

**INFO 215: Social Aspects of Information Systems**

**Assignment 2**

Lixiao Yang, Mengyang Xu

(Non-native English Speakers)

College of Computing and Informatics, Drexel University

Dr. John Seberger

November 1, 2022

## **Thalia: First Step to Dystopia?**

**Lixiao Yang, Mengyang Xu**

It's on your phone, it's in the news. Thalia, an app that uses facial recognition and analysis to monitor users' mental health, has taken the world by storm. But what does it mean for us and our society when AI tells us how happy we are? Could this be our first step toward mass surveillance and dystopia? As a leader in defining well-being through face recognition, can Thalia take on the burden of optimizing the interaction between people and technology? This needs to be analyzed from several aspects from a sociotechnical perspective.

First of all, Thalia's algorithms for distinguishing well-being by face recognition may be biased. It is irresponsible to judge people's well-being only by the expression on their faces and discard other factors. The face recognition algorithm, which is the core feature of the app, is unavoidably biased because it “reflects the values, perspectives, and biases of the humans who design and shape them” (Chandnani & Agosto, 2022). Experts point out that the fundamental problem of face recognition is “they attach numerical values to the human face at all” (Stark, 2019). Such a flaw may give racists an opportunity to take advantage of it.

Second, the protection of user privacy is also an issue that cannot be ignored, especially in such privacy-driven applications. User and information privacy is one of the most important factors that people consider when using technology products, and it directly affects the desire to use the product and thus the direction of the product. However, a noteworthy phenomenon is that people tend to get caught up in the weird paradox which is people will continue to use apps even if they consider them to be “creepy” and it is connected with violation of expectations, violation of personal boundaries and ambiguity of threat (Seberger et al., 2022). As one of the ethics of computing, it is debatable whether Thalia's trade-off between user privacy and security was considered in its design process (Knobel & Bowker, 2011).

What is more, we should be wary of applications like Thalia becoming an enabler of surveillance capitalism. This new type of information capitalism “aims to predict and modify human behavior as a means to produce revenue and market control” (Zuboff, 2015). When Thalia has a lot of facial recognition data, will Thalia make revenues from it by selling it to third-party Big Tech companies or insurance companies? Such profit-driven business practices are often unregulated and can contribute to a society moving toward mass surveillance and privacy breaches.

From the perspective of technology determinism, the distributed use of Thalia could cause serious consequences. Just like the health surveillance of the current epidemic, applications like Thalia may develop in the direction of mass surveillance (Seberger & Patil, 2022). If in the future, whenever you want to express your emotions on your face, you will always remember that someone will record your facial expressions at this moment. Under such circumstances, can

everyone still laugh or cry unrestrainedly? Probably most people will be grumpy about that because to quote an article, “the long-term adoption of such apps as infrastructure for public health surveillance contributes to widespread concerns of mass surveillance and privacy violations that cannot reasonably be described as a greater good” (Seberger & Patil, 2022).

The last and most complicated, the use of Thalia will involve some wicked problems. Before everyone starts to use Thalia, everyone can ask themselves, what is the most fundamental role of this app? And what kind of human futures are implied by Thalia? Since Thalia's real analysis object is actually human society, according to the wicked problem theory of design, we have to consider, Thalia is “the design of complex systems or environments for living, working, playing, and thinking” (Buchanan, 1992). Now that we are gradually giving up our privacy for safety (Naughton, 2020), if Thalia is still used on a large scale in the future, are we going to give up privacy or something for our "well-being"? Most likely it means that we will further slouch toward dystopia.

After considering the above five aspects, we might as well boldly predict that Thalia is our first step toward dystopia. The government should expeditiously strengthen the construction and management of relevant regulations to regulate the use of privacy-intrusive applications like Thalia as soon as possible. It is our duty to protect our rights is to protect the future of mankind from the collapse of society in the direction of dystopia.

(740 Words)

## References

- Chandnani, A., & Agosto, D. E. (2022). Algorithms: Decoding Bias in Messages. In *Media Literacy for Justice: Lessons for changing the world* (pp. 120–123). story, ALA Neal-Schuman.
- Knobel, C., & Bowker, G. C. (2011). Values in design. *Communications of the ACM*, 54(7), 26–28. <https://doi.org/10.1145/1965724.1965735>
- Naughton, J. (2020, February 26). *Slouching towards dystopia: The rise of surveillance capitalism and the death of privacy*. New Statesman. Retrieved November 1, 2022, from <https://www.newstatesman.com/long-reads/2020/02/slouching-towards-dystopia-rise-surveillance-capitalism-and-death-privacy>
- Seberger, J. S., & Patil, S. (2021). Post-covid public health surveillance and privacy expectations in the United States: Scenario-based interview study. *JMIR MHealth and UHealth*, 9(10). <https://doi.org/10.2196/30871>
- Seberger, J. S., Shklovski, I., Swiatek, E., & Patil, S. (2022). Still creepy after all these years: the normalization of affective discomfort in App use. *CHI Conference on Human Factors in Computing Systems*. <https://doi.org/10.1145/3491102.3502112>
- Stark, L. (2019). Facial recognition is the plutonium of ai. *XRDS: Crossroads, The ACM Magazine for Students*, 25(3), 50–55. <https://doi.org/10.1145/3313129>
- Wicked problems in design thinking* - *jstor.org*. (n.d.). Retrieved November 1, 2022, from [https://www.jstor.org/stable/1511637?casa\\_token=2OJsrk0T3vYAAAAA%3An380fZi804iFURHXQNvdx0zk5wH017MJVM8p9cqQOjBia6LSZ5Vz1ouhXHzdGT8YOB9cPVEaE26bom7ZjmERl-Q4UtLcDzpHKIDx1IMhVZ7MeMZ\\_fTM](https://www.jstor.org/stable/1511637?casa_token=2OJsrk0T3vYAAAAA%3An380fZi804iFURHXQNvdx0zk5wH017MJVM8p9cqQOjBia6LSZ5Vz1ouhXHzdGT8YOB9cPVEaE26bom7ZjmERl-Q4UtLcDzpHKIDx1IMhVZ7MeMZ_fTM)
- Zuboff, S. (2015). Big other: Surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology*, 30(1), 75–89. <https://doi.org/10.1057/jit.2015.5>.