Spotify Teardown: Inside the Black Box of Streaming Music
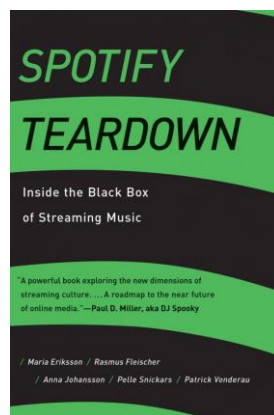by Maria Eriksson, Rasmus Fleischer, Anna Johansson, Pelle Snickars & Patrick Vonderau, The MIT Press, ISBN 978-0262038904 (Paperback)

Book review by Martin Ivan Mikulik

Spotify Teardown: Inside the Black Box of Streaming Music is the highly anticipated work of five interdisciplinary scholars: Maria Eriksson, Rasmus Fleischer, Anna Johansson, Pelle Snickars & Patrick Vonderau. This new text aims to "*initiate public debate about the often subtly changing standards, values, and politics of cultural dissemination online*" (p. 2) by examining, questioning and experimenting with Spotify's front and back end. The book consists of four chapters, plus an introduction and a conclusion, each immediately followed by so-called "interventions". In trying to explore the way in which Spotify is commonly perceived, the researchers analyse Spotify from every possible angle.

Chapter 1 "Where Is Spotify" starts by questioning Spotify's corporate history, analysing it through the lens of its funding rounds. This approach proves helpful to understand the way the company was built

from a service that relied on pirated material. It also helps put into question Spotify's foundational vision, i.e. a narrative that portraits them as the saviors of the music business through the creation of a legal music streaming service. By exploring its many changes, this chapter showcases how, in reality, the company seems to have changed dramatically basing core-business decisions on economically sustainable reasons more than a technological vision.

The second chapter "When Do Files Become Music" explores the system's backstage describing its network infrastructure and the data gathering and sharing processes. It also discusses the service of aggregators, providing evidence of their arbitrary rejection criteria, and the detrimental influence they have on smaller rights holders that see their distribution chain get longer and less profitable. The chapter ends by discussing an experiment aimed at finding algorithmic flaws on Spotify radio that shows how patterns tend to repetition even after different user input.

Chapter 3 "How does Spotify Package Music" moves the analysis to what the user can see, examining the front end of the service. By picking its interface apart, the authors describe the particular way in which the system's recommendations influence users. By displaying a set of playlists at specific hours of the day, the system creates a narrative of what the typical user should be doing at that time to live *the good life"* (p. 121). They also analyse how a "*utilitarian approach to music*" (p. 123) is enhanced by the ubiquitous aspect of the service and the use of playlists targeting the performance of specific activities from working to exercising. As a coda, they share an experiment using Spotify's recommendation algorithm that suggests that there are differences in music recommendations based on gender and age, the two demographic variables that are required to subscribe to the service.

The fourth chapter "What is the Value of Free" explores the monetary aspect of the company. Starting with the historical contextualization of the meaning of free within the music industry, it analyses programmatic advertising within the platform and its middlemen, and it ends by describing the way their network communications work. By doing so,

they question the role of Spotify as a mere distributor and describe it as a mediator because of the role its recommendation and classification systems play connecting users' data with advertisers.

The smaller chapters named *"interventions"* serve as a way for the authors to insert themselves as participants of the Spotify model and interfere in the world they are investigating. This prompted a new topic of discussion on the ethics of big companies toward research after the group received a letter from Spotify questioning their practices. This topic is properly dissected, making it one of the biggest accomplishments of the book. Though some of these interventions work better than others, the overall result demonstrates the power of new bold approaches for the research of new technologies. Through the use of bots and the creation of an app and a record label, the researchers tried to find answers to topics ranging from algorithmic discrimination to the meaning of music within Spotify's platform.

The book is recommended for users of the service and readers curious about the history of Spotify, its inner-functioning, and the way music consumption works in the 21st century. It also will certainly be useful for scholars interested in a discussion of ethics on new research methods on modern technologies.

In conclusion, though some of the author's experiments and results had been published in previous publications, this work proves to be valuable, integrating different concepts, methodologies, and approaches in a well-curated volume. In doing so, it becomes a significant voice in the ongoing discussion that new technologies bring to the table with their disrupting products. As it tries to answer old questions in new and original ways, at the very least, this book raises important and timely questions.