

THE RISK PERCEPTION OF ARTIFICIAL INTELLIGENCE

HUGO NERI



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LEXINGTON BOOKS

Lanham • Boulder • New York • London

Published by Lexington Books
An imprint of The Rowman & Littlefield Publishing Group, Inc.
4501 Forbes Boulevard, Suite 200, Lanham, Maryland 20706
www.rowman.com

6 Tinworth Street, London SE11 5AL, United Kingdom

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British Library Cataloguing in Publication Information Available

Library of Congress Cataloging-in-Publication Data

<CiP data here>

♻️™ The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48-1992.

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Chapter 2

We Wanted to Try

Imagined Robots and Mathematical Experiments Pre-1960s (in Collaboration with Veridiana Domingos Cordeiro)

A clear representation of intelligent machines presenting side effects comes to the surface in the 1920s, in particular in European countries in post-World War I (1914–1918). The representation of artificial intelligence started in association with “automata” or in today’s words “robots.” Automata have been wandering around Europe for centuries and boomed during the late eighteenth century; for instance, Michel Foucault (1926–1984) mentions this fact in *Discipline and Punishment*. In E.T.A. Hoffman’s *Der Sandman* (1816), the protagonist fell in love with an *automaton*, Olympia, and went mad when he figured out that she was not human. The golden age of automata in Europe ranged from 1860 to 1910, when there were families of automata makers especially in France (e.g., *the Bontems*, *the Rouillet & Decamps*). This automata culture was not only confined to Europe. During the Edo period (1603–1867), Japan adopted automata known as *Karakuri ningyōm*, as a form of entertainment. However, automata making was not just an oddity at the fringes of the economy there. The founder of the Toshiba Corporation, Hisashige Tanaka (1799–1881), also known as the “Thomas Edison of Japan,” was a craftsman who created complex automata—some examples of his creations were tea-serving and *kanji* painters automata.¹

The cultural representation of intelligent machines took off in the 1920s, even though there were some literary representations of automata before. We underscore three remarkable examples. Samuel Butler’s *Erehwon: or over the range* (1872), a social fiction placed in Erehwon (reversed for nowhere), where Erehwonians had the perception that machines were potentially dangerous since they could surpass humans.² Gustave Le Rouge’s *Metal Man* in *La Conspiration des Milliardaires* (1900) and Frank Baum’s copper robot *Tik-Tok* who appeared in the third *Oz books* (1907). *Tik-Tok* was one of the

Chapter 6

Let Us Understand Our Relationship with Artificial Intelligence (in Collaboration with Veridiana Domingos Cordeiro)

Heretofore, we have presented throughout the chapters the role of experts in conceiving scenarios in which AI could harm humans. We exposed how experts and fiction writers operate similarly whenever it comes to the counterfactual building of the further consequences of any technology. Unsurprisingly, many scenarios containing the future risks of AI had been thought before the expert's depiction of them. It is also true that the boundaries of fictionality of these scenarios became blurred. Regardless of the plausibility of the scenarios, we restricted ourselves in this book to present the progressive blurring of the roles (both the futurist and the expert) as soon as the experts became more autonomous. Furthermore, we tried to present how future risk scenarios came to be as well as their secondary impacts. We also restricted ourselves to a higher level when it comes to the details of the historical events; otherwise, every single historic event would be a book in its own merit. We also focused only on a Western history for AI. An Eastern history for AI also must be conceived. To ignite this spark, in this chapter, we will draw some crosswise reflections on how eastern culture (we will talk especially about Japan) understand and relate with AI.

While the relation between Western societies and AI pointed to a negative direction, Japan's culture did otherwise. The tripod "cultural representation, media, and experts" that affects the social amplification of risk varies socially and culturally. This trend seems to be historically sedimented. In Japan, machine intelligence is not only positively depicted in movies, mangas, and *animés*, but also Japanese experts do the same, thus enhancing a positive bias with images of familiarity regarding the artificial entities.

We also must add here that the positive influences are not only made of "symbolism," the socioeconomic situation also propels the positive or the