
Before I get to my main topic, I'm going to play a 10-15 second excerpt of a song, and I want you to think about what kind of music it is.

Intro

In early 2017, Chance the Rapper was on top of the world. Unsigned to a major label and without selling any physical copies of his mixtape, *Coloring Book*, he won 3 Grammy awards, including best new artist, best rap album, and best rap performance. Relying entirely on social media, touring, and streaming services, his wins seemed to embody the utopian potential of the music industry's ever-increasing reliance on digital distribution and technological mediation of consumption. The Grammy website lauded Chance as the first “streaming-exclusive” artist to win an award, and his successes appeared to validate recent liberational and decentralizing trends.¹

This utopian vision was recently articulated by Daniel Ek—co-founder and public face of Spotify—in an open letter accompanying the company's official registration for public offering on the New York Stock Exchange on Feb 28, 2018, Ek's letter extols his company's boundary-squashing capabilities for both listeners and musicians. “In this new world,” he proudly proclaims, “music has no borders. ... We're working to democratize the industry and connect all of us, across the world, in a shared culture that expands our horizons” (Ek 2018).

Genre is dead

One part of this boundary-less “shared culture” is one where all musics are accessible, where musical categories seem to be decreasingly important. Much public discourse corroborates this view, awash in the decline and atrophy of genre. On the screen here are a famous rock musician, a music critic, and a blogger all suggesting the same thing: genre is dead. Conveniently enough for me,

¹ <https://web.archive.org/web/20190226223537/https://www.grammy.com/grammys/awards/59th-annual-grammy-awards> accessed Feb 26, 2019.

there's also a small online music magazine titled "Genre is dead" that has been around long enough to undergo a slight branding change since I first found them during earlier stages of my research. Each of these espouses a view that traditional categories of popular music seem to be crumbling, afforded by streaming services' particular technicities.

Chance reviews and medley

In some ways, *Coloring Book* fits into this perspective, and reviews often focused directly on the genre-b(l)ending of Chance's mixtape. "If you're expecting a straightforward hip-hop album," reviewer Alejandra Ramirez suggested, "you may be disappointed. *Coloring Book* is a gospel album that coalesces hip-hop, spoken word, soul, jazz, and funk" (Ramirez 2016). *The Guardian* critic, Dave Simpson, lauded the album's genre-inventiveness, writing that Chance "deliver[s] songs which are both boundary-pushing hip-hop and audibly steeped in black music history, from doo wop to soul to funk to exuberant electro...and especially gospel" (Simpson 2016). Spotify's "about" page on Chance leads off by mentioning "his evasion of stylistic pigeonholing and no label affiliation," followed up by lauding "synthesized various elements of gospel, jazz, and soul."²

We're about to listen to a brief medley of the album that I stitched together to get this soundscape in our minds "So many people want to talk about church when they talk about Chance," Hanif Abdurraqib reflects (2017, 15), and a quick survey of the album is enough to hear why. In particular, I want us to focus our ears on the diverse signifiers of gospel, of faith and Black Christianity, of pews and choirs, and of many forms of revelry. The multitudinous quotes of and allusions to biblical passages provide plenty of grist for the exegetical pursuits of annotators at aggregating sites like genius.com, and musical topics often directly reinforce these divine intertexts. Choirs flutter in and out, an ever-present genre-synecdoche singing its musical, social, and racial

² <https://open.spotify.com/artist/1anyVhU62p31KF8MEzkbF/about> accessed 03/03/2019.

signifieds.³ Listen also for chorale-style homophony in “smoke break,” the carnivalesque “All Night” followed by the Sunday morning “How Great,” the positive sermonizing and testifying in “blessings”. This is about a minute and a half long, and I include some brief topical annotations if you pay attention to the slideshow during your listening.

Genre as cultural unit, abundance examples

In popular music and its discourses, genre acts as more than a simple stylistic description; genre is an important cultural unit, a sign that organizes critical engagements and orients aural experiences. Reviews of *Coloring Book* describe an experience not just of church music, but a broader enactment of faith and celebratory blackness, buttressed by the plethora of gospel topics we just heard. Paratextual, metatextual, and inter and intratextual genre semiosis is not just important but necessary for an understanding of this music. In some sense we arrive at a position that’s paradoxical to the “genre is dead” narrative previously proposed.

Chance’s music is, of course, not unique in its multitudinous evocations of genres. Examples of genre-abundance and vitality are easy to come by in both popular media and musicians’ self-descriptions; and I’ll very quickly run through a few contemporary examples. You needn’t pay too close attention to these besides to get a feel for how genre is *used*, what work it does.

For this locally touring band in the Pacific Northwest, it’s important to lay out that they are a “country-rock-american-western swing band” (Schilling 2017); Brooklyn band Arc Waves situates their music within a milieu of “new wave, psych rock, dream pop and shoegaze”.⁴ French artist, Onra, describes himself with genres like “80’s Funk, 90’s Hip-Hop and R’n’B, Electronic, Spiritual

³ I borrow genre synecdoche from Philip Tagg (Tagg 2012, 524): “A *musical synecdoche* is therefore a set of musical structures imported into a musical ‘home’ style that refer to another (different, ‘foreign’, ‘alien’) musical style by citing one or more elements supposed to be typical of that ‘other’ style when heard in the context of the ‘home’ style. By including part of the ‘other’ style, the imported sounds allude not only to that other style in its entirety but also to the complete genre of which that other musical style is but a part.”

⁴ <https://www.facebook.com/pg/ArcWaves/about/> accessed May 28, 2017.

Jazz, Bossa, Indian Music, Psych Rock and Soul.”⁵ As we’ve seen from reviews of *Coloring Book*, esthetic discourses reflect the same interest in genre labels, as lists of style tags manifest en masse in critical commentary, blogs, and more neutral databases. Wikipedia tags Linkin Park with “alternative rock, nu metal, alternative metal, rap rock, and electronic rock.”⁶ A review of Leela James’s 2014 album, *Fall for You*, finds “’70s funk stomp, ’80s Quiet Storm precision, and ’90s hip-hop soul all within the same song” (Leight 2016). For New Yorker reviewer, Carrie Battan (2017), Sampha’s album *Process* (2017) participates in gospel, rnb, classic soul, experimental electronica.

Spotify genre labels

So, how does Spotify, with its eye on a boundary blurring utopia of omnivorousness and ubiquitous access, react to the paradoxical discourses outlined above, where genre is simultaneously dead and overabundant? Like most streaming services, creates these taxonomies is by tagging musical objects with genre labels. In particular, Spotify has chosen to taxonomize *artists* themselves as Glenn McDonald, a “genre alchemist” for the company, has explained (Brackett 2016, 325). These metadata tags supply important connective tissue through Spotify’s stylistic universe, indexing perceived connections between *musicians*. The tags are hidden to most users; if I’m browsing around in my Spotify app, there’s no tab telling me what labels Chance is tagged with; instead, they’re publicly available for developers via an API, so they often factor into the background processes of recommendations and third-party app development.

On the screen here I give some arbitrarily chosen examples of genre tags that different artists get. It’s not so important that you see the individual genres; instead, focus on two ideas. First, these genre tags vary in the scope or scale that they cover. Something like *pop* tells us less than, for

⁵ <https://onra.bandcamp.com/> Accessed May 28, 2017.

⁶ https://en.wikipedia.org/wiki/Linkin_Park Accessed March 5, 2019.

instance, *Merseybeat*, which signifies a specific time, place, and set of acoustic expectations. But they're all used here at the same classificatory level as simple, flattened adjectival descriptors.

Second, as you can see, the cardinality of these lists varies pretty substantially. Someone like Rihanna or Drake get only a few genre tags, while Dr. John gets over 40 genres. So, how typical are these differences in cardinality?

On this graph I plot the popularity and number of genre tags for 200 rock, rap, and pop musicians on Spotify. (Yes it's a small sample, but I have larger datasets which replicate these general findings). The x-axis shows the popularity and the y-axis shows the number of genre tags that Spotify gives to them. Notice what kinds of music get the most tags. Regardless of popularity, rock has the widest range and largest average number of genre tags. Spotify believes these musicians engage with more *kinds* of music. Hip hop musicians, in general, are understood to *just* be hip hop. In 2017, Chance the Rapper got only 3 genre tags: "rap," "pop rap," and "dwn trap." The cultural units of gospel, soul, funk, and jazz that fundamentally structured reviews of his music get squished out. It seems that this is simply part of Spotify's genre landscape.

How spotify determines

Who are these indices for, and how are they generated? The purpose of such labels is to provide an indexing of musical objects, placing them into contact with others of the same index. Spotify's metadata are determined, to borrow a phrase from my panel mate, Prof. Goldschmitt, using an "ensemble model" of heterogeneous strategies, including machine learning, audio analysis, web scraping, listener activity, and direct human curatorial intervention (Goldschmitt and Seaver n.d.). I show an example here on the screen from Shazam (O'Brien 2017), meant to articulate their own multipart model; I'd be happy to explain this more in the Q&A. Such algorithmic black boxes remain enshrouded in proprietary data and opaque, unexplainable processes, and I'm happy to leave the box mostly shut for now.

But I do want to delve briefly into part of Spotify's input for some of its most popular recommendations via things like Discover Weekly playlists. A large component of Spotify's recommendations come from the copresence of musicians and songs on user-generated playlists. So, for example, if a whole bunch of people put 2Pac and Biggie onto playlists together, then their music will be understood as similar in some important way. And though Spotify doesn't publicly share any demographic data of its userbase, their promotional materials for advertisers and the app's playlist icons make clear the kinds of listeners they tend to value most: those who are young-ish, mostly white, and relatively wealthy. (Though I don't have time to discuss it here in detail, it's worth mentioning that this audience often has omnivorous tastes, which the sociological literature discusses in detail. Diverse taste is tied to high-valuation for streaming services. Nick Seaver explains, "A higher diversity score should indicate a higher social status, which means that these listeners can have more expensive ads sold against them" (Harvey 2016).

Further, Glenn McDonald has explained that "globally male listeners make more and longer playlists than female listeners on average, so this is a pretty textbook example of algorithmic confirmation bias due to inherent asymmetries in the data inputs" (McDonald 2018). In other words, white male users tend to have an outsized effect on recommendation processes since they generate more of the data which feeds into the recommendation models of Spotify.⁷ How *they* understand musical similarity directly affects how Spotify provides recommendations. And though it's not a monolithic grouping, this general habitus orients and calibrates Spotify's recommendation models, whether explicitly through playlists geared towards certain sensibilities or through the feedback loop that intensifies the valuation of these listeners.

⁷ In their investigation of how season and latitude affect musical choices for Spotify's userbase, Park et al. 2019 suggest a few clear correlations between listening habits and gender across a variety of countries as well.

Brief history of popular music(ian) taxonomies in the U.S.

The connection between listener bases and genre tags makes explicit the fact that genre labels are not simple, inert stylistic tags. As Aaron Marcus describes, the meaning of a musical sign, like any sign, “is not a specific referent in the world, but a whole cultural complex of significations that may or may not ... be about entities in the world” (2017, 132). They are cultural units which do specific work. In particular, they feed into the work of classification of musicians themselves, of which there is a long history in the U.S. Plenty of studies have shown how both embodied and disembodied voices and musical acts enter into broad networks of entangled signifying chains, from Stoever’s analysis of antebellum listening that enacted a “sonic color line” (Stoever 2016) to the imbrication of race, place, and music which segregated both people and sound during the early 1900s (Hagstrom Miller 2010). These continued throughout the twentieth century, from racial disparities in early vinyl record distribution (Filene 2000) to mid-century radio practices (Redd 1985). In each case, music industrial powers assume perspectives of musical categorization from the audiences that matter most to them, which, throughout popular music’s history in the U.S., has been largely white and generally well-off, denying potential agglomerating tubers of meaning from their metrics and genre definitions. In these respects, Spotify’s novel technologies are really not so novel. As Omi and Winant as Omi and Winant succinctly argue, “the presence of a system of racial meanings and stereotypes, of racial ideology, seems to be a permanent feature of US culture” (1994, 17).

Despite Spotify’s utopian ideals, none of this probably comes as a surprise. Numerous essays, blogs, articles, etc. have consistently highlighted black artists’ understandable frustration at the way they and their music get categorized, and I list a few recent ones the screen here. On the right of the screen, both Frank Ocean and Moses Sumney describe their dismay at being boxed into genres that inadequately reflect their musics (Younger 2017). I’ll let India.Arie describe how

something like Grammy nominations—mirroring Spotify’s genre tags—enact racially determined and institutionally sanctioned stylistic boundaries. This comes from an interview done about a year ago with NPR’s *All Songs Considered*.⁸

Why is India.Arie’s folk not the Grammy’s folk? Did you hear her song as folk at the beginning of this talk? An album like Chance’s *Coloring Book* fosters idealistic possibilities of genre-transgression and play. But how many other countless hip-hop musicians who *don’t* fit his general modes of positivity, of faith and cooperation, of appeal to a specific, high-value audience, do not have any chance of success. As Hanif Abdurraqib succinctly puts it, “A lot of white people love Chance The Rapper” (2017, 9), and white aesthetics happen to disproportionately matter for institutional success in the U.S. and globally.

Outro

As a sort of summarizing tongue-in-cheek account of which listeners matter to Spotify, I give on the screen here a graph from a recent paper in *Nature* (Park et al. 2019), which essentially maps the “musical intensity” of people’s general listening habits based on age, gender, and their latitude. The purpose was to see how seasonal changes affects what people listening to. As is probably not a surprise, folks in the northern hemisphere—the black and red-ish solid lines—tend to listen to less intense music during the winter months. Their musical interest goes down, somewhat. (This paper is highly problematic in lots of ways I’d love to talk about if you all are interested.)

Next, I created a graph of Spotify’s stock performance since they became a publicly traded entity just about a year ago. Visually mapping these onto each other, we see that Spotify’s stock correlates rather closely with the listening habits of the global north, who tend to be the wealthier,

⁸ <https://www.npr.org/sections/allsongs/2018/03/11/591576816/all-songs-1-india-arie-talks-about-worth-and-the-grammys>

whiter audiences who are most involved in the institutionalization of Chance's successes. Obviously, I don't mean to imply that Spotify's stock success is directly tied to seasonal fluctuations. But, how easy and common is it to tie factual data to absurd or deleterious conclusions? How many musicians who don't match this audience's aesthetic or capitalistic values have their own success limited by Spotify's genre projects?

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