Discussion Leader Proposal

LOUISA CONWILL

ACM Reference Format:
Louisa Conwill. 2022. Discussion Leader Proposal. 1, 1 (March 2022), 2 pages. https://doi.org/10.1145/nnnnnnn.nnnnnnn

1 INTRODUCTION

My research will consider the effects of augmented reality filters on our perception of self and others. I am curious about when Internet users perceive online content as an accurate representation of realities in the physical world versus as a representation of an online or virtual world that they know is separate from the physical reality. For example, when the image of a Snapchat user's face is modified with an augmented reality filter, how much must the face be modified, and in what ways must the face be modified, before other people perceive that it is a modified image rather than an authentic image? In what cases do people think an image accurately reflects the physical world but it is actually a modified (or *virtual*) image? Do different people draw the line between where the physical world ends and where the virtual world begins differently? How does our perception of the boundary between the physical world and the virtual world affect our behavior and well-being?

2 PAPERS

I propose two papers along this theme:

- *Mirror, Mirror on My Phone: Investigating Dimensions of Self-Face Perception Induced by Augmented Reality Filters* (https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9583834)
- *A perceptual study on the manipulation of facial features for trait portrayal in virtual agents* (https://dl.acm.org/doi/pdf/10.1145/3267851.3267891?casa_token=hhx28RA1KbMAAAAA:Hx_bWmkw8VKb7_8V87zqnWsSx6MQh_ZWnbTDuUJnNbDhfSPc8lUBSbeVgxRpuLl2iUcpmzFLXv8C)

A lot of the work on the effect of AR filters on the perception of self and others was studied from the perspective of consumer marketing. Rebecca Fribourg and Rachel McDonnell are some of the only researchers considering this from the perspective of computer science/HCI. Since our class has mainly computer science students and no business students, I thought these papers would resonate with the class more than the ones in consumer marketing.

2.1 Self-Face Perception and Augmented Reality Filters

This study looks at how people perceive their own faces when distorted by an augmented reality filter. Study participants viewed their faces through a number of augmented reality filters that modified their face in ways such as changing the face width, eye size, adding glasses, or adding a cat filter. Participants then evaluated the personality, appeal, emotion, and intelligence traits that their modified faces convey. The results show that even

Author's address: Louisa Conwill.

XXXX-XXXX/2022/3-ART $15.00
https://doi.org/10.1145/nnnnnnn.nnnnnnn

small modifications to the face can impact self-recognition and changes to facial features can impact self-perceived personality traits.

2.2 Facial Features and Trait Portrayal in Virtual Agents

This study has the same last author (Rachel McDonnell) as the previous paper. Rather than focusing on augmented reality, this study looks at how facial traits on virtual reality characters affect personality judgements. The study finds that people make different personality judgements from the same facial traits on a real person versus on a virtual avatar. For example, while people tend to perceive other humans with wide faces as more dominant, this study found that narrow-faced virtual avatars are perceived as more dominant. Although this study does not involve augmented reality, it provides insight into how people make different judgements about things of the physical word versus things of the virtual world.