Tailors of taste

Nick Seaver, *Computing Taste: Algorithms and the Makers of Music Recommendation* (Chicago: University of Chicago Press, 2022). 224pp., $99.00 hb., $20.00 pb., 978 0 226 70226 1 hb., 978 0 226 82297 6 pb.

The cultivation of musical taste has long been subject to critical reflection. Plato deemed music crucial for human flourishing because it reaches the innermost depths of our souls. Absent the harmony the best music imparts and disarray in our personal lives and dissonance in our societies was said to follow. Given the stakes, guidance from knowledgeable intermediaries in the form of philosopher kings was essential. Nick Seaver presents a similar narrative regarding intermediaries of music recommendation services in his new book *Computing Taste: Algorithms and the Makers of Music Recommendation*. Scientists, engineers, programmers and product managers in the industry share a common creation myth where algorithms help to overcome obstacles to tailored taste. Novel internet technology and the rise of digital distribution in the mid-1990s provided a cornucopia of options that unleashed music from the grasp of cultural gatekeepers. Record store clerks, critics and DJs no longer had a monopoly on legitimate taste, but in their absence, listeners were faced with too much unfiltered music. As exciting as the endless possibilities for musical exploration were, people needed new forms of guidance. And so, the makers of music recommendation ushered in a new age of music appreciation aided by predictive algorithms.

We should be skeptical about the details of the music recommendation origin story, Seaver warns. Nonetheless, he argues that much can be learned from understanding how people in the industry, such as those who work for Spotify or Apple Music, make sense of their trade. The people Seaver studies work with algorithms to recommend music to listeners, but it is an imprecise undertaking. As a data scientist he interviewed acknowledged, while taste makers aspire to tap into a 'platonic ideal' that aligns music to the chords of our souls, the actual process is 'not so pure'. Rather than using predictive algorithms to access some heretofore unknown but true form of why people like the music they like, Seaver finds unsettled images of taste. How makers of music recommendation understand their input vary and often draw from non-technical narratives to do their work. Recommender systems do not abide by a singular technical logic.

Seaver explains that techniques of music recommendation are justified on the premise of their origin myth: listeners are overwhelmed and in need of guidance. People have always experienced 'filtering' of their music choices based on their parents' tastes, geography and other contexts. Now, with advances in technology and data drawn from a users' ratings, people can experience music without the inherent limitations of such filtering mechanisms. Music recommenders fill the gap with care and an embrace of difference. They describe their work both in opposition to the old guard of gatekeepers and, employing pastoral metaphors, play the role of park rangers, gardeners and farmers, explorers and guides, cartographers and surveyors. Some roles that recommenders identify with are more compassionate than others. Seaver juxtaposes the narratives recommenders espouse about care for listeners with their acknowledgement of structural demands to make profit. He highlights how images of 'traps' and 'hooks' portray listeners as unsuspecting prey that can be kept listening by way of persuasive technologies. Seaver highlights the way recommendation systems are fragmentary, incoherent, and dynamic based on the complex listener data they draw from. He finds that people working with these systems often feel constrained by and in awe of the variety of listeners. The contexts that a listener puts themselves in (exercising versus relaxing), as well as differences between diverse types of listeners (lean forward vs. lean back) make it difficult to categorise listeners.

In the second half of the book, the scope moves from how recommenders view listeners to how they engage with the sound of music, the spatiality in which types of music are mapped and the metaphors recommenders give themselves in tending to the sound and space of music. At least on the surface, how music sounds is irrelevant from the point of view of music recommenders. Music is studied as a kind of information. Computers are no different than brains, and algorithms are like well-

trained ears. Nonetheless Seaver finds a gap between which patterns algorithms can find, in something like musical genres, and what intuitively makes sense to the human ear. Often patterns pair music that fans of a genre would not recognise. Programmers, because of this, repeatedly check the patterns of machine learning against their own assessments. The way music is grouped into various genres is both technical and intuitive. Music recommenders navigate a terrain between formal and informal practices. They go back and forth from equations to intuitions. Accordingly, Seaver argues that if one were able to open the much talked about black box, the technical code itself would not be enough to understand music recommendation outputs.

Throughout the book, Seaver is reflexive about his experience conducting research. At times, he provides an intimate look at what it felt like to be an outsider and the emotions he faced while doing fieldwork: joy, frustration, surprise. Although Seaver could be criticised for his minimal treatment of his ethnographic tactics, there are helpful methodological suggestions: it is okay to change one's scope given constraints in the field; much can be learned from how people understand their roles;

and often some of the most interesting things happen in interviews just after the recorder is turned off. The epistemic implications are also significant. They corroborate the argument Seaver is making about the subjective nature of music recommendation systems: there is no objective or value-neutral way to recommend taste or study those who do. Emotions, ethical reflections, positionality and context are not brushed to the side, inviting readers to engage with the subject matter and to question the assumptions underlying the research.

The strength of his connection to ethnography is evident as he does more than simple reporting on technical details of science and technology in the music recommendation industry. Seaver brings each aspect of his study into conversation with studies in the ethnographic record. For instance, studies of reindeer pastoralists in Finland, nuclear scientists in the United States, and indigenous trappers in the Western Hemisphere are reflected on respectively to illuminate intriguing ways recommenders try to captivate their subjects without erasing their individuality, the challenges in gaining access to secluded institutions like streaming corporations, and the intricate nature of persuasive technologies used to 'trap' listeners. Making links across disciplines allows Seaver to compare institutions and contextualise those he is studying. Connections to other expert spaces make for a compelling read and serve as a bridge to insights about the continuity of music recommendation spaces. For example, he describes affinities between ethnographic studies of nuclear scientists to music recommendation offices. The self-proclaimed cutting-edge spaces of technology and taste are often found to be conventional.

Those looking for technical details of the industry or insights from the perspective of a musician might be unsatisfied. Seaver's primary focus lies outside of the musician's craft or how listeners engage with music. That is not to say details of this kind are absent from the book. For example, Seaver spends some time talking to a programmer about Djent (a subgenre of metal music) and the process of categorising types of the genre. And there is an enjoyable discussion about the music of Pitbull and Diplo that reflects on the recommendation patterns of both. Instead of a technical snapshot of an industry at a given time, readers are presented with a set of worldviews that continue to shape the way predictive algorithms are used for the cultivation of taste.

Seaver references seminal figures important for taste and science and technology studies including Pierre Bourdieu, Donna Haraway, Michel Foucault and Theodor Adorno but his engagements with these authors are often underdeveloped. By design, he limits his analysis to what his subjects understand themselves to be doing. This approach does not adequately pair beliefs against the material realities of capitalism, unless it is mentioned by the music recommenders themselves. Authors in the traditions he references would each insist on a deeper look at the relationship between technology, ideology and underlying conditions. In addition, a litany of scholarship draws from these traditions to think about predicative algorithms (often even in reference to taste) and an engagement with them would have made for a more nuanced critique of the politics of technology in recommender systems.

Given his light treatment of science and technology studies, Seaver's challenge to critics of technology is not as incisive as it could be. For example, he pushes against critics who he notes often worry about the reductive effects of quantification and how machine learning metaphors, which draw on pastoral metaphors, naturalise and therefore mystify the work they are doing. A more thorough engagement with contemporary critics who draw from Foucault, for example, would reveal a more nuanced set of concerns. For example, Colin Koopman's 2019 book *How We Became Our Data: A Genealogy of the Informational Person* is not referenced but would help strengthen his analysis of power in the corporations he studies. Given that music recommendation companies are a part of a wider informatic world which, as Koopman demonstrates, has a long and often racist history, connecting analysis of recommender worldviews to those histories would help readers understand more deeply what is at stake when corporations present algorithmic curation as wholly new and largely free of human shortcomings like 'bias'. Seaver discusses the impact of human decision making on curation processes often. That these are human, not merely technical processes, is an accomplishment, but he does not incisively examine their relation to broader discourses and histories of power.

That said, the most significant achievement of this work lies in its contribution to critical algorithmic studies. Seaver finds a way to trace encounters between industry techniques and the varied worldviews within. In so doing, he situates his work alongside other scholarship on predictive algorithms that is critical without being totalising. The original ethnographic observation and reflection on algorithmic curation provides readers with a deeper understanding of the mechanisms at play, the narratives embedded in these systems, and their implications for artists and listeners. By delving into unexplored avenues of the music recommendation industry and shedding new light on familiar ideas about the complicated relationship between techniques and cultural imaginaries, *Computing Taste* distinguishes itself as a significant addition to the existing literature on the politics of technology and cultural experiences in the digital age.

Glen Billesbach II