What's Next? Artists' Music After Grammy Awards

Giacomo Negro – Emory University

Balázs Kovács – Yale University

Glenn R. Carroll – Stanford University

Abstract
Do the cultural works artists produce after receiving major awards change in character? As awards lessen the constraints artists typically face, we argue that award winners receive more opportunities, gain more autonomy, and are more likely to pursue unique creative paths. Empirically, we analyze the consequences of winning a major Grammy, a high-profile (often status-shifting) honor in the popular music industry. Using a neural learning approach, we examine the subsequent *artistic differentiation* of albums of award winners from subsequent albums of other artists. We analyze whether the music styles and sonic content of post-Grammy albums of winners change, and whether they become more or less similar to the combined corpus of albums of other artists. In panel regression estimates, we find that after winning a Grammy, artists tend to release albums that stand out more stylistically from other artists. Surprisingly, artists who were nominated but did not win a Grammy became more similar to other artists than they were before the nomination. The findings suggest symbolic awards can regularly induce change and affect the heterogeneity of cultural products.

Keywords
awards, cultural production, status, differentiation, music, Grammys, artists

Corresponding Author: Giacomo Negro, Emory University, Goizueta Business School, 1300 Clifton Road NE, Atlanta 30322 GA, USA. Email: giacomo.negro@emory.edu

Awards bestow honor on the achievements of individuals, groups, or organizations. A common feature in many domains, public awards carry special significance in fields of cultural production, where many regard them as acts of consecration that separate the great from the merely good (Bourdieu 1991).[1] Accordingly, sociologists have examined extensively the individual, relational, and social structural factors that set the stage for consecration in these fields. These factors include: demographic characteristics; distinct forms of valorization by critics, peers, and consumers; institutionalization of genres; and resource mobilization from core and peripheral positions (Allen and Lincoln 2004; Bledsoe 2021; Cattani, Ferriani, and Allison 2014; Dowd et al. 2021; Kremp 2010; Lena and Pachuki 2013; Schmutz 2005; Schmutz and van Venrooij 2021).

Little, if any, systematic research has examined the behavioral consequences to artists of winning a major award. What do award winners do *after* consecration? Do winners embark on a journey of differentiation and innovation, or do they become stalwarts of current styles? The question is potentially of great interest because any change in the behavior of award winners (presumably among the most visible artists) can affect the entire field, directly or indirectly. Award winners garner respect, set trends, and are emulated by many other artists. Learning the post-award fates of winners could also offer insight into the often-fraught relationships between artists and their more commercially-oriented production partners such as recording companies in popular music. Winning an award gives an artist leverage to potentially reduce the long-lamented creative constraints allegedly imposed by these partners. We seek to discover whether the lifting of these constraints might lead to greater artistic innovation and novelty.

The general sociological question raised by awards concerns how factors internal to the system of cultural production shape and enable cultural change over time. This internalist approach focuses on explaining cultural differentiation and innovation based on the relations of cultural producers to one another and their social environment (Kaufman 2004). We suggest awards enhance the winning cultural producers' status, increase their leverage with commercial partners, and result in greater differentiation from others in their field. Differentiation is achieved by means of chronologically ordered positions in the field, akin to Bourdieu's (1985) *prises de position*.

Award recipients experience significant social and economic benefits. The status enhancement associated with a major award grants greater visibility to the recipient (Kovács and Sharkey 2014; Merton 1968; Reschke, Azoulay, and Stuart 2018), as well as more professional opportunities (Goode 1978). For instance, film actors who receive an Oscar award tend to get increasingly better roles and higher pay (Faulkner and Anderson 1987). We argue that such social and economic benefits bring into line artists' interests, incentives, and motivation, allowing them to differentiate more after an award. At the same time, the tradeoff between art and commerce, and that between interests of artists and their production partners, can still impose limitations on how awards increase post-award cultural differentiation. It is reasonable to think that winning an award reduces the material constraints an artist faces in subsequent production, but they do not entirely disappear.

In examining these questions, we study differentiation as contained in cultural products, described as "the discrete and apprehensible human creations—songs, paintings, newspaper articles, meals, sermons, laws, poems, scientific papers, garments—associated with fields of cultural production" (DiMaggio 2011:288). For popular music, album recordings lay for decades at the center of the production system as the field's "extended textual units" (Toynbee 2000). Just as each cultural producer exists in relation to other producers in the field, cultural products exist by virtue of their interdependence (Bourdieu 1983). Cultural products can be represented by sets of features that position them vis-à-vis one another in a space of genre

categories, a system of aesthetic conventions in which cultural fields are embedded (Becker 1982).

We analyze five decades of albums made by thousands of professional music artists. We seek to understand whether and how artists changed their music in response to receiving a Grammy. Watson and Anand (2006:55) describe how one recipient put it, saying that a Grammy confers significant prestige, "because it's the only major award voted for by your peers—you can walk down the street with the thrill of knowing that you are considered worthy by other creative people in the business." Receiving a Grammy in a ceremony broadcast world-wide ensures public visibility, commercial success, and career longevity (Anand and Watson 2004).

We focus on the award's effect on the subsequent *artistic differentiation* of an artist's albums relative to other artists. We measure differentiation in terms of *distance* of stylistic and (technical) sonic content from the products of other artists. The Grammy selection process identifies publicly all award nominees as well as winners. Prior to the award, winners and nominees appear to have generally similar qualities, as we will show. The difference between winning a Grammy and being only nominated can be regarded as a quasi-experimental treatment: winners and nominees all experience social status enhancement and greater visibility. By comparing the albums made by the two groups to other artists, and then comparing them to a matched sample of non-nominated artists, we can see how artists generally respond to the public honor and success emanating from the award.

The findings show that Grammy winners' subsequent albums embody features that are *more* "distant" from the combined work corpus of other artists. These distancing effects of winners occur primarily with stylistic rather than sonic content. The finding suggests differentiation in cultural fields depends on artists constructing their positions in the field through aesthetic choices collectively coded and recognized by audiences (Godart 2018; Lena 2012). When considering the post-nomination albums of all Grammy contenders, we find that non-winning nominees become *less* stylistic distant from other similar, but unnominated, artists in their subsequent albums. This perhaps surprising result matters because for any award, there are more nominees who did not win than who did. By implication, the award system apparently exerts a chilling effect on artistic differentiation in a cultural field, even though the intentions of award sponsors are often the reverse.

Broadly conceived, this study aims to contribute to research on change in cultural production. We consider the dynamics between producers and their associates in organizing cultural production *after* consecration. In doing so, we refocus the analysis of cultural production in artistic fields to cultural products, overcoming criticisms of Bourdieu for neglecting products or treating them as epiphenomena (Beljean, Chong, and Lamont 2015; de La Fuente 2007; Prior 2011). In the depiction presented here, cultural products are central to how artistic producers construct their careers and identities.

THEORY

Differentiation in Cultural Production

Differentiation drives the internal dynamics of cultural change. Bourdieu's (1983) field theory connects differentiation and cultural production, as cultural producers engage in a "struggle" to accumulate recognition as symbolic capital. Cultural recognition is highly prized because it can be converted into valuable economic resources and power in the field. To achieve recognition, producers may break with antecedents and distinguish themselves from others through *prises de position*, or "position-takings"—works, services, acts, arguments, and products. Every position-

taking is defined in relation to the space of other possible position-takings and receives its distinctive value from these relationships (Bourdieu 1983:313).

In this account, competition for recognition varies across production systems, defined as either *restricted* or *large-scale*. In restricted fields, such as the fine arts, science, and poetry, cultural recognition is mainly accorded by peers, and production is grounded in a logic of "art for art's sake," where producers act as creators relatively autonomous from commercial considerations. In large-scale fields, such as mainstream film and broadcasting, production is organized to resonate with consumer audiences and non-producers. Here cultural producers depend more on consumer tastes, as well as the organizations that control the means of production and distribution to consumers, such as media distribution companies or advertisers. Lower artistic autonomy in large-scale fields is expected to encourage homogeneity and repetition, rather than differentiation of products.

The separation between the two types of production systems described in Bourdieu's original framework is far from sharp, however. Large-scale producers face unpredictable consumer tastes and look at their restricted-scale counterparts to produce novelty and change. Bourdieu (1985:35) himself noted that commercial culture defines itself in relation to legitimate culture and renews "its techniques and themes" by borrowing from high art aimed at other producers. In addition, more open markets for cultural goods have weakened institutionalized cultural authority (DiMaggio 1991). Among consumer audiences, omnivorous tastes (Peterson and Kern 1996) and appeals for atypical products (Goldberg, Hannan, and Kovács 2016) imply that differentiation is positively valued beyond fields of restricted cultural production. For instance, in popular music songs that sound too much like previous and contemporaneous music find less success in the mass market (Askin and Mauskapf 2017).

The co-existence of restricted and large-scale production in the same field revises the ideal-typical contrast between cultural fields (Beljean et al. 2015; Schmutz and van Venroij 2021). Specifically, it provides scope for all producers to invest in diverse kinds of works through specific stylistic and genre conventions. The co-presence of restricted and large-scale production also brings the tension between artistic and commercial values into each field. In doing so, the borrowing of ideas and practices by large-scale producers from their restricted counterparts reinforces the cultural significance of artistic values over commercial values. Schmutz (2016) analyzed critical discourse of popular music between 1975 and 2005 in the United States and the Netherlands. He found that elite newspapers increased their coverage of commercially successful artists; the majority of coverage also adopted an aesthetic perspective (although less so in the United States). These findings show the cultural preeminence of aesthetic legitimacy for all producers, including commercial producers, rather than reflect domination of commercial constraints over artistic values (see also Baumann 2001).

In summary, cultural producers seek differentiation in restricted as well as large-scale cultural fields. And, importantly, greater legitimacy tends to be attributed to differentiation achieved through artistic autonomy vis-à-vis commercial success.

Post-Award Producer Differentiation

Awards honor outstanding achievements and enhance prestige. They attract public attention and shape the impressions of others; awards also signify other, more difficult-to-observe qualities of the producer. Status-enhancing awards incentivize future effort, which may be channeled through novel behaviors (Frey and Gallus 2017; Malmendier and Tate 2009). We refer to the actions taken by producers to position themselves in a cultural field in this direction as *artistic differentiation* strategies.

Producers seek to expand their symbolic capital as a way to preserve their authority in a field. Awards can encourage more artistic differentiation because of the individual advantages accrued. The benefits of status-enhancement from a major award grant greater access to resources and opportunities. For example, academics receiving a prestigious award are subsequently more likely to get grants, to receive teaching releases, to attract better students, and to collaborate with productive co-authors (Chan et al. 2014).

As awards confer a more advantageous position in the field, producers gain the ability to pursue personal vocations and aspirations. The resulting strategies of action do not need to be fully conscious. Producers' own capacities to think, feel, and respond to a situation are shaped by their position in the field. Bourdieu's (1980, 1985) notion of *habitus* describes a practical sense learned through experience and internalization of the structures of one's own social space. Accordingly, producers develop their own ideas, expressions, and styles as regulated by patterns attached to the positions they occupy. The existence of "pure" works of art and "disinterested" producers depends on the field's acceptance of disinterestedness of the producer as a strategy to accumulate recognition (Bourdieu 1983; Toynbee 2000).[2] In other words, producers previously celebrated are expected to pursue unique artistic aims to maintain their advantage.

Lamont (2009) argues that engaging in cultural production offers valuable subjective experiences beyond simply hoarding capital and imposing one's position in the field. For instance, pleasure and curiosity are alternative types of motivations for academics doing scientific work, and these motivations may be used in work following receipt of an award. In psychology, award recognition for valuable work is thought to increase effort and to foster the desire for more complex, creative work. Amabile (1993) demonstrates that even a simple award (e.g., a plaque on the wall) motivates a recognized individual to engage more deeply in activities considered intrinsically interesting. Awards also give people the feeling that what they do is worth pursuing, and not necessarily because of the position they occupy (Eisenberger 1992). These analyses suggest a more "positive" view, holding that strategies of artistic differentiation can be explained by more than the pure structural interest associated with Bourdieu's account.[3]

Cultural production is a collective, rather than individual, effort. Cultural products represent the joint work of the producer and the people and organizations that mediate exchanges with the audience (Becker 1982). Cooperation is often not simple—different parties have distinct aims and interests. Cultural production thus implies interdependence between multiple participants, and a complex balance of power. In music, for example, stories abound about how agents or recording companies dominate aspects of artistic decision-making and how this power leads to less artistic or less original recordings (Toynbee 2000). For instance, Singular (1997:112) describes famed record producer David Geffen:

> Throughout his years in the record business, Geffen was vulnerable to the charge that he was more concerned with money than with music. . . . [C]ritics said . . . [h]e knew nothing about making records. . . . He was a mediator between talent and commerce, who'd seen a great opportunity and seized it . . . he has no sense for what has meaning.

<indent here>Record labels, film studios, and publishers typically prioritize economic profits, imposing a pursuit of larger markets, leading to what Bourdieu (1980:287) calls "devaluation entailed in a mass appeal." Awards provide leverage to artists to counterbalance the interests of these other parties involved in the production system. They grant artists some power to negotiate less utilitarian work and to explore more with partners who control production resources. Winning an award potentially lessens the constraints an artist must operate under. In this way, awards facilitate the process of artistic differentiation.

To summarize, artists who win major awards are consecrated as eminent in their field, and we expect they will seek, and can afford to pursue, greater artistic differentiation in their subsequent work. This leads to the first hypothesis:

> *Hypothesis 1:* Artists differentiate their cultural products more after winning a major award.

<indent here>This hypothesis stands in contrast to alternative arguments in which winning can lead to less differentiation because of the potential gains of replicating products that led to consecration and success, or because awards free producers from the pressure of distinguishing themselves. Our analysis instead highlights the role of contextual factors, such as competition for recognition, audience expectations for novelty, and individual interests, feelings, motivation, and incentives that artists experience in engaging in cultural production. These factors suggest a connection between (peer) recognition and producers pursuing more differentiated positions in the field. By most scenarios, the hypothesis also implies that major awards provide enhanced resources to winners for subsequent cultural production, and economic success, for two reasons. First, the enhanced resources provided to the artist show that the balance in the relationship with commercial partners has shifted, with the artist gaining resources through strengthened leverage. Second, additional resources are likely necessary to support the artist's creative discovery and exploration, even after taking into account the different amounts of resources that various types of products can require (differences we control for statistically). This empirical expectation has been partially tested before in popular music (Watson and Anand 2006), but we examine it again with the more comprehensive data we collected for this study.

Constraints on Differentiation

The relative distribution of opportunities for distinction shapes the impetus for differentiation in cultural production (Kaufman 2004). We consider two factors that influence this distribution and thus represent varying constraints to creative production. The first is the balance between differentiation and other artistic strategies; the second factor is an organizational tradeoff. Each factor suggests an additional hypothesis.

With respect to balance of strategies, it is perhaps obvious that commercial success can weaken a producer's disposition toward expanding symbolic recognition, consecration, and prestige. Two types of arguments bear relevance. One holds that commercial imperatives compromise and co-opt artistic activity. Horkheimer and Adorno ([1947] 2002) claim there is little possibility of avoiding the power of economic capital—artists who experience success are challenged to find artistic autonomy and thus produce more homogenous works. The other argument is less radical, and perhaps more realistic: it suggests both creative and commercial criteria may be under simultaneous consideration in cultural production. Commercial success creates individual tradeoffs for artistic differentiation because there is simply more at stake for each participant. The cultural producer who finds success with the consumer audience develops an ambivalent attitude toward the market. As Bourdieu (1983:330–31) put it, these artists become "torn between the internal demands of the field of production which regard commercial successes as suspect . . . and the expectations of their vast audience, which are to some degree transfigured into a populist mission."

Prior success also shapes personal perceptions as well as the appreciation and exercise of artistic autonomy. For example, music artists assimilate the commercial logic of making music when they work with producers who make commercial music (Toynbee 2000). After awards, more successful producers will use their specific competencies to tackle the tension between pursuing a wide variety of artistic aims while simultaneously taking on the expectations of the market. From these arguments, we formulate a second hypothesis:

Hypothesis 2: Post-award artistic differentiation of cultural products is lower for winning artists with greater prior commercial success.

<indent here>Now we consider the organizational tradeoff. Cultural producers are rarely solitary creators, particularly in cases where production is embedded in complex and bureaucratic organizational processes. Managers of large firms seek efficiency of operations and design cultural products to appeal to a broad audience, hampering differentiation and innovation (Godart, Seong, and Phillips 2020). They are less likely to invest in products deemed unlikely to offer large sales, and they place demands on artists to maximize the market potential of their products. Musicians and other artists routinely complain about these pressures and the constraints they place on artistic work (Toynbee 2000).

Van Venrooij and Schmutz (2018) argue that smaller record labels follow a "professional logic" that imposes fewer market-based limitations and facilitates the production of less conventional music. Larger labels, in contrast, follow a "commercial logic" that shapes the sound of artists in the mold of accepted genres and styles. The intent is to secure, among other things, acceptance of the music by retailers and streaming services. Following this logic results in external constraints on artistic autonomy for artists and affords more power to the managers and marketers who uphold established aesthetic conventions. For example, music artist George Michael described his contentious relationship with major label Sony Records:

> [S]ince the Sony Corporation bought my contract along with everything and everyone else at CBS Records, I have seen the great American music company I joined as a teenager become a small part of the production line for a giant electronics corporation, who quite frankly, have no understanding of the creative process. . . Musicians do not come in regimented shapes and sizes, but are individuals who change and evolve together with their audiences. Sony obviously views this as a great inconvenience. (Rule 1992:56)

<indent here>Receipt of an award increases artists' visibility and signals their qualities to audiences. Managers in large firms can see awards as providing opportunities to make the most of such visibility and favor works that reduce market risk and increase profits. By contrast, managers in smaller firms face smaller audiences and smaller risks and may be more willing to invest in works that can bring mainly symbolic profits and the corresponding intellectual authority, at least in the short term. From these arguments, we derive a third hypothesis:

> *Hypothesis 3:* Post-award artistic differentiation of cultural products is lower for winning artists making these products with large-scale organizations.

CONTEXT

Popular Music and the Grammys

Popular music combines features of large-scale and restricted cultural production (Schmutz 2016; Schmutz and van Venrooij 2021; van Venrooij 2011). Music creation can bring together artists and audiences in arenas that are not fully "commodified," such as jazz players out of regular session work (Lena 2012). However, the production and distribution of recorded music can be capital-intensive activities with high fixed costs. Artists and record labels make money from selling a large number of records to the widest possible audiences and through other revenue streams associated with making and distributing music (e.g., concerts, streaming). Audience tastes are difficult to predict and success is uncertain (Caves 2000). The uncertainty stimulates a constant demand for new products and rewards strategies that spread the risk of market failure across different offerings. Toynbee (2000:xxi) sees music-making as the

intersection of: (1) artists' dispositions to play, write, record, and perform in a particular way; (2) the pattern of positions taken by all artists in the field; and (3) the works through which artists communicate musical practices, textual forms, and codes. Music artists are "designers and assemblers who take pieces of what is already heard and recombine them" (Toynbee 2000:xiv).

Some critics consider the tensions between art and commerce a cliched argument. But Negus (1995:325) argues that for participants in music production "these ideas are part of the way in which they make sense of what is happening to them." Frith (1981:61) notes that economic success for artists is important because "failing to sell records and reach audiences through the medium of the market means failing as a musician." However, commercial pressure for sales can conflict with artistic ambitions, and artists who become very successful risk commodifying themselves. Toynbee (2000:32) argues that the industry has embraced the *cult of the author*: "When audiences demand that music makers are creators, the music business must guarantee minimum conditions of independence for them."

Music production involves the mobilization of various resources owned and controlled by distinct participants—including agents, managers, promoters, producers, and record labels—each of whom contributes unique resources (Roy and Dowd 2010). Cooperation between them is not simple because different parties often have different aims and interests. For example, record labels produce, distribute, and promote an artist's music. Large labels control abundant resources, but the supply of artists competing for them is even more abundant. The distribution tips the balance strongly in favor of labels in their dealings with artists, which results in less autonomy for artists (Toynbee 2000).

The collective work of making music takes place within a system of aesthetic conventions (Becker 1982). In music, such conventions include genres and styles (Negus 1995). Rather than being based only on formal musical properties or sonic qualities alone, genres and styles are influenced by social relations, identities, characteristics of producers and audiences, and production technologies. These influences include ways of playing an instrument, the use of voice, forms of expression, and details of presentation (van Venrooij and Schmutz 2015). Artists attempt to find their place in the field by positioning their works within this system of conventions.

In popular music, multiple audiences provide cultural legitimacy (Schmutz and van Venrooij 2021). The Grammy awards represent the most significant form of recognition from peers in music. The Grammys were established in 1959 by the National Academy of Recording Arts and Sciences (NARAS). The intent was to honor musical accomplishments ("high artistic achievement") of entertainers in the industry. The NARAS credo reads that "sales and mass popularity are the yardsticks of the music industry . . . they are not the yardsticks of this academy" (Schipper 1992, in Watson and Anand 2006:43). Until 2020, firms registered with NARAS or individual members (artists and other professionals in the industry) could submit recordings for consideration for a Grammy. A screening committee of more than 150 experts examined each submission and determined whether it was entered in an appropriate category.[4] Voting members chose entries for award nominations, and the five entries that received the most votes in each category comprised the final list of nominees. A subsequent round of balloting among members determined the winners in each category. In voting, NARAS members were instructed not to be influenced by sales, personal friendships, or other extraneous factors.

Grammy promoters proclaim "disinterest in commerce while enabling commercial exploitation that comes from improved artistic reputation" (Watson and Anand 2006:54–55). Participation in tournament rituals such as the Grammys is a "privilege endowed upon influential social actors in an organizational field and an instrument of status contests among them" (Anand and Watson

2004:60). When we interviewed the manager of a Grammy-winning major rock band, he said: "Anything that can build awareness is a good thing for the artist. . . Winning is better than to be nominated but the awareness increases in both cases. . . Winning [a Grammy] is an experience that can change the artist. . . The artist's response is also sensitive to how you make people notice; it means a lot to the creator." Grammys provide the opportunity to make and sell more records, influencing decisions about the type of music that gets produced, distributed, and consumed.

DATA

Our statistical analysis combines data from multiple sources about the music albums of all nominees, winners, and other artists not nominated for Grammy awards who were active in the market during the analysis period (1959 to 2018) and appeared in the data sources.

The first source is the list of Grammy awards compiled by NARAS (http://grammy.com). We collected data for the nominated artists and winners of the four major general-field awards. "Artist" refers to the main performer—an individual such as Carole King or a group such as America—as credited on the recording.[5] Each year, the Grammys considers work released in the previous year. Our data cover awards from 1959, the first year in which the Grammy ceremony was held, to 2018. NARAS considers four major awards as "general field" and does not restrict entry by genre: *Album of the Year* for the performer and production team of a full album; *Record of the Year* for the performer and production team of a single song; *Song of the Year* for the writer or composer of a single song; and *Best New Artist*. Our analysis focuses on these four major and highly visible awards that have significant effects on artists' careers (English 2005).

The second data source is AllMusic (http://allmusic.com), an online music guide considered the most extensive music database on popular music (Mount 2013). We collected data on the music releases of all artists from the database. AllMusic offers descriptive and editorial content to consumers, and it provides data to online and traditional music stores. The content includes basic information on artists and their released albums, such as names, titles, year of release, and production credits indicating the production team involved in recording an album. The entries are curated collectively by a group of popular music historians, critics, and passionate collectors. (We attempted to contact the editors at AllMusic to discuss their practices of reviewing and music categorization but received no response to our inquiries.)

Our analyses focus on music albums. During the study period, albums were the most important format of music recording, containing multiple tracks of similar quality and coherent themes. We excluded other types of recordings: singles/EPs, compilations, videos, and re-releases. AllMusic categorizes albums using genre and stylistic tags to describe the aesthetic characteristics of the music.

Musical genres describe broad aesthetic categories, such as Blues, Country, Jazz, Pop/Rock, and Rap. Styles include more specific categories ranging from Experimental to New Wave and Punk. Musicologist Allan Moore (2001:441) notes that genres characterize "what an art work is set out to do" and refer to the context of musical gestures, whereas styles characterize "how it [the art work] is actualized" and the "manner of articulation" of musical gestures. Moore describes the relationship between musical genres and styles as a loose hierarchy of styles within genres. In the data, many styles are used only for one genre (e.g., British Rock only for Pop/Rock albums). Other styles are used for multiple genres, such as Fusion for Jazz albums like Miles Davis's *Bitches Brew*, but also for Pop/Rock albums like Joe Satriani's *Surfing with the Alien*.

Table 1 lists the primary genres of albums ($N = 21$) in the AllMusic data and their relative frequency. The number of genre categories in the data is small and stable, with only Rap as a new genre introduced during the study period. Roughly 85 percent of albums are associated with a single genre; the remainder have multiple genres (less than .5 percent of these have five or more genres). The list of styles ($N = 832$) is too long to include in the table; we report styles that have at least 5,000 albums in the data. On average, each album is associated with 2.5 styles.

[Insert Table 1 about here]

The third data source is Echo Nest/Spotify, an online music intelligence provider that offers data access via Application Programming Interfaces (APIs).[6] We used this source to code some sonic features of the music. Askin and Mauskapf (2017) used this source to measure sonic attributes of songs in the Billboard charts. We followed the methodology described in their Table 1 and coded information on the same attributes (acousticness, danceability, energy, instrumentalness, key, liveness, mode, speechiness, tempo, and valence) for the songs in albums in the AllMusic database, assigning a quantitative value for each feature.

Sonic fingerprint data summarize some technical attributes of a sound signal, what music theorist Dannenberg (2010) calls "texture." By contrast, styles denote the general impression or intention provided by the music. Dannenberg (2010:49) notes that "style, especially in popular music, includes an important sociological component, so we should not expect style to be purely a matter of how something sounds." Styles describe more the activity of making sound, including behaviors, artistic practices, and social identities; styles reflect attributions established through perceptions and social interaction between producers and audiences (DeNora 1997). More generally, Godart (2018:106) defines styles as "durable and recognizable patterns of aesthetic choices." Styles unite works of individual artists of a given place and era; they are observable and codified in a social and historical context (Lena 2012; Lena and Peterson 2008).

The sonic attributes from Echo Nest/Spotify and the styles from AllMusic represent distinct aspects of the music, and we do not interpret them as measuring the same information "objectively" versus "subjectively." Echo Nest CEO Jim Lucchese described the sonic attributes as "machine listening" of what people hear, and social and cultural attributes such as styles as "cultural analytics" that provide editorial insight (Ransbotham 2015). Both types of features are viewed as significant to represent music and taste profiles. Indeed, the correlation between the two variables that measure artistic differentiation based on the two types of features (described next) is positive but low (.12). Research on music information retrieval finds that, compared to sonic features, context-based data such as stylistic tags tend to explain more accurately how music classification systems are organized (Oramas et al. 2017; Wang, Li, and Ogihara 2010).

The fourth data source is the industry publication *Billboard*, which publishes weekly charts showing the popularity of recorded music in the United States. We collected information from the *Billboard 200* chart, which has tracked the 200 most popular albums and extended plays according to sales since 1967. (The chart was first published as a top-10 list in 1956 and became a top-200 in May 1967.) Higher positions in the chart indicate larger sales and greater market success for artists. The chart has social and cultural value, and the media often discuss the albums and artists that debut or reach the top of the list.

AllMusic served as the core organizing database for the analyses. In these data, we found albums for all but one of the Grammy artists, and 99 percent of the albums in the *Billboard* charts. We also found a total of 125,340 albums whose songs had sonic features information on Echo Nest/Spotify. These 125,340 albums are the main dataset used for the analyses and to generate the matched sample described next. Part A of the online supplement provides further details on the analysis files.

Measurement

Outcome variables. The main outcome variable measures the artistic differentiation of an artist's post-award music. Artistic differentiation is represented as the *distance of an artist's albums from albums in the same genre(s) made by other artists over the previous three years.* We constructed three variables. The first measures distance based on stylistic as well as sonic content. The second variable uses only stylistic content, and the third only sonic content. For stylistic content, we used the style labels in AllMusic. For sonic content, we used the sonic features provided by Spotify. The style-only and sonic-only measures are special cases of the first variable, incorporating only the relevant subsets of input information. All three measures are based on a neural learning model estimated at the album level.

The neural learning network uses two kinds of information: (1) the set of styles associated with an album and the genre(s) into which the album is classified; and (2) the sonic fingerprint data. We constructed the outcome variables in two major steps. In the first step, we used the AllMusic style descriptors and the Echo Nest/Spotify sonic data to determine the coordinates of the position of each album in the genre space. The classification layer outputs a 21-dimensional vector for each album's location in the space of genres. These values are the predicted probabilities that the album is classified in a given genre. As illustration, the location of album A may be represented with a 1-by-21 vector, such as A = (.20, .14, 0, 0, 0, .23, .14, .2, 0, 0, …, .04, .01). Interpreting this vector implies that the predicted probability that album A is Pop/Rock is .20, that it is Jazz is .14, that it is Electronic is 0, and so on. Similarly, album B may be represented with a vector such as B = (.32, .12, .02, .05, 0, .06, .04, .02, 0, 0, …, .02, .08). These values are predicted probabilities and sum to 1. We opted to use a neural learning algorithm to locate albums in the genre space because it is well-suited to combine input information of different types (text information such as styles, continuous variables such as tempo, and categorical variables such as key). We have no clear a priori expectation of the functional form to use to combine the various types of stylistic and sonic information. A neural learning network is flexible about handling and exploring different ways the various styles and sonic features can be combined.[7]

In the second step of variable construction, we used the coordinates of the albums in the genre space to calculate the pairwise distances of all albums from each other. The dimensions in a classification layer are orthogonal, and we calculated a simple Euclidean distance between the vectors. For example, the distance between albums A and B is calculated as sqrt[(.2 − .32)^2 + (.14 − .12)^2 + (0 − .02)^2+…+(.01 − .08)^2]. Formally, $dist(A, B) = \sqrt{\sum_{i=1}^{21}(A_i - B_i)^2}$. With such pairwise album distance measures in hand, we then calculated the average distance between albums. For example, if a genre has albums A, B, and C, and a new album D is released, then to measure the newest album's average distance from the previous albums, we calculated dist(D, <A,B,C>) = (dist(A,D) + dist(B,D) + dist(C,D))/3. The range of each distance variable is between 0 and 1.4, with an average of .2. Figure 1 shows the structure of the neural learning approach we followed. Part B of the online supplement provides more details.

[Insert Figure 1 about here]

To illustrate how the measure and its components contribute to represent an artist's music, consider the artist Jody Watley, who won the *Best New Artist* Grammy in 1987 based on her eponymous album. AllMusic classified the album in the R&B genre with styles Contemporary R&B and Dance-Pop (artistic distance = .330). Later, Watley arguably broadened her creative boundaries beyond Dance. Her next albums *Intimacy* and *Affection* were labeled in genres R&B and Rock/Pop with styles Dance-Pop and Urban. These albums carved out a more unique voice

for the artist, one focused on more introspective themes and smooth sounds (distance = .490 and 1.004, respectively). Recently, Watley moved to a personal blend of electronic club music in the House style in the R&B genre with *Midnight Lounge* (distance = 1.088). Finally, she returned again to more conventional R&B with *The Makeover* (distance = .494).

We also looked for effects assumed by the relationship between awards and differentiation as measured by album sales charts and resources in terms of production credits for post-award albums. We analyzed the *peak position of each album in the Billboard 200 album chart*. The chart is based on sales of albums in the United States at the retail, and later digital, level. We calculated the highest position reached by each album on the chart as a measure of audience evaluation, and reverse-coded it for more intuitive interpretation (so higher chart positions indicate greater success). The *Billboard* chart ranks the 200 best-selling albums in the United States, and some albums may not reach the chart at all. We coded albums that did not rank on the chart with a position of 201. We also used a log-transformation of the original peak position variable to smooth differences between positions at the bottom of the chart. To account for truncation of the chart position variable, we estimated the *number of weeks the album spent on the chart* as an alternative measure of success.

We examined the resources involved in the musical production of post-award albums. For this analysis, we measured the *number of distinct production credits associated with each album* of an artist. Production credits (from AllMusic) list everyone who makes a significant contribution to the creation of a music album. Credits comprise creative as well as technical inputs, including producers, mixers, engineers, backup musicians, and songwriters. The number of entries in the production credits reflects the level of resources used to make the music.

We expect that following receipt of an award, an artist will be given more resources to make their music, and that more resources will be reflected in more production credits. Albums in the data have an average of 10 credits; the average declined slightly over time (the correlation between number of credits and a year trend is –.07). Variation between genres suggests some differences in production systems: Electronic albums have the lowest average with six credits, and Holiday and Stage & Screen the highest with 32. In the middle range are Classical and Folk with 15 credits, and Pop/Rock with nine. The models include dummies for each genre of an album, to control for differences in production resources across these categories.

Covariates. The main explanatory variable codes the awarding of a major Grammy. The Grammy awards studied cover the four general-field categories: *Album of the Year*, *Record of the Year*, *Song of the Year*, and *Best New Artist*. The annual Grammy ceremony for the recordings of any given year (e.g., 2018) is typically held in February of the following year (e.g., 2019). The analysis is conducted on albums released by an artist after the award, and we calculated a running lagged *count of Grammy wins*. When we expanded the analysis to include non-nominated artists, we created a similar *count of Grammy nominations*.

Table 2 presents descriptive data about the Grammy-winning and Grammy-nominated artists. Between 1959 and 2018, a total of 1,036 distinct artists received award nominations. The majority of these artists (over 60 percent) obtained only one nomination in their careers. The artist with the highest number of Grammy nominations in the four major general field categories is Frank Sinatra, who received 22 nominations and won four awards. Of the 278 artists who received at least one Grammy, 28 percent won more than one award. Adele and Paul Simon won the most Grammys—seven each—in the major general field categories.

[Insert Table 2 about here]

A second covariate measures *prior commercial success*. We calculated the variable as the lagged average peak position in the *Billboard 200* chart for each artist. The variable is reverse-coded to simplify interpretation. A positive coefficient implies a positive association with prior success in the market. We included this variable and interaction terms with the Grammy variables to test the second hypothesis, that artistic differentiation increases less with an artist's prior commercial success.

The third covariate considers the influence of type of record label on artist behavior. It relies on a distinction between major labels with global promotion and distribution networks, and independent labels with relatively limited reach (Dowd 2004; Lena and Pachucki 2013). Major record labels – such as Universal Music Group, Sony Music Entertainment, Warner Music Group – jointly account for about two-thirds of the U.S. music market. These companies have distinct production and distribution strategies (Dowd 2004). We coded the *major label* variable as a dummy equal to one if an album was released by a major label or an associated subsidiary, and zero otherwise.[8] We included this variable and interaction terms with the Grammy variables to test the third hypothesis, that artistic differentiation will increase less if an artist's albums are released by larger companies.[9]

We included a set of control variables in the analysis. First, we included a linear *year trend* to account for temporal trends that correlate with macro factors that can influence cultural production, such as technology and industry structure (Peterson and Anand 2004). Music production is partitioned in genres, and genres vary in types and social trajectories (Lena and Peterson 2008). To account for such heterogeneity, we included dummies for each of the 21 primary *music genres* in which each album is classified by AllMusic. Genres also change over time, so we included as controls the *interaction terms between each music genre and year*. The *Billboard 200* chart started in 1967, so our estimations with these data cover 1967 to 2018.

Our analyses use fixed-effects estimators. Table 3 contains the summary statistics and correlations for the variables in the main analysis.

[Insert Table 3 about here]

Matching for Comparisons

Our interest resides in the possible post-award differentiation in the recordings of artists winning a major Grammy award. Our analysis draws on two comparisons. To establish internal validity of the award effect, one comparison focuses on winners of a Grammy and other artists who were nominated but did not win the prize. To establish external validity, another comparison includes the combined sample of Grammy nominees and winners, and a sample of non-nominated artists that we matched on observable characteristics.

We leveraged some features of the Grammy award process as a quasi-exogenous status shift. In the ideal empirical analysis, we would compare a Grammy winner's post-award albums to those of the same artist had they not been nominated or won the award. This counterfactual cannot be observed, so we considered a plausible empirical proxy for the hypothetical outcome without the status increase. A starting point would be to compare average post-award recordings of winners to the average among all non-winning artists. This approach would provide a valid estimate of the treatment effect if assignment to the treatment group were random. However, this assumption likely does not hold here.

An alternative approach is to compare winners to another group of potential recipients who are similar along most important dimensions, including merit (Malmendier and Tate 2009). Nominees shortlisted for the award offer an appropriate matched sample for the winners

(Kovács and Sharkey 2014). Winning artists are often not necessarily 'better' than the other nominated artists. Ginsburgh and Weyers (2014) show this lack of differentiating quality in the Queen Elisabeth piano contest in Belgium, where musicians' random order of appearance influences the final rank in the competition.

The data support this assumption. In Part C of the online supplement, we compare the means of the outcome variables and covariates for all nominated artists *before* their first nomination or win (Table C1). In all the *t*-tests, the group of Grammy winners does not differ statistically from the group of nominees prior to the award. It is noteworthy that artistic differentiation from other artists before the award does not differ between winners and nominees. This addresses an alternative heuristic suggesting that: (1) winners are rewarded because of higher (or lower) pre-award artistic differentiation than nominees; and (2) nominees show greater conformity post-award because they follow the pre-award artistic differentiation of winners. More specifically, Table C2 establishes that albums that won a Grammy for *Best Album* are similar to those that were nominated but did not win across a host of variables. Tables C3 to C6 show similarity in artistic differentiation between the two groups of albums for each of the other awards and conjointly. Note this does *not* mean the award selection system is unbiased. Rather, the data suggest bias can occur earlier in the nomination process than in the process selecting the winner.

We sought to establish a general comparison of award winners beyond other nominated artists. The differences between nominated and non-nominated artists can be difficult to assess, thereby confounding the counterfactual comparison between the groups of artists in standard regressions. For instance, on average, nominated artists at the time of first nomination show higher artistic differentiation than non-nominees do (.392 versus .324; $p \sim 0$). To ensure a more plausible comparison with Grammy-nominated artists, we use fixed-effects estimators to control for omitted variable bias due to unobserved heterogeneity. In addition, we constructed a matched sample of non-nominated artists using "coarsened exact matching" (CEM), a nonparametric method that reduces data covariate imbalance and increases the comparability of units in a sample (Iacus, King, and Porro 2012).

In the CEM procedure, units receiving a "treatment" are matched to a "control" group. Treatment here means an artist received a Grammy nomination, and each artist-year dyad represents the unit to match. The CEM procedure matches units in the two groups within the cut-points for every covariate, and ensures matched units have similar values. To improve the comparison, we also included the lagged dependent variable as a matching covariate. CEM reduces systematic differences in the composition of the groups. The procedure calculates the imbalance statistic L_1, a distance measure based on the difference between the multidimensional histogram of all pretreatment covariates in the treated group and that in the control group. A good matching solution would produce a reduction in its value overall and for each variable. Our data show a substantial reduction in imbalance, not only in the means, but also in the marginal and joint distributions of the data. Some imbalance remained for the experience variable. One approach to deal with this common situation is to add the variable with imbalance as an additional control to the statistical model. Accordingly, the regressions include a variable of the *experience of the artist* in music, calculated as number of years since the artist's first album release. To avoid perfect collinearity of individual variation for the year trend and experience variables, we log-transformed experience.

Part D of the online supplement provides details about the covariates included in the CEM matching and the matched dataset. The final number of observations in the main regressions (45,012 albums for 36,808 artists) is the result of the dataset pruned from matching for the period jointly covered by the multiple data sources (1967 to 2018). Table 4 summarizes the key details of our analyses.

[Insert Table 4 about here]

FINDINGS

Artistic Differentiation

As a test of the first hypothesis, Table 5 shows estimates of the effects of Grammy awards on the artistic differentiation of an artist's albums. We start with the distance measure that uses both stylistic and sonic content. In Model 5.1, we restrict the analysis to Grammy-nominated artists; we included albums for these artists until they were nominated or won a second award, if they did. This approach allows us to isolate the effect of the Grammy count covariate from confounders by estimating the effect of a first-time win relative to a first-time nomination. (As described earlier, the tests in Part C of the online supplement show that winning and non-winning Grammy-nominated artists and albums are similar along the dimensions the data could measure.) Model 5.1 also excludes non-nominated artists, because although the matching procedure reduced the data imbalance between Grammy-nominated and non-nominated artists, it also assumes all the important matching characteristics have been measured. If some characteristics related to artistic merit are not observable among the non-Grammy artists, then the matching cannot compensate for these confounding factors. Model 5.1 includes 2,570 observations for 713 artists. With such a limited data panel structure, a fixed-effects model can yield less reliable estimates, and the smaller number of observations (less than 2 percent of the sample) suggested the use of ordinary least squares (OLS) regression. These estimates use robust standard errors to mitigate specification error. In this model, we estimated a positive coefficient of a Grammy win ($\beta = .077$; p-value $= .001$), suggesting winners increase their differentiation in subsequent albums after receiving the award. The finding is consistent with the first hypothesis in the sample of Grammy-nominated artists.

[Insert Table 5 about here]

All additional regressions reported here include fixed effects for artists and for genres, as well as for interactions between genres and year trend, and the other control variables to isolate the effects of winning and nomination from stable differences (e.g., demographic characteristics) between artists. The estimations expand the analysis sample to the full set of matched albums of Grammy-nominated artists and the sample of unnominated artists.

In Model 5.2, we find that when artists win a Grammy, their subsequent albums show greater artistic differentiation (in styles and sonic features) from the albums of other artists ($\beta = .025$; p-value $= .003$). So, we find further support for the first hypothesis in the full analysis sample.

Model 5.3 replicates the previous specification and includes a covariate measuring the running count of prior Grammy nominations that did not result in an award. This specification is intended to isolate the effect of winning from that of being nominated and to test whether albums of award contenders become more differentiated after being nominated, which we would expect to a lesser extent. We continue to find that winning a Grammy is associated with subsequently more differentiated albums ($\beta = .057$; p-value ~ 0). Surprisingly, however, receiving a nomination but not winning the award shows subsequent *lower* differentiation ($\beta = -.019$; p-value ~ 0). These findings support the first hypothesis for winners but not for non-winning nominees in the full matched data sample.

To illustrate the negative differentiation effect for nominees, we point to Grammy-nominee Charlie Byrd. Byrd was nominated for Record of the Year (*Desafinado*) and Album of the Year (*Jazz Samba*) in 1963. His blend of Jazz and International (especially Brazilian) genres later

became popular with the term "bossa-nova," also one of the styles used by AllMusic for *Jazz Samba,* in addition to Brazilian Jazz, Brazilian Traditions, Samba, and World Fusion. This album was praised for its artistic merit, and its artistic distance value is 1.273. In the years after *Jazz Samba*, bossa-nova became part of the mainstream in North American music. In the next 12 years, Byrd released several albums in the same genres and styles or with minor changes, including *Bossa Nova Pelos Passaros* (distance = .336), *Traveling Man* (.391), *Byrdland* (.396), and *Hollywood Byrd* (.380). These albums have the same genres and styles, except for Bop instead of Samba. Another of Byrd's albums, *Great Guitars* (.289), substituted Guitar Jazz and Bop styles for Samba and World Fusion. Accolades for these albums suggest Byrd continued to combine classical and bossa-nova guitar with few exceptions to his usual playing style.

In the next two model specifications, we test the effect of Grammy awards on artistic differentiation based separately on stylistic content and sonic content. Model 5.4's specification parallels that of Model 5.3, but the estimation uses only the sonic information from Spotify. Here, neither a Grammy win nor a Grammy nomination shows a statistically significant association with sonic distance.

In Model 5.5, we measure artistic differentiation using only styles from AllMusic. In this model, the same pattern from Model 5.3 appears and is statistically significant: (1) artistic differentiation increases after winning a Grammy; and (2) non-winning Grammy nominations show the opposite effect, lowered differentiation.[10] Comparing Models 5.3 and 5.5 shows greater explanatory power of the model measuring distance with styles only than of the one using stylistic and sonic content ($R^2 = .16$ versus .09). Accordingly, we report additional analyses using artistic differentiation based only on styles.

These estimated equations include a host of controls. We see a negative and significant coefficient for the experience variable measured as log-years since first album. In additional analyses not shown in detail here, we examined the stability of these effects, that is, whether the effects of awards "decay" over time. We do not find evidence supporting this idea. When we re-estimated Model 5.5 adding interaction terms between the Grammy variables and number of years since an award win or nomination, we found that differentiation significantly increases with years since winning ($\beta = .002$; p-value = .02) and significantly decreases with years since having been nominated ($\beta = -.001$; p-value = .04).[11]

In Table 6, we test the second and third hypotheses. In Models 6.1 and 6.2, we include the variable *past commercial success* and its interactions with the Grammy variables in the main model specification (4.5). The argument is that awards lead artists along different creative paths, but past success creates tension between economic and artistic interests. We find a negative significant coefficient for commercial success, and the main effects of the Grammy variables are unchanged (6.1). The interaction of past success with Grammy wins shows a significant negative effect ($\beta = -.001$; p-value = .006), and the interaction with nominations is not statistically significant ($\beta = .0002$; p-value = .12) (6.2). Artistic differentiation of award winners appears to weaken with greater past success in the market but, differentiation of nominees is left unaffected. These estimates support the second hypothesis for Grammy-winning artists.

[Insert Table 6 about here]

In Figure 2, we plot the adjusted predictions to compare the effects on stylistic distance of winning a Grammy versus not winning with past success ranging from the bottom of the chart to the top. The linear prediction of stylistic distance decreases from .26 to .13 for non-Grammy winners (dashed gray line), a 50 percent reduction. Stylistic distance decreases more, roughly 74 percent from .34 to .09, for artists who won a Grammy (black solid line). The graph also shows

lower stylistic distance overall when Grammy winners rank around the middle of the chart, and declining further with more success.

[Insert Figure 2 about here]

In Models 6.3 and 6.4, we include the variable *major record label* and its interactions with the Grammy variables. The estimates support the third hypothesis. The interaction between major label and Grammy wins is negative and significant ($\beta = -.050$; p-value = .001), and the interaction with nominations is not significant ($\beta = .003$; p-value = .53). Albums released by award winners with major labels show less artistic differentiation.

Figure 3 shows the adjusted predictions of winning a Grammy and releasing an album with a major label. For artists who do not win a Grammy, the linear prediction of artistic differentiation is similar for independent and major labels (.258 versus .253). Artistic differentiation increases 29 percent to .333 for Grammy winners who work with independent labels and 9.8 percent to .279 for Grammy winners who work with major labels. Model 6.5 includes both sets of interactions and shows the same pattern as the previous two specifications.

[Insert Figure 3 about here]

Billboard Rankings and Production Credits

We next analyzed the implicit empirical expectations about the effects of awards on audience evaluation and production resources. The data in these analyses include Grammy winners, nominees, and the matched group of non-nominated artists. Table 7 presents the analysis of the relationship between Grammy awards and success in the consumer market (cf. Peacock and Hu 2013). Model 7.1 contains artist fixed-effects regressions for position of each album in the year of the Grammy award in the *Billboard 200* album chart. (Peak position is reverse-coded.) Instead of the lagged running counts of Grammy wins and nominations, we used a dichotomous variable equal to one for albums containing Grammy-nominated or -winning music to better isolate the award effect (the awards are given for music released in the previous year), and zero otherwise.

[Insert Table 7 about here]

The estimates in Model 7.1 imply that after a Grammy nomination, artists' albums land roughly 22 positions higher in their peak performance in the *Billboard* chart (net of controls). Winning the award implies a gain of 27 positions to the chart, although an *F*-test indicates the extra five positions are not a statistically significant advantage ($F(1,8159) = .028$; p-value = .59). These estimates suggest that recognition from awards results in economic benefits. In Model 7.2, we find the same pattern by replacing the reverse-coded peak position with the negative of the log-transformation of the original peak position variable to reduce differences between positions at the bottom of the chart. Model 7.3 estimates the log of the number of weeks the album spent on the chart.[12] Grammy nominations and wins increase the time on the chart.[13] We assume this enhanced market power affords artists greater leverage in their relationships with commercially oriented partners such as record labels.

Table 7 also examines an implied effect of enhanced artist leverage, an expected positive association between Grammy awards and the resources used in production of subsequent albums. In Model 7.4, the outcome variable is the number of production credits, and the covariates again measure the running count of Grammy wins and nominations. The regression specification includes artist fixed effects. We find that a Grammy nomination leads to an increase of almost four additional production credits to an artist's subsequent albums ($\beta =$

3.648; *p*-value ~ 0). Winning a Grammy award results in approximately two additional credits in each subsequent album, but the coefficient is not statistically significant. The average number of credits per album is 10, and receiving an award increases the level of future production resources by about half, an exceptional change in production resources. These estimates demonstrate that awards provide more resources for those nominated, an outcome consistent with the assumption that artists earning awards gain leverage in their relationships with recording companies.[14]

Further Robustness Checks

We examined the robustness of the Grammy awards effects to a series of confounds and measurement artifacts. We determined that the effects of awards measure distance in styles rather than: (1) making music simply categorized as more "mainstream" or Pop/Rock (Regev 2015); (2) shifting the comparison set of genres to include a wider set of artists and styles; (3) spanning multiple genres; or (4) spanning multiple styles. We also found that stylistic distance represents a more general form of differentiation, rather than specific differentiation, from certain subgroups of artists, or from an artist's prior own music. Specifically, we found that the main findings hold across various comparison groups: when winners and nominees are compared to all other artists, to prior winners only, to prior nominees or winners, or to non-Grammy winners or non-nominees, and when stylistic distance from one's own prior music is controlled for. In unreported estimates, we also used stylistic distance from the artist's prior own albums as the outcome and did not find significant effects of Grammy wins or nominations, suggesting stylistic distance implies primarily differentiation from others.

Finally, we do not observe bias in the relationship between awards and expert ratings (in AllMusic reviews), which would suggest stylistic distance simply reflects changes in perceptions of winners rather than, as we argue, differences in the music as perceived by audiences. The findings are also not sensitive to excluding any one of the four awards included, to excluding albums with fewer styles, or to excluding albums in specific genres, such as Classical, where the music can recombine works composed earlier in time. The details of these robustness tests are reported in Part E of the online supplement. In Part F of the supplement, we explore whether the genre and style measures show obvious signs of endogeneity bias (which we did not discover).

DISCUSSION

We suggested that a promising (but perhaps uncanny) pathway to studying change in a field of cultural products involves looking at how artists respond to status-shifting awards. Winning an award gives an artist recognition and potential market power, thereby offering leverage to offset the usual boundaries imposed by commercially oriented recording companies. Once these constraints are lessened, do award-winning artists become more unique or less unique relative to other artists? The answer carries broad significance because an award system that exerts systematic effects on the work of the more visible and highly regarded artists will likely induce change on other artists and the entire field.

We investigated these issues in the field of popular music and the Grammy awards. Consistent with our motivation, we found the Grammys show significant effects on artists' subsequent creative strategies. In the main analyses, artists' recorded music shifted after a Grammy nomination. For winners, music albums released after the award show greater stylistic distance from the albums of other artists. By contrast, albums released after an artist is nominated but does not win become stylistically closer to the albums of other artists. We also found that market success increases for artists after they receive a nomination for a major Grammy award, resulting in higher *Billboard* chart positions for their albums. Recognition by the Grammys also

results in enhanced resources for future albums. Both effects suggest that artists gain leverage over recording companies through Grammy recognition.

Consider again the chilling effect of non-winning award nominations on artistic differentiation. How to explain it? Social psychologist Fritz Heider (1958:141) suggested that award effects for winners might not extend to those shortlisted for the prize, pointing to negative affective reactions of "near success" such as "exasperation, heightened frustration." Indeed, "silver medalists" often express disappointment over almost winning (Medvec, Madey, and Gilovich 1995). And employees who do not win a corporate award can feel they have no chance of succeeding and become demotivated (Frey and Gallus 2017).

Other research suggests a conformity response from award contenders. First, awards provide not only recognition but also information about the performance and status hierarchy. They signal to non-winners that their past strategies did not deserve the award (Neckermann and Yang 2017). Non-winners subsequently focus on different actions that may be relevant for winning the award. For example, when the criteria for winning are not easily observable, non-winners can follow how the award treated products in the past and imitate more features of the winners (Rossman and Schilke 2014). Second, contenders receive information that their actions represented a normative deviation. In response, they may update their beliefs and adapt their choices. Previous research shows that even with unpredictable outcomes, award contenders perceive that their previous actions deviated from the norm and will increase conformity (Hoogveld and Zubanov 2017).

Given typical award intentions of enhancing creativity and quality, the result that non-winning nominations decrease subsequent artistic differentiation prompts the following question: Would the music world be better off not publishing the list of nominees, as with awards such as the Nobel? Such a change in the system would no longer encourage conventional behavior by shortlisted artists. On the other hand, publicizing a shortlist promotes album sales even if an artist does not win.

It seems worthwhile to address the empirical finding that the sonic-based differentiation of artists' albums is not apparently affected by a Grammy win or nomination. One possible reason for this non-finding is that a pure sonic-based characterization, as captured by the Echonest/Spotify data, is simply not rich enough to capture albums' location in the space of artistic position-takings. Sonic features are important, but styles are more general: styles incorporate information not only about the sonic features but also aspects such as lyrical content, choice of instrumentation, playing approach, and aesthetic and political ideals (Lena 2012; Lena and Peterson 2008; Toynbee 2000). Because the style data contain more information, they have higher predictive power—in our sample, we found 82 percent accuracy for genre classification based on styles, but only 73 percent accuracy based on sonic features. This pattern is well-documented in research on music information retrieval and classification. This research finds that, compared to sonic features, context-based data tend to explain more accurately how music classification systems are organized (Oramas et al. 2017; Wang et al. 2010). In supervised learning tasks, distinct context-based approaches have higher predictive power, on average, than do sonic-content approaches (Turnbull et al. 2009). Audio features also show more limited power in predicting preferences for songs or stream counts (Nijkamp 2018). Our findings are consistent with this research.

This study contributes to sociological research on cultural production, particularly what Kaufman (2004) labeled the internalist, or endogenous, approach (see also Abbott 2001). This approach builds on Bourdieu's field theory but focuses on mechanisms of cultural dynamics not exclusively associated with social structure and group interests, or economic factors. The theory

also follows field theory's idea that differentiation results from the competitive process of position-taking by producers in their field. We extend this account in four ways.

First, we examine the consequences, rather than the determinants, of cultural consecration. Consecration can be viewed as an end-point of cultural production, whereas we argue it also feeds back on cultural production through strategies of artistic differentiation among producers. Second, the content of differentiation is modulated by the distribution of the award system. The path of separation between consecrated and non-consecrated artists continues post-award for winners. The desire for novelty can direct audience attention toward new producers, but more established producers innovate and pursue less conventional paths (and have the means to do so) (Kremp 2010). The findings show the separation between winners and other artists also applies to nominees who are also consecrated yet revert to the conventional. Third, as a trigger for differentiation, awards do not exclude the role of structural interests (an award indeed enhances the winner's status position); rather, awards interact with structural interests as well as motivation, incentives, and affect to shape strategies of cultural production (Beljean et al. 2015). Finally, the study builds on the idea of correspondence between field positions of cultural producers and products: we developed a methodology to examine an iterative process of differentiation of products that leads to long-term differences among producers (Prior 2011).

The findings suggest two interesting paradoxes for the analysis of cultural production. First, prior market success limits differentiation of artists post-award. Audiences expect novelty from producers, but the support they provide producers curbs the process that satisfies this desire. Indirectly, the success that awards engender can inhibit subsequent differentiation. Recognition and success may become a curse of sorts for cultural production. Future research might explore how artists themselves perceive the spoils of the awards—how aware they are, how intentionally they plot their trajectories in the cultural field, and how the position-takings of other artists who emulate them evolve.

Second, consecration leads to subsequent artistic work that may fulfill individual aims but does not necessarily appeal to consumers or critics. Askin and Mauskapf (2017) showed that atypicality of popular music songs increases consumer success up to a point. In Part G of the online supplement, we also explored that inclusion in lists of Best Albums compiled by influential music critics is affected by Grammy nominations but appears unaffected by artistic differentiation. This pattern suggests award winners follow consecration by innovating in ways that usually do not meet new acclaim. Yet moving away from the work that was consecrated may reinforce winners' place among the greats. After the award, increased differentiation can reduce direct comparisons to an artist's previous work (and perhaps this is related to artists sometimes resisting being associated with their earlier labels). In addition, other artists who follow in winners' steps usually experience lower chances of recognition, because certain aesthetic strategies have already been rewarded. In this context, nominees—who differentiate less than winners—may fare relatively well: they do not receive full consecration for their work but receive positive audience response because they do not differentiate as much. All these concurring effects suggest the overall effects of awards on the creative careers of winners, near-winners, and other artists deserve further examination.

Research on social status in markets shows multiple advantages of recognition for winners, from greater public attention to outsized credit, increased productivity, and resources that cumulate over time (Kovács and Sharkey 2014; Sauder, Lynn, and Podolny 2012; Zuckerman 1967). In science, an individual's rise in social status after a scientific prize can elevate general interest in their domain, but it can also capture the attention that audiences had allocated to their domain neighbors. For example, neighboring scientific articles attract less attention when authors of papers near them receive a prestigious prize (Jin, Ma, and Uzzi 2021; Reschke et al. 2018). This is especially the case if the star is highly differentiated from others.

The "crowding out" effects documented in science can apply to cultural production such as popular music; in fact, it may be an important factor involved in enduring phenomena such as canonization. Canonization declares that some works or artists are of highest importance. It may be that post-award differentiation makes the consecrated work more salient and contributes to establishing its value over time, as it will be separated from the prior work of other artists as well as the winner's. In fact, a canon lays claim to permanence but is not independent of time, place, and context (Dowd et al. 2021). Future work on cultural production might examine canonization as a social process involving diverse actors, products, institutions, and discourses that collaborate and compete. This process is also clearly shaped by inequalities of access to power and discourse, ideology, class, or gender.

The limitations of the present analysis should be recognized. First, we focused on the four major Grammy awards, but many other awards obviously exist, Grammys and non-Grammys. It would be useful to explore whether the findings generalize to settings in which awards come with substantial financial gain. For instance, the Nomura Art Award and the Nobel Prize come with million-dollar cash awards. We know that post-award motivation associated with monetary prizes declines (Gubler, Larkin, and Pierce 2016. It may be that in these situations awards result broadly in greater conformity, including for winners. Conversely, it would be relevant to examine symbolic awards in more restricted production fields, where the economic benefits of the award are more limited and post-award strategies toward more conventional work may be less expected.

One example is the Pulitzer Prize for music, a highly prestigious award usually reserved for critically acclaimed artists. We collected data on all Pulitzer Prize winners and shortlisted artists, merged the data with the AllMusic dataset, and replicated the analysis of our main model (5.5). We again found that winners become more differentiated post-award, but the nomination did not have any significant effect on subsequent albums for shortlisted artists. The estimates are presented in Part H of the online supplement. Although this is only initial evidence of this idea, it appears promising to examine the general differentiation effects of awards as well as how variation in type of award and field structure shapes creative work.

A second, and related, limitation is that we studied only one cultural field. Even with music's vast impact, it comprises just one aspect of cultural life. Awards play a central role in fields for books, movies, theater, dance, paintings, sculpture, architecture, politics, and even science. Do the patterns uncovered here occur in other cultural fields?

Finally, we could only observe subsequent producer strategies applied to products; we do not see the cognitive and psychological processes that artists experience. Changes in artists' stylistic positioning may plausibly be attributed to changes in artistic choices, but the content of an album can also be influenced by extraneous factors such as contractual obligations. Future research on the music industry could delve deeper into how such factors influence musicians' artistic choices, perhaps by studying specific cases.

Notes

1. Although no standard definition exists, awards typically involve: (1) programs of public recognition to winners; (2) the formal bestowal of something tangible, such as money or a certificate or trophy; and (3) scarcity or competition, such that not everyone can win (Frey and Neckermann 2008).

2. For Bourdieu (1998:77), interest is "to be there," to be invested in the field, "to recognize the game and to recognize its stakes."

3. In economics, Borjas and Doran (2015) find that awards incentivize unconventional work. They see this behavior as arising from a tradeoff between labor and leisure. Awards increase "wealth" through the social value of the prize, which in turn stimulates more consumption of leisure over labor. Borjas and Doran (2015) suggest awards shift producer attention ("cognitive mobility" in their words) toward less conventional paths. For example, mathematicians who had received the Fields Medal produced less of the pure mathematics the medal was awarded for, and frequently branched out into different areas from those they had pursued before, increasing their consumption of more "enjoyable" work topics.

4. This selection and voting system was installed in 1995. This temporal change does not alter the pattern of findings we report. In the Discussion section, we address whether the revision of the nomination process in 2021 could affect our findings.

5. Our analyses use unique identification numbers as assigned by AllMusic. Our regressions control for fixed artist characteristics but do not link cases when an artist is part of multiple performing acts (e.g., Paul Simon and Simon & Garfunkel).

6. In 2014, Echo Nest was acquired by Spotify and its data integrated, so we used Spotify's Web API (https://developer.spotify.com/documentation/web-api/).

7. In supplemental analyses, we used a multinomial logit regression approach to calculate the distance variables. When we used these logit-based variables in our analyses, we found a pattern of results similar to what we report in the main tables of the paper (see Table B1 in the online supplement).

8. Coding the record label types reliably over time can be elusive. We coded the variable to the best of our knowledge, based on research that analyzed strategic changes in the music industry during time periods in our data (Benner and Waldfogel 2016), as well as music industry webpages (e.g., https://en.wikipedia.org/wiki/Lists_of_record_labels).

9. Additional analyses indicate the effect of the major label variable is not a spurious association between artists changing label or changing label type from the previous albums.

10. The effects of winning and being nominated are also statistically different from each other ($F = 9.29$, $Prob > F = .002$).

11. We considered several alternative accounts for our findings. One account is regression to the mean (Malmendier and Tate 2009; Zuckerman 1967). This account would suggest less conventional work for winners after an award acknowledging their exceptional achievements. Yet we find more, not less, differentiation in post-award creative work of winners. And we find systematic asymmetries in creative strategies between winners and nominees who also were selected for their notable achievements. Another account would suggest reward systems will increase conformity of all candidates. Winners follow the same path because they are inclined to reciprocate the honor bestowed on them. Contenders perceive that their past behavior did not

conform to the apparent norm in the group and will conform more in the future (Bradler et al. 2016). One final account is middle-status conformity (Phillips and Zuckerman 2001). This argument would suggest less conventional behavior for those at the top (and at the bottom) of the status ranking and more conventional behavior for those in the middle, which is consistent with our findings. Here the analysis of audience effects shows award nominees and winners are separated by minor differences in recognition and in gains if at all, not whole categories. Also, in Phillips and Zuckerman (2001), the risk of illegitimacy is a major reason why those with middle status would be expected to conform. Here it is unlikely award nominees can become illegitimate by engaging in more creative, non-conventional behavior. Rather, in creative industries producers are praised for their non-conformity.

12. One advantage of this variable relative to the peak chart position is that zero weeks is not an attributed value.

13. In unreported analyses, we examined the statistical associations between Grammy awards and critical response. We used data on the year-end top-40 critics list published by the *Village Voice* from 1971 to 2018; this list is based on polling hundreds of popular music critics (Schmutz and van Venrooij 2021). This list was published at the end of each year, typically after announcement of the Grammy nominations but before the winners' selections. This timeline makes the causal path connecting ratings and awards more unclear to model, and the reported statistical associations need to be interpreted with caution. We find positive yet moderate associations. Correlation is slightly higher between albums first receiving Grammy nominations and then ending on the *Village Voice* list (.21) than for albums first on the *Village Voice* list that win a Grammy (.16), suggesting Grammys can predict critics appeal more than the reverse. These correlations decrease as the same artists accumulate awards and nominations (.06 and .02, respectively), suggesting critics regularly add more artists to the list who are not yet consecrated. These data suggest benefits from the Grammys that translate in popular demand and to some extent critical appeal, and positive relationships between distinct forms of recognition (Schmutz and van Venrooij 2021).

14. Artistic differentiation does not appear to be the simple product of a greater amount of resources used in music production. The resource effects for production credits do not differ significantly between nominees and winners, but the effects for artistic differentiation go in opposite directions for the two groups.

References

Abbott, Andrew. 2001. *Chaos of Disciplines*. Chicago: University of Chicago Press.

Allen, Michael P., and Anne E. Lincoln 2004. "Critical Discourse and the Cultural Consecration of American Films." *Social Forces* 82(3):871–94.

Amabile, Theresa M. 1993. "Motivational Synergy: Toward New Conceptualizations of Intrinsic and Extrinsic Motivation in the Workplace." *Human Resource Management Review* 3(3):185–201.

Anand, Narasimhan, and Mary R. Watson. 2004. "Tournament Rituals in the Evolution of Fields: The Case of the Grammy Awards." *Academy of Management Journal* 47(1):59–80.

Askin, Noah, and Michael Mauskapf. 2017. "What Makes Popular Culture Popular? Product Features and Optimal Differentiation in Music." *American Sociological Review* 82(5):910–44.

Baumann, Shyon. 2001. "Intellectualization and Art World Development: Film in the United States." *American Sociological Review* 66(3):404–26.

Becker, Howard S. 1982. *Art Worlds*. Berkeley: University of California Press.

Beljean, Stefan, Phillipa Chong, and Michèle Lamont. 2015. "A Post-Bourdieusian Sociology of Valuation and Evaluation for the Field of Cultural Production." Pp. 38–48 In *Routledge International Handbook of the Sociology of Art and Culture*, edited by L. Hanquinet and M. Savage. New York: Routledge.

Benner, Mary J., and Joel Waldfogel. 2016. "The Song Remains the Same? Technological Change and Positioning in the Recorded Music Industry." *Strategy Science* 1(3):129–47.

Bledsoe, Ashlee. 2021. "Walk the (Gendered and Racialized) Line: Retrospective Consecration and the Rock and Roll Hall of Fame." *American Behavioral Scientist* 65(1):59–82.

Borjas, George J., and Kirk B. Doran. 2015. "Cognitive Mobility: Labor Market Responses to Supply Shocks in the Space of Ideas." *Journal of Labor Economics* 33(S1):S109–S145.

Bourdieu, Pierre. 1980. "The Production of Belief: Contribution to an Economy of Symbolic Goods." *Media, Culture and Society* 2(3):261–93.

Bourdieu, Pierre. 1983. "The Field of Cultural Production, or: The Economic World Reversed." *Poetics* 12(4–5):311–56.

Bourdieu, Pierre. 1985. "The Market for Symbolic Goods." *Poetics* 14(1–2):13–44.

Bourdieu, Pierre. 1991. *Language and Symbolic Power*. Cambridge, MA: Harvard University Press.

Bourdieu, Pierre. 1998. *Practical Reason: On the Theory of Action*. Stanford, CA: Stanford University Press.

Bradler, Christiane, Robert Dur, Susanne Neckermann, and Arjan Non. 2016. "Employee Recognition and Performance: A Field Experiment." *Management Science* 62(11):3085–99.

Cattani, Gino, Simone Ferriani, and Paul D. Allison. 2014. "Insiders, Outsiders, and the Struggle for Consecration in Cultural Fields: A Core–Periphery Perspective." *American Sociological Review* 79(2):258–91.

Caves, Richard E. 2000. *Creative Industries: Contracts between Art and Commerce.* Cambridge, MA: Harvard University Press.

Chan, Ho Fai, Bruno S. Frey, Jana Gallus, and Benno Torgler. 2014. "Academic Honors and Performance." *Labour Economics* 31(December):188–204.

Dannenberg, Roger B. 2010. "Style in Music." Pp. 45–58 in *The Structure of Style: Algorithmic Approaches to Understanding Manner and Meaning*, edited by S. Argamon, K. Burns, and S. Dubnov. Berlin: Springer-Verlag.

DeNora, Tia. 1997. *Beethoven and the Construction of Genius: Musical Politics in Vienna, 1792–1803*. Berkeley: University of California Press.

de La Fuente, Eduardo. 2007. "The 'New Sociology of Art': Putting Art Back into Social Science Approaches to the Arts." *Cultural Sociology* 1(3):409–25.

DiMaggio, Paul J. 1991. "Social Structure, Institutions, and Cultural Goods: The Case of the U.S." Pp. 133–35 in *Social Theory for a Changing Society*, edited by P. Bourdieu and J. S. Coleman. Boulder, CO: Westview Press.

DiMaggio, Paul J. 2011. "Cultural Networks." Pp. 286–310 in *The Sage Handbook of Social Network Analysis*, edited by J. Scott and P. J. Carrington. London, UK: Sage.

Dowd, Timothy J. 2004. "Concentration and Diversity Revisited: Production Logics and the US Mainstream Recording Market, 1940–1990." *Social Forces* 82(4):1411–55.

Dowd, Timothy J., Trent Ryan, Vaughn Schmutz, Dionne Parris, Ashlee Bledsoe, and Dan Semenza. 2021. "Retrospective Consecration Beyond the Mainstream." *American Behavioral Scientist* 65(1):116–39.

Eisenberger, Robert. 1992. "Learned Industriousness." *Psychological Review* 99(2):248–67.

English, James F. 2005. *The Economy of Prestige: Prizes, Awards and the Circulation of Cultural Value*. Cambridge, MA: Harvard University Press.

Faulkner, Robert R., and Andy B. Anderson. 1987. "Short-Term Projects and Emergent Careers: Evidence from Hollywood." *American Journal of Sociology* 92(4):879–909.

Frey, Bruno S., and Jana Gallus. 2017. *Honours versus Money: The Economics of Awards*. Oxford, UK: Oxford University Press.

Frey, Bruno S., and Susanne Neckermann. 2008. "Awards: A View from Psychological Economics." *Zeitschrift für Psychologie/Journal of Psychology* 216(4):198–208.

Frith, Simon. 1981. *Sound Effects: Youth, Leisure, and the Politics of Rock*. New York: Pantheon Books.

Ginsburgh, Victor, and Sheila Weyers. 2014. "Nominees, Winners, and Losers." *Journal of Cultural Economics* 38(4):291–313.

Godart, Frédéric. 2018. "Why Is Style Not in Fashion? Using the Concept of 'Style' to Understand the Creative Industries." *Research in the Sociology of Organizations* 55:103–28.

Godart, Frédéric, Sorah Seong, and Damon Phillips. 2020. "The Sociology of Creativity: Elements, Structures, and Audiences." *Annual Review of Sociology* 46:489–510.

Goldberg, Amir, Michael T. Hannan, and Balázs Kovács. 2016. "What Does It Mean to Span Cultural Boundaries? Variety and Atypicality in Cultural Consumption." *American Sociological Review* 81(2):215–41.

Goode, William T. 1978. *The Celebration of Heroes: Prestige as a Social Control System*. Berkeley: University of California Press.

Gubler, Timothy, Ian Larkin, and Lamar Pierce. 2016. "Motivational Spillovers from Awards: Crowding Out in a Multitasking Environment." *Organization Science* 27(2):286–303.

Heider, Fritz. 1958. *The Psychology of Interpersonal Relations*. New York: John Wiley & Sons.

Hoogveld, Nicky, and Nick Zubanov. 2017. "The Power of (No) Recognition: Experimental Evidence from the University Classroom." *Journal of Behavioral and Experimental Economics* 67(April):75–84.

Horkheimer, Max, and Theodor W. Adorno. [1947] 2002. *Dialectic of Enlightenment*. Stanford, CA: Stanford University Press.

Iacus, Stefano M., Gary King, and Giuseppe Porro. 2012. "Causal Inference without Balance Checking: Coarsened Exact Matching." *Political Analysis* 20(1):1–24.

Jin, Ching, Yifang Ma, and Brian Uzzi. 2021. "Scientific Prizes and the Extraordinary Growth of Scientific Topics." *Nature Communications* 12:5619 (https://doi.org/10.1038/s41467-021-25712-2).

Kaufman, Jason. 2004. "Endogenous Explanations in the Sociology of Culture." *Annual Review of Sociology* 30:335–57.

Kovács, Balázs, and Amanda J. Sharkey. 2014. "The Paradox of Publicity: How Awards Can Negatively Affect the Evaluation of Quality." *Administrative Science Quarterly* 59(1):1–33.

Kremp, Pierre-Antoine. 2010. "Innovation and Selection: Symphony Orchestras and the Construction of the Musical Canon in the United States (1879–1959)." *Social Forces* 88(3):1051–82.

Lamont, Michèle. 2009. *How Professors Think: Inside the Curious World of Academic Judgement*. Cambridge, MA: Harvard University Press.

Lena, Jennifer C. 2012. *Banding Together: How Communities Create Genres in Popular Music*. Princeton, NJ: Princeton University Press.

Lena, Jennifer C., and Mark Pachucki. 2013. "The Sincerest Form of Flattery: Innovation, Repetition, and Status in an Art Movement." *Poetics* 41(3):236–64.

Lena, Jennifer C., and Richard A. Peterson. 2008. "Classification as Culture: Types and Trajectories of Music Genres." *American Sociological Review* 73(5):697–718.

Malmendier, Ulrike, and Geoffrey Tate. 2009. "Superstar CEOs." *Quarterly Journal of Economics* 124(4):1593–638.

Medvec, Victoria H., Scott F. Madey, and Thomas Gilovich. 1995. "When Less Is More: Counterfactual Thinking and Satisfaction among Olympic Medalists." *Journal of Personality and Social Psychology* 69(4):603–10.

Merton, Robert K. 1968. "The Matthew Effect in Science." *Science* 159(3810):56–63.

Moore, Allan F. 2001. "Categorical Conventions in Music Discourse: Style and Genre." *Music and Letters* 82(3):432–42.

Mount, Andre. 2013. "Multimedia Review: AllMusic." *Journal of the Society for American Music* 7(3):359–61.

Neckermann, Susanne, and Xiaolan Yang. 2017. "Understanding the (Unexpected) Consequences of Unexpected Recognition." *Journal of Economic Behavior & Organization* 135:131–42.

Negus, Keith. 1995. "Where the Mystical Meets the Market: Creativity and Commerce in the Production of Popular Music." *The Sociological Review* 43(2):316–41.

Nijkamp, Rutger. 2018. "Prediction of Product Success: Explaining Song Popularity by Audio Features from Spotify Data." Bachelor's thesis, University of Twente, Enschede, Netherlands.

Oramas, Sergio, Oriol Nieto, Francesco Barbieri, and Xavier Serra. 2017. "Multi-Label Music Genre Classification from Audio, Text, and Images Using Deep Features." *18th International Society for Music Information Retrieval Conference,* Suzhou, China.

Peacock, David E., and Gongzhu Hu. 2013. "Analyzing Grammy, Emmy and Academy Awards Data Using Regression and Maximum Information Coefficient." *2013 IIAI International Conference on Advanced Applied Informatics,* pp. 74–79.

Peterson, Richard A., and Narasimhan Anand. 2004. "The Production of Culture Perspective." *Annual Review of Sociology* 30:311–34.

Peterson, Richard A., and Roger M. Kern. 1996. "Changing Highbrow Taste: From Snob to Omnivore." *American Sociological Review* 61(5):900–907.

Phillips, Damon J., and Ezra W. Zuckerman. 2001. "Middle-Status Conformity: Theoretical Restatement and Empirical Demonstration in Two Markets." *American Journal of Sociology* 107(2):379–429.

Prior, Nick. 2011. "Critique and Renewal in the Sociology of Music: Bourdieu and Beyond." *Cultural Sociology* 5(1):121–38.

Ransbotham, Sam. 2015. "Analytics in E Major." *MIT Sloan Management Review* 56(3) (http://mitsmr.com/1BOgUXw).

Regev, Motti. 2015. "Cultural Globalization: Pop-Rock and Musical Cosmopolitanism." Pp. 201–10 in *The Routledge Reader on the Sociology of Music,* edited by J. Shepherd and K. Devine. New York: Routledge.

Reschke, Brian P., Pierre Azoulay, and Toby E. Stuart. 2018. "Status Spillovers: The Effect of Status-Conferring Prizes on the Allocation of Attention." *Administrative Science Quarterly* 63(4):819–47.

Rossman, Gabriel, and Oliver Schilke. 2014. "Close, but No Cigar: The Bimodal Rewards to Prize-Seeking." *American Sociological Review* 79(1):86–108.

Roy, William G., and Timothy J. Dowd. 2010. "What Is Sociological about Music?" *Annual Review of Sociology* 36:183–203.

Rule, Sheila. 1992. "The Pop Life." *New York Times*, November 25, p. 56.

Sauder, Michael, Freda Lynn, and Joel M. Podolny. 2012. "Status: Insights from Organizational Sociology." *Annual Review of Sociology* 38:267–83.

Schipper, Henry. 1992. *Broken Record: The Inside Story of the Grammy Awards*. Secaucus, NJ: Birch Lane Press.

Schmutz, Vaughn. 2005. "Retrospective Cultural Consecration in Popular Music." *American Behavioral Scientist* 48(11):1510–23.

Schmutz, Vaughn. 2016. "Commercialization and Consecration: Media Attention to Popular Music in the US and the Netherlands, 1975–2005." *Poetics* 59(1):82–95.

Schmutz, Vaughn, and Alex van Venrooij. 2021. "Harmonizing Forms of Legitimacy in the Consecration of Popular Music." *American Behavioral Scientist* 65(1):83–98.

Singular, Stephen. 1997. *The Rise and Rise of David Geffen.* Secaucus, NJ: Birch Lane Press.

Toynbee, Jason. 2000. *Making Popular Music: Musicians, Creativity and Institutions*. London, UK: Arnold.

Turnbull, Douglas, Luke Barrington, Mehrdad Yazdani, and Gert Lanckriet. 2009. "Combining Audio Content and Social Context for Semantic Music Discovery." *Proceedings of the 32nd International ACM SIGIR Conference on Research and Development in Information Retrieval.*

van Venrooij, Alex. 2011. "Classifying Popular Music in the United States and the Netherlands." *American Behavioral Scientist* 55(5):609–23.

van Venrooij, Alex, and Vaughn Schmutz. 2015. "Classification in Popular Music." Pp. 799–804 in *International Encyclopedia of the Social and Behavioral Sciences,* 2nd ed., Vol. 3, edited by J. D. Wright. Oxford, UK: Elsevier.

van Venrooij, Alex, and Vaughn Schmutz. 2018. "Categorical Ambiguity in Cultural Fields: The Effects of Genre Fuzziness in Popular Music." *Poetics* 66:1–18.

Wang, Dingding, Tao Li, and Mitsunori Ogihara. 2010. "Are Tags Better than Audio Features? The Effect of Joint Use of Tags and Audio Content Features for Artistic Style Clustering." *11th International Society for Music Information Retrieval Conference*, pp. 57–62.

Watson, Mary R., and Narasimhan Anand. 2006. "Award Ceremony as an Arbiter of Commerce and Canon in the Popular Music Industry." *Popular Music* 25(1):41–56.

Zuckerman, Harriet. 1967. "Nobel Laureates in Science: Patterns of Productivity, Collaboration, and Authorship." *American Sociological Review* 32(3):391–403.
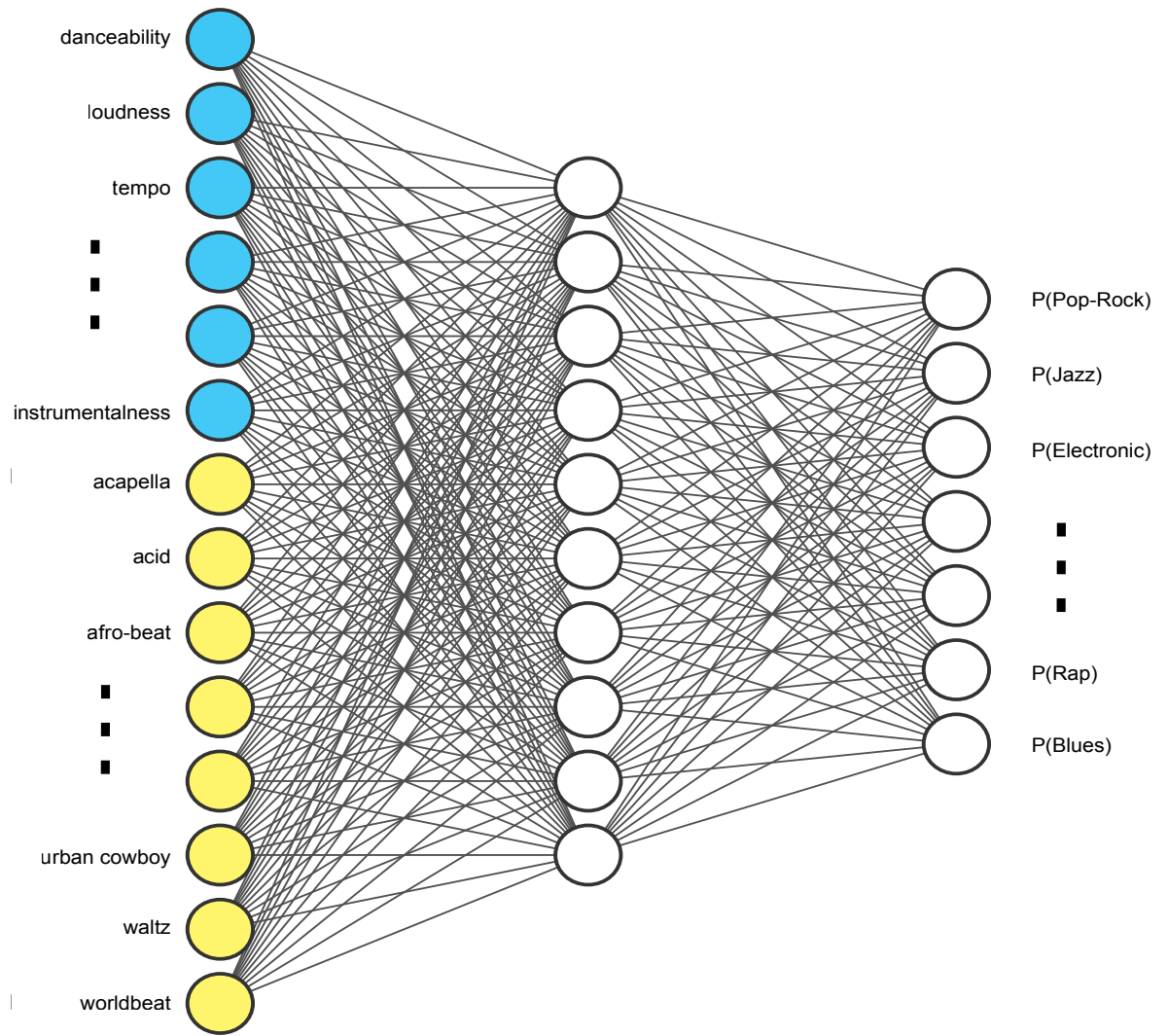
Figure 1. Neural Learning Approach Used to Measure Stylistic and Sonic Distance
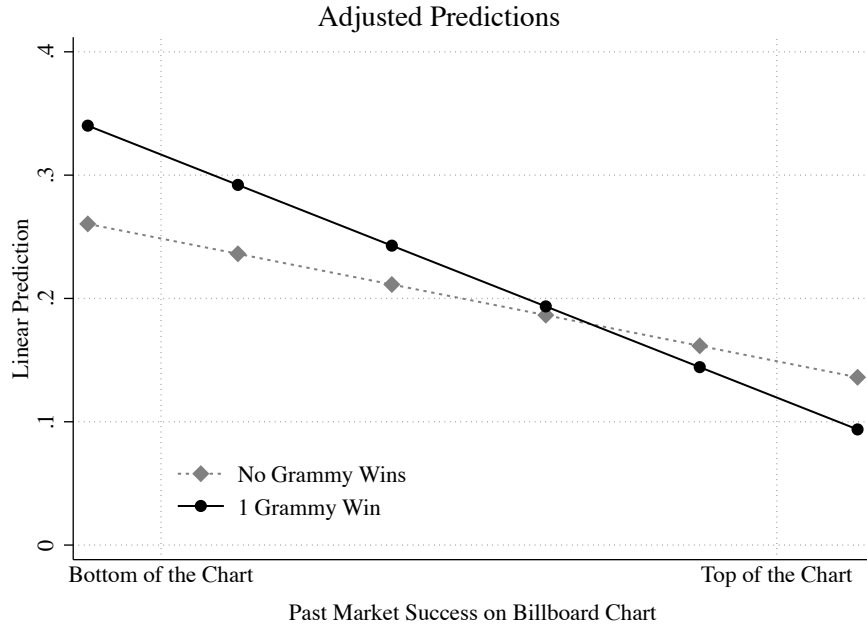
Figure 2. Average Marginal Effects of Winning a Grammy Award and Past Market Success on Stylistic Distance
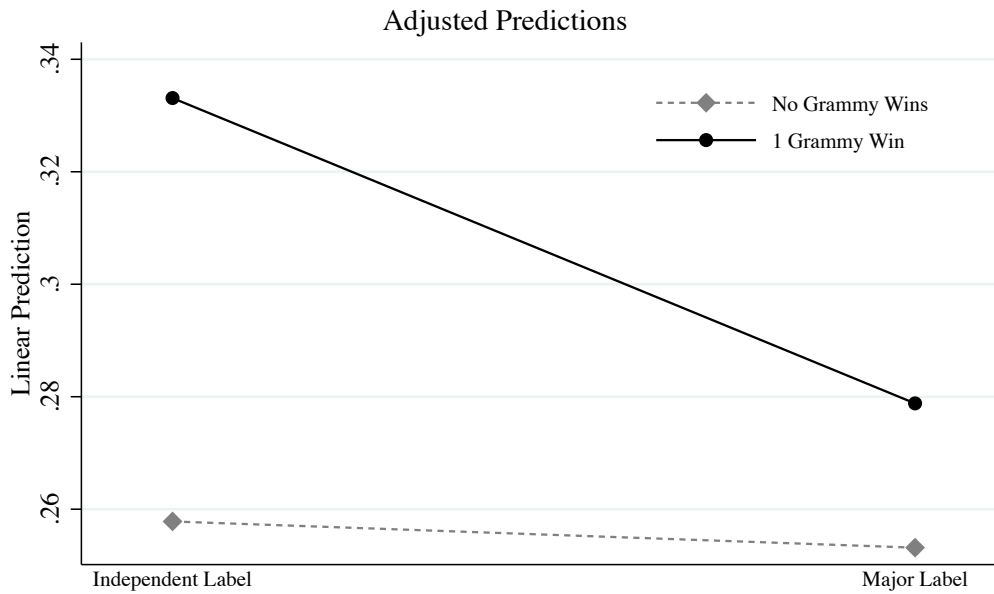

Figure 3. Average Marginal Effects of Winning a Grammy Award and Major Record Label on Stylistic Distance

Table 1. Albums in AllMusic Archive, by Primary Genre and Primary Style

Primary Genre	Percent of Total Albums	Style[a]	Percent of Total Albums
Avant-Garde	.69	Adult Pop/Rock	1.06
Blues	1.34	Alternative Pop/Rock	4.36
Children's	1.07	Brazilian Traditions	.83
Classical	13.79	Chamber Music	5.67
Comedy/Spoken	.59	Choral	3.04
Country	2.56	Christmas	.70
Easy Listening	1.05	Club/Dance	5.10
Electronic	9.04	Concerto	3.28
Folk	2.41	Contemporary Pop/Rock	.90
Holiday	.25	Gospel	2.80
International	8.11	Hard Bop	.91
Jazz	7.89	Heavy Metal	1.57
Latin	4.34	Indie Rock	6.10
New Age	1.60	Japanese Traditions	1.37
Pop/Rock	33.49	Keyboard	3.27
R&B	2.22	Latin Pop	.89
Rap	4.64	Opera	2.45
Reggae	.81	Orchestral	2.25
Religious	2.34	Post-Bop	.97
Stage & Screen	.82	Symphony	2.25
Vocal	.95	Vocal Music	2.40
Total	100	Total	52.17

[a]Includes styles with at least 5,000 albums.

Table 2. Distribution of Grammy-Winning and Grammy-Nominated Artists

Number of Wins[a]	Number of Artists	Number of Nominations	Number of Artists
0	738	1	612
1	220	2	192
2	44	3	86
3	16	4	58
4	10	5	28
5	4	6	16
6	1	7	13
7	3	8	4
	1,036	9	9
		10	4
		11	5
		12	4
		13	0
		14	2
		15	1
		16	1
		17	0
		18	0
		19	0
		20	0
		21	0
		22	1
			1,036

[a] Reports number of wins among nominated artists (includes wins = 0 for artists who are nominated and do not win).

Table 3. Summary Statistics and Correlations of Variables Used in the Regression Analyses ($N = 45{,}012$)

	Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1.	Stylistic and sonic distance	.256	.161										
2.	Stylistic distance	.297	.2	.501									
3.	Sonic distance	.304	.149	.643	.123								
4.	Peak position in *Billboard 200*	9.21	35.336	−.035	.141	−.079							
5.	Number of production credits	12.642	20.86	.029	.293	−.060	.419						
6.	Grammy win	.016	.189	.034	.089	.007	.130	.157					
7.	Grammy nomination	.081	.542	.046	.140	.002	.232	.267	.713				
8.	Past commercial success	6.559	20.737	−.020	.139	−.072	.591	.400	.239	.372			
9.	Experience	1.023	1.377	−.071	.306	−.062	.212	.403	.111	.206	.289		
10.	Major record label	.096	.295	−.021	.150	−.054	.388	.331	.138	.246	.378	.355	
11.	Year	2003	8.495	−.061	−.215	−.012	−.136	−.070	−.095	−.160	−.280	−.085	−.277

Table 4. Summary of the Regression Analyses in the Study

Outcome	Main Covariate	Estimation Method	Data	Analysis
Artistic differentiation from other artists (Hypothesis 1)	Lagged running count of Grammy wins	OLS with robust standard errors across artists	Grammy-nominated artists from start of recording career to second nomination	Table 5 (Model 5.1)
Artistic differentiation from other artists (Hypothesis 1)	Lagged running counts of Grammy wins and nominations	Fixed-effects estimators with robust standard errors across artists	Matched sample of Grammy-nominated and non-nominated artists	Table 5 (Models 5.2–5.5)
Artistic differentiation from other artists (Hypotheses 2 and 3)	Interaction terms between lagged running count of Grammy wins, lagged running count of Grammy nominations, and prior commercial success and major record label	Fixed-effects estimators with robust standard errors across artists	Matched sample of Grammy-nominated and non-nominated artists	Table 6
Peak position in *Billboard* (Assumption for Hypothesis 1)	Dummy for albums containing music for which the artist won or was nominated for a Grammy award	Fixed-effects estimators with robust standard errors across artists	Matched sample of Grammy-nominated and non-nominated artists	Table 7
Number of production credits (Assumption for Hypothesis 1)	Lagged running count of Grammy wins and nominations	Fixed-effects estimators with robust standard errors across artists	Matched sample of Grammy-nominated and non-nominated artists	Table 7

Table 5. Regression Estimates of Artistic Differentiation from Other Artists

Variable	Model 5.1 Stylistic and Sonic Distance	Model 5.2 Stylistic and Sonic Distance	Model 5.3 Stylistic and Sonic Distance	Model 5.4 Sonic Distance	Model 5.5 Stylistic Distance
Grammy win	.077**	.025*	.057***	–.010	.035*
	(.024)	(.012)	(.015)	(.011)	(.015)
Grammy nomination			–.019**	.002	–.022***
			(.006)	(.004)	(.006)
Experience		–.024***	–.025***	–.015***	–.041***
		(.005)	(.005)	(.003)	(.004)
Year		–.004	–.004	–.006	–.001
		(.005)	(.005)	(.004)	(.005)
Primary genre		Included	Included	Included	Included
Primary genre × Year		Included	Included	Included	Included
Constant	.434**	8.850	8.694	13.142	2.109
	(.006)	(10.850)	(10.844)	(7.470)	(10.333)
R^2	.01	.09	.09	.05	.16
Observations	2,570	45,012	45,012	45,012	45,012

Note: Estimates are obtained with artist fixed-effects regression (Models 5.2, 5.3, 5.4, 5.5) and OLS (Model 5.1). Robust standard errors are in parentheses. The data include Grammy nominees including winners (Model 5.1); Grammy nominees including winners, and a matched sample of non-Grammy nominees (Models 5.2, 5.3, 5.4, 5.5, 5.6). The matched group was selected using Coarsened Exact Matching (CEM). Experience is log-transformed. Dummies for primary genre and for interactions between primary genre of each album and year are included but not reported.
*$p < .05$; **$p < .01$; ***$p < .001$ (two–tailed).

Table 6. Regression Estimates of Artistic Differentiation from Other Artists; Effects of Commercial Success and Major Record Labels

Variable	Model 6.1	Model 6.2	Model 6.3	Model 6.4	Model 6.5
			Stylistic Distance		
Grammy win	.030*	.080**	.035*	.075***	.108***
	(.014)	(.023)	(.015)	(.019)	(.025)
Grammy nomination	−.021***	−.033**	−.021***	−.024***	−.034**
	(.006)	(.009)	(.006)	(.007)	(.019)
Past commercial success	−.001***	−.001***			−.001***
	(.0001)	(.0001)			(.0001)
Grammy win × Past commercial success		−.001**			−.001**
		(.0002)			(.0002)
Grammy nomination × Past commercial success		.0002			.0001
		(.0001)			(.0001)
Major record label			−.008	−.005	−.004
			(.005)	(.005)	(.005)
Grammy win × Major record label				−.050**	−.043**
				(.016)	(.016)
Grammy nomination × Major record label				.004	.003
				(.006)	(.006)
Experience	−.037***	−.037***	−.040***	−.040***	−.037***
	(.004)	(.004)	(.004)	(.004)	(.004)
Year	−.001	−.001	−.001	−.001	−.002
	(.005)	(.005)	(.005)	(.005)	(.005)
Primary genre	Included	Included	Included	Included	Included
Primary genre × Year	Included	Included	Included	Included	Included
Constant	3.057	3.214	2.526	2.905	3.851
	(10.318)	(10.315)	(10.335)	(10.328)	(10.312)
R^2	.16	.16	.16	.16	.17
Observations	45,012	45,012	45,012	45,012	45,012

Note: Estimates are obtained with artist fixed-effects regression. Robust standard errors are in parentheses. The data include Grammy nominees including winners, and a matched sample of non-Grammy nominees. The matched group was selected using Coarsened Exact Matching (CEM). Experience is log-transformed. Dummies for primary genre and for interactions between primary genre of each album and year trend are included but not reported.
*$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed).

Table 7. Regression Estimates of Peak Position in *Billboard 200* Chart, Number of Weeks Spent in *Billboard 200* Chart, and Number of Production Credits

Variable	Model 7.1 Peak Position in *Billboard 200*	Model 7.2 Peak Position in *Billboard 200*	Model 7.3 Number of Weeks in *Billboard 200*	Model 7.4 Number of Production Credits
Grammy win	27.341**	.486***	.374**	2.108
	(8.015)	(.131)	(.142)	(1.906)
Grammy nomination	21.767***	.643***	.376***	3.648***
	(4.067)	(.066)	(.072)	(.711)
Experience	−.159	−.001	−.029	.934
	(1.766)	(.029)	(.031)	(.588)
Major record label	5.649***	.051***	.112***	3.643***
	(1.068)	(.017)	(.019)	(.529)
Year	.578	.001	.004	.202
	(1.078)	(.018)	(.019)	(.376)
Primary genre	Included	Included	Included	Included
Primary genre × Year	Included	Included	Included	Included
Constant	−1141.962	−7.649	−8.184	−389.791
	(2156.116)	(35.190)	(38.282)	(753.259)
R^2	.09	.09	.16	.16
Observations	45,012	45,012	45,012	50,333

Note: Estimates are obtained with artist fixed-effects regression. Robust standard errors are in parentheses. In Model 7.1, peak position is reverse-coded so that a positive coefficient implies a better position in the chart. In Model 7.2, peak position is a negative log-transformation, and a positive coefficient implies a better position in the chart. In Model 7.3, number of weeks in *Billboard 200* is log-transformation of number of weeks the album spent in the chart (if the album charted multiple times, the variable measures the total number of weeks spent in the chart), and a positive coefficient implies better performance. The data include Grammy nominees including winners, and a matched sample of non-Grammy nominees. The matched group was selected using Coarsened Exact Matching (CEM). Experience is log-transformed. Dummies for primary genre and for interactions between primary genre of each album and year are included but not reported.

*$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed).