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ARTIFICIAL AUDIO: EMERGING USES OF AI IN PODCASTING

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Rationale

Several recent controversies have erupted at the intersection of podcasting and artificial intelligence. In April 2023, there was the launch of the *Joe Rogan AI Experience*; a podcast that used AI to generate fake voices and scripts of conversations between the world's most popular (and controversial) podcaster, Joe Rogan, and a number of celebrity guests, including hip hop star Drake and former U.S. president Donald Trump. The stunt was an experiment by an audio producer in Sydney, Australia, looking to test the capabilities of generative AI, but the attention it drew raised ethical and legal questions about creativity, ownership and the economics of platforms that host and stream podcasts (e.g. YouTube and Spotify). Other AI-hosted shows have been taken down shortly after their launch due to misinformation or content that was racist, sexist, or otherwise offensive (Xiang 2023). Even shows that remain on platforms, like *AI Radio* - a "current events" show hosted by chat bots Adam and Bella that discuss topics like different sex acts human enjoy and kangaroos invading Uganda - come with content warnings and feel like they could be taken down any day: "These segments are made up by AI. Sometimes they get to pretty questionable territory" (AI Radio Description in Spotify, 2023).

While the popular press covering these stories focused on long-held worries about fraud, deception, and the differences between "real" human practices and "fake" machinic ones, these incidents speak to larger concerns about the future role of artificial intelligence in the everyday routines of podcast industry workers and in the circulation and consumption of podcasts as a media form. As Jonathan Sterne and Elena Razlogova argue about the use of artificial intelligence in the music industries: "To understand, assess, and intervene in the cultural politics of AI, scholars will need to consider broader questions of how work processes operate, the meanings of the work performed by the AI to its users, the ideologies operating in the interface, [...] and the infrastructural conditions within which it must operate" (2021: 765). While the popular press discourse around AI is full of stories about the uncertain ways AI systems might threaten or deskill workers, the challenges it brings to questions of credibility and

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veracity of information or might provide untold new possibilities for productivity, efficiency and creativity, Sterne and Razlogova remind us of the very real, mundane, and routine ways AI is already, and will be, built into the everyday practices of cultural industry workers.

Research Questions and Methods

In light of their call, then, this paper aims to survey the state of artificial intelligence in the podcasting industry by exploring the following two research questions:

- 1) How is AI being used by podcasters and other actors in the podcasting industry?
- 2) How is the use of AI in podcasting framed in articles and writing about the industry?

Using a collection of 30 podcasts that employ AI during the production and consumption process, the paper describes the various ways AI is currently being employed by podcasters. The AI-enabled podcasts will be identified by finding references to the shows in podcast newsletters, websites, and tech articles about the use of AI in the media industries. The paper will also present a discourse analysis of industry texts about a variety of AI tools designed for podcasters. Through textual analysis of the AI-enabled podcasts and an analysis of the rhetoric within the industry texts, the paper employs a critical media industry studies lens to present a typology for the various uses of AI within podcasting and explores the various promises, threats and challenges that accompany the deployment of AI-based features, services, and technologies. Each category of the typology raises questions about labor, economics, creativity, and ownership within the podcasting industry.

Broadly, there are 1) tools that focus primarily on production, such as AI scriptwriting, AI voice generation, AI sound effect creation, as well as AI-enabled mixing, mastering, and editing services, 2) tools that support the podcasting infrastructure more broadly like AI assistants for buying and placing advertising or for finding and negotiating sponsorships, and 3) tools that center around listening, such as services that further personalize the podcasting experience, allowing dynamic content to be inserted into shows based on listener preference, location, or time of day. AI tools are also being put in service of “spoofing” streaming platforms by posing as listeners. Even from this cursory typology, it's clear that there is greater need for researchers to develop more specificity around what we mean as we discuss “AI in podcasting”, to push beyond simply worrying about whether our next favorite podcast will be hosted by AI.

Bearing in mind the prevalence and dominance of platformization in the podcasting industry (Bonini 2015; Sullivan, 2019; Hesmondhalgh et. al. 2023), it is perhaps not surprising that content producers may be turning towards using more artificial intelligence in the podcast production process. If platforms have found that podcasts are a cheaper source of audio entertainment than music or other audio media that require licenses and royalties, it stands to reason they'd also be interested in content that could be produced regularly and in an automated fashion. Moreover, as individual podcasters are looking to stand out on crowded platforms, using AI to generate more content, more quickly, helps podcasts stay top-of-mind with audiences and the platform's search algorithms.

The closed and proprietary nature of many of these AI services and technologies stand in contrast with podcasting's origins as a relatively open and accessible format (Berry 2016, Bottomley 2019, Spinelli and Dann) that could potentially open media-making up to a greater diversity of identities, perspectives, and communities by creating "audio enclaves" (Florini 2015) or providing a "space at the margins" (Vrikki and Malik 2019) for underrepresented individuals and historically silenced communities. While podcasting has long been structured by significant exclusions (Markman 2011; Wang 2021), the format still represents a fruitful space for expression, community-building and meaning-making for a range of different identities (Copeland 2018; Florini 2015; Fox et al. 2020; Hogan 2008; Tiffe and Hoffmann 2017). As the podcasting industry begins to incorporate artificial intelligence and innovate around it, we need research that explores how these new developments alter or shift podcasting's historical promises and practices.

By analyzing a number of AI-enabled podcasts, and by unpacking the industrial discourse around the AI services, tools, and software offered to podcasters and podcast listeners, I explore how podcasters and others in the podcasting industry are using AI to create novel and perhaps, problematic, podcasting experiences. Given the controversies AI technologies raise around misinformation, unsavory content, intellectual property and creativity, the paper aims to raise attention of the important role that podcast platforms like Spotify, Google and Apple Podcasts play in creating the institutional, aesthetic, and technical "conditions" where artificially generated podcasts and listeners are not only possible but an unsurprising outcome.

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