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Music to Our Ears: New Market Creation and Creative Influences in the Popular Music Industry

Erik Noyes

Babson College, enoyes@babson.edu

Sal Parise

Babson College

I. Elaine Allen

Babson College

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MUSIC TO OUR EARS: NEW MARKET CREATION AND CREATIVE INFLUENCES IN THE POPULAR MUSIC INDUSTRY

ERIK NOYES
Babson College
Entrepreneurship Division

SAL PARISE
Babson College
Technology, Operations and Information Management Division

I. ELAINE ALLEN
Babson College
Entrepreneurship, Mathematics and Science Divisions



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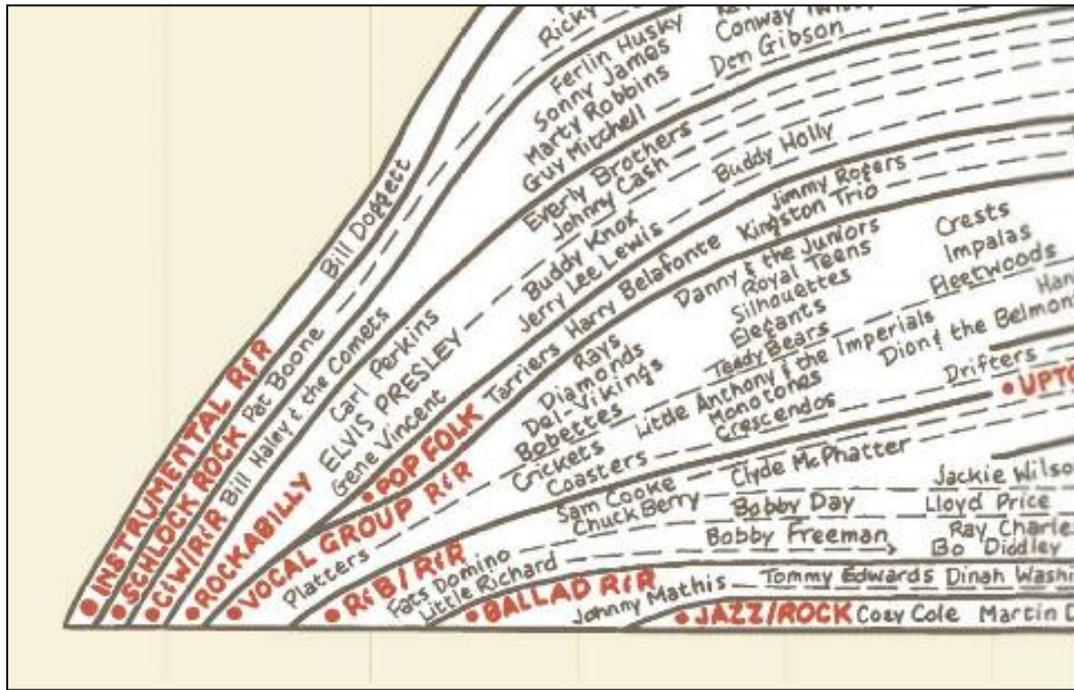
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Erik Noyes, Assistant Professor, Babson College, enoyes@babson.edu
 Salvatore Parise, Associate Professor, Babson College, sparise@babson.edu
 Elaine Allen, Associate Professor, Babson College, allenie@babson.edu

Music to Our Ears: New Market Creation and Creative influences in the Popular Music Industry



The Genealogy of the Pop/Rock Music Industry by Reebee Garofalo

Abstract

In a creative industry, what pattern of creative influences increases the likelihood that an artist will pioneer a new market? This longitudinal research examines all major artists in the Popular Music Industry between 1950 and 2008 and their unique creative influences to examine if certain structural positions in the complete network of influences make one more or less likely to be a first mover in new markets. Since 1950, the Popular Music Industry has grown into a \$8 billion dollar a year industry with wealth creation arising from the creation of 193 separate new markets. We apply network analysis to the social structure of the Popular Music Industry to see—do artists who pioneer new markets occupy and exploit distinct structural positions in the influences network? Applying Resource Dependency Theory, we examine each artist's structural pattern of creative influences as an idiosyncratic resource base from which to fashion industry-shaping musical innovations. We find that artists who draw from centrally-positioned versus peripherally-positioned artists/creative influences are more likely to pioneer new markets.

Key words: creative industries, entrepreneurship, new market creation, networks, innovation

Music to Our Ears: New Market Creation and Creative influences in the Popular Music Industry

Introduction

Creative industries are increasingly a source of wealth creation in both developed and developing economies. Creative industries are estimated to account for more than 7% of the world's GDP and are forecast to grow on average by 10% a year (United Nations Conference on Trade and Development, 2004). The broader transition from industrial economies to knowledge and service economies has increased the need to understand the production and distribution of creative goods in the global economy. Relatedly, certain countries, such as Ireland, the U.S., and India, see creative industries and the global export of creative products as an attractive and viable route to economic growth, job creation and national competitive advantage. According to the United Nations Conference on Trade and Development (2008), "Creative industries have emerged as one of the world's most dynamic economic sectors, offering vast opportunities for cultural, social and economic development". For this reason, it is important to understand factors that generate innovation in creative industries and the production and distribution of creative goods at large.

This chapter examines one particular type of innovation in creative industries: new market creation. New market creation is the servicing of newly emergent and newly identified customer needs resulting in a change in an industry's market structure (White, 1981; Bala and Goyal, 1994; Kirzner, 1997; Malerba et al., 1999; Geroski, 2003; Sarasvathy and Dew, 2005). Importantly, new market creation often requires an entrepreneur to invent or exploit different methods of production and distribution. In the automotive industry, for example, the birth of the Sport Utility Vehicle market (SUVs) created new consumption patterns in the industry and placed new demands on automotive companies in terms of R&D, product development, marketing and strategy. Analogously, the emergence of the online subscription-based movie rental market, as led by Netflix, required new investments in technology and operations to satisfy a broad collection of previously unmet needs in the movie rental industry. The fragmentation of an industry into new specialized markets is an important innovation phenomenon because the emergence of a new market can create competitive advantages for

industry players, particularly those best positioned in the new market. Also, an entrepreneur's ability to be a *first mover* in a new market—and potentially shape the creation of that market—can impact his/her future influence and wealth creation in the industry.

Collectively, the exploration, perception and validation of new markets is a social process—both by individuals and organizations embedded in networks. This research, similarly, takes a decidedly social approach in considering the role of others, particularly creative influences, in the pioneering of new markets. John Lennon of The Beatles once commented, “At least the first forty songs we wrote were Buddy Holly influenced.” Buddy Holly, it follows, was a creative influence to The Beatles who, in turn, went on to influence thousands of other artists, and ultimately shape the market terrain of the Popular Music Industry.

Specifically, here we consider how previously unidentified or unmet needs are identified and exploited by alert industry entrepreneurs (here examined as musical artists) who recognize an opportunity to create new value. Our research question is: In a creative industry, what pattern of creative influences increases the likelihood that an artist will pioneer a new market? We posit that certain patterns of creative influences—and particularly certain structural positions in the complete network of influences—should aide artists in pioneering new markets. Trying to understand new market pioneers, those who lead the creation of new markets, our dependent variable is *first movership* or creating into a market in the first year of a market's existence. To predict first movership, we analyze structural differences in each artists' creative influences networks, considering 14,000+ influence ties among all major popular music artists in the industry between 1950 and 2008. Our main predictor variables include: the centrality of the artist in the complete influences network (does the artist draw from centrally-positioned or peripherally-positioned artists?), each artist's out-degree (the total number of different influences an artist cites), and each artist's in-degree (how commonly the artist is cited as an influence to others).

In this chapter, we first examine existing research on new market creation and the role of influence in this process. Drawing from resource dependency and network theory, we develop hypotheses about artist positions and how different network positions in an influences network may facilitate pioneering new markets. We aim to contribute to the entrepreneurship literature while looking at the birth of 193 new markets in the roughly \$8 billion Popular Music Industry. Quite opposite to the prevailing view that a tortured, socially-isolated artist is most likely to

generate industry-changing innovations, we find that highly socialized, and particularly centrally-influenced artists are most likely to pioneer new markets.

Research On New Market Creation And Influence

New market creation, by definition, shapes an industry's market structure. New market creation has been examined as a process involving a new network of stakeholders (Sarasvathy and Dew, 2005). At a high level, new market creation is arguably an important sub-process of creative destruction, including industry creation and industry evolution (Schumpeter, 1934; Van de Ven and Garud, 1988). Theories of entrepreneurial opportunity discovery emphasizing *opportunity recognition*, *opportunity search*, and *opportunity creation* alike all highlight close relationships between entrepreneurs' successful actions and the formation and formalization of new markets (Hayek, 1945; Kirzner, 1973, 1997; Shane and Venkataraman, 2000; Alvarez and Barney, 2007). The creation of new markets is tightly linked to the diffusion of innovations (Rogers, 1995). According to Bala and Goyal (1994), new markets constantly open up due to technological, political or regulatory changes. One key observation about new markets is that they are regularly emerging.

Knowledge about new markets—along with knowledge of ways to serve markets—are each triggers for entrepreneurship in the individual-opportunity nexus framework of entrepreneurship (Eckhardt and Shane, 2003). Broad questions about the process of new market creation examine: individuals' perception/non-perception of new market opportunities; other entrepreneurs' uncertainty that a new market will truly emerge, including the exact timing of the new market; and the process by which other entrepreneurs ultimately learn about and exploit the new market opportunity. Particularly during the growth stage of an industry, one expects to see the emergence of several new markets. Oppositely, one expects to see a declining rate of new market creation as an industry enters maturity and decline.

Technological innovation can lower barriers to entry in an industry and stimulate new investments which foster the creation of new markets (Malerba et al., 1999). How entrepreneurs search for new markets is captured in March's (1991) exploration-versus-exploitation quandary. Namely, at any given time, entrepreneurs must balance their efforts to capitalize on existing capabilities that are valuable in known markets with other efforts to expose and identify new market opportunities. Generally, while new market creation is tightly linked to entrepreneurship,

there is a relatively small literature on new market creation in entrepreneurship research and in creative industries research particularly.

One challenge is that valuable resources in established markets may not facilitate entry into new markets, thereby creating innovation difficulties for industry incumbents. Specifically, here we examine how one's *creative influences* make it more or less likely one will be a first mover—or pioneer—in new markets. Creative influences are the set of recognized social predecessors in a creative industry (“forefathers” or “foremothers”) who are credited for prior achievements in a creative industry. The creative influences of artists in a creative industry can and do vary widely, but they are particularly interesting because artists openly recognize and celebrate their influences—the raw material from which they attempt to fashion industry-changing innovations. In particular, we view each artist's structural pattern of creative influences as idiosyncratic resources from which they may develop innovations and, particularly, pioneer the creation of new markets.

Although it can be difficult to document creative influences, musical artists, software architects, game designers, and film directors all operate in a social context where they are influenced by the creative products of their predecessors and peers (Becker, 1982; Uzzi and Spiro, 2005). One's creative influences may shape what one believes is possible or desirable within a creative industry. Therefore, influence can be viewed as both a source of exploration and exploitation in the creation of new markets in creative industries. As such, this research aims to disentangle the relative importance of one's individual talent versus the importance of one's creative influences in leading the creation of a new market.

The birth and evolution of the Popular Music Industry (1950 to present) is a fascinating context to explore the importance of direct and indirect creative influences on innovation in an industry. Artists responsible for major innovations (pioneering new markets and departing from prior traditions) have often combined new technologies, new group members and fused different musical styles to fashion new musical experiences (e.g., The Beatles, David Bowie, Pink Floyd, Stevie Wonder, and Herbie Hancock). Bob Dylan, for example, influenced an entire generation of singer/songwriters by redefining the folk genre in the 1960s. By incorporating sophisticated lyrical techniques and infusing pop, rock, and other musical instrumentation to the traditional acoustic folk genre of the early 1960s, Dylan essentially helped create and define new music markets (e.g., folk rock) for “follower” artists such as The Byrds.

More broadly, considering the traditional creative industries of music, film, and publishing, loose personal and professional affiliations are a treasure chest for locating critical talent, for sourcing funding for risky new ventures and for assembling teams to commercialize and industry-shaping innovation. Specifically, a culture of openness about one's creative influences—both near and distant—allows one to analyze artists' positions in the complete network of influences. By analyzing each artist's unique position in the complete network of musical influences, we examine relationships between social structure and new market pioneering in a creative industry.

The Importance Of Networks In Creative Industries

Entrepreneurs and entrepreneurial firms in creative industries commonly develop innovations and generate new wealth by exploiting resources in their professional and personal networks. Looking at software—both in startups and at larger companies like Microsoft —"flash teams" assemble and disband to exploit the potential of new technologies and business models by drawing on specialized expertise, depending on the unique demands of bringing a specific innovation to market. Considering the rapid-growth gaming industry, leading game developers such as *Electronic Arts* cultivate and exploit far-flung networks of game developers, interaction designers, programmers, licensing specialists and marketing partners to pioneer new markets in their industry. The *Nintendo Wii* is a particularly compelling example of how a gaming company disrupted existing dominance in the industry by Microsoft by pioneering a new market (e.g., fitness-related gaming) enabled by development of radical new user-interface technologies. Specifically, the breakthrough Wii system with its novel controllers enabled system owners to box, to bowl and to play tennis against each other through physically-exerting gestures. Relatedly, the *Nintendo Fit*, an add-on controller, allows consumers to elevate their heart rate by practicing yoga or aerobics with a virtual trainer by standing on an interactive floor pad. Because leading in new markets is often a key to creating wealth—as well as to gaining access to emerging technologies and future networking capability—artists and companies in creative industries strive to build and exploit the most innovative networks with diverse expertise in different markets and varied technological platforms.

Supporting this overall process, researchers have demonstrated that worker free agency in Silicon Valley—and particularly lax non-compete arrangements, fluid organizational boundaries

and strong informal networks of talent—are critical to the pursuit of fast-changing opportunities in dynamic industries such as the IT and Life Sciences industries. Regional advantages, it follows, have been shown to emerge from heightened labor mobility and accepted norms of moving between and networking within organizations (Saxenian, 1996).

Theory and research on networks provide insight into why networks—and particularly why entrepreneur positions in networks—matter (Bavelas, 1951; Milgram, 1967; Granovetter, 1985; Burt, 1992; Krackhardt, 1995; Powell, Koput and Smith-Doerr, 1996; Hills, Lumpkin and Singh, 1997; Singh et al., 1999; Ahuja, 2000; Borgatti and Foster, 2003; Freeman, 2004; Smith-Doerr and Powell, 2005). For example, Resource Dependency Theory, a foundational theory of networks research, predicts that one's adaptability and chances of survival in an industry depends on one's access to scarce resources in a business environment (Pfeffer and Salancik, 1978). Particularly, social contacts, or one's position in a social network, may enable or constrain access to critical resources needed for basic operation, growth and innovation. Critical resources obtained through social contacts may include financial resources, such as funds needed to develop a technical innovation, or social capital such as important social contacts needed to assemble or distribute an innovation. From this perspective, certain social ties—and particularly resources obtainable in the external environment—are what shape the survival and innovation capacity of certain industry players. A chief point in this theoretical perspective, to summarize, is that social ties can enable or constrain strategic actions by industry entrepreneurs.

In the context of software design, for instance, this may mean that a software company's ability to lead in a market is constrained by its ability to locate and attract top talent through its industry contacts—which may be facilitated by its *centrality* in industry networks. Relatedly, in the gaming industry, a game development team may be successful—or oppositely limited—based on its awareness of emerging technologies through formal and informal networks. One risk is to be peripheral, versus central, in key industry networks. Lastly, in music, an artist, we posit, may face advantages or disadvantages in pioneering a new market based on the structural pattern of his or her creative influences. In the music industry, creative artists must collaborate in the creation of the product itself (e.g., band mates and record labels to create a CD) as well as in the formation of new musical styles (e.g., musical influences from artists with specialized or different backgrounds) (Smith, 2006). Our aim in this research is to isolate the

importance of the network, and particularly certain structural positions in the network, in relation to one specific innovation outcome: being a first mover, or pioneer, in a new market.

Network methods have found broad application in the study of business strategy, innovation processes, and earlier in epidemiology and politics (Wasserman and Faust, 1994; Powell, Koput and Smith-Doerr, 1996). Network analysis examines the architecture of direct and indirect social ties among network actors—such as people, teams, organizations and nations—and focuses on the *relations* among actors as opposed to the *attributes* of actors as is more common focus in the social sciences. Network research asks: does one's position in the network affect one's outcomes? Also, it asks: are there superior (or inferior) positions in the network from which initiate certain actions—here examined as pioneering a new market.

Recently, network theory has been used to study the structure and performance in creative industries. Uzzi et al. (2007) reviewed the use of small-world networks (a class of networks where actors are highly clustered and the average path between any two actors across the entire network is relatively short) across several industries, including creative industries such as the music industry. Uzzi and Spiro (2005) found a non-linear relationship between small world network structures and the performance of creative artists. Smith (2006) studied the network of Rap, Jazz, and Brazilian pop music artists and found they all shared small-world network characteristics.

A particular network theory, Structural Hole Theory (Burt, 1992), which complements Resource Dependency Theory, suggests that *brokers* in networks should have advantages in recognizing entrepreneurial opportunities and fashioning innovations because they sit at the nexus of unique information, also known as *non-redundant* information. Specifically, those artists who are connected to other network actors—where those network actors are otherwise unconnected—can exploit unique information flows and perceive entrepreneurial opportunities that only partially present themselves to others (who, by contrast, have inferior access to unique information by virtue of their network positions). Brokerage is a specific example of a network position that should be favorable for initiating innovations according to the network perspective.

Music Artist's Network Structure And New Markets

In the Popular Music Industry (1950-2008), a culture of openness about one's creative influences—both near and distant—allows one to analyze artists' positions in the complete network of influences. By analyzing each artist's unique position in the complete network of musical influences, we examine relationships between social structure and new market pioneering in this creative industry. Particularly, for each artist, we can determine: his/her/a group's exhaustive list of creative influences, the markets the artist created into, and most importantly, the timing of entry into each market.

Since its inception, the roughly \$8 billion Popular Music Industry (Recording Industry Association of America, 2010) has evolved into 13 broad pop/rock market categories and 193 constituent markets (Allmusic, 2008). The 13 broad market categories (i.e., sub-genres) include: *Folk/Country Rock*, *Art-Rock/Experimental*, *British Invasion*, and *Alternative/Indie Rock* as a sampling. The constituent 193 markets include specialized artists and target customers such as: *Christian Punk*, *Post-Grunge*, *Scandinavian Metal*, *Japanese Pop*, *Post-Punk* and *Aboriginal Rock*, among others. In sum, we build-out a continuous lineage of creative influences among all major artists cutting across all 193 new markets going back to the formation of the industry, a complete network. We located the birth, or pioneering, of individual new markets within this lineage. Considering theory and empirical findings presented earlier, we looked to test the following hypotheses:

Hypothesis 1: The structural pattern of creative influences for market pioneers will be different than non-pioneers.

Hypothesis 2: Artists with a higher total number of direct influences will be more likely to pioneer new markets than artists with few direct influences.

Hypothesis 3: Artists who draw from centrally-positioned versus peripherally-positioned artists/influences will be more likely to pioneer new markets.

The three hypotheses above derive directly from our consideration of Resource Dependency and network theory. Namely, we expect that an artist's structural position vis-à-vis his/her creative influences should impact access to critical resources necessary to fashion an industry-changing innovation. Specifically, Hypothesis 2 predicts that artists with a higher total number of direct influences will be more likely to pioneer new markets. This prediction is based on the idea that several (versus few) influences should theoretically offer artists many influences

to draw from, or recombine, in their efforts to pioneer the creation of a new market. While structural, this perspective only considers the number of direct influences immediately “surrounding” the artist and is therefore a localized measure of direct resource availability. A step change, Hypothesis 3, predicts that artists who draw from centrally-positioned versus peripherally-positioned artists/influences will be more likely to pioneer new markets. Broadly, this hypothesis sets up two ideas: one that new market creation builds on core influences in the industry—and less so the exploitation of peripheral influences in the industry—and two, that having centrally-positioned creative influences is an especially efficient way to access the direct and indirect influences of others. An artist with centrally-positioned influences, by definition, is more likely himself or herself to be centrally-positioned in the complete influences network, which is what we measure. Consistent with our prior discussion, the three hypotheses capture the broad idea that the pioneering of a new market is a decidedly social—versus isolated—process.

Method

Data

The data come from allmusic.com, a top industry information provider whose database is the platform for both America Online’s and Yahoo! Music’s e-commerce website. The archive provides data including each artist’s name (individual or group), markets associated with the artist’s music, discographies of albums and songs, and most importantly, lists of artists that have influenced each artist (1950’s-2008). In total, there are 14,000+ “influenced by” ties for nearly one thousand artists. This data allows for a seamless and complete network picture of all major artists in the industry and their creative influences over the past six decades (See Figure 1 below for a sample of the data). Relatedly, Figure 3 in the Appendix provides a network visualization showing only the creative influences among the most influential artists in the industry (i.e., those cited most as creative influences to all the other artists in the industry).

Biography
 So much has been said and written about the Beatles — and their story is so mythic in its sweep — that it's difficult to summarize their career without restating clichés that have already been digested by tens of millions of rock fans. To start with the obvious, they were the greatest and most influential act of the rock era, and introduced more innovations into popular music than any other rock band of the 20th century. Moreover, they were among the few artists of any discipline that were simultaneously the best at what they did and the most popular at what they did. Relentlessly imaginative and experimental, the Beatles grabbed a hold of the international music

Group Members

- George Harrison
- John Lennon
- Paul McCartney
- Ringo Starr
- Pete Best
- Stuart Sutcliffe

Influenced By

- Roy Orbison
- Ravi Shankar
- Fats Domino
- Phil Spector
- Lonnie Donegan
- The Shirelles
- The Supremes
- Gene Vincent
- Smokey Robinson
- Elvis Presley
- Carl Perkins
- Little Richard
- The Isley Brothers
- Buddy Holly
- The Everly Brothers
- Bob Dylan
- Chuck Berry
- Arthur Alexander
- Larry Williams
- Eddie Cochran
- Little Willie John

Followers

- Steve Wariner
- Bangles
- Kate Bush
- Neil Diamond
- Electric Light Orchestra
- Iron Butterfly
- Joe Jackson
- John Kilzer
- The Move
- The Neighborhoods
- Pere Ubu
- Prefab Sprout
- Pure Prairie League
- Roxette
- The Searchers
- Paul Simon
- Grace Slick
- June Brides
- Thee Headcoats
- Craig Nuttycombe

Picture Browser
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Formed
 1960 in Liverpool, England

Disbanded
 1970

Years Active
 1910 20 30 40 50 60 70 80 90 2000

Genre
 Pop/Rock

Styles

- Early Pop/Rock
- Rock & Roll
- British Invasion
- Psychedelic
- Merseybeat
- Pop/Rock
- British
- Psychedelia
- Folk-Rock

Figure 1. Detailed example of creative influences for one artist. Picture/graphic from www.allmusic.com.

For this study, we used UCINET 6.0 (Borgatti et al., 2002) to build-out the complete network and to measure the network positions associated with each artist. As mentioned, within the Popular Music Industry there are 193 markets. For each artist, we created variables that measure their year-of-entry into new markets (i.e., year 0, 1, 2 or 3, etc.) from when the market came into existence, our dependent variable. Entry in *year zero* (0) is considered being a first mover, or pioneer, in a market since entry occurred during the first year of the market's existence. We looked at the dependent variable in two ways: first as a binary outcome variable where artists are either first movers or not (i.e., either create into new markets in year zero or at some later unspecified time). Second, we looked at first movership as a continuous dependent variable and considered each artist's year-of-entry into new markets (year 0, 1, 5, 10, for example, or later). Because we have year-of-entry data for all artists for all markets, we have continuous data showing first (early) and last (late) entry into each market for the industry. With this second method, the requirement for first movership was loosened to include the several first years of a market's existence. Here, entry into in a new market in year two, for instance, represents first movership when compared to other artists entering in year fifteen of the market's existence.

For overall context concerning the creation of new markets, Figure 2 below shows the percentage of “Top 10” Billboard Albums in Popular Music coming from each of the 13 broad market categories in the period between 1950 and 2008. As one can see, certain broad market categories—and therefore certain constituent markets—were not in existence for large periods of the industry’s history. An artist’s creation of music into several markets (i.e., styles) is an indication of an artist’s versatility. Figure 4 in the Appendix shows creative influences among artists who created into *eight or more* markets, an elite group within the industry.

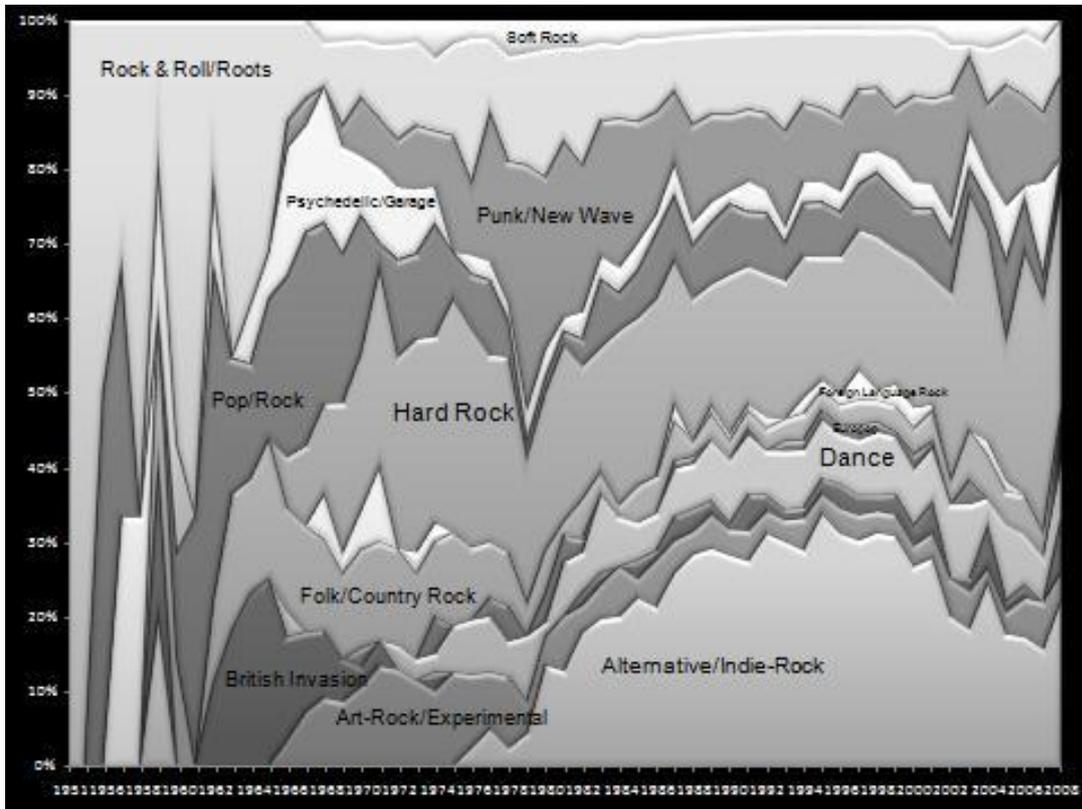


Figure 2. Percentage of “Top Ten” Albums Coming from 13 Sub-Genres, 1951-2008. Data from allmusic.com.

Analysis

First using the binary measure of first movership (i.e., where artists are either first movers or not), we analyzed the characteristics of first movers in markets as well as comparisons between an artist’s numbers of “top 10” Billboard albums, an artist’s number of record labels, and an artist’s nationality (U.S. or not). Motivated by our hypotheses, we examined the centrality of the artist in the complete influences network (does the artist draw from centrally-positioned or peripherally-positioned artists?), each artist’s out-degree influence (the number of different influences an artist cites), and each artist’s in-degree influence (how commonly the artist is cited as an influence to others). More specifically, for centrality, we measured betweenness centrality

influence, or the average number of times an artist was on the shortest network path lengths between all other artists. These variables were calculated for the years 1950-2008.

These bivariate and multivariate comparisons (using Analysis of Variance) provided variables for use in our final continuous model of first movers. We fit a logistic model to the dataset using a binary dependent variable (1 = first mover, 0 = non-first mover). Logistic regression is a useful way of describing the relationship between several independent or predictor variables (in this case, an artist's network position, number of albums issued, etc.) and a binary dependent variable (in this case, whether an artist is a first mover or not). The results of the logistic model in Table 1 shows the strongest differentials between first movers and non-first movers controlling for other variables.

Table 1: Results of the Logistic Model of First Movers in a Market

| Predictor Variables | Significance Levels | Exp(B)=OddsRatio |
|-----------------------------------|---------------------|------------------|
| Number of Billboard albums | .382 | .959 |
| Number of Top 10 Billboard albums | .050 * | 2.100 |
| Number of labels | .035 * | 1.700 |
| U.S. origin or not | .043 * | 4.110 |
| Centrality (betweenness) | .026 * | 10.335 |
| Out-degree (normalized) | .340 | 1.528 |
| In-degree (normalized) | .007 ** | 3.200 |

Applying these stringent requirements, 5% of the artists in the allmusic.com database are first movers in a market and, of these, 0.9% are first movers in two markets. Significant differences ($p < 0.05$) between means for first movers and non-first movers are seen in the number of top 10 Billboard albums (7.9 vs. 1.6), in-degree influence (34.4 vs. 3.0), and centrality influence (498.9 vs. 37.8). The results of the logistic model predicting first mover vs. non-first mover are given in Table 1 above.

The logistic model was highly significant ($p < 0.001$) with a pseudo-R-square of 0.461. The odds ratios indicate that first movers are: (1) twice as likely to have more top 10 Billboard albums; (2) almost twice as likely to have issued albums on more than one label; (3) four times more likely to be from the US; (4) more than ten times more likely to be centrally located in the network and have centrally-positioned creative influences, and (5) over three times more likely to have a high in-degree influence.

In addition to this logistic model, we also created a linear regression model using year-of-entry as our continuous dependent variable. This model examined whether an artist entering early into a market has similar characteristics to the (binary) first mover explored above in the logistic regression. The linear regression predicting the year-of-entry, our continuous variable for first movership, was also highly significant ($p < 0.001$) with an R-square of 0.540. Important parameters are the artist's total albums, the artist's number of top 10 Billboard albums, whether or not the artist is a first mover (included as a dummy variable), whether or not the artist is a solo artist (included as a dummy variable), the number of markets the artists is associated with, and the artist's central influence position. As shown in Table 2, all variables are statistically significant. The more centrally positioned an artist is in the influence network and the more albums an artist issued, the less likely an artist is to be a late mover. Interestingly, later movers in a market are much more likely to be solo artists.

Table 2: Results of the Regression Model Examining Years to First Album in a Market

| | Unstandardized Coefficients | | Significance Level |
|-----------------------------------|-----------------------------|------------|--------------------|
| | B | Std. Error | |
| (Constant) | 10.427 | 1.393 | .000 *** |
| Number of Billboard albums | -1.283 | .147 | .000 *** |
| Is solo artist (Yes/No) | 11.378 | 1.043 | .000 *** |
| Number of Top 10 Billboard albums | -.646 | .154 | .000 *** |
| Number of markets | 1.262 | .281 | .000 *** |
| First mover (Yes/No) | -4.817 | 1.225 | .004 ** |
| Centrality (betweenness) | -.133 | .003 | .045 * |

Combined, the two models support Hypothesis 1, which predicts that the structural pattern of creative influences for market pioneers will be different than non-pioneers. Neither model, however, supports Hypothesis 2, which predicts that artists with a higher total number of direct influences will be more likely to pioneer new markets than artists with few direct influences. Finally, both models support Hypothesis 3 which predicts that artists who draw from centrally-positioned versus peripherally-positioned artists/influences will be more likely to pioneer new markets. Broadly, the results suggest that first movers (i.e., pioneers) build on core influences in the industry—and less so the exploitation of peripheral influences in the industry.

Implications And Value

This research draws attention to the unique social nature of new market creation in a creative industry. Specifically, despite the widespread stereotype of the social-isolated tortured artist, our findings suggest that pioneers of new markets likely fuse together several different creative influences versus fashioning innovations from an *absence* of influences. Particularly, our findings suggest pioneers draw from centrally—versus peripherally—important artists in the industry. Put differently, this suggests new market pioneering in the Popular Music Industry—one particular type of industry innovation—results from recombining cultural touchstones more than introducing and exploiting distant, unknown influences. Additionally, we find that artists with higher total numbers of creative influences are no more likely to be market pioneers. So, the centrality of an artist's influences, versus the abundance of his/her direct influences, is a better predictor of pioneering a new market.

It is important to note, however, these particular findings could be explained by what innovation an industry will bear and what is ripe—versus too far afield—for consolidation into a new market at a given point in time in the evolution of the industry's market structure. However, overall, the findings de-emphasize the importance of one's individual talent versus one's idiosyncratic pattern of creative influences in new market creation in a creative industry.

As discussed, Resource Dependency Theory strongly suggests that one's position in a network should impact one's ability to pioneer a new market, particularly if one has superior access to resources that other's do not. Here, access is meant in a creative or inspirational sense where all artists have creative influences, but only some have certain structural patterns among their influences and occupy certain unique structural positions in the complete network of influences among all major music artists. Being influenced by centrally-positioned artists, through one lens, is an especially efficient way to access the direct and indirect influences of other artists (as opposed to having a comparable number of peripherally-located influences).

By generalizing findings, this research may contribute to our understanding of the role of networks in new market creation in other creative industries. Specifically, the research has the potential to identify network positions among artists (e.g., software architects or game designers) that may be fertile for initiating innovation, including but not limited to the pioneering of new markets. In particular, we feel these findings are particularly applicable to creative industries where networks of stakeholders (e.g., product producers, suppliers, customers) are very tightly intertwined such that resources (e.g., product/market knowledge) need to be

continuously shared to be effective. Moreover, taking a portfolio perspective, this research may suggest that music recording companies, such as BMG, Sony Music or Universal, might examine their aggregate artist portfolio positions in influence networks to maximize the probability of pioneering new markets in the future. Such an inquiry might suggest music recording companies are strongly, or weakly, positioned for future industry evolution. Broadly, if extended, this research may inform artists and executives in other creative industries, such as software, gaming, film and publishing, about strategies to generate and sustain innovation as established markets wane in an industry.

Future research examining networks in creative industries should examine how artist positions in networks impact commercial success, which often differs dramatically from what is regarded historically and contemporarily as innovation (e.g., pioneering a new market). While there are artists in creative industries that are widely regarded for creating commercially-successful innovations, a common outcome is innovation without commercial success or commercial success without innovation. Clearly, research on creative industries needs to examine both market and financial outcomes in relation to these questions. Another research opportunity is to examine the types of resources (e.g., knowledge, reputational, tangible) that are being accessed and leveraged across social networks in creative industries such as popular music. One limitation of this study is that it relied on a single source of secondary research data. To understand the types of resources being exchanged may require additional data sources, including primary data from the network actors themselves. More broadly, this research presents the opportunity to disentangle the importance of individual talent—which is so commonly viewed as a primary driver of innovation—and the importance of idiosyncratic social influences on innovation.

This network visualization shows creative influences among artists who created into *eight or more* of the 193 studied markets. Creating into several markets indicates an artist's versatility and delineates where the artist does—and does not—have recognized contributions in the industry. Artists shown in the upper left have created into eight or more markets, but are not influenced directly by other artists depicted in the visualization.

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