Mass Media Technologies and Popular Music Genres: K-pop and YouTube*

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Abstract

Sociological studies of the music industry emphasize the importance of mass media technologies in the birth of a new popular music genre. However, these studies have not fully explained the business structure of new media and new popular music. They also failed to predict K-pop's global success via YouTube and iTunes. The emergence of Internet-based music stores and music video streaming sites, particularly YouTube, has a strong connection to Korean content as it allows Korean artists to bypass conventional music distributors who control business-to-customer music distribution channels in the United States and Europe. The emergence of the digital economy powered by PCs and smartphones, ushered in a new era of business-to-business music distribution, thus minimizing transaction costs of the global music business for Korean entertainment firms. This article argues that K-pop producers, with no alternative channels for distributing their music to global audiences for profit, actively chose YouTube for its free music distribution despite its low-profit margins from royalty fees. J-pop and American pop music distributors, however, avoided YouTube because the profit margin from YouTube was far lower than from traditional media, such as CDs and iTunes, giving *K-pop primary standing in the niche market.*

Keywords: K-pop, music industry, technology, media, YouTube, iTunes, SNS

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Introduction

The K-pop phenomenon, or the sudden global fame of Korean popular music and dance, made headlines on major on- and offline news media outlets in Korea when Girls' Generation debuted for the first time on U.S. network TV via the *Late Show with David Letterman* and *Live with Kelly* with their album's title song, "The Boys," in January 2012. This appearance, along with the Wonder Girls' first debut at number 76 on the Billboard Hot 100 in October 2009, marked a remarkable turn in K-pop history, as Korean girl bands successfully launched their U.S. campaigns for the first time.¹

However, no one in Korea or the United States could predict that Girls' Generation would serve as a minior precursor to the YouTube phenomenon that would take the world by storm, all without the reliance of U.S. network television channels: Korean rapper Psy's "Gangnam Style." The song remained at number 2 on the Billboard chart for several weeks in 2012, and his follow-up song "Gentleman" debuted at number 12 on the Billboard Hot 100 chart only two weeks after its release on April 12, 2013. In a rather pompous article in *The Atlantic*, Patrick St. Michel² argued that:

The forecast is more favorable for Wonder Girls, who mirror Pink Lady's appropriateness for the time, as their new American single "The DJ Is Mine" features several dub step-aping portions. Although watching the trailer for their movie can prompt cringes, their Teen Nick flick shows that the folks marketing the group know how to zero in on a demographic. . . . Given the music industry's hyper-segmentation, it's a smart move to focus on the same audience that turned artists like Miley Cyrus and Demi Lovato into household names. Girls' Generation, meanwhile, seem poised to repeat the mistakes of previous Asian artists. They

^{1.} The Kim Sisters was the first Korean girl band to successfully debut its songs on the Billboard Hot 100 in the 1960s. However, they were managed by an American named Tom Ball and are not part of the current K-pop boom (Kwon 1996; Choi 2008).

^{2.} Patrick St. Michel, "Does Korean Pop Actually Have a Shot at Success in the U.S.?" *Atlantic*, January 30, 2012, http://www.theatlantic.com/entertainment/archive/2012/01/does-korean-pop-actually-have-a-shot-at-success-in-the-us/252057/.

released "The Boys" virtually void of promotion, and now will have to hope an established American rapper can give them a boost. While all of these groups could wind up footnotes like the Asian acts before them, the smart money seems to be on Wonder Girls to have the best chance yet to finally break through and sustain success in America. Even if that outcome doesn't materialize, becoming the Korean Cheetah Girls wouldn't be a bad gig either.

Despite the apparent importance of YouTube and the subsequent fame garnered by Psy and other possible follow-ups like Crayon Pop with their hit song, "Bar Bar," St. Michel wrongly predicted that the Wonder Girls would be the first Korean singers to realize the American dream (assuming that they survive the harsh and volatile market conditions in the United States). Rather, the Wonder Girls have completely withdrawn from the U.S. market and disbanded due to one member's sudden marriage and pregnancy. In the meantime, Psy never received the spotlight from entertainment commentators and industry pundits for the potential global role he would play in the future. In a *Chosun Ilbo* article, Son Nam-Won reported that:

No one inside the Korean pop music world predicted that Psy would be a leading singer in the K-pop boom. . . . When Yang Hyeon-Seok, CEO of YG Entertainment which manages Psy, was struggling with a new strategy for Internet sites like iTunes and YouTube to target the global market, many inside YG Entertainment were opposed to his ideas. They argued, "YG singers and songs will only succeed when we focus our efforts on Korean radio and television programs." However, Yang broke the conventional mannerisms [among Koreans] by pushing forward in his own style and eventually garnered good results. According to Yang, "it is the Internet that made BIGBANG and 2NE1 popular in such European countries as France and the United Kingdom without any official promotion."

Son Nam-Won, "YG Yang Hyeon-Seok-eun wae inteonet-e maedallyeosseulkka?" (Why Did YG's Yang Hyeon-Seok Cling on the Internet?), Chosun Ilbo, August 29, 2012, http:// news.chosun.com/site/data/html_dir/2012/08/29/2012082901038.html.

According to Son's report, seven to eight music videos in the top 10 most watched list of all K-pop music videos on YouTube, including those by Psy, were produced by YG. The fact that YG and Psy's success derives from its YouTube strategy indicates that YouTube may be the single most important outlet for K-pop music videos, boasting more than 10 million clicks.

Against this backdrop, it is puzzling to find only a few articles in academic circles (notable exceptions include Oh and Park 2012) regarding the relationship between YouTube and K-pop. Although YouTube itself has been widely studied (Keelan et al. 2007; Cheng et al. 2008; Burgess 2009), apart from Oh and Park (2012), no previous studies have actually analyzed its implications for the music industry, music distribution, and music technology in general and its relationship with K-pop in particular. The dearth of published studies on the relationship between YouTube and K-pop is partly derived from the lack of interest in sociological studies of media technologies and music genres, which were popuar in the 1970s (Petersen and Burger 1971, 1975; Hirsch 1971). Recently, Lopes (1990) and Sterne (2003, 2006) revived the sociological tradition of studying music technologies and music industries, although they failed to correctly predict or explain the rise of non-European, non-American pop music on YouTube.

Like MP3 files (Sterne 2006), YouTube is an Internet platform with multiple functions: delivering content to users, facilitating video swapping, streamlining visual contents, and even social networking. YouTube is also a new medium using remarkably different technology than that of other conventional media, such as radio, CDs/DVDs, and TV music channels. iTunes and YouTube are clearly overtaking and substituting the conventional media of the music industry once dominated by big time label companies such as SONY Music, Columbia Records, EMI, and others.

This article intends to answer important questions regarding the relationship between YouTube and K-pop as a new global pop music genre. It also intends to examine the industrial and structural meaning of K-pop and YouTube in the global music industry. The article analyzes the technological evolution of music distribution in order to explain why and how

YouTube opened up a new global business opportunity for K-pop. In conclusion, this article argues that YouTube is a new global marketplace for music from unconventional regions, such as Korea, characterized by a new ecology of supply and distribution networks. Furthermore, YouTube is much more radical than any other conventional media in its delivery of music content, as it has few built-in institutional bias or censorship against particular genres. For these reasons, K-pop producers, who would have no other way of distributing their music to global audiences for profit, actively chose YouTube for its free music distribution, despite the low-profit margins from YouTube royalty fees. J-pop and American pop music distributors, however, avoided YouTube, giving a niche market to K-pop, because the profit margin from YouTube was far lower than from traditional media, such as CDs and iTunes, giving K-pop primary standing in the niche market.

Making Sense of YouTube and the New Global Music Industry

The music industry is full of market surprises and turbulence, often requiring an entrepreneurial segment of its organizational structure to neutralize such uncertainties (Petersen and Burger 1971). However, this does not mean that the entire industry has remained void of monopolies or monopolistic competition similar to other major capitalist industries. As Petersen and Burger (1975) succinctly note, the music industry, like others, has clear cyclical ups and downs in terms of concentration that is followed by a short period of open competition by entrepreneurs. This cyclical interlude between long periods of market concentration leads to innovation and content/genre diversification in the music industry. Conversely, Lopes (1990), using similar music industry data sets, finds that innovation and diversity in American popular music occurred during long periods of concentration, as major recording companies used an open system of "development and production" that allowed diversity and innovation in popular music genres. Be that as it may, scholars agree that: (1) media technologies, such as radio and MTV, have a close relationship with diver-

sity and/or the birth of new music genres, and (2) media technologies and the structure and/or strategies of distribution and marketing significantly curb diversity and new genre creation through the "gate keeping" role that media technologies supposedly play in the popular music industry (Hirsch 1971; Petersen and Burger 1975; Lopes 1990).

However, the relationship between media technologies and the birth of new music genres is epiphenomenal rather than causal. As Hirsch (1971) argues, the birth and rapid spread of "rock and roll music" (i.e., a particular U.S. music genre created and spread by Elvis Presley) through local and independent radio stations required the concentration of big music business money in TV networks that refused to show Presley on TV. This opened up a new niche market for local and independent radio music stations and recording companies to work together to experiment with new music styles. When rock music became the main popular music genre in the 1960s and 1970s, the popular music market was once again dominated by big music labelers. It goes without saying that these global European and American music labelers worked as "gate keepers" in the industry, preventing further experimentation with other types of subculture popular music. Consequently, the concentration of the American popular music market also entailed the concentration of musical and creative talents in New York, Nashville, and Los Angeles, the three major urban areas where big recording companies of rock and other popular music genres do business. This effectively created a cycle of capital and creativity concentration in one geographical cluster (Scott 2000).

Although the gate keeper theory sounds convincing in terms of the evolution of popular music genres, how these gate keepers actually work together to promote a new genre over preceding ones remains in the black box. Excluding the notion of gate keepers, a more technology-specific argument includes a demand-side explanation of technological evolution and new music genres. As Table 1 illustrates, the evolution of music technologies seems to depend on customer needs or preferences of one musical genre over preceding ones. Technological discontinuity occurs when recording companies decide to move up the product design hierarchy, whereas movement down in the hierarchy engenders a dominant

design in a specific product class (Funk 2007). By focusing on manufacturing rather than media technologies in the popular music industry, Funk (2007) could analyze the demand-side relationship between customers' music tastes and technological discontinuity in music production.

Like Hirsch's technological explanation, however, Funk's analysis also suffers from the inability to predict and accommodate customer needs of participating in music distribution (by actively clicking "like" or spreading digital music to other online friends) and uploading user created content (UCC), such as parodied music videos. Whereas Hirsch (1971) overemphasized "gate keepers," Funk (2007) neglected distributional technologies altogether (e.g., radio, TV, CDs, iTunes, YouTube).

YouTube's unprecedented success is also epiphenomenal because the continuous concentration of big music business in conventional MTV, DVD, CD, and film markets opened up a new niche market for local, independent music producers and artists from remote places such as Korea via new digital distribution channels, such as iTunes and YouTube. As long as YouTube and other platforms of new social media allow free uploading of new UCC musical content, global audiences, who can express their preferences and opinions by clicking the "like" button or leaving comments in the message box, are the sole gate keepers in cyberspace. Although such Internet companies may obtain the right to delete any uploaded content, they have no power over favoring music genres. On the one hand, YouTube clicks may not necessarily guarantee radio air time (due to conventional industry gate keepers) and therefore may not always allow independent singers to release UCC singles and albums through major global music labelers. However, the number of clicks on YouTube signals instant fame for new artists in the global music niche market as they can bypass conventional industry gate keepers. This is the single most important reason that more artists, especially underground live musicians, want to directly market their music on iTunes and YouTube through monetization (Bockstedt et al. 2005; Curien and Moreau 2007). This is also why music and media technologies, such as YouTube, have transformed themselves into a cultural and social apparatus, as theorized in Bourdieu's concept of "habitus" (Sterne 2003).

In response to this, conventional recording giants like Sony Music, Uni-

Table 1. Major Product Classes in the Music Industry

Tech Introduction		Product Design Hierarchy			Customer Choice Hierarchy	
Date of intro-duction	Product class	Recording media	Recording unit	Playback unit	Early application	Types of music
1880s	Acoustic cylinders	Tin foil; wax cylinder	Stylus etches wave form on cylinder	Movement of stylus drives horn	Juke box; home listening	Expansion of folk to classical
1900s	Acoustic discs	Shellac record	Stylus etches wave form on discs	Different stylus and player	Home listening	Addition of opera
1920s	Electrical recording	Shellac record	Electrical recording from microphones	Movement of stylus drives speakers	Home listening	Addition of jazz
Late 1940s	Vinyl (long playing); LPs	Vinyl record	Move to magnetic tape for editing	Narrower stylus; lighter pickups	Home listening	Initially classical; later rock and roll
Late 1950s	Stereo music	Vinyl with lateral and vertical cuts	Continued move to magnetic tape	Stereo players	Home listening	Rock and roll
1960s	Transistor players	Not applicable	Not applicable	Transistor players	Young users tolerated poor sound quality	Rock and roll
Mid-1960s	Magnetic tapes	8-track and cassette	Integrated and separate recording and playback machines		Cars; Other portable	Rock and roll
Late 1970s	Digital	Compact discs (CD) and others	Digital recording	CD and other players	Home listening and portable	Addition of disco rap

Source: Funk (2007).

versal, and EMI have also formed a new digital music company called Vevo and have begun to upload music videos on YouTube to countervail the declining offline music market.⁴ In addition, these giants can also control substantial numbers of "like" clicks on YouTube using their marketing tools and resources (Benevenuto et al. 2009; Marigiotta 2011). However, this does not mean that they can shut down UCC music content uploaded by non-mainstream producers. Instead, their goal is to co-opt with underground live musicians from around the world after they have garnered a large global audience on YouTube (Cayari 2011). As a result, the industry's logic seldom changes. Co-opting new and upcoming artists was the same reason that RCA awarded a US\$40,000 contract to Elvis Presley in 1955, the latter of whom initially released his early albums through a local recording firm, Sun Records (Hirsch 1971). In a similar vein, this was the same reason that Scooter Braun signed a surprise contract with Psy in order to tap into the new K-pop market with a strong global pitch. The parallels between the Presley and Psy stories indicate that technological evolutions in both production design (recording media, recording unit, playback unit) and customer devices (radio, TV, Internet, smartphones and other devices) are the central business secrets that generate mega bucks in the popular music industry by correctly matching a new technology with a new music genre (and the artists who created it). It goes without saying that artists themselves will match the two, while music producers and their recording companies will do the same.⁵

The technology view of the popular music industry presented here explains why K-pop is a different genre from J-pop or popular music from Greater China. In a nutshell, J-pop and Chinese pop music are genres for LP, CD, and MTV channels, while K-pop is a new genre for social media

^{4.} Greg Sandoval, "Sony Joins YouTube and Universal on Vevo Video Site," Cnet, http://news.cnet.com/8301-1023 3-10257359-93.html.

^{5.} SM Entertainment and Psy are sometimes discussed in parallel to the 1960s Motown experiment, which introduced systemic singer training and genre diversification. Motown surprisingly matched media technologies and music genres with strict artist training in singing, dancing, and manners. While SM Entertinment and Psy are very similar to the Motown business model, the former first introduced YouTube-based music delivery with a new music genre, K-pop.

in general and YouTube in particular. This is why many music fans in the United States still believe that iTunes is the main source of music purchases, whereas K-pop fans all over the world consider YouTube as the source of free streaming views.⁶ Like the pre-K-pop generation in Korea, the popular music industry in Greater China has always been under the threat of mass piracy which has hindered its proliferation into a major Asian music market.⁷ On the other hand, J-pop has been a burgeoning music business in Japan, boasting the world's second largest domestic popular music market and enjoying full copyright protection.8 Due to the characteristics of the domestic market, the Chinese music industry must rely on TV appearances and concerts as major sources of income for artists, whereas its Japanese counterparts are able to garner profits through CD and DVD sales in addition to TV appearances, concerts, and karaoke royalties (Condry 2004). These domestic restrictions mean that neither Chinese pop nor J-pop are interested in the legitimate export of their music to the global popular music market through YouTube. Even if one or two extraordinary artists from these countries could penetrate the U.S. music market, they would not be able to sustain their fame with consecutive hits

This is a very strong counterargument to the cultural hybridity or pop Asianism views, which argue that K-pop is a mere copy or modification of Japanese and Chinese popular cultural success in the global cultural industries (Iwabuchi 2004, 2013; Jung 2011; Shim 2011). As Park argues in this special issue, K-pop process of globalization-localization-glo-

^{6.} It is very important to note that no pirated J-pop or Chinese pop music videos are on YouTube, although they can be found on illegl Chinese music sites. This article is not concerned about music piracy; rather, it deals with why YouTube serves as the single most important platform for K-pop.

^{7. &}quot;Jjaktung-euro sineumhaneun buga pangwon suik" (Added Copyright Losses due to Piracy), *Hankook Ilbo*, August 21, 2008, http://economy.hankooki.com/lpage/society/200808/e2008082117133293760.htm.

^{8.} Yoo Jae-Hyuk, "Ilbon eumak sijang mannyeon 2 wi?: segye choedae miguk-gwa daedeung-haejyeo" (Is Japan's Music Market Still the Second?: It Has Grown to be Similar to the World's Largest U.S. Market), *Korea Economic Daily*, April 17, 2013, http://www.hankyung.com/news/app/newsview.php?aid=2013041740751.

balization in manufacturing artistic and music creativity, as well as innovation, is unique (see also Oh and Park 2013). Furthermore, K-pop artists' physique, training systems, collective dance-singing skills, and commitment to artistic zeal (in the name of "cosmopolitan striving") far exceed the levels of their Chinese and Japanese counterparts (Oh 2009; Ho 2012; Abelmann and Shin 2012). Ultimately, if Chinese pop and J-pop were archetypes of K-pop, all three should have been huge successes on YouTube. But in reality, neither Chinese nor Japanese pop music artists have been able to utilize the K-pop style monetization strategy to gain visibility in the new global social media.

This may signal that the K-pop industry is characterized by a different value chain and ecology than those of the conventional popular music industry.

Technological Evolution and the Industrial Value Chain

Technological evolution in the popular music industry invites changes in the value chain and its industrial ecology. For example, the move from silver screen to radio on the one hand and from radio to TV on the other created a whole new industrial value chain, while transforming or destroying an old one. However, the music industry has basically maintained the same value chain, if not the industrial ecology, until the advancement of online music downloading and/or streaming technologies. What is even more astounding is that YouTube has created a substantially different value chain from that of other digital music downloading sites: anyone who sells his or her music cannot make large profits, because YouTube takes the lion's share (Oh and Park 2012).

At the center of this radical change in the value chain of the global music industry is the lure of free music on the Internet in general and You-Tube in particular for the benefit of listeners (i.e., the demand side). Free online music has crippled the traditional music industry, which has survived movies, radio, TV, the Walkman, and the iPod (Fox and Wrenn 2001). The free music service model is based on the so-called "broadcasting"

model" in which advertisers provide revenues to the recording companies and broadcasters (Fox and Wrenn 2001; Oh and Park 2012). The Internet, especially YouTube and Facebook, are much more sophisticated than radio and TV with the same broadcasting model, because online music dispensers can collect "like" data with actual users. Once consumer data is collected online, advertisers can market their products to a specific target group, increasing the efficiency of marketing tactics (Fox and Wrenn 2001).

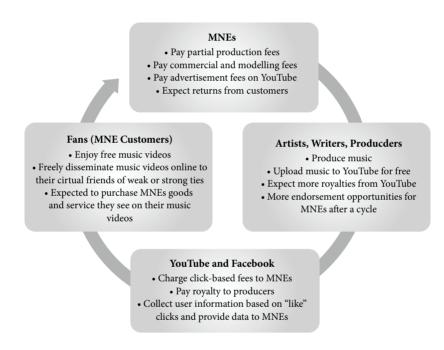


Figure 1. Generation of Revenue via Broadcasting Model

Source: Fox and Wrenn (2001); Oh and Park (2012).

As Figure 1 shows, the music industry will survive as long as it sells music to YouTube and other online downloading sites based on the broadcasting model, although there is always the possibility of artists uploading their music without relying on traditional recording companies (Parikh 1999). In the case of K-pop, recording companies take the role of venture

capitalists by investing heavily in young artists in their early teens or earlier in order to: (1) train them according to the demands of the customer countries, (2) globalize their talent through multilingual and multicultural education, (3) garner the largest payoff when these K-pop idols achieve mega success in designated export markets, and (4) prevent artists from directly marketing their music to consumers through YouTube and iTunes. The maximum utility of the venture capital-broadcasting model of the global music industry is to maximize the number of such trainees who can actually bring in profits in the near future (i.e., "manufacturing creativity" in Park's article in this special issue).



Figure 2. Value Chains of Traditional vs. Digital Music Industries

Source: Authors' modification of Bockstedt et al. (2005, 4); Oh and Park (2012, 377).

Figure 2 contrasts the changing value chains of the traditional and digital music industries. In lieu of "manufacturing and distribution" and "inventory and sale" in the traditional value chain, "contracting with iTunes and YouTube" and "digital distribution and sales" have become important tasks of the new value chain since the birth of iTunes and YouTube. In addition, "copyright and licensing" lost much of its business appeal in the new value chain, as iTunes and YouTube guarantee revenues even without providing elaborate legal safeguards. Also noticeable is the fact that recording companies are now abandoning the marketing function in order to revamp training activities almost in a fashion similar to a venture capital company. Training activities, which were functions of talent agencies in the past, now constitute a key function of giant entertainment venture capital firms that combine the functions of traditional recording companies and talent agencies. Furthermore, as revenue comes from product

endorsements and advertisement royalties, these new music companies are now adding emphasis to endorsement functions and "like" data management in the new value chain.

Of all these value chain changes and shifts, what makes K-pop startlingly different from other non-Western recording companies is the fact that K-pop entertainment/venture capital companies (or recording companies in the traditional sense) are actively recruiting or outsourcing music creativity to non-Korean artists, songwriters, producers, and choreographers (Oh and Park 2013).9 This new phenomenon makes K-pop very successful on the Internet, unlike its counterparts in Chinese and Japanese pop music.¹⁰ The traditional creativity network that linked Korean artists with Korean recording companies has been replaced by a new global network that links global artists with Korean recording companies (or music venture capital firms). For example, SM Entertainment, YG Entertainment, and JYP Entertainment, the so-called Big Three (Big-3) music venture capital firms in Korea, widely use Swedish, Danish, British, American, and Japanese songwriters, producers, and choreographers for singers they have trained in-house on long-term contracts that can last up to ten years with automatic renewal (Oh and Park 2012, 2013).

The globalization of creativity networks and the transformation of recording companies into music venture capital firms in the K-pop music industry entail four interesting outcomes. First and foremost, K-pop singers and dancers cannot easily opt out of long-term contracts with the Big-3 firms. This is because it is becoming increasingly difficult to find independent composers who are willing to sell their songs to unknown and/or unaffiliated singers. One case in point is Rain, a Korean K-pop idol who made himself an overnight superstar during his contract with JYP, but lost his fandom in a very short period of time after he refused to renew his contract (Shin 2009). Second, this also means that in the digital

^{9.} This new method was not found in Motwon, which mainly featured African-American talents.

^{10.} Again, unlike K-pop, Chinese and J-pop music cannot generate income from illegal Internet sites that allow free downloading of their music.

K-pop music industry, gate keepers are still strong and abundant, unlike other digital music industries in other countries. For example, by allowing artists to directly market their songs digitally to consumers, gate keepers have substantially disappeared in the U.K. music industry (Graham et al. 2004). Third, the digital music industry in Korea also implies that artists, especially idol groups and singers, receive the smallest cut from the entire value chain due to their special contractual relationship with the Big-3 firms. The Big-3 act like venture capitalists who make their own profit the top priority, while global distributors like iTunes, YouTube, and Avex (the largest K-pop distributor in Japan) take the largest cut from the value chain. This reality contrasts sharply with the commonsense assumption that as music digitization progresses, artists will take the largest share from the value chain either through direct marketing of their music to consumers or through recording companies (Graham et al. 2004). Unlike the extant prediction that popular singers would largely benefit from digital distribution and/or copyrights in such countries as the United Kingdom and Germany, where copyright protection is strictly enforced (Kretschmer 2005), in the K-pop industry, successful idols do not necessarily garner the largest payoff from the value chain itself (see Fig. 3). Finally, since YouTube and MNEs take the largest cut in this new value chain, the Big-3 firms in Korea also cannot garner high profits (see Fig. 4), because they assume the venture capitalist posture in the market (i.e., they must invest large sums in the training and promotion of their artists amid lowprofit margins).

Aside from advertisers, YouTube, and K-pop venture capitalist firms, it is the consumers of K-pop that have gained a power boost as a collective interest group. This is an easily foreseeable consequence of digital direct marketing (Graham et al. 2004). In the case of K-pop, fans *qua* consumers of the new global music genre increase their input in the business by collectively managing the number of "like" or "dislike" clicks, not to mention the number of total views. In one sense, viewing rates are to television what clicks are to "free" digital music. However, YouTube viewers can directly control "like" and "dislike" clicks, whereas TV viewing rates can be easily manipulated by promoters. In addition, fans can participate

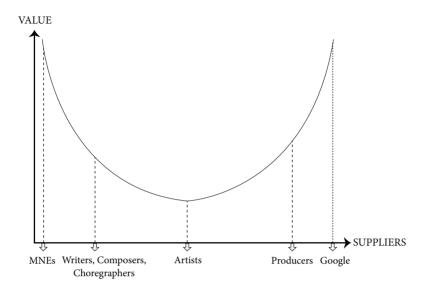


Figure 3. Income Scale of K-pop Artists in the Value Chain

Source: Oh and Park (2012, 13).

in the digital music industry by uploading parodied music videos to show loyalty to existing music videos of their favorite artists. For example, Psy's "Gangnam Style" generated hundreds of fan videos based on Psy's original music. Consumers in the digital music industry ultimately have access to "free" music by watching commercials before music videos uploaded on YouTube, which may be the best part of the business for consumers who upload parodied music videos.

Would Any Music Fly on YouTube: Why K-pop?

As elaborated on extensively in other literature (Oh and Park 2013), the K-pop industry is characterized by a unique globalization strategy of outsourcing creativity (G) \rightarrow internalizing local manufacturing of creativity (L) \rightarrow exporting K-pop globally through YouTube (G'). This model of

international business was first conceived and perfected by SM Entertainment under the leadership of Lee Soo-man and Kim Young-min, and is very similar to the Korean export drive during the past six or seven decades (Lie 2012; Oh and Park 2012, 2013; Lie and Oh, forthcoming). In the case of Hyundai Motors, Hyundai's design creativity and technological innovation were usually outsourced to Europe, North America, and Japan, while the auto giant perfected its domestic manufacturing process. This allowed for the low-cost and high-quality strategy, first invented by Toyota. Toyotism is to the auto industry what SMism is to the K-pop music industry.

Given that only Japan and Korea succeeded in developing and perfecting Toyotism in Asia, it is not very likely that other Asian countries can emulate K-pop's success, at least in the near future. This is based on the highly probable assumption that the whole process of G-L-G' is much

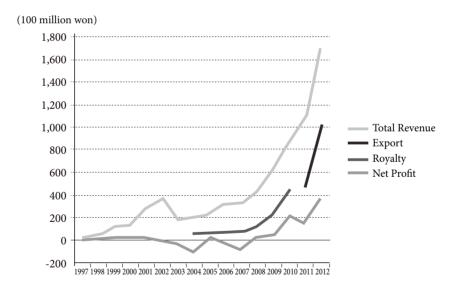


Figure 4. SM Entertainment's Financial Structure (1997-2012)

Source: SM Entertainment (2013).

Note: "Export" from 2011 corresponds to "royalty" between 2004 and 2010.

more complex to adopt and perfect by newly developing countries because: (1) outsourcing creativity to developed countries is unlikely to happen unless outsourcing fees are too high to be refused by Western artists, (2) domestic manufacturing in developing countries is also fraught with difficulties due to the lack of tacit knowledge necessary in the process of converting creativity into commercial products, and (3) distributing popular music from developing countries to the global audience through YouTube is not easy without major promotional efforts undertaken by MNEs in the form of massive advertisements or royalty payments to K-pop producers and YouTube's dedicated distribution channels, such as SM Town and Vevo.

Figure 4 depicts how the K-pop music industry, especially SMism, resembles a typical Korean export industry. First, the gap between SM's total revenue and net profit is huge (i.e., low-price, high-quality strategy), while total exports (royalty from YouTube and export) constitute more than 60% of its total revenue. Second, net profit was only 22% of the company's total revenue in 2012, although it had remained in the red until 2007 before the YouTube revolution took off in 2008. The reason that net profit continues to be low are twofold: (1) the profit margin negotiated with YouTube is reportedly low;¹¹ and (2) since SM assumes a venture capitalist role in the K-pop music industry, it must spend enormous amounts of money in creativity outsourcing (i.e., music and choreography), signer training, and music promotion. Only 10% of their trainees generate profits (see Jang and Kim's article, also in this issue).

The high-quality, low-price strategy is an extremely difficult export strategy for developing countries to maintain. This may make it a virtually impossible model for China, India, and other developing Asian economies to emulate in the short run. In particular, the low-profit (or sales maximizing) strategy rather than the profit maximizing strategy is very attractive to Western and other global music distributors. This may allow

^{11.} Lee Soo-man once told reporters that he could get only 40% of the total YouTube revenue earned from his music videos, whereas Kim Young-min told one of the authors of this article that they received 50% (see also Oh and Park 2012, 2013).

such distributors to realize that they can outsource music manufacturing to China and India later with a proven SMism formula. As in all export industries, K-pop's fate depends on YouTube, as SM's profit turned around from being in the red as a direct result of the YouTube revolution in 2008. Therefore, the diversification of export markets using different distribution channels is a crucial task lying ahead for SM management. In addition, SMism also depends heavily on cheap K-pop talent that talent managers recruit from Korea and the United States (e.g., Korean Americans). If the pool of young talent is depleted because of low pay, harsh training environments, and new opportunities in other industries, SMism may have to relocate its K-pop manufacturing facilities to China. In fact, Lee Soo-man, the founder of SM Entertainment, considers China to be the largest music market in the world, as he has not abandoned his hope of conquering the market in the near future.¹²

Another solution to SMism's internal contradictions is the development of a new technology to replace YouTube and usher in a new music genre. Replacing YouTube requires changes in both product design and customer choice hierarchies. YouTube has allowed consumers to be immersed in music, to the extent that anyone can listen to music anywhere via the Internet and smartphones. The consumer's choice during this transition was K-pop dance music along with extremely fancy, sexy, and artistically-sophisticated music videos. For K-pop to abandon this digital streaming technology is very costly and risky, at least until a cheap and readily available alternative can be identified. This means that there is no sufficient causal relationship between new technology and a new music genre, although we can affirm a necessary causal relationship in the future. Given this, it is difficult to foresee a new revolutionary music genre that goes hand-in-hand with a particular new media technology. What is most urgent for the K-pop industry is to narrow the gap between total revenue and net profit by increasing either price or quality (or brand value). One possible means of boosting prices or brand value is to devise a new K-pop

^{12.} Chris Lee, A&R Team Manager, SM Entertainment, interview by the author, December 22, 2012.

distribution channel so that K-pop manufacturers can directly sell their music to consumers without going through global distributors, or a strategy shift from B2B to B2C.

As explained above, K-pop's success hinges on its heavy reliance on exports through YouTube, or what can be called a "from B2C to B2B" strategy (Oh and Park 2012). Before the rise of K-pop, Korean popular music relied on record sales (a B2C strategy) while focusing on singers' radio and TV appearances to boost record sales. Amid rampant piracy in the Korean market, the B2C strategy was a sure way to lose money, unless singers could explore foreign markets where copyright protection is sternly enforced. However, in Japan, where such copyright protection is intact, Korean singers could not release records without paying substantial amounts to recording companies (Lie 2012; Oh and Lie, forthcoming). YouTube (a new B2B strategy) provided a better solution than maintaining dependence on foreign recording companies, but the possibilities of bypassing YouTube in order to regain K-pop's B2C strategy are few and far between.

If the sociological understanding of technology and music genre is correct, bypassing YouTube requires a radical innovation in music dissemination technologies in addition to a new music genre that complements it. Whether SMism can envision such an innovation is quite unlikely given its concentration on the "L" process, while outsourcing creativity and distribution to global players. What Korea needs to achieve in order to move to the B2C strategy in the long run (especially in its music industry) is to organize a vast geographical concentration of multimedia industries consisting of visual media, print media, and audio media, all of which are connected to both software and hardware industries in the upstream sector and simultaneously linked to games, entertainment, education, business applications, and other industries that constitute the downstream sector (Scott 2000, 132).

Although Korea is geographically outsized by California, where a dense web of multimedia clusters is located alongside both upstream and downstream sectors, its multimedia industry is just as robust as California, with most of its software and hardware companies concentrated in

the vicinity of Seoul, Incheon, and Gyeonggi-do. However, Korea lacks a channel of interorganizational learning and business between firms of different sectors. For example, of all subcontracts outsourced by Southern California multimedia firms, only 15.2% are to non-California and foreign companies (Scott 2000, 147), whereas more than 60% of total revenue for SM in 2012 was from exports (or subcontracts to foreign distributors, such as YouTube). The difference comes from a lack of: (1) multifaceted social division of labor based on "definite forms of collaborations, trust, and information sharing," (2) local educational facilities that can train high-caliber workers who can serve the global multimedia firms, (3) opportunities to obtain tacit knowledge from experienced managers of global multimedia firms, and (4) both institutions and infrastructure facilities, such as industrial clusters, that can undergird the success of global multimedia firms (Scott 2000, 150).

The K-pop industry has succeeded in perfecting the local process of manufacturing K-pop creativity through traditional Korean-style export business organizations. However, the time for the new export industry to consider creating a domestic multimedia sector that is connected to both the software and hardware industries is long overdue. Together, these upstream and midstream firms can lead to better net profits for these firms by providing digital content for games, educational products, business and commercial applications, and the visual effects and entertainment industries.

Conclusion

This article explored the possibility of applying a sociological thesis of the music industry: the importance of mass media technologies in the birth of new popular music genres. To reiterate, local radio stations, especially FM music stations, spread rock and roll music all over the world after the birth of TV, whereas MTV and music videos ushered in Michael Jackson-type African-American dance music. This article agrees that K-pop is also a new music genre that is based on the invention of new technologies in

digital music recording and online "free" music distribution through You-Tube. However, the problem of the sociological thesis is its limitation of studies to the U.S. music market and inability to expand the thesis to the global music industry, where K-pop has been seen to dominate a new market niche through YouTube and iTunes. This new digital music industry has a widely different industrial ecology from that of the traditional music industry and warrants new analyses.

Furthermore, the birth of Internet-based music stores and music video streaming sites, especially YouTube and iTunes, has a strong connection with Korean content as it allows Korean artists and their managing firms to bypass conventional music distributors who control the B2C music distribution channels in the United States and Europe. The emergence of the digital economy, powered by PC and smartphones, ushered in a new era of B2B music distribution, especially via YouTube. This has minimized transaction costs of global music distribution for Korean entertainment firms such as SM Entertainment and YG Entertainment. As previous studies have correctly predicted, new media technology can indeed breed new music genres. However, no one could have predicted that the death of LPs, CDs, and DVDs would lead to the abrupt rise of K-pop.

This article analyzed the technological evolution of music distribution in order to explain why and how YouTube opened up a new global business opportunity for K-pop. Key findings of this article include a new industrial ecology in which, unlike the traditional music industry, the broadcasting model of value creation plays a crucial role. The value chain is itself characterized by substantially different ecological elements, leading to a new global division of labor with highly distinctive payoff scales, in which the highest cuts go to SMEs (advertisers) and YouTube, while the lowest payoff goes to K-pop performers.

Although gate keepers are few and far between in the digital market, talent management firms in the K-pop industry act as strong gate keepers in order to maintain a strategic international business export model of high quality and low price (i.e., G-L-G' model). This article also found that SM's unbalanced reliance on YouTube or exports for its total revenue (more than 60%) has not only created a huge gap between total revenue

and net profit, but may endanger the long-term sustainability of the K-pop export business model.

In order to sustain, as well as expand, business, K-pop management firms, including SM, YG, and JYP, must encourage a social division of labor of a dense web of business networks with software and hardware firms that are also connected to the game, entertainment, education, and business applications industries. Geographical clustering among these firms will substantially reduce creativity outsourcing costs, along with the profit-sharing costs with YouTube.

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