

DIGITAL THOUGHT CLONES- LEGAL AND ETHICAL IMPLICATIONS

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Abstract

Digital Thought Clone refers to the evolution of Digital Cloning into a more advanced personalized Digital Clone that consists of a behavioural replica of a specific living person through known data and recording in their choices, preferences, behavioural trends, and decision making patterns. It is a profit making technique. It predicts and manipulates a person's choice in real time by using specific data (against him). This is a Digital Twin. It is made by consistently collecting one's intimate personal data in real time application without informing the person whose information is collected. Free apps, social media accounts, gadgets, mobile phones, GPS tracking, monitored online and offline behaviour and activities, and public records are completely responsible for the evolution of digital twins. Artificial intelligence (AI) algorithms test strategies in real time are used to predict, influence, or manipulate a person's consumer or online decisions. It is the nearest representation; a company would have of a living person's thoughts. It enables companies to try to sell products and services at the most effective time and at premium prices, to influence a user's voting intentions, or to use intimate details of their personal digital life to decide whether their bank shall grant them a loan. Digital Thought Clones are produced by tracking the internet user's moves by recording who the users are meeting, who their friends are, what they talk about, what they are spending, and what they are reading. Free and convenient use of technology has enabled data miners to commercialise these data for use in predictive technologies. This is a sophisticated shape of relentless exploitation.

“We are just the tip of the iceberg of humanity having to deal with a new source of truth”.

-Rob Meadows, The AI Foundation

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SUBJECT MATTER OF STUDY

The free and convenient usage of technological expertise has enabled data miners to commercialise the public data. This is a sophisticated shape of relentless exploitation by using predictive technologies. **Digital Thought Cloning** is a profit-making technique as a **Digital Clone** consists of a replica of the behaviour of a person. This replication is possible through known data, a record of choices and preferences, decision making patterns and behavioural trends. A track of the internet user's moves is kept which is done by recording that the users are meeting, who their friends are, what they talk about, how much they are spending, and the content that they read. This paradigm enables companies to sell products at the most effective time by popping up advertisements with benefits on the screen of the (targeted) buyer. This influences the user's voting intentions by using their intimate details. The selling companies and brands go to the extent of predicting whether the target consumer would be able to avail a bank loan or not. This shows the extent of a company encroaching a living person's thoughts. The concept of Digital Clone is based upon Artificial Intelligence (AI) algorithm test strategies. A Digital Clone has a motive of manipulating the intended consumer's online decision. Free apps, social media accounts, gadgets, mobile phones, GPS tracking, monitored online and offline behaviour and activities, and public records are completely responsible for the evolution of digital twins. This is a massive violation of privacy rights because the collection of one's personal information is done without informing. A **Digital Twin** predicts and manipulates a person's choice extensively.¹

REVIEW OF RELATED LITERATURE

The literature available and information from internet has been studied in the proposed study. Here in after follows an attempt to review the relevant literature:

Roman V Yampolskiy in his book *Artificial Superintelligence*² has made sincere efforts to directly address the issues arising out of artificial intelligence and performs consolidated research aimed at making sure that emerging artificial super intelligence is exhaustively explained. The author explains that AI varies from potential economic hardship to the complete extinction of

¹ Jon Truby and Rafael Brown, *Human digital thought clones: the holy grail of artificial intelligence and big data*, Taylor and Francis Online, Available at: <https://www.tandfonline.com/doi/full/10.1080/13600834.2020.1850174> (Accessed on: October 21, 2021)

² Roman V Yampolskiy, *Artificial Superintelligence* (2015)

humankind. It is addressed that many researchers agree that the issue is of utmost importance and needs to be seriously addressed.

In another book written by Jenny Huberman on *Immortality Transformed: Mind Cloning, Transhumanism and the Quest for Digital Immortality*³ the author discovers the trans humanist effort to attain digital immortality through the technology of mind cloning.

Clayton Newell and Joseph Beard in their article '*Clones, Bones and Twilight Zones: Protecting the Digital Persona of the Quick, the Dead and the Imaginary*'⁴ explores the various laws including right to publicity, copyright and trademark that may be employed to prevent unauthorised alterations in the digital data.

N Bostrom and E Yudkowsky in their draft '*The Ethics of Artificial Intelligence*'⁵ the authors question the issues of creating AIs more intelligent than human, and ensuring that they use their advanced intelligence for good rather than ill.

In the paper authored by V Kumar and others '*Understanding the Role of Artificial Intelligence in Personalized Engagement Marketing*'⁶ predictions for managers regarding the AI-driven environment on branding and customer management is discussed.

Other than the above referred literature, various other Books, Journals, Magazines, Newspapers, Law Reporters and significant Websites have been used as a source for collecting the required information.

STATEMENT OF PROBLEM

Digital Cloning is an emerging technology for creating digital clones of people. It deals with manipulating text, audio, and video etc. This technology has rapidly advanced and involves issues relating to human rights and right to privacy. With this technology comes a new Pandora's box of potential ethical concerns that we need to bring to the forefront. Digital clones will move beyond products and vehicles to houses, buildings, factories. This can take us as far as privacy debate permits, but the possibilities are endless. It raises concerns of double

³ Jenny Huberman, *Immortality Transformed: Mind Cloning, Transhumanism and the Quest for Digital Immortality* (2020)

⁴ Clayton Newell and Joseph Beard, *Clones, Bones and Twilight Zones: Protecting the Digital Persona of the Quick, the Dead and the Imaginary*' (2001) 16(3) Berkley Technology Law Journal.

⁵ N Bostrom and E Yudkowsky, *The Ethics of Artificial Intelligence* (2011) Cambridge University Press.

⁶ V Kumar and others, *Understanding the Role of Artificial Intelligence in Personalized Engagement Marketing* (2019) 61(4) California Management Review

presence and occur in the real world in the form of counterfeiting. The breakneck development of AI is creating even more threatening opportunities. The advances in artificial intelligence and the ethical questions associated with the technology have now bounced back into public discourse. It is the need of the hour to examine if a digital thought clone be deemed a digital agent or a digital signature of the biological original.

Software cloning technology rests on two principles:

- that data belongs to someone and that there are privacy concerns
- permission should be sought beforehand if data can be shared with an unauthorized entity.

HYPOTHESIS

There is an urgent need for stringent regulations to protect citizens against misuse of digital thought cloning. Laws should be framed to ensure that the people are in charge of their digital data.

UNDERSTANDING THOUGHT CLONE

The creation of a thought clone in the digital world poses a set of challenges to our ethical concepts of privacy. A digital thought clone can act and think like a biological person. In mind cloning, the data on the thoughts, recollections, feelings, beliefs, attitudes, preferences, and values of a person are used to create mind files. Thought cloning raises questions on

- consent and privacy
- immortality
- the philosophical and legal status of digital clones as humans.

Human cloning for reproduction has been universally deemed as a moral wrong because of the inherent dangers in the cloning procedure. Likewise, it is essential to understand the ethical issues raised by digital cloning as well. It is also a matter of concern that if digital clones are given an explicit legal validity encompassing the right to publicity, then what will be the status of copyright law relating to these clones. The issue of copyright protection for digital models has been discussed in the U.S. case of *Meshwerks v. Toyota*⁷. However, digital thought clones are not mere digital copies, unlike the digital copies of design in the *Meshwerks* case, as AI algorithms arguably possess some minimal degree of creativity and engage in independent creation of

⁷ *Meshwerks v. Toyota*, 528 F.3d 1258 (10th Cir. 2008)

predictions and analysis of the digital data. Therefore, while the digital thought clone system itself may be protected by copyright, the personal data fed into the AI system may not be so. Behavioural cloning is a method by which human sub-cognitive skills can be captured and reproduced in a computer program. The pop up advertisements regarding a divorce lawyer on devices of a happily married couple on their devices seems to be strange. This is relative to how a digital clone understands the social behaviour by acquiring information on the location history to perform predictions such as whether one spouse in a married couple is sleeping outside of their usual sleeping place in order to estimate whether the couple is likely to separate.⁸

THE (UN)SOCIAL NETWORK

Facebook, Twitter, and Instagram have developed sophisticated algorithms that predict user's actions by keeping them hooked on their platforms. The technology companies are preying on their user's digital activities without their consent and awareness. They even predict whether a person will make the effort to compare online prices for a purchase. This digital manipulation encroaches a person's ability to make choices freely. If financial institutions are also using digital thought clones to make financial decisions, such as whether a person would repay a loan, it is alarming. For example, an insurance company judging the medical insurance applications by predicting the likelihood of future illnesses. This can be done by keeping a track of the applicants' diet, gym membership, the distance applicants walk in a day and other variables by tying up with different companies who can fetch them such information about the applicants.⁹ When humanity's unquenchable thirst for predicting human behaviour, decision-making, and the human mind are coupled with economic incentives, the idea of a digital thought clone is not surprising.

The Federal Trade Commission in the United States has identified voice cloning as one of the technologies used for social engineering scams. Digital cloning is propagating because of lack of public awareness, and the absence of a regulatory regime. Identity theft is difficult to redress without a permanent legal solution on unscrupulous cloning activities based on AI. The threat that thought cloning poses to privacy, cyber security and democratic processes needs to be

⁸ Washington Post, *It's the middle of the night. Do you know who your iPhone is talking to?* Washington Post (28 May, 2021) Available at: <https://www.washingtonpost.com/technology/2019/05/28/its-middle-night-do-you-know-who-your-iphone-is-talking/>

⁹ Qatar University College of Law, *The (un) social network: the emergence of digital thought clones and what to do about them*, Machine Learning and AI, Available at: <https://techxplore.com/news/2020-12-unsocial-network-emergence-digital-thought.html> (Accessed on: June 29, 2021)

combatted without infringing the development aspirations and scientific integrity of the society.¹⁰ Thought cloning raises novel and menacing issues related to our future in the age of intelligent machines. Massive personal data generation and manipulation is being done about us, as we go about our daily lives while scrolling through our phone screens. It is vital that data protection is seen as a human rights issue and not just as a compliance issue. *Confidentiality of communications and privacy of data in the digital age* is crucial.

THE UN HUMAN RIGHTS OFFICE REPORT

The Human Rights Council requested the High Commissioner for Human Rights to prepare a report identifying and clarifying principles, standards and best practices regarding the promotion and protection of the right to privacy in the digital age. It was also requested that the report should include the evaluation of the responsibility of business enterprises in this regard.

The report which was presented in the 39th Session, demonstrated that the need to address the challenges that the digital world brings to the right to privacy is more acute than ever. The trend of continuous exploitation of data is penetrating the social, cultural, economic and political fabric of modern societies. The report also stated that it cannot be denied that the data-driven technologies can be put to highly beneficial uses but at the same time it creates an intrusive digital environment where the business enterprises are able to conduct surveillance, analyse, predict and even manipulate people's behaviour to an unprecedented harmful degree. The report emphasised on the fact that these technological developments carry very significant risks for human dignity, autonomy and privacy. The Human Rights Council and the General Assembly have expressed concerns about the risks to privacy and need for data privacy protections. The report mentioned about *The European Union General Data Protection Regulation and the African Union Commission Personal Data Protection Guidelines for Africa* and other adopted laws or proposed legislation which provides guidelines on how to address some of the pressing challenges that the right to privacy faces in the digital age.¹¹

UNDERSTANDING THE RIGHT TO PRIVACY IN THE DIGITAL AGE

The right to privacy is a fundamental human right. Article 17 of the International Covenant on Civil and Political Rights (ICCPR) provides that no one shall be subjected to an arbitrary or unlawful interference with his or her privacy, family, home or correspondence, nor to unlawful

¹⁰ Clayton Rice, QC, *The ethics of voice cloning*, Clayton Rice, Available at: <https://www.claytonrice.com/the-ethics-of-voice-cloning/> (Accessed on: 1 December, 2021)

¹¹ UNHRC, 39TH Session, A/HRC/39/29

attacks on his honour and reputation, and that everyone has the right to the protection of the law against such interference or attacks.¹² Right to privacy holds a better meaning than simply a right to be 'left alone'. Right to privacy is a liberty right which is interlinked with the right to freedom of expression: the two are mutually dependent upon one another and both facilitate the ability of individuals to participate in free and democratic societies. However, it is not an absolute right and there are limitations to it. The social media platforms and search engines are the places which hold most of our information.¹³

The existing algorithms that automate the outcome of a decision through statistical profiling are surrounded by legal controversies because there is a possibility of a discriminatory outcome for a person. This was demonstrated in a case before a Finnish tribunal where a bank used profiling software that resulted in an automated decision that rejected a person's credit application. The automated decision-making algorithm used data factors such as gender, language, and age to determine whether the credit applicant was ineligible. As this was discriminatory, the National Non-Discrimination and Equality Tribunal ruled that it had violated Finland's Non-Discrimination Policy.¹⁴

Media Privacy Scams Through Thought Prediction

a) Doxing: Doxing is a term that is associated with internet vigilantism and hacktivism. Doxing means collecting personal information about someone or something and releasing it to another party. This is very helpful for understanding the next move of the victim by mind cloning.¹⁵

b) Viral Videos: These types of videos are very attention seeking and hence become the perfect bait for scammers. While clicking or viewing the video there might be a pop-up and which may ask the victim to perform or execute something in his device on which he is accessing. The criminal further downloads many types of malware and viruses in the victim's device without consent or permission.

¹² International Covenant on Civil and Political Rights, 1966, Art.17

¹³ Turby and Brown (n1), Taylor and Francis Online

¹⁴ C O'Neilly, *Weapons of Math Destruction. How Big Data Increases Inequality and Threatens Democracy* (Allen Lane, 2016)

¹⁵ Jayaysh Rao, "privacy in the digital age with special reference to doxing", Available at: <https://www.legalserviceindia.com/legal/article-4770-privacy-in-the-digital-age-with-special-reference-to-doxing.html> (Accessed on: October 10, 2021).

c) Free Coupons: They are very commonly visible and on social media. They are mostly offered after studying the consumer's tastes and buying patterns. Scammers give fake coupons by fetching the victim's information online to trap them for wrongful gains.

d) Geo-Stalking: This plays the strongest part in the thought cloning process. Through geo stalking, criminals use your location on social media and stalk or follow the victim.

JUDICIAL TREND

Privacy is an inherent part of human personality and inalienable from a human-being. The reason that right to privacy has been debatable in India is because the Indian Constitution does not expressly grant right to privacy in Article 21. Article 21 mentions the word "personal liberty" revealing that that for an individual to lead a dignified life, his/her liberty should be protected which ultimately demands a legal recognition for right to privacy. In *Kharak Singh v. State of U.P.*¹⁶, Justice Subbarao in his minority opinion expressed a need to recognize right to privacy even though it is not expressly granted by the Constitution of India. The petitioner being suspected of involved in criminal activities, in the afore-mentioned case, was put under surveillance. He challenged this action of police as a violation of his right to privacy. However, the court refused to give recognition to his right to privacy. A similar view was observed by the Apex Court in *M.P. Sharma v. Satish Chandra*.¹⁷ Somehow these views diverted from the contradictory and reasoned views of US Supreme Court wherein Justice Frankfurter believed that *security of one's privacy is basic to a free society and hence, it should be protected from unreasonable intrusion from police authorities.* With the growing use of information technology in almost all the sectors, there is definitely a need to recognize such a right at a global level. Hessen (one of the German States) was the first country to enact data protection laws (in 1970) which was ultimately to safeguard the privacy of the masses. The US Supreme Court has recognised privacy as a fundamental right in *Loving v. Virginia*.¹⁸

The government of India decided to provide to all its citizens a unique identity called Aadhaar which is card containing 12-digit Aadhaar number. The registration procedure for Aadhaar card required the citizens to give their biometrics such as fingerprints, iris scans etc. Retired judge justice K.S Puttaswamy filed a petition challenging the constitutional validity of this Aadhar

¹⁶ AIR 1963 SC 1295

¹⁷ AIR 1954 SC 300

¹⁸ *Loving v. Virginia*, 388 US 1 (1967).

project contending that there was a violation of right to privacy of the citizens since, the registration for Aadhaar is made mandatory.¹⁹

FINDINGS

- It is possible that every human who uses the digital technology has a digital thought clone replicating all their known digital data.
- Thought cloning is possible by retrieving the personal from free apps, social media accounts, gadgets, mobile phones, GPS tracking, monitored online and offline behaviour and activities, and public records.
- The practice of creating thought or digital clones poses legal and ethical issues. It directly attacks right to privacy and freedom of personal choice.

EXAMINATION OF HYPOTHESIS

In the light of the above findings the hypothesis is proved as no specific law exists on digital thought clones.

CONCLUSION

Digital thought cloning is setting a trend of manipulating the private information of innocent people for personal gains by big companies. There is a lack of data protection laws which leads to violation of right to privacy of the individuals. Data breaches continue to be a key enabler of fraud. Digital thought clones can often be devastating – psychologically as well as financially for elderly and other vulnerable group of the society like children. There are legal and ethical implications of digital cloning. Digital thought cloning, raises issues of consent and privacy violations whenever the data used to create the digital clone are obtained without the informed consent of the owner of the data.

SUGGESTIONS

The following suggestions are contributed based on the above research.

- The data retrieved by companies for the purpose of creating a digital thought clone is usually done through concealed means. *An informed consent* of the subject should be taken before proceeding with any kind of action on this data.

¹⁹ AIR 2017 SC 4161

- There should be a *concrete legal framework* in order to stop the misuse of personal data and monitoring should be done so that there is no infringement of right to privacy through digital means.
- Respect for dignity, privacy and freedom to have personal choice should be given priority over entrepreneurship and profit making. An individual's digital behaviour should not be examined without his consent. Doing so should be dealt with seriously.
- Digital thought cloning should be categorically and explicit be mentioned as cyber-crime.