminal law is beginning to prohibit certain aspects of deepfake technology, but such laws do not prohibit unauthorized use unless there is a severe and tangible harm.²¹

The Analysis will compare the benefits and potential harms that could come with the growing prevalence of post-mortem digital cloning technology, as well as discuss the successes and failures of attempted claims against it. While there are some possible solutions for victims of unauthorized digital cloning, legislators have not been able to keep up with the growing prevalence of this technology, and there are several gaps in protection. Further, postmortem rights are practically non-existent in every field of law except probate law. Current standards within probate law regarding digital assets and digital estate planning do not currently include specific protections against postmortem digital cloning, but they could be extended to do so. The final section of the Analysis will present estate planning and probate law as an innovative way to preempt unauthorized post-mortem digital clones. Requiring explicit, affirmative permission from a decedent is the best way to successfully protect a deceased person's estate from the unauthorized creation and use of postmortem digital clones.

II. BACKGROUND

A. Artificial Intelligence Capabilities Have Advanced to Producing Lifelike Synthetic Media, like Digital Cloning

The term "artificial intelligence" was first used in the 1950s in an effort to describe the process of teaching computers to understand and recreate human reasoning.²² After many years of development, AI seems to have a hand in so much of society's day-to-day life—from vehicles, to phones, to Google Home hubs.²³ While there are certainly a wide variety of benefits attributable to the prevalence of AI, its fast growing adaptation also presents a series of concerns for the future.²⁴ AI uses algorithmic technology to learn our routines and interests, which allows for personalized advertising and lifestyle convenience.²⁵ However, with such access to personal data, there are

^{19.} See infra Section II.C.1.

^{20.} See infra Section II.C.2.

^{21.} See infra Section II.C.3.

^{22.} See N.Y.C. MAYOR'S OFF. OF THE CHIEF TECH. OFFICER, AI STRATEGY: THE NEW YORK CITY ARTIFICIAL INTELLIGENCE STRATEGY 14 (2021), https://www1.nyc.gov/assets/cto/downloads/ai-strategy/nyc_ai_strategy.pdf [https://perma.cc/2HNJ-FEBY].

^{23.} Smith, *supra* note 4.

^{24.} Id.

^{25.} See id.

concerns about privacy and how daily interactions with AI might be used.²⁶ Further, as AI capabilities increase, there is concern that in the wrong hands the technology may be used in more malicious ways.²⁷

Synthetic media is content created through the use of AI—equipping algorithmic deep learning technology to create incredibly lifelike artificial media.²⁸ This technology can modify or manipulate currently existing photos and videos of a person by superimposing them onto other existing media—creating what is colloquially known as a "deepfake" or "digital clone."²⁹ By exchanging aspects of existing media with other existing media, a person can create hyper-realistic media depicting something that does not actually exist.³⁰ Popular deepfake media shows politicians, celebrities, and even private citizens doing or saying something they have never done or said.³¹ Similarly, there also exists AI technology that takes existing audio clips of a person and programs software to recreate that person's voice saying anything they want.³² Throughout this Note, the terms "synthetic media," "deepfakes," and "digital clones" will be interchangeably used to refer to any kind of AI-generated media mimicking a real person that has been created using the person's preexisting media outputs.

People's lives and reputations are at stake now that there is such potentially deceptive technology out there that could leave the public with a false impression of someone's behavior.³³ Political figures could equip deepfake technology to present opposing parties doing or saying something that is not congruent with their true political or moral standpoints.³⁴ Courts have also recently become aware that a more robust system of authentication may be needed for certain pieces of evidence in order to admit them as

^{26.} See id.

^{27.} See Cade Metz, Efforts to Acknowledge the Risks of New A.I. Technology, N.Y. TIMES (Oct. 22, 2018), https://www.nytimes.com/2018/10/22/business/efforts-to-acknowledge-therisks-of-new-ai-technology.html [https://perma.cc/6UAW-QCH6]; see also INCREASING THREAT OF DEEPFAKE IDENTITIES, supra note 5, at 10.

^{28.} Ian Sample, *What Are Deepfakes – And How Can You Spot Them?*, GUARDIAN (Jan. 13, 2020, 5:00 AM), https://www.theguardian.com/technology/2020/jan/13/what-are-deepfakes-and-how-can-you-spot-them [https://perma.cc/U8L5-B8JH].

^{29.} Id.

^{30.} See id.

^{31.} *Id*.

^{32.} Jennifer Kite-Powell, *The Rise of Voice Cloning and DeepFakes in the Disinformation Wars*, FORBES (Sept. 21, 2021, 3:14 PM), https://www.forbes.com/sites/jenniferhicks/2021/09/21/the-rise-of-voice-cloning-and-deep-fakes-in-the-disinformation-wars/ [https://perma.cc/JB5U-KG7Z].

^{33.} See id.

^{34.} Rob Toews, *Deepfakes Are Going to Wreak Havoc on Society. We Are Not Prepared.*, FORBES (May 25, 2020, 11:54 PM), https://www.forbes.com/sites/robtoews/2020/05/25/deepfakes-are-going-to-wreak-havoc-on-society-we-are-not-prepared/ [https://perma.cc/96NP-EXHG].

reliable. 35 Audio files, photos, and videos can no longer be taken at face value. 36

State legislators have recently begun analyzing these arising issues and enacting new legislation to regulate the effects of deepfakes and artificial intelligence, primarily related to election interference and pornography.³⁷ Congress also recently voted to require that the Department of Homeland Security issue annual reports for the next five years on potential harms that may arise from the increasing use of deepfake technology.³⁸ In 2021, the Department released an infographic detailing possible threats and scenarios that could arise from such synthetic media.³⁹ Even though the concept of AI has been around since the 1950's, and has a prevalent role in everyday life, there is still very little legislative or judicial guidance on how to protect the public from the number of harms it could potentially bring about.

B. Digital Cloning Is Not Limited to the Living

Films, television shows, and books have predicted the idea of "digital cloning" for decades.⁴⁰ The popular television show *Black Mirror* has even addressed the possible dangers that could emerge from post-mortem digital clones.⁴¹ *Black Mirror* is popular for exhibiting not-yet existing technology and then asking its audience a series of "what ifs" in an attempt to warn against the dangers that certain advanced technology could bring about.⁴² Some episodes even have technology that does not seem too far off from what already exists today.⁴³

In the episode "Be Right Back," the main character orders an AI bot to imitate her recently deceased boyfriend.⁴⁴ The bot starts as a voice on the other end of a phone call—integrating preexisting audio recordings of his voice

44. Black Mirror: Be Right Back (Channel 4 television broadcast Feb. 11, 2013).

^{35.} See Matt Reynolds, Courts and Lawyers Struggle with Growing Prevalence of Deepfakes, A.B.A. J. (June 9, 2020, 9:29 AM), https://www.abajournal.com/web/article/courts-and-lawyers-struggle-with-growing-prevalence-of-deepfakes [https://perma.cc/T3N9-K4RA].

^{36.} See id.

^{37.} Scott Briscoe, U.S. Laws Address Deepfakes, ASIS INT'L (Jan. 12, 2021), https://www.asisonline.org/security-management-magazine/latest-news/today-in-

security/2021/january/U-S-Laws-Address-Deepfakes/ [https://perma.cc/MEQ6-HA8R].

^{38.} *Id.*; National Defense Authorization Act for Fiscal Year 2020, Pub. L. No. 116-92, § 5709, 133 Stat. 2168, 2168-70 (2019).

^{39.} See INCREASING THREAT OF DEEPFAKE IDENTITIES, supra note 5, at 18.

^{40.} See, e.g., Joseph J. Beard, Clones, Bones, and Twilight Zones: Protecting the Digital Persona of the Quick the Dead, and the Imaginary, 16 BERKELEY TECH. L.J. 1165, 1250-54 (2001).

^{41.} Oscar Rickett, *How Far off Are We from the Digital Clones of 'Black Mirror'?*, VICE (Jan. 15, 2018, 7:36 AM), https://www.vice.com/en/article/zmq8vy/how-far-off-are-we-from-the-digital-clones-of-black-mirror [https://perma.cc/6XHY-DLPY].

^{42.} See Oihab Allal-Chérif, 'Black Mirror': The Dark Side of Technology, CONVERSATION (June 4, 2019, 5:47 PM), https://theconversation.com/black-mirror-the-dark-side-of-technology-118298 [https://perma.cc/JWW7-ZWCG].

^{43.} Justin Render, *10 Technologies from Black Mirror That Have Already Been Invented*, SCREENRANT (Oct. 24, 2019), https://screenrant.com/black-mirror-technologies-already-invented/ [https://perma.cc/79R9-5FTH].

with algorithmic deep learning technology from his social media posts—so that his girlfriend can feel as though she is really speaking with him.⁴⁵ After upgrading the service, the girlfriend receives a full-size, realistic, tangible clone of him—manufactured from even more preexisting audio-visual media.⁴⁶ The AI bot was supposedly meant to bring solace to those grieving the loss of a loved one, but the episode reminds its audience that humanity requires more than a performance of the media captured or posted online during one's lifetime.⁴⁷

For years, Black Mirror-levels of technology somehow felt futuristic, inevitable, and impossible at the same time. However, as artificial intelligence develops, the likelihood of indistinguishably lifelike digital clones also increases.⁴⁸ Today, a phone call with a deceased loved one is not entirely out of the question.⁴⁹ Å company called HereAfter is giving people the opportunity to record stories about their life before they die, creating a kind of "life story avatar" for their loved ones to listen to after they pass away.⁵⁰ When HereAfter co-creator James Vlahos was in the process of losing his father to cancer, he created the "Dadbot" using stories from his father and predictive algorithms to allow for text conversation with a digital version of his father.⁵¹ He was even able to show his father the Dadbot before he died, who expressed enthusiasm at the idea of members of his family being able to learn things about him in the years after his death.⁵² These life story avatars use predictive algorithms to fill in the holes, but the substantive aspects of the conversation are facts recorded by the person before they die with the knowledge of how it will later be used.⁵³

Similar companies like Eternime have proposed services allowing users to let a software program inundate their life—their social media, online communications, etc.—in order to learn as much as possible about them until they die, with the hope of creating digital immortality for those they leave behind.⁵⁴ There are also facilities like University of Southern California's Institute for Creative Technologies, which built an interactive hologram exhibit using recorded stories from Holocaust survivors to teach future

^{45.} *Id*.

^{46.} *Id*.

^{47.} See id.; see also Rickett, supra note 41.

^{48.} See Rickett, supra note 41.

^{49.} HEREAFTER, https://www.hereafter.ai [https://perma.cc/X5JD-QQZK] (last visited Apr. 12, 2022).

^{50.} See Leslie Katz, *Talk with Your Dead Loved Ones – Through a Chatbox*, CNET (Dec. 17, 2021, 10:46 AM), https://www.cnet.com/news/hereafter-ai-lets-you-talk-with-your-dead-loved-ones-through-a-chatbot/ [https://perma.cc/3U95-3R9E].

^{51.} See James Vlahos, A Son's Race to Give His Dying Father Immortality, WIRED (Jul. 18, 2017, 6:00 AM), https://www.wired.com/story/a-sons-race-to-give-his-dying-father-artificial-immortality/ [https://perma.cc/Z5CE-HNFK].

^{52.} See id.

^{53.} Id.

^{54.} See Marius Ursache, *The Journey to Digital Immortality*, MEDIUM (Oct. 23, 2015), https://medium.com/@mariusursache/the-journey-to-digital-immortality-33fcbd79949 [https://perma.cc/93VM-QBST].

generations.⁵⁵ All of the aforementioned projects have a very important component in common—permission to use the preexisting media needed to create these varying digital clones was affirmatively given by the deceased for that express purpose while they were still alive.

Alternatively, there are people like Eugenia Kuyda, who spent years building a neural network to mimic her friend who passed away—using old text messages from him to create a chatbot similar to the Dadbot.⁵⁶ Her project was met with mixed responses, and she even received a message from a friend that she had not learned the lesson that the *Black Mirror* "Be Right Back" episode intended to teach.⁵⁷ There was also no indication that her friend, nor his relatives, had ever given Kuyuda permission for the text messages to be used in such a way.⁵⁸ In 2020, Microsoft received a patent for software that aims to use a person's social media presence to create conversational chatbots that mimic their personality.⁵⁹ It is unclear what levels of permission Microsoft would seek from users or social media sites prior to creating these hypothetical chatbots.⁶⁰

In the film world, the practice of digitally reanimating actors and celebrities for movies is also on the rise.⁶¹ In 2016, a *Star Wars* prequel brought back a character from the original 1977 films.⁶² The actor, Peter Cushing, who played the character in the original films had since passed away.⁶³ Instead of recasting the character, Lucasfilm studios opted to use visual effects to digitally reanimate the deceased actor.⁶⁴ The studio obtained permission from Cushing's estate.⁶⁵ These kinds of "digital actors" are present in a number of films where an actor may have passed away during filming.⁶⁶ Studios like Lucasfilm even admit to obtaining digital scans of all their actors for post-production editing, which could ultimately be used for digital

^{55.} See Leslie Katz, *Holograms of Holocaust Survivors Let Crucial Stories Live On*, CNET (Feb. 11, 2013, 10:40 AM), https://www.cnet.com/news/holograms-of-holocaust-survivors-let-crucial-stories-live-on/ [https://perma.cc/GA9A-7QZW].

^{56.} See Casey Newton, Speak, Memory – When Her Best Friend Died, She Rebuilt Him Using Artificial Intelligence, VERGE, https://www.theverge.com/a/luka-artificial-intelligence-memorial-roman-mazurenko-bot [https://perma.cc/4XFX-UJWB] (last visited Apr. 12, 2022); see also Vlahos, supra note 51.

^{57.} See Newton, supra note 56.

^{58.} See id.

^{59.} See Dalvin Brown, AI Chat Bots Can Bring You Back from the Dead, Sort Of, WASH. Post (Feb. 4, 2021, 11:53 AM), https://www.washingtonpost.com/technology/2021/02/04/chat-bots-reincarnation-dead/

[[]https://perma.cc/VJP4-FP54]; U.S. Patent No. 10,853,717 B2 (filed Apr. 11, 2017) (issued Dec. 1, 2020).

^{60.} See Brown, supra note 59.

^{61.} See Rogue One: What Peter Cushing's Digital Resurrection Means for the Industry, TODAY (Dec. 17, 2016) [hereinafter Peter Cushing's Digital Resurrection],

https://www.todayonline.com/entertainment/rogue-one-what-peter-cushings-digital-resurrection-means-industry [https://perma.cc/A8XE-DQFS].

^{62.} Id.

^{63.} Id.

^{64.} *Id*.

^{65.} *Id.*

^{66.} See, e.g., Smith, supra note 11, at 1725-28.

reanimation if needed.⁶⁷ In 2019, the family of James Dean granted permission for his likeness to be wholly digitally reanimated for a brand new film about the Vietnam War.⁶⁸

In 2021, a documentarian recreated the late Anthony Bourdain's voice for his film about Bourdain by manipulating preexisting video and audio files of him.⁶⁹ Members of the public were unnerved upon learning that the audio was synthetic and that it was generated without permission from Bourdain's ex-wife.⁷⁰ The synthetic audio was a reading of an email sent by Bourdain while he was still alive, so while the audio itself was digitally manufactured, the words were still Bourdain's.⁷¹

The company that created the Robert Kardashian hologram, Kaleida, claims to use synthetic reality technologies to resurrect "pop singers, heads of state[,] and historical figures."⁷² Holographic reanimations of deceased musicians, like the Tupac hologram Superbowl XLVI performance, are widely known examples of post-mortem digital cloning.⁷³ Despite Tupac's express disapproval of digital cloning, he was reanimated performing for millions of people a song he had never sung while alive.⁷⁴ Similarly, Prince expressed disgust and horror at the idea of a hologram being created of him.⁷⁵ But after Prince's passing, there were reports that Justin Timberlake would be performing with a Prince hologram at the Superbowl LII halftime show.⁷⁶ This did not end up occurring, possibly because of the backlash surrounding the reports, as Prince's explicit opposition to holographic performances was widely known.⁷⁷ Conversely, an upcoming Amy Winehouse posthumous hologram tour was announced, with support from the Winehouse estate.⁷⁸

Clearly, artificial intelligence in the form of posthumous digital cloning is already part of the collective, national zeitgeist. Whether it manifests itself

^{67.} Ryan Britt, *Lucasfilm Has Digital Clones of Your Favorite 'Star Wars' Characters*, INVERSE (Apr. 6, 2018), https://www.inverse.com/article/43342-star-wars-digital-leia-flying-last-jedi-vfx-episode-ix [https://perma.cc/T6XC-TQCM].

^{68.} Brian Welk, *James Dean to Be Digitally Reanimated in CGI for Vietnam War Movie 'Finding Jack'*, WRAP (Nov. 6, 2019, 7:43 AM), https://www.thewrap.com/james-dean-to-bedigitally-reanimated-in-cgi-for-vietnam-war-movie-finding-jack/ [https://perma.cc/B9ZN-XNKJ].

^{69.} See Helen Rosner, *The Ethics of a Deepfake Anthony Bourdain Voice*, NEW YORKER (July 17, 2021), https://www.newyorker.com/culture/annals-of-gastronomy/the-ethics-of-a-deepfake-anthony-bourdain-voice [https://perma.cc/N494-9QTZ].

^{70.} See id.

^{71.} See id.

^{72.} *The Synthetic Reality Co., supra* note 2.

^{73.} See, e.g., Chris Young, *How It Works: 13 Famous People Brought Back to Life as Holograms*, INTERESTING ENG'G (Mar. 12, 2020), https://interestingengineering.com/how-it-works-13-famous-people-brought-back-to-life-as-holograms [https://perma.cc/X6KE-ZUL8].

^{74.} See Smith, supra note 11, at 1720-21.

^{75.} See Dee Lockett, We May Never Know the Truth About Justin Timberlake's Prince Hologram, VULTURE (Feb. 6, 2018), https://www.vulture.com/2018/02/whats-the-truth-about-justin-timberlakes-prince-hologram.html [https://perma.cc/5RZB-MUNQ].

^{76.} See id.

^{77.} See id.

^{78.} Seamus Duff, *Amy Winehouse 'Hologram Set to Go On Tour' in 'Celebration' of the Star*, MIRROR (Aug. 21, 2021, 4:05 PM), https://www.mirror.co.uk/3am/celebrity-news/amy-winehouse-hologram-set-go-24807401 [https://perma.cc/D436-6D86].

as a performative hologram, audio clip, CGI actor, or interactive chatbot, dying can place a person's digital footprint at risk of manipulation or resurrection. Without requiring specific and affirmative action from the decedent to protect against unauthorized use, there is no way to predict how their voice and likeness might be used after death.

C. Current Law Does Not Provide Adequate Support Against the Unauthorized Creation of Digital Clones

1. Privacy Law

Privacy law can be split into four sub-categories: intrusion upon seclusion, appropriation of name or likeness, public disclosure of private facts, and false light publicity.⁷⁹ Should one find themself a victim of deepfake technology, bringing a claim of false light, libel, and/or defamation is likely the best course of legal action—especially if the deepfake shows one in a misleading or harmful light.⁸⁰ However, common law dictates that personal injuries die with a person, while injuries to one's property or estate survive them.⁸¹ This is further detailed in the *Second Restatement of Torts*: "There is no action for the invasion of the privacy of one already deceased, in the absence of statute."⁸² Many authors have rightfully questioned why the dead do not have rights to privacy, dignity, or autonomy.⁸³ This concept goes back to the 1860s, and courts have since held that because privacy rights protect against personally and uniquely felt harms, the dead have no such rights because they are unable to vocalize or experience such harms.⁸⁴ Therefore, privacy rights die when you die.⁸⁵

As of 2021, both Idaho and Nevada have statutes criminalizing libel or defamation of the dead,⁸⁶ and Oklahoma has a statute stating that a threat to publish libel concerning the dead relative of a person "shall be liable civilly and criminally to have the same intent as though the publication had been made…"⁸⁷ In prior years, most states had similar criminal and civil statutes protecting against "blackening the memory of the dead."⁸⁸ But the steady invalidation and repeal of such statutes over the recent years suggests that

282

^{79.} RESTATEMENT (SECOND) OF TORTS §§ 652A-652I (AM. L. INST. 1965).

^{80.} See Alexander Ryan & Andrew Hii, Disinformation Takes on a New Face: 'Deepfakes' and the Current Legal Landscape, GILBERT & TOBIN (Oct. 4, 2019), https://www.gtlaw.com.au/knowledge/disinformation-takes-new-face-deepfakes-current-legal-landscape [https://perma.cc/SG8K-JPRY].

^{81.} See Shafer v. Grimes, 23 Iowa 550, 553 (1867).

^{82.} RESTATEMENT (SECOND) OF TORTS § 652I cmt. b (Am. L. INST. 1965).

^{83.} See, e.g., Kirsten Rabe Smolensky, Rights of the Dead, 37 HOFSTRA L. REV. 763, 763-65 (2009).

^{84.} See Banta, supra note 14, at 935-36.

^{85.} Id. at 932-33.

^{86.} Idaho Code § 18-4801 (2021); Nev. Rev. Stat. § 200.510 (2021).

^{87.} OKLA. STAT. tit. 21, § 778 (2022).

^{88.} See William H. Binder, Note, *Publicity Rights and Defamation of the Deceased: Resurrection or R.I.P.*?, 12 DEPAUL-LCA J. ART & ENT. L. 297, 322-25 (2002).

courts are uneasy to limit free speech in such a manner.⁸⁹ As such, courts continue to follow a civil common law standard that there is no liability for publishing defamatory remarks about a deceased person.⁹⁰

Under the category of appropriation is the right of publicity.⁹¹ There are currently 36 states that have some variation of statute or common law protecting against the unauthorized use of a person's likeness for commercial gain.⁹² These laws vary by state and are intended to protect a person's "personality rights" or "rights of publicity"—phrases coined by a 1953 case, *Haelan Laboratories, Inc. v. Topps Chewing Gum, Inc.*⁹³ These rights suggest that if a person's likeness has value, using it for commercial purposes without their permission is infringing upon their right to earn money (i.e., their property rights).⁹⁴ Most of these laws require that the person whose likeness is being misappropriated holds a level of recognizability, so celebrities are typically the only individuals who are successful in these kinds of suits.⁹⁵ Further, these laws typically protect against the unauthorized *commercial* use of a person's likeness, leading celebrities to also find greater success in these types of suits, as non-celebrity individuals are less likely to find their likeness abused for commercial use.⁹⁶

While 36 states protect the right of publicity, there are only 25 states that have extended such rights to include protection after death.⁹⁷ Each state that *does* recognize post-mortem publicity rights has varying criteria for such a claim—including the amount of time after death that a claim can be brought.⁹⁸ Additionally, in order to make a claim of violation of post-mortem publicity rights, the decedent must have been domiciled in a state with a post-mortem publicity right statute.⁹⁹ The estate of Marilyn Monroe encountered difficulty litigating against a company that was selling unauthorized photographs of her for commercial gain.¹⁰⁰ At the time of litigation, New York did not have a post-mortem publicity right statute.¹⁰¹ Because Marilyn Monroe was domiciled in New

^{89.} See id.; see generally Garrison v. Louisiana, 379 U.S. 64 (1964).

^{90.} See Binder, supra note 88, at 317-18.

^{91.} RESTATEMENT (SECOND) OF TORTS § 652I (AM. L. INST. 1965).

^{92.} See RIGHT OF PUBLICITY SURVEY, supra note 16.

^{93.} See Haelan Laboratories, Inc. v. Topps Chewing Gum, Inc., 202 F.2d 866, 868 (2d Cir. 1953).

^{94.} See Peter L. Felcher & Edward L. Rubin, Privacy, Publicity, and the Portrayal of Real People by the Media, 88 YALE L.J. 1577, 1588 (1979).

^{95.} See Jennifer L. Carpenter, Internet Publication: The Case for an Expanded Right of Publicity for Non-Celebrities, 6 VA. J.L. & TECH. 1, 5-6 (2001).

^{96.} See id. at 6.

^{97.} See RIGHT OF PUBLICITY SURVEY, supra note 16.

^{98.} See id.

^{99.} See generally Milton H. Greene Archives, Inc. v. Marilyn Monroe LLC, 692 F.3d 983, 1000 (9th Cir. 2012).

^{100.} See id. at 991-92.

^{101.} See James P. Flynn, Le Morte d'Elvis: The Birth of New Claims as New York Statute Recognizes Post Mortem Right of Publicity, NAT'L L. REV. (Jan. 19, 2021), https://www.natlawreview.com/article/le-morte-d-elvis-birth-new-claims-new-york-statute-recognizes-post-mortem-right [https://perma.cc/W9G2-39SQ].

York at the time of her death, her estate was unable to make any viable claims against the infringing party.¹⁰²

As technology develops, room for misappropriation of a person's likeness grows to new mediums—specifically, that of a digital clone.¹⁰³ Some suggest that there should be a federal right-of-publicity statute specifically addressing post-mortem virtual clones to create a more universal standard.¹⁰⁴ However, such a statute would do nothing to protect private individuals whose estate suffers no compensatory damage from such a privacy violation.

2. Trademark and Copyright Law

You cannot obtain a trademark registration for your identity or persona.¹⁰⁵ It is possible, though difficult, for a celebrity to obtain a trademark for their likeness so long as their trademark application features a mark specific to their likeness—i.e., their name or a distinguishing feature.¹⁰⁶

Further, this trademark must also function in conjunction alongside a source of goods or services.¹⁰⁷ Thus, such a trademark is bound by commercial use, and any claim of trademark infringement would require some loss of commercial value.¹⁰⁸

The Lanham Act is a federal statute that prohibits misleading consumers into believing a product is falsely endorsed by another person.¹⁰⁹ While such cases do not necessarily require that a plaintiff actually register a trademark with the United States Patent and Trademark Office, courts have to identify whether such a false endorsement truly creates demonstrable consumer confusion.¹¹⁰ For example, the U.S. Court of Appeals for the Second Circuit recently emphasized a plaintiff's level of celebrity and notoriety while analyzing the "consumer confusion" element of their Lanham Act claim.¹¹¹

Using artificial intelligence to create a digital clone of a person whose specific features have been trademarked—most likely a celebrity—could be considered trademark infringement so long as it was in the unauthorized advertising of a commercial product.¹¹² Additionally, using artificial intelligence to create a digital clone of someone promoting a product could be considered a breach of the Lanham Act if it has the potential to create

- 109. See 15 U.S.C. § 1125(a)(1)(A).
- 110. Rozansky et al., supra note 105.

^{102.} See Milton H. Greene Archives, Inc., 692 F.3d at 1000.

^{103.} See Smith, supra note 11, at 1725.

^{104.} See, e.g., id. at 1719.

^{105.} Daniel A. Rozansky et al., *Protecting Image and Likeness Through Trademark Law*, NAT'L L. REV. (Oct. 19. 2021), https://www.natlawreview.com/article/protecting-image-and-likeness-through-trademark-law [https://perma.cc/38QR-2GDM].

^{106.} See id.

^{107.} *Id*.

^{108.} See id.

^{111.} Electra v. 59 Murray Enters., Inc., 987 F.3d 233, 257-59 (2d Cir. 2021) (determining whether professional models' images could appear in ad campaigns for gentlemen's clubs without their consent).

^{112.} Rozansky et al., supra note 105.

consumer confusion.¹¹³ However, like the publicity law statutes, each of these types of claims require that the unauthorized use of a digital clone be in a commercial setting.

Alternatively, depending on where a person is getting the media to create a digital clone, unauthorized use could be a case of copyright infringement. Condé Nast tested this theory by attempting to get a deepfake video of Kim Kardashian-created by manipulating a video of Kardashian originally posted by Condé Nast-taken off Instagram and YouTube.¹¹⁴ However, under the Fair Use Doctrine, it is likely that this deepfake video is not actually infringing upon a copyright.¹¹⁵ The video could be considered transformative in nature-making a statement on influencer culture by manipulating what the deepfake says-and it was only using a small portion of the original Condé Nast video.¹¹⁶ The video was quickly removed from YouTube using its internal Content ID claim feature,¹¹⁷ but as of October 2022, the video remains on Instagram.¹¹⁸ An interesting separate conundrum is whether a digital clone itself might be copyrightable.¹¹⁹ The World Intellectual Property Organization approached this, and a number of other similar, hypothetical questions in a recent session on intellectual property and artificial intelligence.¹²⁰

Texts and emails could be considered intellectual property.¹²¹ But while the unauthorized publishing of texts and/or emails could certainly lead to infringing upon someone's intellectual property, it is possible that using them to create a chatbot (as discussed previously) might also fall within the Fair Use Doctrine.¹²² Creating a deep learning, algorithmic chatbot using someone else's text messages could be considered derivative or even educational. Therefore, relying on copyright, trademark, or intellectual property law to protect against the unauthorized creation and use of a digital clone—postmortem or not—does not appear to be a viable route.

116. Id.

117. Id.

^{113.} See 15 U.S.C. § 1125(a)(1)(A); see also Brenna Gibbs, Is Seeing Still Believing? Deepfakes and Their Future in the Law, MICH. TECH. L. REV. BLOG (Oct. 30, 2019), http://mttlr.org/2019/10/is-seeing-still-believing-deepfakes-and-their-future-in-the-law/ [https://perma.cc/V9KC-3SD7].

^{114.} Samantha Cole, *The Kim Kardashian Deepfake Shows Copyright Claims Are Not the Answer*, VICE (June 19, 2019, 2:18 PM), https://www.vice.com/en/article/j5wngd/kim-kardashian-deepfake-mark-zuckerberg-facebook-youtube [https://perma.cc/EJV8-ZCYA].

^{115.} *Id.*

^{118.} Bill Posters (@bill_posters_uk), INSTAGRAM (June 1, 2019), https://www.instagram.com/p/ByKg-uKlP4C/ [https://perma.cc/9C3R-5LCN].

^{119.} See Truby & Brown, supra note 5, at 159-60.

^{120.} See generallyWorld Intell. PROP. Org. SECRETARIAT, WIPO CONVERSATION ON INTELLECTUAL PROPERTY (IP) AND ARTIFICIAL INTELLIGENCE (AI) (2020), https://www.wipo.int/edocs/mdocs/en/wipo_ip_ai_2_ge_20/wipo_ip_ai_2_ge_20_1_r ev.pdf [https://perma.cc/L4LC-QAMX].

^{121.} See Matt Knight, *The Legal Conundrum of Publishing Text Messages*, SIDEBAR SATURDAYS (July 8, 2017), https://www.sidebarsaturdays.com/2017/07/08/httpwp-mep7vddb-tq-2/ [https://perma.cc/3GEZ-E8DE].

^{122.} See id.

3. Criminal Law

As digital cloning and deepfake technology becomes more prevalent and easier to create, the threat and fear of cybercrime increases.¹²³ In 2021, the Federal Bureau of Investigation ("FBI") released a report warning against malicious actors who may use synthetic content in a criminal manner.¹²⁴ Deepfake videos and photos creating the illusion of someone in a compromising position could lead to threats of extortion.¹²⁵ Virginia was the first state to criminalize the sharing of deepfake pornography, which superimposes images to make it look as though someone is performing pornographic acts.¹²⁶ Other states, like Texas, have focused on criminalizing deepfake technology that targets political figures and/or elections.¹²⁷

With existing audio files on hand, it is also possible for a malicious actor to recreate a person's voice using artificial intelligence capabilities.¹²⁸ There have already been a variety of attempted fraudulent swindles using such technology.¹²⁹ For example, fraudsters are now able to use voice cloning technology to bypass voice biometric systems, which are meant to confirm a person's identity.¹³⁰ Monica Sedky, an attorney for the U.S. Department of Justice, has suggested that using a cloned voice in such a fraudulent effort could likely be prosecuted under 18 U.S.C. §§ 1028 and 1029—federal fraud and aggravated identity theft statutes.¹³¹ While there are no reports of it happening yet, the ability to voice clone someone who has already passed away may eventually lead to identity theft and Social Security fraud—

126. See Harmon Leon, Deepfake Revenge Porn Is Finally Illegal – At Least in One State, OBSERVER (July 3, 2019, 8:30 AM), https://observer.com/2019/07/deepfakes-revenge-porn-illegal-virginia/ [https://perma.cc/LAS5-W6KW].

128. INCREASING THREAT OF DEEPFAKE IDENTITIES, supra note 5, at 5.

^{123.} See Dave McKay, *How Deepfakes Are Powering a New Type of Cyber Crime*, HOW-TO GEEK (July 23, 2021, 8:00 AM), https://www.howtogeek.com/devops/how-deepfakes-are-powering-a-new-type-of-cyber-crime/ [https://perma.cc/NBD8-C6H9].

^{124.} CYBER DIV., FED. BUREAU INVESTIGATION, MALICIOUS ACTORS ALMOST CERTAINLY WILL LEVERAGE SYNTHETIC CONTENT FOR CYBER AND FOREIGN INFLUENCE OPERATIONS 1 (2021), https://www.ic3.gov/Media/News/2021/210310-2.pdf [https://perma.cc/J8BY-AXSV].

^{125.} See McKay, supra note 123.

^{127.} See Kenneth Artz, Texas Outlaws 'Deepfakes' – But the Legal System May Not Be Able to Stop Them, LAW.COM (Oct. 11, 2019, 1:20 PM), https://www.law.com/texaslawyer/2019/10/11/texas-outlaws-deepfakes-but-the-legal-systemmay-not-be-able-to-stop-them/ [https://perma.cc/TR2M-7LAT].

^{129.} See, e.g., Thomas Brewster, Fraudsters Cloned Company Director's Voice in \$35 *Police Find*, FORBES Million Bank Heist, (Oct. 14, 2021, 7:01 AM), https://www.forbes.com/sites/thomasbrewster/2021/10/14/huge-bank-fraud-uses-deep-fakevoice-tech-to-steal-millions/?sh=3d76f3e57559 [https://perma.cc/75B2-ZTPU]; see also Lorenzo Franceschi-Bicchierai, Listen to This Deepfake Audio Impersonating a CEO in Brazen VICE (July 23, 2020, 5:01 Fraud Attempt, PM), https://www.vice.com/en/article/pkyqvb/deepfake-audio-impersonating-ceo-fraud-attempt [https://perma.cc/688H-YW2J].

^{130.} See Kite-Powell, supra note 32.

^{131.} Kyle Wiggers, *Voice Cloning Experts Cover Crime, Positive Use Case, and Safeguards*, VENTUREBEAT (Jan. 29, 2020, 2:10 PM), https://venturebeat.com/2020/01/29/ftc-voice-cloning-seminar-crime-use-cases-safeguards-ai-machine-learning/ [https://perma.cc/BCD7-AXFU].

allowing fraudsters to use voice cloning technology to make it seem like someone is still alive, so as to continue receiving financial benefits from the government.¹³²

Although the FBI has made efforts to warn the public about the dangers of deepfake technology, there are very few criminal sanctions to fight against potential malicious behavior. Only a few states have even made the effort to propose laws that fight against the most drastic iterations of digital cloning technology—pornographic images and political figure manipulation.¹³³ And the federal government seems to be in a wait and see cycle, trying to determine the biggest potential threats arising from deepfake technology. As of now, there are no criminal sanctions in place to mitigate unauthorized post-mortem digital cloning without a showing of clear, tangible harm arising from fraudulent use.

III. ANALYSIS

Regulating the creation and use of digital cloning and synthetic media is not intended to place a chilling effect on the development of artificial intelligence. Synthetic media can certainly bring about valuable benefits to society. For example, voice cloning technology can give back the voice of someone who is no longer able to audibly communicate.¹³⁴ Post-mortem digital cloning can bring comfort to those mourning their loved ones.¹³⁵ Interactive chat bots can reconnect children to their deceased family members.¹³⁶ And interactive holograms can tell future generations stories from historical events, straight from the mouths of the people who actually experienced them.¹³⁷

But there are also many harms that have already arisen from deepfake technology—revenge porn, political interference, harm to reputation.¹³⁸ As technology grows, there will almost certainly come a time where society can no longer identify whether media is real or synthetic. And in response to the fear of posted, online media being manipulated while one is still alive or even after one's passing, there may arise an extreme chilling effect—minimizing societal online engagements and fearing new, exciting technological advances.

^{132.} Cf. Tresa Baldas, Social Security Scammers Invented Wild Cover Stories, Posed as Dead Relatives, Feds Say, USA TODAY (Oct. 2, 2019, 7:19 PM), https://www.usatoday.com/story/news/nation/2019/10/02/feds-target-social-security-scammers-living-off-dead-relatives/3841975002/ [https://perma.cc/GS5W-YFBB] (revealing a man who raised the pitch of his voice on phone calls to pretend to be his dead mother).

^{133.} See Briscoe, supra note 37.

^{134.} See Kite-Powell, supra note 32.

^{135.} See Ursache, supra note 54; see also Sarah Beth Guevara, Breonna Taylor Gets Immortalized in an Augmented Reality App, GOOD MORNING AM. (Dec. 17, 2021), https://www.goodmorningamerica.com/living/story/breonna-taylor-immortalized-augmentedreality-app-81678852 [https://perma.cc/Y987-URWM].

^{136.} See Vlahos, supra note 51.

^{137.} See Katz, supra note 55.

^{138.} See supra Section II.A.

This section will address specific attempts to curb deepfakes and digital cloning. But as this technology is so new, these types of claims remain highly speculative. Courts have yet to set a precedent for claims against unauthorized digital cloning, and legislators have only produced limits to the most severe instances.¹³⁹ Further, these hypothetical legal claims could not be applied post-mortem. This section will present probate law as a novel solution to this issue, arguing that modern estate planning should require a digital legacy clause, dictating how one's digital assets should be accessed and used after death. Existing probate law should also be expanded to further safeguard against unauthorized digital cloning.

A. Lackluster Solutions to Curb Deepfakes and Digital Cloning

Artificial intelligence will likely continue growing at unprecedented speeds, and hopefully legislators will eventually catch up with these developments. Some believe deepfake technology should not be regulated at all,¹⁴⁰ while others grow concerned that the rate of legislation is not in step with the rate of technological growth.¹⁴¹ In 2021, the Deep Fakes Accountability Act was introduced in Congress.¹⁴² This act would require producers of deepfakes to include digital watermarks and disclosures on their products, ensuring that the public is aware they are viewing synthetic media.¹⁴³ But skeptics have voiced concerns that those with bad intentions will simply not abide by such regulations, regardless of whether they are passed.¹⁴⁴

Some deepfake apps and websites are free and readily accessible to the public.¹⁴⁵ Synthetic media creations using this kind of software are typically limited to superimposing one's face onto preselected characters or celebrities or manipulating a photo of someone by assigning to it a variety of preprogrammed moves.¹⁴⁶ These websites have a variety of terms and conditions, suggesting that their content is self-regulated in some way. For example, one of the terms that Avatarify sets forth requires that users "not use the App in any way that violates any rights of a third party, including

^{139.} See supra Section II.C.3.

^{140.} See generally Chapter 5: AI Policy and Governance, in STAN. INST. FOR HUM.-CENTERED AI, THE AI INDEX 2022 ANNUAL REPORT 172 (2022), https://aiindex.stanford.edu/wp-content/uploads/2022/03/2022-AI-Index-Report_Master.pdf [https://perma.cc/UKB7-AECC].

^{141.} See, e.g., Cade Metz, *How Will We Outsmart A.I. Liars?*, N.Y. TIMES (Nov. 19, 2018), https://www.nytimes.com/2018/11/19/science/artificial-intelligence-deepfakes-fake-news.html [https://perma.cc/6VH8-V3CL].

^{142.} DEEP FAKES Accountability Act, H.R. 2395, 117th Cong. (2021).

^{143.} *Id*.

^{144.} Mathew Ingram, *Legislation Aimed At Stopping Deepfakes Is a Bad Idea*, COLUM. JOURNALISM REV. (July 1, 2019), https://www.cjr.org/analysis/legislation-deepfakes.php [https://perma.cc/A8FZ-SC3A].

^{145.} Geoffrey A. Fowler, Anyone with an iPhone Can Now Make Deepfakes. We Aren't Ready for What Happens Next., WASH. POST (Mar. 25, 2021, 8:00 AM), https://www.washingtonpost.com/technology/2021/03/25/deepfake-video-apps/ [https://perma.cc/X9GE-NA3J].

^{146.} Id.

intellectual property rights, data privacy rights, rights of publicity and privacy rights."¹⁴⁷ Similarly, Deepfakes Web prohibits users from "[i]nfringement of property rights, portrait rights, publicity rights, personal rights, honor rights[,] or privacy rights of Company or any third party."¹⁴⁸ However, these sites provide no clear indication on how they intend to enforce compliance.¹⁴⁹

So, what could one do after discovering the existence of an unauthorized digital clone of themself? Currently, there is no clear way to make a claim against the unauthorized use of one's likeness in deepfake technology. Courts have referenced "deep fake" or "deepfake" technology in fewer than 10 published decisions, and each instance was more of a passing mention than an actual analysis into its legal merits as a claim or defense.¹⁵⁰ Existing publicity rights law only has the potential to protect recognizable celebrities from the unauthorized creation of digital clones used for commercial purposes—and only in states with such publicity rights laws.¹⁵¹

Regardless of the failure or success of a right of publicity claim in such a scenario, the existing laws would likely not extend to protect private parties, or even celebrities, against any non-commercial use of an unauthorized digital clone.¹⁵² If the digital clone were pornographic in nature, depending on the state's deepfake statutes, civil or criminal action could be brought.¹⁵³ Similarly, if the digital clone were being used to improperly influence a political race, depending on the state's deepfake statutes, civil or criminal action could also be brought.¹⁵⁴ Here too, courts have not yet had the opportunity to make a ruling on such a suit. If none of the above criteria applies but a person still wishes to find relief against the unauthorized creation and use of a digital clone of themselves, a defamation or libel claim would likely be the next best option.¹⁵⁵ But this, too, has yet to be tested in court.

Each of these potential methods through which claims could be made would require a showing of harm to a particular person. But this kind of reasoning does not work after death, as it has long been held that deceased persons cannot experience harm.¹⁵⁶ Even with the existence of hypothetically successful solutions to curb deepfakes and digital cloning, none of these solutions could be applied to protect private parties post-mortem. Celebrities should not be the only ones who can protect their legacy after death. While someone is alive, they can identify media that has been made to look like them

^{147.} Terms of Service, AVATARIFY, https://avatarify.ai/terms [https://perma.cc/R5P7-H8PC] (last modified July 17, 2020).

^{148.} *Terms of Use*, DEEPFAKES WEB, https://deepfakesweb.com/terms [https://perma.cc/V6CS-5JTU] (last modified Feb. 21, 2021).

^{149.} See Fowler, supra note 145.

^{150.} See, e.g., People v. Smith, 969 N.W.2d 548, 565 (Mich. 2021) ("[W]e are mindful that in the age of fake social-media accounts, hacked accounts, and so-called deep fakes, a trial court faced with the question whether a social-media account is authentic must itself be mindful of these concerns."); *Aerotek, Inc. v. Boyd*, 624 S.W.3d 199, 214 (Tex. 2021).

^{151.} See supra Section II.C.1.

^{152.} See id.

^{153.} See supra Section II.C.3.

^{154.} See id.

^{155.} See supra Section II.C.1.

^{156.} See id.

doing something or saying something they never did or said. They could try to refute it, sue the creator, or request injunctive relief. But after someone dies and can no longer bring a claim, what is to keep people from creating synthetic media that is indistinguishable from real media and sharing it with the world? Without standing, how can your family, estate, or personal representative protect your digital persona after you die?

B. The Solution to Unauthorized Post-Mortem Digital Cloning Uses the Legal Mechanisms Controlling Property Through Probate Law

Property rights are typically the exclusive right awarded to deceased people,¹⁵⁷ and probate law gives credence toward a decedent's intent before death regarding their property.¹⁵⁸ The Uniform Probate Code indicates that one of its primary purposes is "to discover and make effective the intent of a decedent in distribution of the decedent's property."¹⁵⁹ The idea of inheritance law has existed since Roman times.¹⁶⁰ And people have tried to apply the Roman concept of post-mortem rights to a variety of claims—most of which, like privacy rights, have been unsuccessful.¹⁶¹ As previously discussed, in the United States, the right to privacy is not maintained after death.¹⁶²

Many courts have granted certain privacy rights to dead bodies holding that images exploiting corpses, or actions degrading corpses, should not be allowed.¹⁶³ However, the courts consistently cite to the feelings of the family members left behind, not the feelings of the person who has died, as the reasoning behind such decisions: "Family members have a personal stake in honoring and mourning their dead and objecting to unwarranted public exploitation that, by intruding upon their own grief, tends to degrade the rites and respect they seek to accord to the deceased person who was once their own."¹⁶⁴ Further, these instances typically must be so egregious that they shock the conscience.¹⁶⁵

In the 1890s, the City of New York wished to raise money to erect a statue of Mary Hamilton Schuyler in order to honor her philanthropy from when she was alive.¹⁶⁶ Her family objected to the statue, claiming that she was a private person and would not have wanted her image celebrated in such a way.¹⁶⁷ The court reasoned that any findings in support of protecting the dead are exclusively in relation to how it affects the living and that, in this case, the Schuyler family would not be deeply harmed by the erection of such

^{157.} See id.

^{158.} UNIF. PROB. CODE § 1-102(b)(2) (amended 2020).

^{159.} *Id*.

^{160.} See generally Max Radin, Fundamental Concepts of the Roman Law, 13 CALIF. L. REV. 207, 224-26 (1925).

^{161.} See, e.g., Smolensky, supra note 83, at 790, 795.

^{162.} See supra Section II.C.1.

^{163.} See, e.g., Marsh v. Cnty. of San Diego, 680 F.3d 1148, 1157 (9th Cir. 2012).

^{164.} Nat'l Archives & Recs. Admin. v. Favish, 541 U.S. 157, 168 (2004).

^{165.} See Marsh, 680 F.3d at 1154-55.

^{166.} See Schuyler v. Curtis, 42 N.E. 22, 24 (N.Y. 1895).

^{167.} Id. at 24-25.

a statue.¹⁶⁸ The dissent in this case, however, articulated similar concerns addressed in this Note about maintaining the right to conserve one's image and privacy in life and death:

The evidence does not establish that Mrs. Schuyler was a public character, nor that she was in such public station, or so prominent in public works, as to make her name and memory public property [S]he was never a public character, and in no just sense can it be said that, because of what she chose to do in the private walks of life, she dedicated her memory to the state or nation, as public property. To hold that by reason of her constant and avowed interest in philanthropical works unconnected with public station, the right accrued to an association of individuals, strangers to her blood, to erect a statue of her, typifying a human virtue, through contributions solicited from the general public, is, in my judgment, to assert a proposition at war with the moral sense, and I believe it to be in violation of the sacred right of privacy, whose mantle should cover not only the person of the individual, but every personal interest which he possesses and is entitled to regard as private ¹⁶⁹

Unfortunately, the dissenter was unable to convince his fellow justices that Mrs. Schuyler's wishes should be honored.

As discussed, protecting the rights and wishes of the deceased is rarely, if ever, a priority of courts except in certain probate matters.¹⁷⁰ In fact, successful claims supporting post-mortem rights are often those concerning property rights.¹⁷¹ There is a reason why publicity rights are a consistently successful tort claim that can be made on behalf of the deceased.¹⁷² While publicity rights are technically within the scope of privacy law, the reasoning for these claims are typically based in property law, as it is the celebrity's estate that suffers from the unauthorized commercial use of the decedent's likeness.¹⁷³

C. Digital Assets Are Already Included in Existing Probate Law

In 2015, the Revised Uniform Fiduciary Access to Digital Assets Act ("RUFADAA") was approved and recommended for enactment by the Uniform Law Commission.¹⁷⁴ As of March 2021, 48 states have enacted laws addressing what happens to a person's digital assets after they die—46 of

^{168.} Id. at 27.

^{169.} Id. at 28 (Gray, J., dissenting).

^{170.} See Smolensky, supra note 83, at 763, 772.

^{171.} See id. at 765.

^{172.} See id.

^{173.} See id. at 769.

^{174.} Revised Unif. Fiduciary Access to Digit. Assets Act (Unif. L. Comm'n 2015).

which adopted RUFADAA or some version of it.¹⁷⁵ RUFADAA defines a digital asset as "an electronic record in which an individual has a right or interest."¹⁷⁶ Courts have yet to officially define what a "digital asset" is,¹⁷⁷ but it is colloquially accepted that types of digital assets include emails, text messages, electronic files on the cloud (like photos and videos), social media accounts, and more.¹⁷⁸

RUFADAA provides that if explicitly drafted in a person's will, digital fiduciaries can be given managerial access to a decedent's digital assets.¹⁷⁹ This 2015 revision came about after the original act was met with strong opposition due to its lack of requirement for express consent by the decedent prior to their death.¹⁸⁰ The opposition was partially based on concerns for a decedent's personal privacy in electronic communications.¹⁸¹ Online service providers are subject to the Stored Communications Act, which imposes certain privacy requirements.¹⁸² The original Uniform Fiduciary Access to Digital Assets Act, by allowing fiduciaries access without affirmative action on the part of the decedent, risked placing these online service providers in conflict with federal law.¹⁸³

The revised act, on the other hand, requires that the decedent take an affirmative step in their estate planning process to assign a digital executor to manage their digital assets—by maintaining exclusive control, deleting online profiles, distributing digital assets among the decedent's beneficiaries, etc.¹⁸⁴ This affirmative step sometimes occurs in online tools provided by certain companies,¹⁸⁵ like the Facebook Legacy Contact.¹⁸⁶ There are also a number

^{175.} Access to Digital Assets of Decedents, NAT'L CONF. STATE LEGISLATURES (Mar. 26, 2021), https://www.ncsl.org/research/telecommunications-and-information-technology/access-to-digital-assets-of-decedents.aspx#2020 [https://perma.cc/447S-KLXM].

^{176.} Revised Unif. Fiduciary Access to Digit. Assets Act § 2.10.

^{177.} Joseph Ronderos, Note, Is Access Enough?: Addressing Inheritability of Digital Assets Using the Three-Tier System Under the Revised Uniform Fiduciary Access to Digital Assets Act, 18 TRANSACTIONS: TENN. J. BUS. L. 1031, 1047 (2017).

^{178.} See Digital Asset Estate Planning: What You Should Know, PNC INSIGHTS (Aug. 24, 2021) [hereinafter Digital Asset Estate Planning], https://www.pnc.com/insights/wealth-management/living-well/digital-asset-estate-planning-what-you-should-know.html [https://perma.cc/66RM-62L4].

^{179.} See Revised Unif. Fiduciary Access to Digit. Assets Act §§ 6, 15.

^{180.} See Betsy Simmons Hannibal, *The Revised Uniform Fiduciary Access to Digital Assets Act (RUFADAA)*, NOLO, https://www.nolo.com/legal-encyclopedia/ufadaa.html [https://perma.cc/MQH7-V7FP] (last visited Apr. 12, 2022).

^{181.} See id.

^{182.} See generally Sasha A. Klein & Mark R. Parthemer, Who Will Delete the Digital You? Understanding Fiduciary Access to Digital Assets, PROB. & PROP. MAG, JULY-AUG. 2017.

^{183.} See id.

^{184.} See Rachel Sommer, What is RUFADAA and Why Should You Care?, EASEENET (Apr. 19, 2021), https://easeenet.com/blog/what-is-rufadaa-and-why-should-you-care/ [https://perma.cc/C4S9-665H].

^{185.} See, e.g., Jennifer Pattison Tuohy, *Apple Will Soon Let You Pass on Your iCloud Data When You Die*, VERGE (Nov. 10, 2021, 8:49 PM), https://www.theverge.com/2021/11/10/22774873/apple-digital-legacy-program-comes-to-ios15-iphones-macs [https://perma.cc/EYX7-R542].

^{186.} See generally What Is a Legacy Contact and What Can They Do With My Facebook Account?, FACEBOOK, https://www.facebook.com/help/1568013990080948 [https://perma.cc/Q5EK-VMS7] (last visited Apr. 12, 2022).

of digital vault services that provide assistance to its users in digital estate planning.¹⁸⁷ Other ways to provide for one's digital assets are through wills or trusts.¹⁸⁸ Unfortunately, many people die without having conducted any estate planning.¹⁸⁹ And in the absence of an active assignment of a digital estate custodian, all digital assets remain under the terms of the relevant service provider—potentially infinitely excluding access to their digital records after death.¹⁹⁰

After an examination of current legislation and common law standards regarding post-mortem legal mechanisms, probate law is a logical area to seek protection against unauthorized post-mortem digital cloning technology. By enacting some version of RUFADAA, most states' probate laws already provide direction for a variety of digital assets.¹⁹¹ As such, RUFADAA should be expanded to specifically preclude a decedent's digital assets from being used to create any kind of digital clone without their express approval.

D. The Media Used to Create Digital Clones Should Be Considered Digital Assets, and RUFADAA Should Be Expanded to Protect Against Their Unauthorized Use

The world has become almost exclusively digital.¹⁹² Any photos, videos, or audio that might be used to create a digital clone of someone almost certainly lives in their digital cloud or on their social media profile.¹⁹³ Likewise, texts, emails, and social media posts found online or in the cloud could be used to create algorithmic post-mortem chatbots.¹⁹⁴ Even in using Eternime or the Microsoft patent project, unfettered access to a person's social media accounts would be required.¹⁹⁵ Courts should be led by RUFADAA's definition of a digital asset and interpret each of these potential digital cloning ingredients as a digital asset that is controlled and protected through probate law after death. Estate planning in the modern era now involves the consideration of who will have access, control, and possession of your digital assets after you die.¹⁹⁶ But this consideration should go a step further. During estate planning, a person should ask themselves: "How do I want my digital

190. See Ronderos, supra note 177, at 1038.

^{187.} See Cheryl Winokur Munk, Organizing Digital Assets—A Life and Death Matter, FORBES (July 14, 2020, 10:00 AM), https://www.forbes.com/sites/cherylwinokurmunk/2020/07/14/dont-let-digital-assets-get-lostor-stolen-in-cyberspace/ [https://perma.cc/MV4C-TX2V].

^{188.} See Digital Asset Estate Planning, supra note 178.

^{189.} See Alberto B. Lopez, Posthumous Privacy, Decedent Intent, and Post-Mortem Access to Digital Assets, 24 GEO. MASON L. REV. 183, 187 (2016).

^{191.} REVISED UNIF. FIDUCIARY ACCESS TO DIGIT. ASSETS ACT prefatory note (UNIF. L. COMM'N 2015).

^{192.} See Natalie M. Banta, Inherit the Cloud: The Role of Private Contracts in Distributing or Deleting Digital Assets at Death, 83 FORDHAM L. REV. 799, 800-03 (2014).

^{193.} See id.

^{194.} See id.

^{195.} See supra Section II.B.

^{196.} See Lopez, supra note 189, at 187.

assets to be used after I die? Do I want my digital assets to be used to digitally resurrect me after death?"

Just as probate courts allow for certain provisions in a person's will to determine how their property should be used after they die,¹⁹⁷ so too should probate courts allow for stipulations on how their digital property should be used. People should be able to expressly allow for their digital assets to be used for post-mortem digital cloning—for science, innovation, mourning, or any other purpose that could be conceived. Alternatively, people should be able to definitively lay out in their will that they do not wish for their digital assets to be used in such a way.

Some celebrities and actors have already begun getting digital scans of themselves while still alive (or still young), in order to potentially use them for future projects.¹⁹⁸ While some are hesitant to have their likeness digitally scanned,¹⁹⁹ others see it as an opportunity to preemptively bring in more financial support for their estate after they die.²⁰⁰ With such proactive behavior, the actors are clearly making an effort to ensure proper future use of their digital scans after they die.²⁰¹ These digital scans would certainly be considered digital assets—assets that are specifically laid out in the person's will, with details on how to access and use them after they die. Although such thorough digital scans would not be required for a digital clone to be created, the decedent's intentions for their use should be valued in the same way as a decedent's intention for any other digital asset's use. Like a celebrity planning for their death, so too should private citizens be mindful and prepared to address how their digital assets should be used after their death.

Most states require express consent for someone to be able to access a decedent's digital assets under RUFADAA-like probate statutes.²⁰² A future decedent is required to expressly identify their digital fiduciary—someone who can act in their best interest after they die regarding accessing and managing their digital assets.²⁰³ Without so expressing, such media cannot be touched.²⁰⁴ A simple way to assign a digital fiduciary is through a digital legacy-type clause in one's will.²⁰⁵ After dictating who their digital fiduciary should be, the future decedent should then expressly identify in their digital legacy clause how they wish their digital assets to be used—including whether they would allow for their digital assets to be used to create a digital clone of themself after their death. Digital legacy clauses should certainly

^{197.} See generally RESTATEMENT (FIRST) OF PROP. § 437 (AM. L. INST. 1936).

^{198.} See Ben Laney, Comment, Bringing the Dead Back to Life: Preparing the Estate for a Post-Mortem Acting Role, 12 EST. PLAN. & CMTY. PROP. L.J. 349, 352-53 (2020).

^{199.} Chris Lee, *Digital Doubles Are Revolutionizing Hollywood. But Why Do Some Movie Stars Hate Them?*, VULTURE (Dec. 12, 2018), https://www.vulture.com/2018/12/why-do-movie-stars-hate-being-digitally-scanned.html [https://perma.cc/NSR7-WHXD].

^{200.} See Peter Cushing's Digital Resurrection, supra note 61; see also Laney, supra note 196, at 352-53.

^{201.} See Laney, supra note 198, at 352-53.

^{202.} See Sommer, supra note 184.

^{203.} See id.

^{204.} See id.

^{205.} See Revised Unif. Fiduciary Access to Digit. Assets Act § 6 (Unif. L. Comm'n 2015).

expand over the years as technology grows and further digital capabilities emerge.

To further safeguard against post-mortem digital cloning, RUFADAA statutes should be expanded to not only protect against the unauthorized access of a decedent's digital assets, but also their unauthorized use. Section 15 of RUFADAA states that a digital fiduciary may not use a decedent's digital assets to "impersonate the user."²⁰⁶ RUFADAA statutes should be expanded to insist that unless express permission exists, digital assets should not be used by anyone in such a way that impersonates or digitally resurrects the decedent. Further, as RUFADAA specifically protects against unauthorized access to a decedent's social media account, a digital fiduciary or beneficiary should not be allowed to then give access to sites like Eternime²⁰⁷ (or whatever the Microsoft patent becomes)²⁰⁸ without express permission from the decedent. By expanding RUFADAA, even if a person dies before expressing how they wish their digital assets to be used, there is still a defense against unauthorized digital cloning.

It could be difficult to protect against an instance in which a fiduciary goes against the decedent's express wishes and creates (or commissions the creation of) a digital clone of the decedent. As the person authorized to protect a person's digital assets, there would be no immediate recompense if the fiduciary themselves breached their fiduciary duty. So, when assigning a digital fiduciary, one must select a person they are confident will follow through with their requests after death.

Further, fiduciaries under RUFADAA have the same fiduciary duties as those under other areas of probate law.²⁰⁹ They must act in the best interest of the decedent, and they have a legal duty of care, loyalty, and confidentiality regarding their management of the digital assets.²¹⁰ As previously stated, RUFADAA also already protects against a fiduciary's use of a digital asset to impersonate the user.²¹¹ Creating a digital clone of someone doing and saying things that they never did or said while still alive could certainly be interpreted as a type of impersonation of them. Should a digital fiduciary breach their duties, as with any type of fiduciary, interested parties or next of kin would need to file a petition in probate court and have a judge determine whether the digital fiduciary should be replaced and whether injunctive relief is available.²¹²

The rule against perpetuities prevents someone from using a will to control their private property for a time long past the lives of those living at the time the will was written.²¹³ While only a few states still maintain a

^{206.} Id.

^{207.} Ursache, supra note 54.

^{208.} Brown, supra note 59.

^{209.} See generally Klein & Parthemer, supra note 182.

^{210.} REVISED UNIF. FIDUCIARY ACCESS TO DIGIT. ASSETS ACT § 15.

^{211.} Id.

^{212.} See, e.g., In re Karavidas, 999 N.E.2d 296, 301 (Ill. 2013).

^{213.} GEORGE GLEASON BOGERT ET AL., THE LAW OF TRUSTS & TRUSTEES § 213 (3d ed. 2007).

common law rule against perpetuities,²¹⁴ there has also been no judicial consideration about how it would apply to the control of a decedent's digital assets. Most current post-mortem publicity rights statutes identify the length of time that estates can claim protection for the decedents in question.²¹⁵ These state statute time frames range from 10 to 100 years.²¹⁶ Again, with the constant evolution of technology, social media, and online hosting platforms, the fate and length of everyone's online presence and digital legacy is largely unknown.²¹⁷ However, when determining the length of time for post-mortem protections against the unauthorized creation of digital clones, as set forth in a person's will, following the publicity right statutes and allowing for a limit of no more than 100 years seems a reasonable constraint.

A decedent's affirmative action prior to their death could encourage proper digital cloning when desired. But by requiring affirmative action on the part of the decedent, unauthorized post-mortem digital cloning would be minimized, leading to fewer fears of putting oneself out into the world digitally only to have one's digital footprint taken over and maliciously or unsuitably resurrected after death.

IV. CONCLUSION

Over the next few years, artificial intelligence will only grow in popularity and become more accessible to the general public. There must be preemptive action to protect against a free range of artificial intelligence creations—especially synthetic media. To protect private citizens against the unauthorized creation and use of synthetic media and digital clones after death, probate law should automatically disallow such actions unless explicit permission is given prior to death. This will allow for an atmosphere that supports innovation and technology while also avoiding litigation to determine whether certain kinds of technology cross the line of misappropriation. Setting firm boundaries now, while synthetic media and digital clones are still in their formative years, will avoid instances of gross unauthorized misappropriation of such technology in the years to come.

^{214.} Id. at § 214.

^{215.} See RIGHT OF PUBLICITY SURVEY, supra note 16.

^{216.} See id.

^{217.} See Banta, supra note 192, at 800-03.