

and then the hammer broke: seeing machine vision

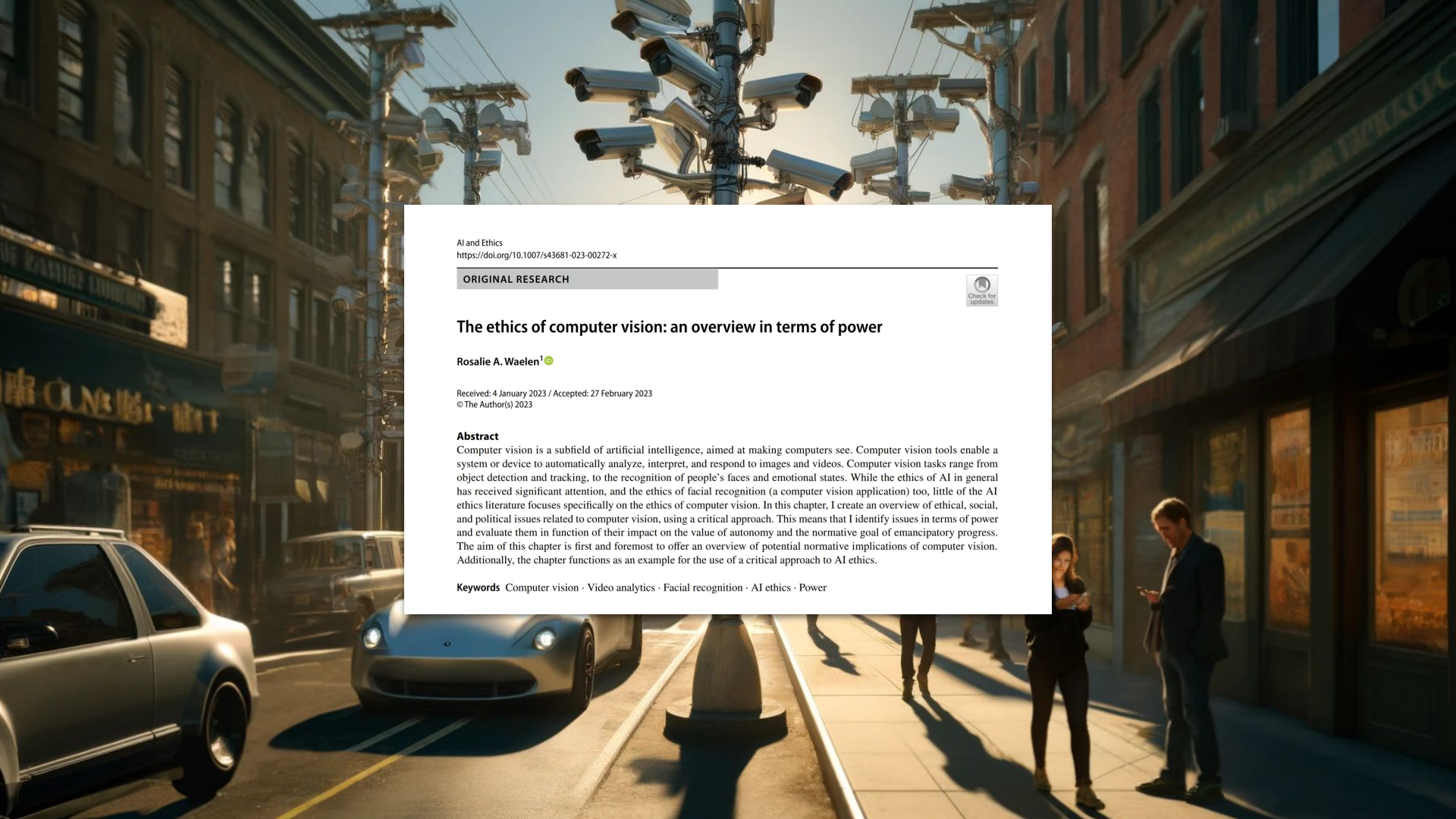


“Seeing everything from nowhere...
this eye fucks the world to make
technomonsters.”

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. Waelen¹

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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



CHAPTER

13 Race and Gender

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Timnit Gebru

<https://doi.org/10.1093/oxfordhb/9780190067397.013.16> Pages 252–269

Published: 09 July 2020

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

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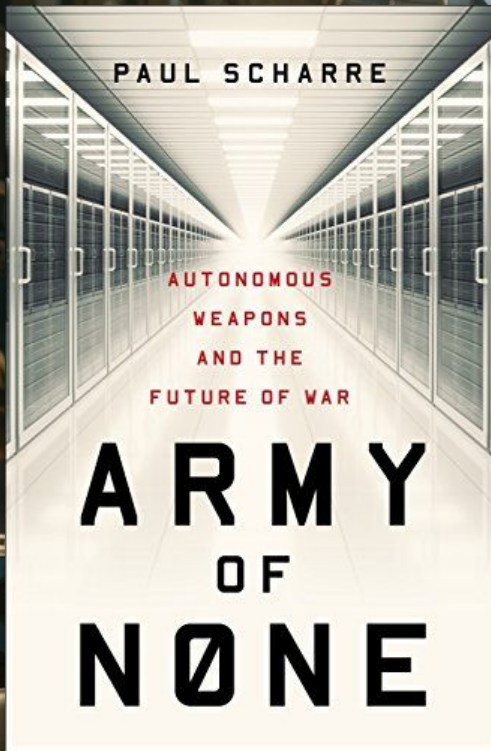
This chapter discusses the role of race and gender in artificial intelligence (AI). The rapid permeation of AI into society has not been accompanied by a thorough investigation of the sociopolitical issues that cause certain groups of people to be harmed rather than advantaged by it. For instance, recent 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

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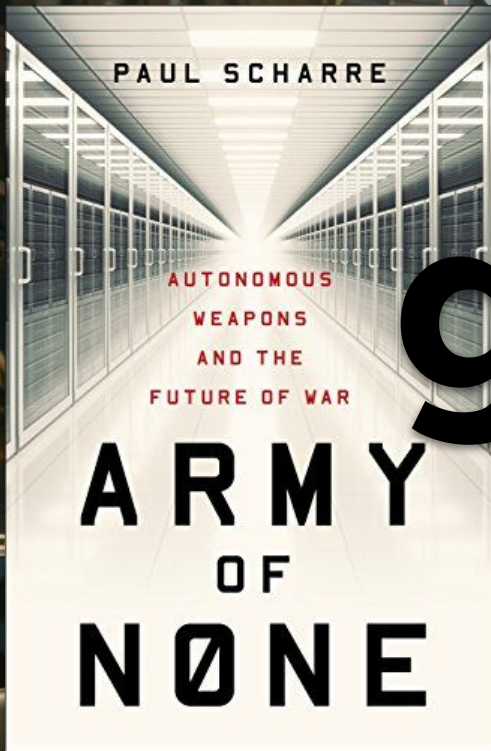
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Computer vision is a subfield of artificial intelligence, aimed at making computers see. Computer vision systems or devices to automatically analyze, interpret, and respond to images and videos. Computer vision is used for object detection and tracking, to the recognition of people's faces and emotional states. While the ethics of computer vision has received significant attention, and the ethics of facial recognition (a computer vision application) to the ethics literature focuses specifically on the ethics of computer vision. In this chapter, I create an overview of the ethics and political issues related to computer vision, using a critical approach. This means that I identify issues and evaluate them in function of their impact on the value of autonomy and the normative goal of emancipation. 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.

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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 corresponding investigation of sociopolitical issues. Because certain groups of people are harmed by advanced AI, for instance, recent studies have shown that commercial automated analysis systems have much higher error rates for dark-skinned women, having minimal errors on light-skinned men. In 2016, a public investigation uncovered that machine learning—based on what a crime victimism 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.

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g from nowhere
everything from no
god trick
even nothing from
NONE
seeing everything

PAUL SCHARRE

AUTONOMOUS
WEAPONS
AND THE
FUTURE OF WAR

and Ethics
tps://doi.org/10.1093/oxfordhb/9780190067397.013.16
OF
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ethics
view in
A. W
January 2020
hor(s) 2020
Computer vision is a subfield of artificial intelligence, aimed at making computers see. Computer vision includes image recognition, video analytics, and facial recognition. It is a critical component of many modern systems, including autonomous vehicles, surveillance, and social media. This chapter discusses the ethical implications of computer vision, particularly in the context of facial recognition and surveillance. It explores the potential for bias and discrimination in these systems and offers a critical approach to their use. The chapter concludes with a discussion of the future of computer vision and the need for ethical oversight.

Keywords: Computer vision - Video analytics - Facial recognition - AI ethics - Power

Paul Scharre
Gebru
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This chapter discusses the role of computer vision in artificial intelligence (AI). The rapid growth of AI into various applications has been accompanied by a growing concern that certain groups of people may be disproportionately affected. For instance, recent studies have shown that commercial automated analysis systems have much higher error rates for dark-skinned individuals, while having minimal errors on light-skinned individuals. A 2016 study published in *Investigation* uncovered that machine learning-based crime analysis systems in the United States are biased against African Americans. Other studies show that natural language-processing tools trained on news articles contain societal biases. Many technologies have been proposed to address these biases, but they are often multifaceted and difficult to implement. This chapter discusses the challenges of determining what factors can be used to identify and address these biases, and offers a critical approach to their use. The chapter concludes with a discussion of the future of computer vision and the need for ethical oversight.

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Subject: Law, Economics, Business Law, Business Law, Business Law
Book: Oxford Handbook of Artificial Intelligence
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Pages 252-269
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intelligence, face-recognition, machine
automated decision tools, machine
quality transparency ethics
Law,



Thor's Hammer

Heidegger's Hammer



playing god with telescopes



Haraway's god trick

new machines: machines that learn



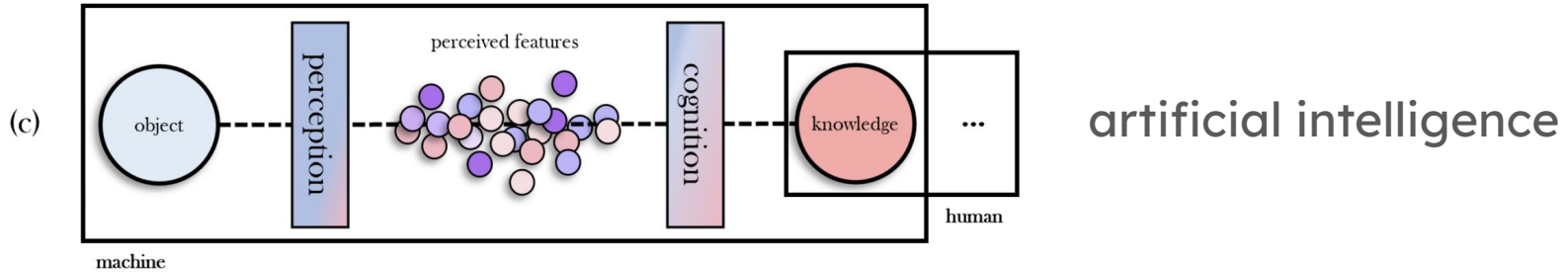
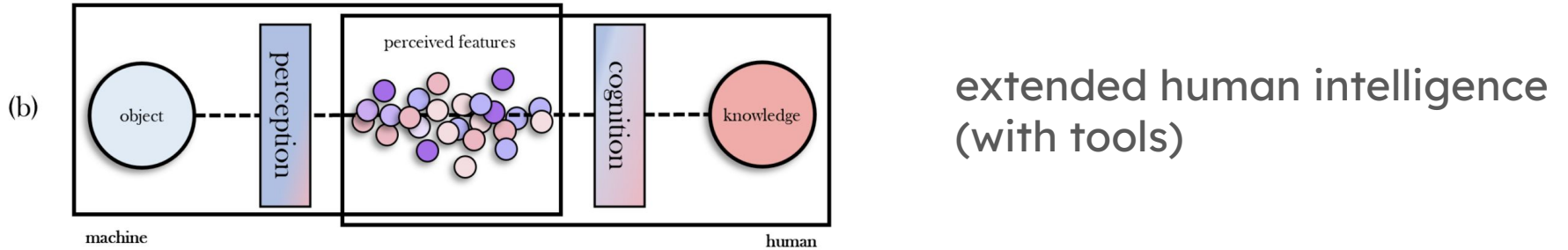
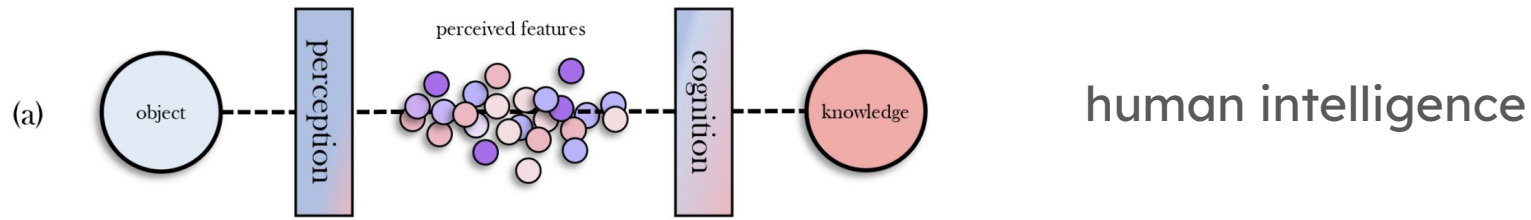
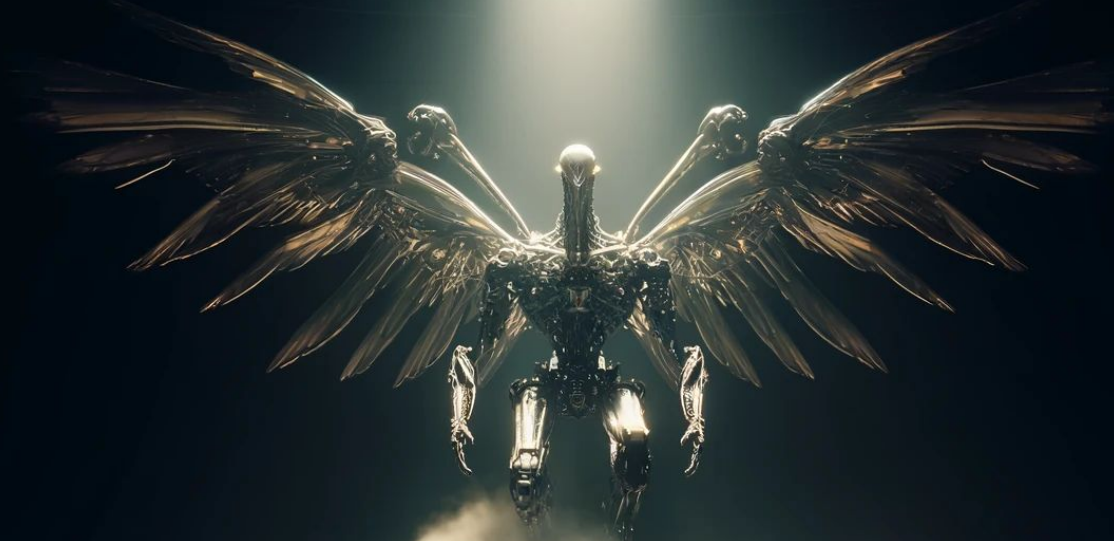


Figure 1: a) *Vision in general*: objects are mapped to perceived features, which are cognized as knowledge. b) *Vision for Haraway's machine vision*: the machine perceives the object and generates perceived features, which we cognize into (false) knowledge. c) *Vision for our contemporary machine vision*: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



A large, dark, mechanical creature with wings and a human figure on its back against a sunset sky. The creature is composed of various mechanical parts, including gears, wires, and a large circular component on its head. The human figure is silhouetted against the bright light of the sunset, sitting on the creature's back and pointing towards the sky. The background is a dramatic sky with dark clouds and a bright sun low on the horizon, creating a silhouette effect on the creature and the human figure. The overall mood is somber and contemplative.

Heideggerian hammers require our ethical labor

"With whose blood were my eyes crafted?"

Donna Haraway

