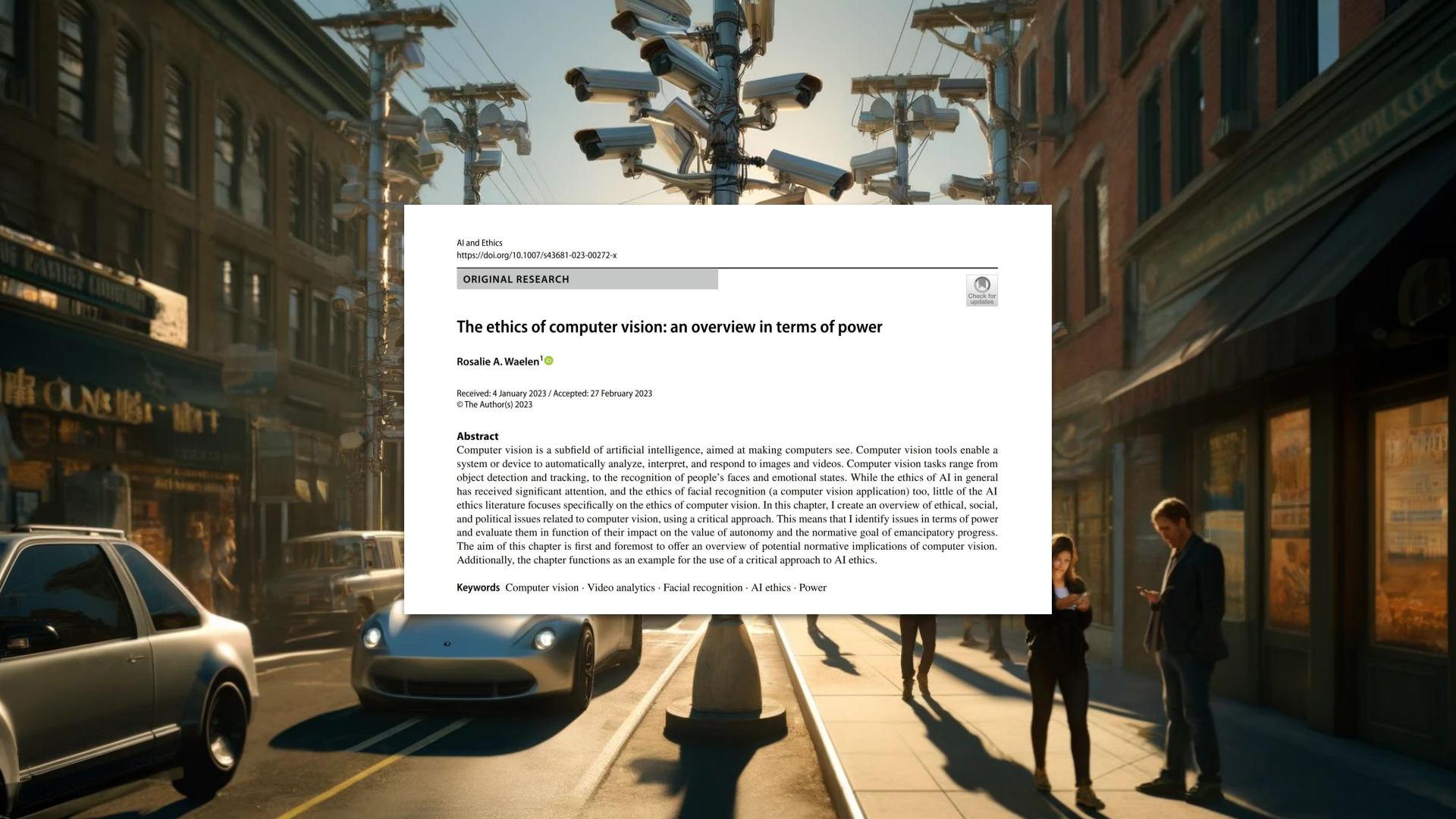
and then the hammer broke: seeing machine vision

andre ye | pacific university philosophy conference

“Seeing everything from nowhere… this eye fucks the world to make technomonsters.”

Donna Haraway



AI and Ethics
https://doi.org/10.1007/s43681-023-00272-x

ORIGINAL RESEARCH

The ethics of computer vision: an overview in terms of power

Rosalie A. Waelen[1]

Received: 4 January 2023 / Accepted: 27 February 2023

Abstract
Computer vision is a subfield of artificial intelligence, aimed at making computers see. Computer vision tools enable a system or device to automatically analyze, interpret, and respond to images and videos. Computer vision tasks range from object detection and tracking, to the recognition of people's faces and emotional states. While the ethics of AI in general has received significant attention, and the ethics of facial recognition (a computer vision application) too, little of the AI ethics literature focuses specifically on the ethics of computer vision. In this chapter, I create an overview of ethical, social, and political issues related to computer vision, using a critical approach. This means that I identify issues in terms of power and evaluate them in function of their impact on the value of autonomy and the normative goal of emancipatory progress. The aim of this chapter is first and foremost to offer an overview of potential normative implications of computer vision. Additionally, the chapter functions as an example for the use of a critical approach to AI ethics.

Keywords Computer vision · Video analytics · Facial recognition · AI ethics · Power

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CHAPTER

13 Race and Gender

Get access

Timnit Gebru

https://doi.org/10.1093/oxfordhb/9780190067397.013.16 Pages 252–269
Published: 09 July 2020

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Abstract

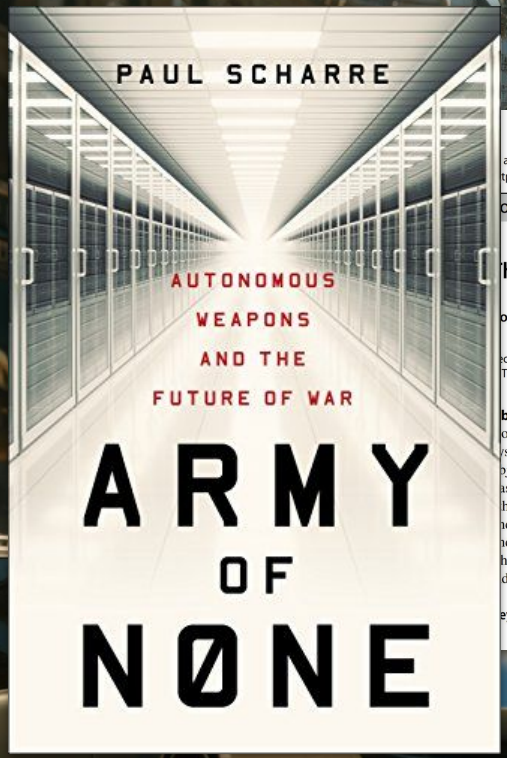
This chapter discusses the role of race and gender in artificial intelligence (AI). The rapid permeation of AI into society has not been accompanied by a thorough investigation of the sociopolitical issues that cause certain groups of people to be harmed rather than advantaged by it. For instance, recent studies have shown that commercial automated facial analysis systems have much higher error rates for dark-skinned women, while having minimal errors on light-skinned men. Moreover, a 2016 *ProPublica* investigation uncovered that machine learning–based tools that assess crime recidivism rates in the United States are biased against African Americans. Other studies show that natural language–processing tools trained on news articles exhibit societal biases. While many technical solutions have been proposed to alleviate bias in machine learning systems, a holistic and multifaceted approach must be taken. This includes standardization bodies determining what types of systems can be used in which scenarios, making sure that automated decision tools are created by people from diverse backgrounds, and understanding the historical and political factors that disadvantage certain groups who are subjected to these tools.

Keywords: race, gender, artificial intelligence, face-recognition systems, machine learning systems, societal biases, automated decision tools, AI ethics, machine learning fairness, fairness accountability transparency and ethics

Subject: IT and Communications Law, Law

Series: Oxford Handbooks

Collection: Oxford Handbooks Online



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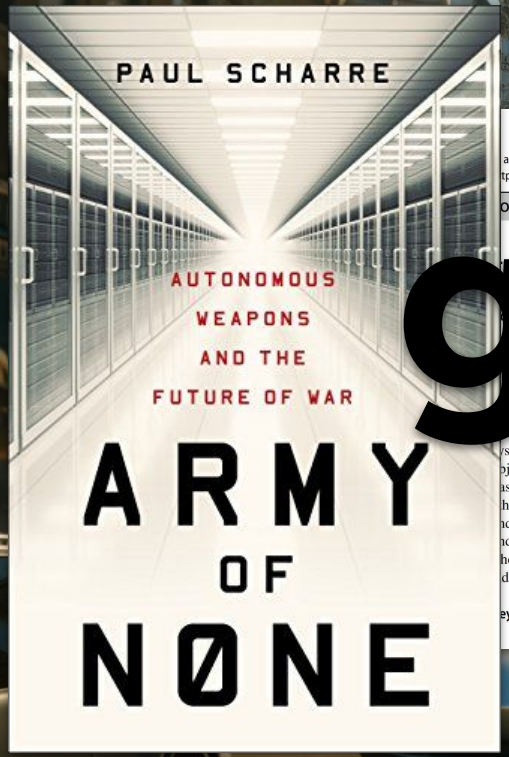

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god trick


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PAUL SCHARRE
AUTONOMOUS
WEAPONS
AND THE
FUTURE OF WAR
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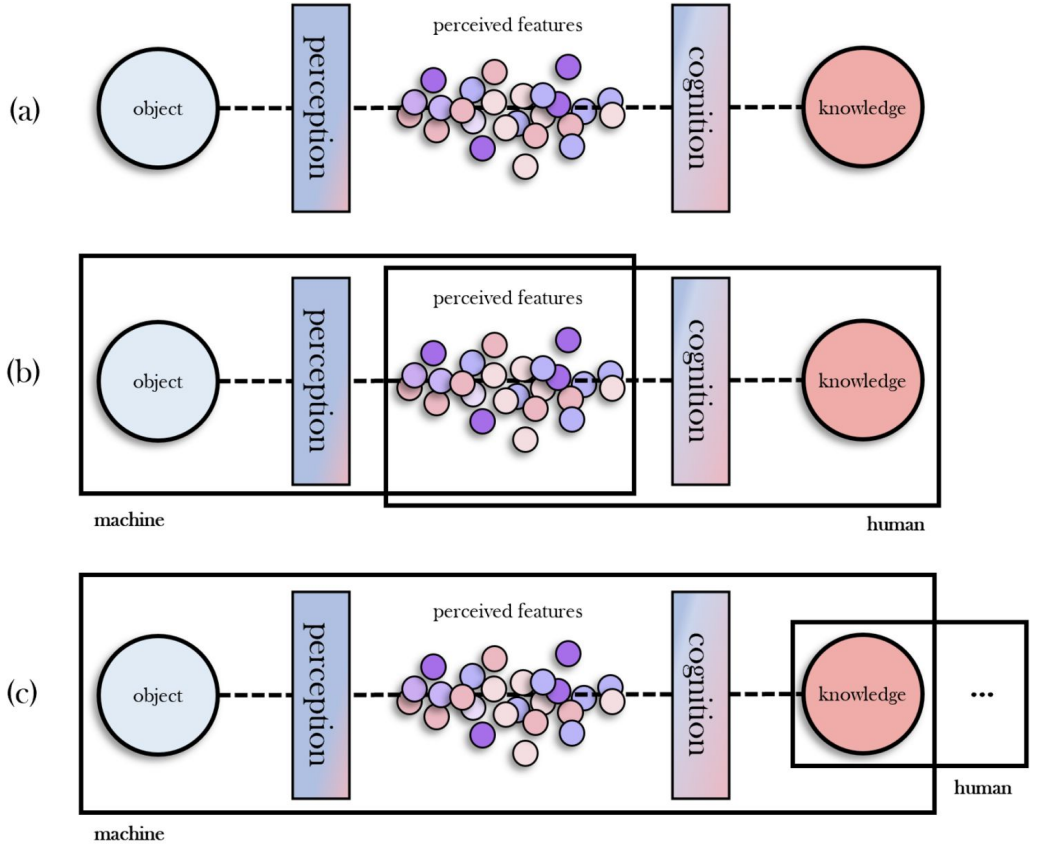
Heidegger's Hammer
Thor's Hammer


playing god with telescopes
Haraway's god trick

new machines: machines that learn



human intelligence

extended human intelligence (with tools)

artificial intelligence

Figure 1: a) *Vision in general*: objects are mapped to perceived features, which are cognized as knowledge. b) *Vision for Haraway's machine vision*: the machine perceives the object and generates perceived features, which we cognize into (false) knowledge. c) *Vision for our contemporary machine vision*: the machine both perceives and cognizes the object, and we take the resulting knowledge and use it for some other purpose.

from gods to disciples:

the new god trick

machines are bad at playing gods

Heideggerian hammers require our ethical labor


Heideggerian hammers require our ethical labor
"With whose blood were my eyes crafted?"
Donna Haraway