The Impact of J Dilla

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Abstract

In this study, we drew from existing work on networking J Dilla’s influence among the rap community and created a network via NetworkX [15], HoloViews [16], and Bokeh [17] to understand the amount of influence he has provided. After using NetworkX to create a spring layout of a sample work of data, we tackle the larger amount of data to create a larger version of the spring layout. Our network visualizations demonstrate just how vastly J Dilla’s music has been spread, going beyond the hip hop world and into songs that are being written and produced to this day. We believed that these networks can show the power that music has to culturally, morally, and emotionally influence our society.

**Keywords**: music, network analysis, sampling, musicology analysis, soundcloud, network, hip-hop, J Dilla

# Introduction

Music is a timeless piece of our lives that has the ability to constantly change. It’s therapeutic, can make your heart race, and is truly all our own. We chose to look at the influence that J Dilla had on the music industry, since we were most interested in exploring how music from different eras and genres have influenced the current music space- which in today’s 21st century is pop culture. We chose to look at the single producer, J Dilla and his reach in hip-hop but expanded our end product to allow for visualizing any artist’s influence on the condition that all goes well.

J Dilla’s work has impacted a countless number of people and his legacy built on helping others, especially people with illness, and kids who were musically gifted but had little hope due to poverty. By showing the impact J Dilla has had on artists around the world, we are hoping to show the influence that one artist can have on multiple communities. These networks can show the power that music has to culturally, morally, and emotionally influence our society.

In this paper, we draw from existing work on music sampling to present an appeal for a visualization that marks how vastly the influence of a single producer can grow to be.

# Related Work

James Dewitt Yancey, better known by his stage name J Dilla was one of the most influential music makers of his time. J Dilla was born in 1974 in Detroit, Michigan, at a time when deindustrialization had profound socioeconomic repercussions on the Black and Latino working class Bronx residents [5]. He apprenticed with Joseph (Amp) Fiddler, who was a legendary local funk musician who inspired him to master the art of sampling early on. His tipsy style caught on quickly and caused other rappers he’d worked with to be slightly off beat, too. As his popularity rose, he became a freelance producer making tracks and remixes for prominent singers like Janet Jackson, Busta Rhymes and Daft Punk, even going as far as influencing to Kanye West’s early work [9].

## Influence

J Dilla passed away in 2006 having battled a rare blood disease for years that left him in hospitals, too weak to perform on a stage. Regardless, J Dilla was always mixing, even when in the hospital, asking his mother to buy him tracks to record on and leaving behind hundreds of hours of unreleased music that later provided insight into his creative process. When J Dilla passed away in 2006, a vacuum of power and influence was created allowing for many rising stars to appear, including Black Milk. In 2007, Black Milk began sampling off of J Dilla’s music, providing a similar feel and style by removing beats and timers as well as looping up vocal-heavy 60s soul to complement the rugged drums and upbeat bravado. When asked if he was to become the next J Dilla, his response was, “I’m not really trying to fill Dilla’s shoes. I probably won’t ever fill his shoes,” [18].

Another rapper heavily influenced by J Dilla even had the option to record songs with him. Madlib was a prominent artist who chose to record under the Quasimoto voice because he didn’t like rapping himself. His style was influenced by J Dilla but also from Prince Paul’s album, “3 Feet High and Rising.” Madlib and J Dilla were similar in that they both made beats all day long. In 2003, they created an album titled “Champion Sound.” It was described to have less sonic thicket and more sunlight. Madlib recalled that when working with J Dilla, the music became more loose and soulful than what he had already been producing[11]. As the sound of hip hop altered to what society was giving it, more and more rappers began sampling beats form the legendary J Dilla. The Sa-Ra language that has been used in other works is science fictional and the songs are laced with references to the cosmos, stars and spaceships. It’s described as hearing the music as the culmination of an anti-gangsta tendency, including J Dilla’s work that has quietly coalesced in hip-hop over the past decade [7].

## Networking Music

Networking music has grown over the years as more and more people delve into the power of networking whether it’s between genres, sounds, or artists. The social network analysis applications in music have included sites such as linkedjazz.org which combines automation and crowdsourcing to extract relationship information from oral history transcripts. The creators hope to enrich the data to include attributes including gender and intstruments played. The Lost Voices Project is reconstructing different vocal parts on the final volumes of the four-voice *Chansons* Novvelles by Nicolas du Chemin which was written between 1549-1568. The project explores the similarities of the song’s cadence. The Libretto written by Felice Romani I due to Figaro in 1820 was adapted from the popular play Martely’s *Les Deux Figaro (1794)*. The authors note that the weak ties are interesting as they can act as a bridge between the different parts of the network. They have the potential to influence behavior, spread ideas, spur a chain reaction or even introduce us to a significant change with great efficiency [1].

A study done in London called the *Networks of Value in Electronic Music: Soundcloud, London, and the Importance of Place* takes a deeper look via London’s electronic music scene through social network analysis of SoundCloud and uncovers substantial patterns of geographic inequality. Using mixed methods, the researchers conducted five interviews and observational research. They downloaded 150,000 public samples of SoundCloud data from randomly chosen accounts before looking at the themes that emerged around the geographic location. It was discovered that it wasn’t as important for individual music-makers to be in any specific location. However, they oriented themselves to clearly located centers in the global cultural economy- being London, New York or the San Francisco Bay Area. What was more important to music-makers was the locality, existence of specific sound to that city, and importance of international exchange between the localities. Other factors that were important for their electronic dance music (EDM) based study included location because it primarily existed to facilitate related forms of sociality. Consumption was closely tied to particular kinds of venues and association with a specific place meant that the potential for development of other genres was restricted without appropriate venues. Venues were an entrance into the scene. For example, Berlin, Chicago, and London were internationally known as centers for EDM. Meanwhile, EDM fans of those certain genres were more invested in the site and therefore more inclined to provide detailed user profiles for themselves than fans of genres most associated with another location. Enthusiasts of EDM were more likely found in the vicinity of music-makers they valued rather than enthusiasts of music with a more global reach. Cities tended to be grouped together according to geographical and linguistic relationships. It was also discovered that SoundCloud users in some cities may have benefited more from audiences in like-cities, too [14]. A similar study done in London produced survey data and used social network analysis to explore the significant slice of networks structure of the UK’s translocal underground heavy metal world. And these local worlds are connected, forming a translocal world, by traveling audi- ence members. Not all fans travel. Only those whose desire to participate exceeds opportunity within their locality [14].

The British-Asian music and its networks narrated an analysis of both social and cultural influences to analyze the future evolution of British-Asian music. The main focus was on Apache Indian, a large time rapper who created his own school to help kids write their own music. Within that school, there was a profound influence of promoting togetherness and unity among artists through the construction of a network with links to an eductational environment. Larger industries from India, like Bollywood and Bhangra began to overshadow the British-Asian music industry, causing many artists to head back to South Asia, ultimately leaving the British “stages” blank, yet the network maintained itself as more musicians grew [2].

A social network analysis done in the article *A World According to iTunes* explored and mapped the relational urban networks of production within the global recorded music industry. It focused on linking cities to cities, but additionally wrote on the production of music which provided a focus for research due to the ways in which its production was caught up in the multiple layers of networks that involved a wide range of actors given the rise of new internet technologies. It was found that some actors within networks derived their capacity to influence from structural positions while others experienced power through relational practice with power emergent through the practice. This network allowed us to understand the power to others, rather than the power over others. It was also reported that cities with a higher degree of flow betweeness centrality were the most important mediators in the urban network due to the position they occupied within the network. Cities were better situated than other cities due to their own and their neighbors network of connections, similar to the friendship paradox [13]. the musical influence networks and ranks of sample- based music presented with WhoSampled.com data. Within the music information retrieval community, this has led to the creation of artist collaboration, recommendation, similarity, and influence networks. Empirical results found on constructed network graphs suggest musical influence-based networks follow a power-law degree distribution; heavy influence of funk, soul, and disco music on modern hip-hop, R&B, and electronic music; and various other anecdotal discussions of the unique corpus.

A final study that provided insight into the network of the musical world was a social mix that proposed a scheme for recommending music automatically by considering both the personal and general music predilections. Understanding that the general preference for music changes over time, the researchers analyzed social networks and implemented a prototype system before performing experiments to measure the system’s performance [10].

## J Dilla’s Legacy

J Dilla’s work impacted thousands of people from those with illnesses to and musically talented kids of color who had little hope due to poverty. As the hip-hop and rap genre has influenced the charts more frequently, it’s allowed greater visibility for people of color. Rap has been a dominant force for years and has always been a free genre. In today’s world, the barrier to enter this genre has become easier via SoundCloud, Spotify and Apple Music, its discovery has grown rapidly. Streaming services now allow rappers to be discovered by huge audiences. Recently, Chance the Rapper won an award for a streaming-only album, which was a watershed moment. The ability to stream has helped bring rap out from the underground mixing purgatory. Many young people of color turn to music to find an outlet and music trends are always youth powered, including rap which skews to specific and authentic in this century. It’s become a more complicated but relatable art that’s being found more quickly thanks to social media [3]. Lately, the hip-hop culture and rap music has been integrated into society more fluidly, specifically into social justice counseling with Black males. Hip Hop originated in South Bronx, New York in the 1960s, not long before J Dilla was born. Its influence included other Black musical genres including jazz, blues, funk, soul, and rhythm which are all unique, pronounced and indelible impacts on the culture. The culture developed to communicate the Black and Latino working class’ feelings. It was a desire by the youth to unify their communities which had been splintered because of violent clashes precipitated by sparse economic resources. Hip-Hop’s most recognizable characteristics include socio and political consciousness and activism, traced back to spoken word artsits from the late 1960s, such as the Last Poets, Gil Scott-Heron and Nikki Giovanni. When J Dilla entered the scene, he was a prominent artist in the process of sampling different flavors that rang clear and new ideas of unity to the youth of Detroit, and later to the rest of the nation [5].

All of these articles provided the group with insight into other data collection techniques and analysis of how one might possibly begin to cover the vast field that is music data. It also provided the group with more reason as to why J Dilla’s influence was not only so large, but so rapid, both before and after he passed away.

# Discussion

Network structure is important because it is the cumulative effect of the various interactions, which constitute a world and therefore allows us to perceive and understand how that world is organized. Moreover, it is an outcome of interaction that generates opportunities and constraints for future interaction, shaping what can happen within a world and how it develops. It is a structure-in-process; shaped by and shaping the interactions that constitute it [14]. Our original plan for this project was to collect data from [random users] in SoundCloud to determine what the network of sampled music looked like. However, due to the amount of large data we began to receive, we re-scaled it to focus on the single producer, J Dilla.  We began by scraping data from whoSampled.org of all of J Dilla’s work. From this, we were able to obtain a sample of data to use as a trial run for the larger network of data. Following, we sought out the different scales we could run, including focusing on the expansion of influence on genre and on the timeline of years that J Dilla’s work was most prominent.

## Genre

J Dilla’s main genre of music was soul. However, his influence spanned further than that going into genres like classic rock, electronic, funk, jazz and soul. Looking into the genres of the different sampled music allowed us to gain an understanding of not only how many artists used J Dilla’s work, but *how* they used it. As each artist began getting a sample of his work, both during his career and after, it’s shown that soul, while still the main genre in which his music is heard, has also expanded to other genres- most prominently in similar Black musical genres.

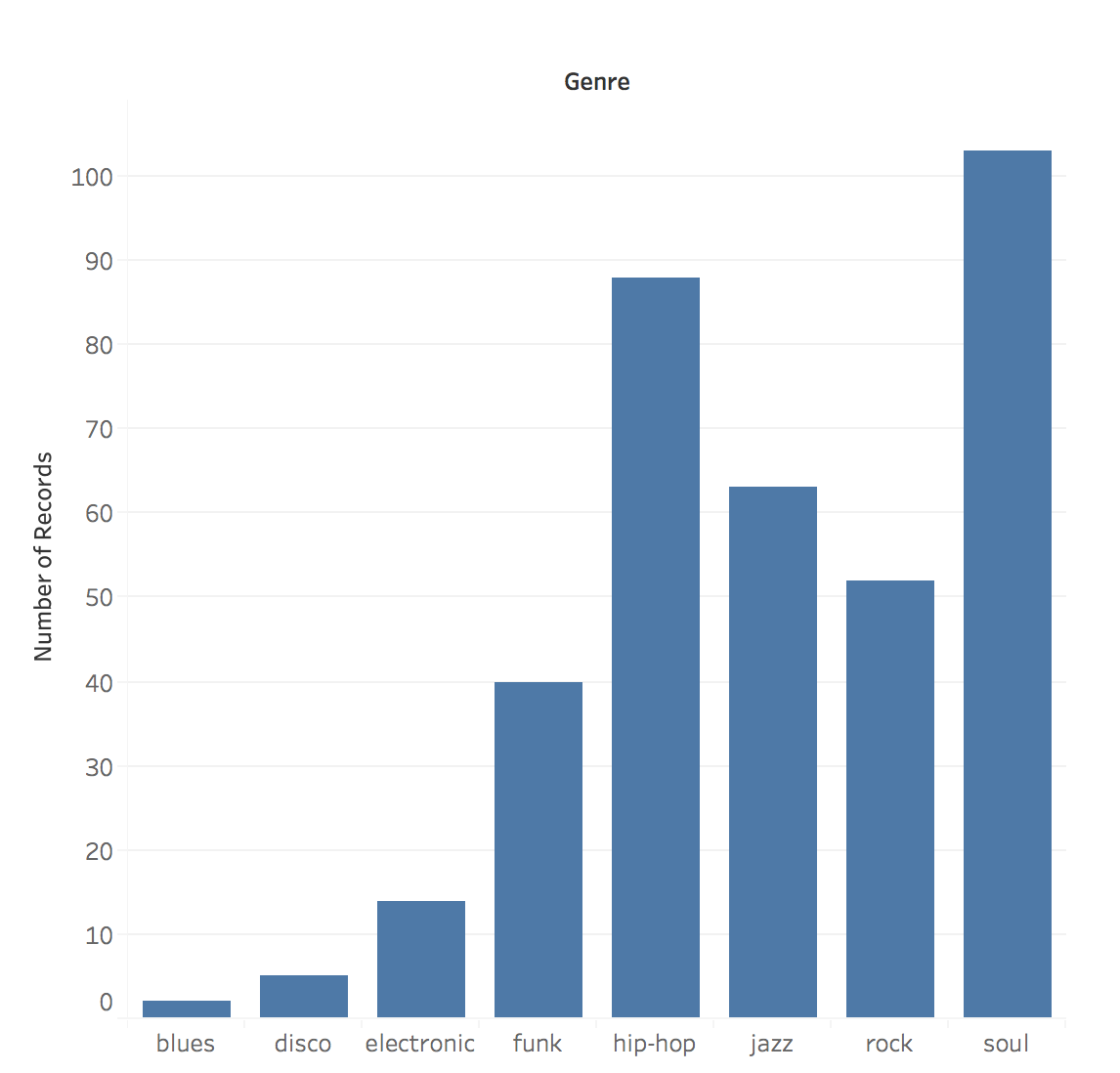
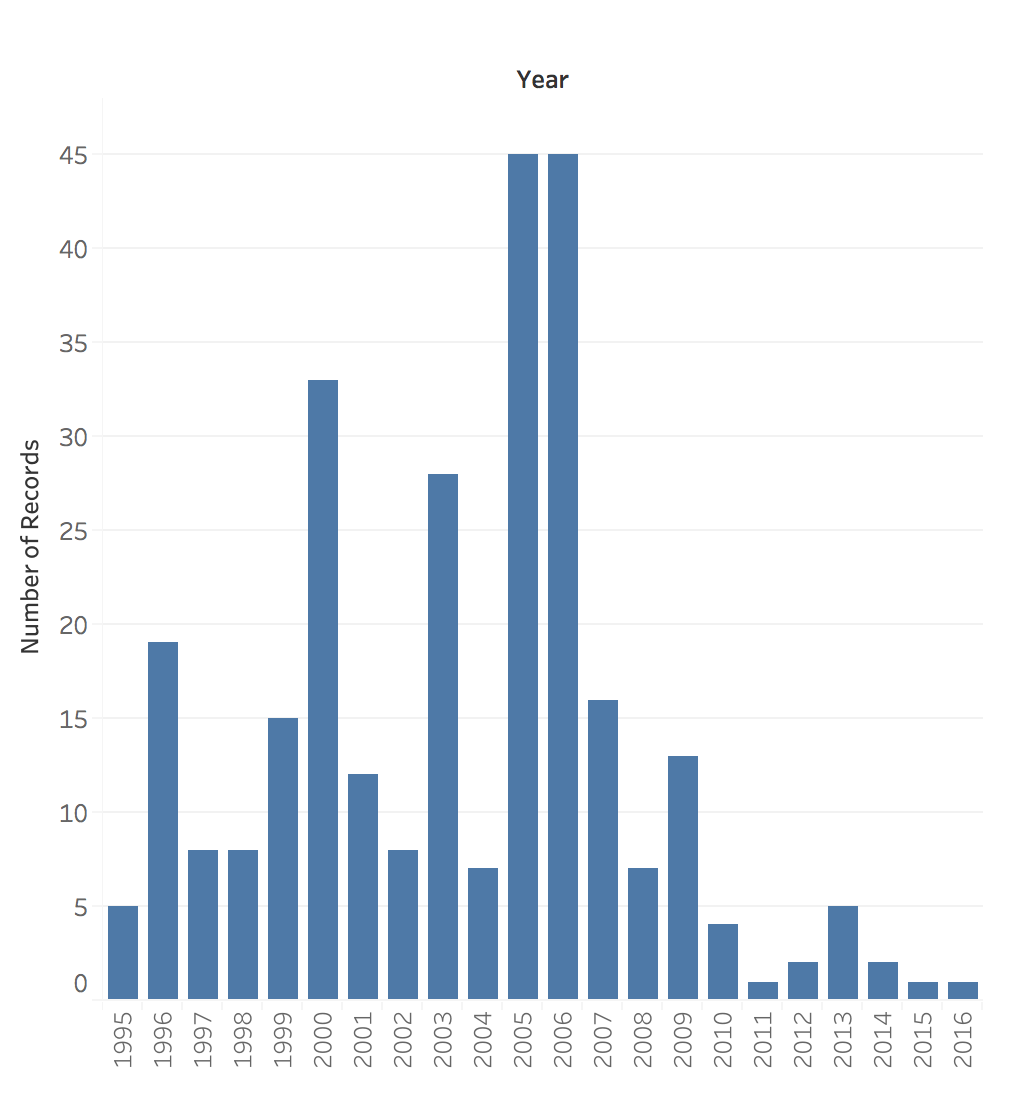


Figure 1: Genre Distribution of J Dilla Samples

## Year



J Dilla began creating music in 1995. From then until 2006, his sampled music led him to become one of the greatest legends in the Detroit area. He later became a freelance producer making tracks and remixes for famous artists like Janet Jackson, Busta Rhymes and Daft Punk. Even his track, “So Far” anticipated Kanye West’s early work.

J Dilla was praised for his ability to sample songs from many different eras, but predominately included songs from the late 1960’s to the mid 1970’s. When J Dilla passed away in 2006, a vacuum of power and influence was created despite his hundreds of unpublished sounds floating around. After his death, his music was being used immediately after his death and far into the next year as many new artists hoped for a chance to get their hands on some of his unpublished samples.

Figure 3: The Distribution of J Dilla’s Work by Year

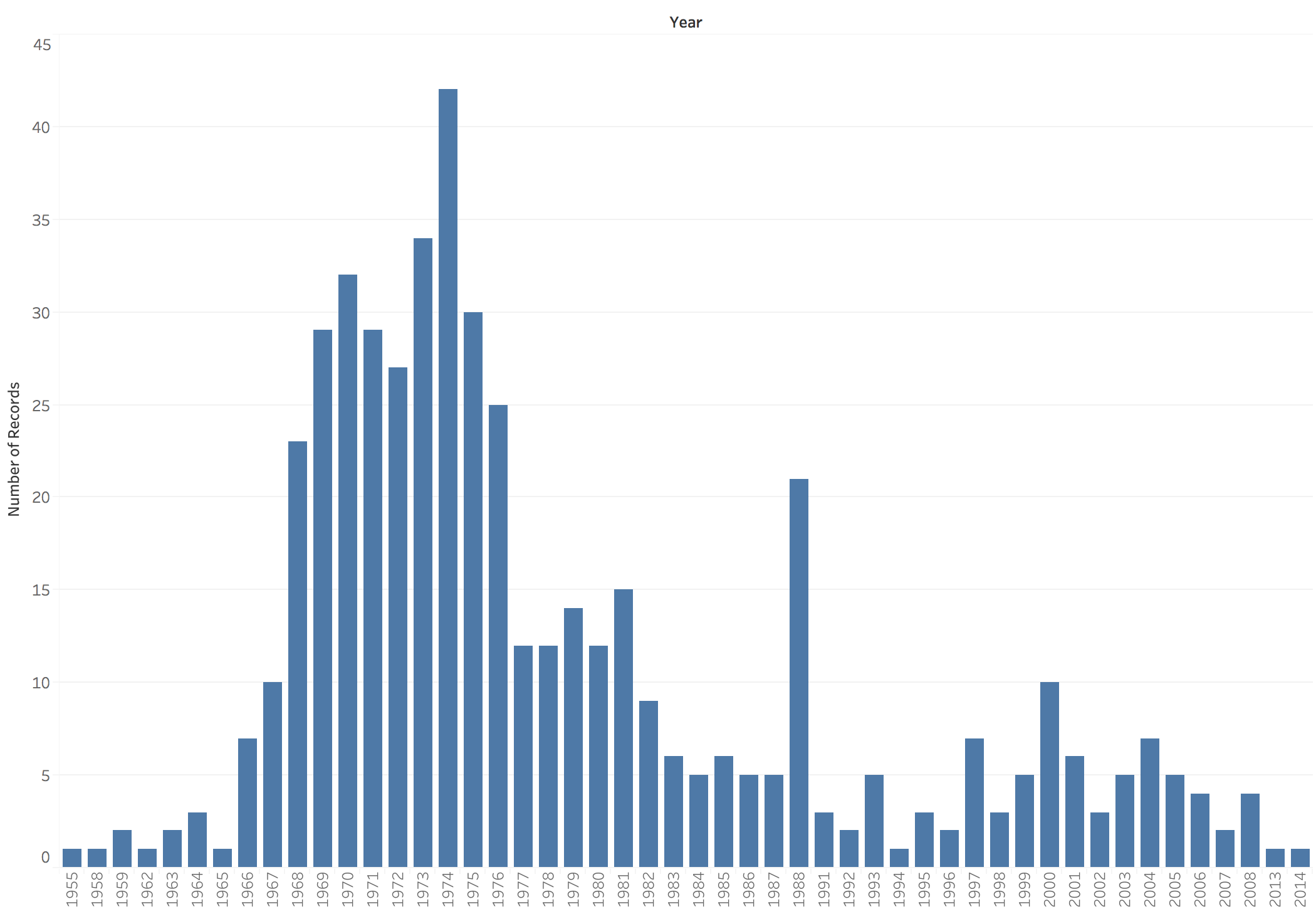


Figure 4: The Distribution of J Dilla’s Samples by Year

## Overall Relationship

J Dilla was most known for his work with hip-hop. A majority of his work was in hip-hop but most of his samples are from jazz songs. This reinforces his ability to produce music that crosses genre boundaries. His diverse use of samples attracted people from different cultures and bridged the social gap through their common interest.

# Conclusion

“The work of music cannot be divorced from the social networks of people who make and promote it, and the sites they occupy in order to do so [12]. Through social network analysis this study, dove into the both the song and human networks of J Dilla. Previous research has shown the importance of location in music along with the importance that music has on (marginalized) communities and people (of color). Hip hop was an emerging genre, allowing certain communities to vocalize and express their issues while also proving their effort to re-unify themselves. J Dilla’s music was just that providing listeners with strong truth but in a loose and un-sectioned way, allowing artists after him to truly change the face of their own music and the genre of hip-hop.

References

1. Giannetti, F. (2016). A Review of Network Approaches in Music Studies. *Music Reference Services Quarterly*, *19*(2), 156-163. doi:10.1080/10588167.2016.1166842
2. Acciari, M. (2014). British Asian music and its networks: Notes from a music-making workshop at the Apache Indian Music Academy, Handsworth, UK. *South Asian Popular Culture*, *12*(3), 181-188.
3. Bruner, R. (2018). How Rap Ascended (Again) to Become the Sound of the Mainstream. *Time*, *191*(4), 43-45.
4. Warren, A., & Evitt, R. (2010). Indigenous Hip-hop: overcoming marginality, encountering constraints. *Australian Geographer*, *41*(1), 141-158
5. Washington, A. R. (2018). Integrating Hip-Hop Culture and Rap Music Into Social Justice Counseling With Black Males. *Journal Of Counseling & Development*, *96*(1), 97-105.
6. Bryan, N.J., & Wang, G. (2011). Musical Influence Network Analysis and Rank of Sample-Based Music. *ISMIR*.
7. Fisher, M. (2009). Mama said knock you out. *New Statesman*, *138*(4956), 44-45.
8. Allington, D., Dueck, B., & Jordanous, A. (2015). Networks of value in electronic music: SoundCloud, London, and the importance of place. *Cultural Trends*, *24*(3), 211-222.
9. Hsu, H. (2017, June 18). A New Vision of J Dilla. Retrieved from https://www.newyorker.com/magazine/2016/04/18/j-dillas-the-diary
10. Jun, S., Kim, D., Jeon, M., Rho, S., & Hwang, E. (2015). Social mix: automatic music recommendation and mixing scheme based on social network analysis. *Journal Of Supercomputing*, *71*(6), 1933-1954.
11. Als, H. (2017, June 18). Madlib's Genealogy of Hip-Hop. Retrieved from https://www.newyorker.com/magazine/2016/02/08/the-waves-critic-at-large-hilton-als
12. Balaji, M. (2012). The Construction of “Street Credibility” in Atlanta's Hip-Hop Music Scene: Analyzing the Role of Cultural Gatekeepers. *Critical Studies In Media Communication*, *29*(4), 313-330.
13. WATSON, A. (2012). The world according to iTunes: mapping urban networks of music production. *Global Networks*, *12*(4), 446-466.
14. Emms, R., & Crossley, N. (2018). Translocality, Network Structure, and Music Worlds: Underground Metal in the United Kingdom. *Canadian Review Of Sociology*, *55*(1), 111-135.
15. NetworkX
16. HoloViews
17. Bokeh
18. Herman, M. (2007). BLAST OFF. *Remix*, 9(4),22.