Chapter 2
Mecha-Media:
How Are Androids, Cyborgs, and Robots Presented and Received Through the Media?

Roger Andre Søraa
NTNU Norwegian University of Science and Technology, Norway

ABSTRACT

How are robots, androids and cyborgs presented and received in the media? This chapter applies a social media analysis to this question by using empirical research on news stories that feature robotic technologies to see how robots are presented, consider what reporters focus on when writing about robots, and review how the public discusses and receives robots. The theoretical framework utilised focuses on how robot narratives are framed, how robot controversies are presented in different media, and how robots are domesticated through the media. The two main cases are a "robot hotel" in Japan, and a "killer robot" at a Volkswagen factory in Germany. News coverage of both stories shows widely differing ways for how the robot-narrative is framed.

INTRODUCTION

The term "robot" has been around for quite some time, with deep roots in fictional works. Since entities such as androids and cyborgs have entered the discourse, there is a need to analyze how these "non-human human-lookalikes" are portrayed. This chapter does so by a media-analysis which gives expression on how robots are *portrayed*, and how they are *received*. The *portrayal* of robots will be analyzed by media-analysis strategies, tackling the who, what, where, and how, of concrete news-articles on robots. The analysis on how robots are *received* will utilize research techniques that analyse some new social media applications and comment fields found on the Internet. By analyzing public opinions seen in comment fields - tweets regarding shows where robots are found; e.g., on Facebook groups and forums discussing robots - the author will qualitatively explore ways the general public receives robots.

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In addition to the two focus areas of portrayal and reception, a thorough background will be given for each empirical sample on search terms, frequency, statistics, and background information on the given media. The media analysis will cover news articles from 2015, focusing primarily on articles written in English, originating from Europe and the US, but also with focus on robots in Japan. All three of these regions are robot hotspots in terms of production and/or consumption, with Japan being the primary producer of robots, and until recently the top consumer. In 2016, China surpassed Japan in the number of robot units bought per year. The US and EU represent the two largest economies in the world affecting the money flowing into robotic research. However, they are, along with Japan, troubled by an increasingly aging population. Robots are seen as one possible solution to combat this problem.

Different robots are presented in different ways, and the presentation varies, not only between robots, but also between countries. Simply put, robots are presented very differently by the media in the US, Europe, and Japan. This is perhaps tied to "homegrown" robots; i.e., Japanese robots might be better presented and received in Japan than American ones, and vice-versa.

While many articles written about robots are quite positive, focusing on how new robotic technology can benefit mankind, there are also critical voices. The interesting thing in the portrayal of robots is not only the actual context the robot is reported to perform in, but also the multiple critical stories in the media regarding what robots can be capable of with present new technology. This matter is heavily tied to cultural contexts, and with an analysis of the media presentation and reception of robots, can be further investigated.

The research for this chapter is methodologically founded in *Grounded Theory*, which is an inductive theory-building method (Charmaz & Smith, 2003; Glaser & Strauss, 2009; Strauss & Corbin, 1994). Grounded Theory starts with data, and follows it, seeing whom it touches and how, and it then builds the theory on the basis of the empirical data collection. The strength of the Grounded Theory method is that it enables us to not "blind ourselves" with theory before searching for the data. In a media context, this can be especially fruitful, as the author is primarily concerned with the way the data is presented and received, and not how it can fit into existing theoretical frameworks.

The reason these particular stories have been chosen for this chapter is because they represent different *framings* of the controversy of robots in the media. They are also examples of the three types of robotic beings that this book describes: robots, androids, and cyborgs. It shows that, especially for humanoid robots (androids) and robotic humans (cyborgs), certain "doomsday" prophecy scenarios are occurring more and more often. The data material case studies people who comment on news articles online. The chapter aims to give qualitative insight into commenters that make commentary on robot cases; but, is too narrow to give qualitative general numbers on reception rates of robots, not necessarily seeing how robots are received by everyone, but how they can be received by particular groups of people who comment on news stories about robots, thereby shining light on the phenomenon. The news stories are not neutral; journalists write them in specific cultural settings with their various interests, biases, and goals.

THEORETICAL BACKGROUND

The different theoretical concepts used for analyzing what may be called 'Mecha-Media' in this chapter are culled from Studies of Science and Technology (STS). STS studies how and why societal and cultural factors impact science and technology and, conversely, how and why science and technology affect society and culture. The theories used in this chapter are interlinked as follows: The chapter