

The Art of Musical Collaging: Sampling

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On August 27th, 1991, rapper Biz Markie released one of the most influential music albums: *I Need a Haircut*. This album received mixed reviews, getting 2.5 out of 5 stars from *The Rolling Stone Album Guide* and peaking at 113 on the US Billboard 200.¹ However, this album's impact was not in its artistry but in the legal battle that sparked after its debut. Songwriter Gilbert O'Sullivan sued Markie for using his song on the track "Alone Again" through sampling. In a landmark ruling, the court sided with O'Sullivan, making *I Need a Haircut* the first album in history to be pulled from shelves due to copyright infringement.² The art of sampling involves including elements from pre-existing songs in a new production, such as a drum beat or guitar solo.³ The Biz Markie case set a precedent that reshaped the music industry, requiring artists to clear samples before using them. It also brought much needed light to this technique and solidified it as a legitimate form of musical writing. Despite the shaky legal history, sampling has become one of the most transformative techniques in modern music. By repurposed sounds from the past, it bridged cultures and generations, allowing old music to find new life in new contexts. It opened the door for emerging artists to break into the industry, repurposing existing music for innovation.

Before the popularity of sampling boomed, the first instances of sampling began in France in the late 1940s with an avant-garde music genre named *musique concrète*. Artists Pierre Schaeffer and Pierre Henry recorded live sounds, from instruments, nature, and more, onto tape and spliced the lengths of recording tape together to create new music. Some of the techniques they used included altering the recordings themselves, speeding up different parts, layering them, looping them, and more. Their first released work consisted entirely out of edited tracks of

sounds from the human body.⁴ This unique development laid the groundwork for many music mainstays today, being developed further with more technological advancements. The techniques, such as splicing the sounds and rearranging them, evolved into modern sampling practices. Not only did this style of music pioneer sampling, but it also pioneered entire genres such as electronic music, which included almost exclusively electronically produced sounds.

The next step toward modern-day sampling technology was Mellotron in the 1960s, developed by Harry C. Chamberlin. This was a huge machine that used a magnetic tape system to playback sounds from real instruments on a keyboard.⁵ Artists were able to play guitar, piano, and even vocals on two 35-key keyboards. These were like modern-day synthesizers, which generate many different types of sounds, some trying to replicate real instruments and some creating completely new ones.⁶ Notable early rock bands such as King Crimson and even The Beatles used the Mellotron to make a unique sound, unable to be replicated using acoustic instruments. One notable example of this is “Strawberry Fields Forever” by The Beatles, in which they used a reversed flute recording on the Mellotron to make a unique sound identity. This technique at the time was named “collage composition.”⁷ The instrument is still used today by modern artists for its unforgettable sound, such as in the song “Paranoid Android” by Radiohead.⁸ Most importantly, this was the first instance of a sampler. A sampler is a special instrument that allows for playback of different instrument recordings, songs, and more.⁹ This category of tools are the basis of sampling in many genres.

The Mellotron had its downsides. Notably, it was very expensive, and still relied on tape technology, or physical tape that instruments were recorded onto.¹⁰ These were alleviated by the Fairlight CMI. Designed in Australia by Peter Vogel and Kim Ryrie, the instrument released in 1979 for the price of \$25,000 (or about \$77,000 today).^{11 12} This keyboard was computer-based

digital sampler, allowing for even more control over the sounds generated, using a modern CPU and interchangeable instrument memory with floppy disks.¹³ The development of the Fairlight was monumental for sampling, as it allowed any sound from a vinyl record to be played back in virtually any way.

However, before samplers were widely used, artists were already using the technology they had to make sampling projects. One of these being vinyl records, the root of sampling in hip-hop. The well-known founding father of incorporating sampling in hip-hop is Grandmaster Flash. His technique involved looping certain parts of vinyl by moving them with his fingers while they were playing. Flash was constitutionally “the first DJ to actually physically put his hands on the vinyl.”¹⁴ He would loop certain drum breaks so that rap artists to have a “bed” to lay their lyricism with.¹⁵ This was an innovative technique, as Flash combined certain DJ skills and his knowledge of hip-hop to make a track with a unique sound. Another known founder of hip-hop is DJ Kool Herc, who combined this practice of looping drum breaks with looping parts of melodies of songs.¹⁶ The tracks used by these artists were funk, soul, R&B and more. A big part of early hip-hop was the formation of rap groups, such as Afrika Bambaataa and the Soul Sonic Force. Afrika Bambaataa was another pioneer in the hip-hop production world, leader of many hip-hop groups including the Zulu Nation.¹⁷ He helped shape hip-hop to spread peace and unity, as he wanted to use the music to get kids away from gang violence and crime, and is recognized today as a pillar of the culture.¹⁸ Columbia College’s Josef Sorett retrospectively writes, “Since its earliest formations, hip-hop has celebrated individuals coming together in community to create something new, something that changed the world- and the music and culture wouldn’t have been possible without people like Grandmaster Flash willing to take risks and put themselves out there.”¹⁹

These vinyl techniques were eventually combined with the technology of samplers, and a new instrument called a drum machine, which provided a deep bass sound to the track. Drum machines like the Roland TR-808 became staples in hip-hop production by offering punchy, synthetic drum sounds that complemented the looped breaks sampled from vinyl records.²⁰ These machines allowed producers to create beats with precision, layering drum patterns that were consistent and predictable, which contrasted with the unpredictable nature of manually mixed vinyl breaks. The 808's booming bass kick became synonymous with hip-hop, especially with tracks that called for heavy, rhythmic low-end to drive the groove.²¹ As samplers allowed for the manipulation of tracks, producers could now combine both original vinyl samples and electronic drum kits, opening new creative possibilities for rhythm and texture in their beats. The ability to manipulate tempo, pitch, and loop length gave producers even more freedom, allowing them to craft intricate soundscapes that were once impossible to achieve with traditional instruments alone. In 1982, the previously mentioned Afrika Bambaataa and the Soul Sonic Force, an early and very influential rap group, released "Planet Rock," one of the first instances of a drum machine being used in a hip-hop song.²² This, along with their innovative use of synthesizers, gave the record an "infectious rhythm and futuristic sound" which had an impact far beyond the hip-hop scene, extending to electronic and other genres as well.²³ In addition to its new take on electronic sounds in rap, it reverberated many core sentiments in hip-hop that were established by icons such as Grandmaster Flash, including themes of peace, unity, and togetherness.²⁴

These new technologies and the blending of old cultures helped shape the golden age of hip-hop, spreading from the late 1970s to the 90s. Some of the most well-known songs of this era were made using samplers and drum machines. One of these being "Rapper's Delight" by The

Sugarhill Gang, often remarked as the first hip-hop song. This sampled the disco song “Good Times” by Chic. While in reality, this was far from the first ever hip-hop song, it was the first to rank high on the charts, reaching the top 40 in the U.S. and even peaking at number 1 in Canada.²⁵ “It Was a Good Day” by Ice Cube, released in 1993, sampled an Isley Brothers song, “Footsteps in the Dark.”²⁶ The Ice Cube track used the iconic guitar riff as well as the drumbeat, which became iconic and was later sampled again by Thundercat in his song “Them Changes.”²⁷ This use of sampling helped the song gain a legendary status, as it now currently holds more than a billion online streams.²⁸

The boom in popularity for sampling also created hip-hop subgenres, such as jazz-rap. While many classic samples are from jazz, this new genre was known for keeping elements such as psychedelia, jazz solos, and child-like, imaginative lyrics. One of the most notable albums from this genre is *3 Feet High and Rising* by De La Soul. Taking inspiration from the hippie movement of the 60s and 70s, as well as taking samples from the song “5 Feet High and Rising” by Johnny Cash (which the album takes inspiration from). Another notable jazz rap group from this era was A Tribe Called Quest. The group’s early work focused on taking samples from underground jazz classics, from artists such as Lou Reed, Billy Brooks, and Eugene McDaniels. They were known for encouraging their listeners to indulge in the early history of hip-hop and its jazz roots. Without sampling, these groups may not have seen success, and these new innovations would never have emerged.

Sampling not only spread within hip-hop, but into other genres as well. Most notably, the world of electronic and dance music was significantly impacted by innovations in sampling technology. The first artist to bridge this gap was DJ Shadow, emerging in the mid and late 1990s. This artist pushed the boundaries of sampling, extending to borrowing elements from

songs in even more genres, such as rock, ambient, and even from hip-hop itself.²⁹ Shadow's unique track selection is credited to the way he found them; in secondhand record bins.³⁰ While this style was experimental, his unification of old and new music was highly acclaimed and has influenced artists from many different genres, such as in rock with Radiohead and in trap with Migos.³¹ His debut album, *Endtroducing...*, is often seen as a landmark in alternative hip-hop.³² However, one of the most famous groups to utilize samples in a unique way was Daft Punk. This French house duo was able to renew older tracks and give them new life in the form of an emerging genre known as EDM, or electronic dance music. They were fascinated with disco and soul's "charge," and wanted to emulate their "life and magic."³³ This led them to sample many obscure pieces in these genres, and experiment with many of their own techniques such as using synthesizers and live bass.³⁴ In an interview, Thomas Bangalter, half of the iconic pair, described their early music as a new experience. He states, "It's almost like projecting ourselves back into a certain time. But as if you had seen the future with the evolution of where it was going to go, the technology, and what would happen in the following thirty years."³⁵ Their skill to combine old and new music ultimately paid off, as their debut album *Homework* in 1997 released to worldwide acclaim, introducing existing electronic fans to a new sound and reaching countless newer listeners.³⁶

Sampling grew in many ways during the 90s. However, the style was a major hit with the case of Biz Markie. The previously described case proved to be a significant blow to the art of sampling in many ways. Firstly, Judge Kevin Thomas Duffy's decision started with the line, "Thou shall not steal."³⁷ This framed the debate on morals and theft, rather than fair use and artistry, which portrayed sampling as a criminal act. Music historian Amir Sa'id notes, "This ruling represented a tectonic shift... one that criminalized the act of sampling through a warped

interpretation of the law.”³⁸ The decision was criticized for blatantly ignoring the artistry and cultural significance of the technique. Adding to the controversy, the case set a precedent that sent shockwaves through the industry: all samples must be cleared before release. This sounds simple enough, however, policies made by record labels made the task difficult, expensive, and time consuming. These changes marked a transition in sampling culture. The technique turned from an accessible and innovative way to create music, to a legal liability no record label wanted to carry.³⁹

Despite the uncertainties, the computer boom of the late 90s alleviated this by revolutionizing sampling forever. The introduction of DAWs, or digital audio workstations, made multi-track editing possible for everyone with access to a computer and a microphone, while making sure that the core “impulse” of sampling stays the same.⁴⁰ Furthermore, the internet made it possible for anyone to download audio files, drum hits, and even full songs from the internet, albeit sometimes illegally.⁴¹ Programs such as ProTools, Ableton, and Logic got their start here, and created a brand-new generation of artists and producers. These DAWS acted as replacements for traditional, analog samplers, as they were less expensive, more versatile, and somewhat portable.

One of the last and most notable artists from this generation was J Dilla, a legendary producer. Particularly, his final album, *Donuts*, was a revolutionary landmark in sampling production history. Released in 2006, 3 days before his death, the album was a great achievement in hip-hop production. All created using a Boss sampler and a portable turntable, brought to him by his friends and family to the hospital, the 31 track LP was produced mostly on J Dilla’s death bed, battling thrombotic thrombocytopenic purpura and lupus.⁴² Every song from the album is a sampled beat, no rapping or singing over. Using a bouncy 808, and iconic songs such as The

Jackson 5's "All I Do Is Think of You," and The Isley Brothers' "Don't Say Goodnight: It's Time for Love (Parts I & II)."⁴³ The masterpiece album is known for conveying complex emotion even without original lyricism, from the guitars. Dilla uses splicing to change the original lyrics of some songs into something new. The intricacy and intimacy of his sampling work sent shockwaves through the industry. Well-known artists such as Tyler, the Creator, MF DOOM, Madlib, and more cite J Dilla as a significant influence on their musical styles.

Artists such as J Dilla opened a stream of innovation for the music industry, enabling new artists to pave their way into the industry. The most important one of these music artists is Kanye West. Often crowned "the king of sampling," he left an undeniable mark on not only the art of sampled music, but hip-hop and pop music as well.⁴⁴ His most recognizable technique is his sampling of soul music. Some noteworthy artists Kanye sampled in his freshman album, *College Dropout*, include Aretha Franklin, Marvin Gaye, Jackie Moore, and Curtis Mayfield, all significant figures within soul music from the mid-1900s.⁴⁵ West brought many characteristics of the soul into his early work, sometimes incorporating not only the instruments but the structure of the songs.⁴⁶ Furthermore, he even used some of the messages and themes of the writing from these songs, echoing these themes in a modern fashion.⁴⁷ For example, his sampling of Marvin Gaye's "Distant Lover" on West's track "Spaceship." Here, Kanye mirrors many effects from the original song, such as the reverb, rhythm, and the key that the song is in, making it sound like it's "part of the same musical texture."⁴⁸ Additionally, he repeats many of the themes in his lyrics, such as highlighting socioeconomic inequality and critiques on capitalism. This is a prime example of Kanye's use of sampling to bring old cultures back into the mainstream, while making them unique and relevant.

These sampling pioneers eventually grew big enough to extend the art of sampling outside of their respective genres. The release of Kanye's third album in 2007, *Graduation*, brought sample songwriting to the mainstream. His work blurred the lines between rap and pop music with broadly relatable lyrics, simplistic structure, and anthemic production.⁴⁹ This was combined with iconic sample flips, such as the track "Stronger" sampling the iconic song "Harder, Better, Faster, Stronger."⁵⁰ The original track, by Daft Punk, was itself a global success, which itself was composed using sampling. This song, and other hits such as "One More Time" and "Digital Love," highlight the group's ability to bring sampled songs to mainstream listeners, normalizing the technique in pop music. This marked a significant shift in pop music. Nonetheless, this time was also characterized by a major shift in not only music culture, but pop culture and everyday life as well.

In September of 2001, internet usage in American homes increased to around 50%.⁵¹ By the mid to late 2000s, most music was distributed through the internet, and by 2013, streaming services were the norm for most music listeners.⁵² The impact of the internet on the music industry is undeniable. However, the true nature of the effects it had are still being debated today. Modern-day technology has revolutionized the way people learn, make, and promote music. Instead of going to a music store, choosing what album to buy, talking to people about it, et cetera, listeners can pay a small fee every month and gain access to a planetary amount of songs, albums, podcasts, and much more. This can be seen as a monumental feat, not only immortalizing a substantial amount of music, but expanding the audience of all music to effectively everyone with internet access.⁵³ Still, many argue that the "streaming era" of music threatens the industry. Firstly, the ease of creation with music has created what some would say is an "overflooded market" for music, making it extremely difficult for indie artists to break

through. Additionally, the abundance of music in everyday life can make each song, album, or artist, have a lower perceived worth than if they were discovered on the radio or in a record store.⁵⁴ Moreover, total industry revenue has decreased in this time. The stream-lined funding from listeners (mostly from their \$10/month subscription fee) has halted the industry's growth. Even songs with millions of views could translate to pennies for an artist, if they don't rely on sales from merch, shows etc.⁵⁵

The rise of the internet raised a crucial question: how would the art of sampling be affected? Put simply, it wasn't, and if anything, sampling only benefited from the internet. Many argue that the technique was never in danger of dying, let alone being killed by the internet. Due to the nature of sampling, music within the culture historically grew through collaboration, which only increased with the internet.⁵⁶ Additionally, the distribution and widespread use of DAWs was greatly beneficial to sampling culture. Applications like FL Studio and Ableton expanded the potential in how samples could be used, and the internet allowed people around the world to share, combine, and learn new techniques. The programs also increased workflow and gave access to millions of songs that could be used with the click of a button, as supposed to crate-digging for hours.⁵⁷ Overall, sampling saw many improvements with the help of the internet.

By the 2010s, sampling transformed into a legitimate, recognized, trans-genre, compositional method.⁵⁸ First of all, Daft Punk's rise led to an acceptance of EDM in mainstream music. They paved the way for artists such as Justice to innovate further into the genre. The electronic group Justice, who have talked on multiple occasions about Daft Punk's influence on their music,⁵⁹ used sampling to bridge even more genres together on their self-titled LP. When talking about their influences, Xavier de Rosnay, one half of the group, stated, "We

intended to make a disco opera, blending elements of classical and baroque music with danceable rhythms.”⁶⁰ Furthermore, this group used these influences to make techniques within sampling. For example, in their hit single, “D.A.N.C.E.,” Justice does not make it obvious that samples were involved. They would sample small bits of many different songs, such as single bass plucks, and combine them in a technique the duo coined “micro sampling.”⁶¹

The hip-hop scene was greatly affected by the internet as well, right after the wave of sampling. Following the monumental success of *Graduation*, Kanye followed up in 2008 with his experimental album *808s and Heartbreak*. This album featured modified versions of 808 drum machines and a new effect called Autotune.⁶² This effect allowed any artist singing on a track to essentially play an instrument with their voice, even if they had subpar singing skills. The unique sound of this singing gave birth to a new era of hip-hop, incorporating more pop elements and singing along with traditional rapping and sampling. Artists such as Drake, Trippie Redd, Kid Cudi, and many more saw their success with an influenced style. Some of the biggest hits of this era include Drake’s “One Dance” and Juice WRLD’s “Lucid Dreams.” Kanye’s influences echoes in all these songs, with Drake’s autotuned vocals, and Juice’s parallel lyrics referencing “Good Life” from *Graduation*. At length, none of this would have happened if it were not for Kanye’s influential use of sampling.

Sampling’s effect resonated with rock during this time as well. While previously, the prog-rock band Radiohead use sampling in their 1997 album *OK Computer*, they further innovated the technique in their LP named *King of Limbs*. Much of the album was made by sampling recordings of guitarist Colin Greenwood on custom software.⁶³ This resulted in a new sound within rock, involving ambient, dubstep, and soul influences, which Radiohead was acclaimed for.⁶⁴ Another rock band that used sampling during this era was Nine Inch Nails. For

example, on their hit single “March of the Pigs,” the band used samples from various movies from the 1970s to create a unique, industrial sound.⁶⁵ Lastly, psychedelic rock band TV Girl used a variety of samples on their 2016 album *Who Really Cares*. They layered dreamy guitars with vocal samples such as an anti-theft PSA and Nixon’s Watergate speech.⁶⁶

Lastly, sampling came full circle during this time, as the internet saw the second rise in ambient and avant-garde music. Artists such as Annea Lockwood sampled sounds from nature and even their backyards to create unique sonic environments.⁶⁷ Other artists, such as Moor Mother, used archival sounds to make political statements out of their work.⁶⁸ Furthermore, this experimental style of music led to innovation in nature recordings and narratives in media.⁶⁹

The legality of sampling faced some hiccups during this time. The 2005 Bridgeport Music, Inc. v. Dimension Films case further restricted sampling. It required pre-emptive clearing of samples, even if they are distorted beyond recognition. This decision discouraged artists from sampling, some avoiding it and some moving to an underground scene where they can distribute their work without worrying about lawsuits.⁷⁰ However, in the 2016 VMG Salsoul, LLC v. Madonna Louise Ciccone case, artists started seeing cracks in the original decision. This involved Madonna using a very short sample of a horn from Salsoul Orchestra’s “Love Break” in her song “Vogue.” Ultimately, fair use and context-based policies were opened again in the context of sampling debates. It also sparked some advocacy for sampling against oppressive legislature.⁷¹

In the current day, many would argue that sampling is a niche, focused technique barely even used in hip-hop anymore.⁷² However, the statistics say otherwise. In 2022, sampling popular music increased by 31%.⁷³ Samples are taken from a variety of genres, including pop, R&B, soul, and much more. Sampled songs even reached the Football World Cup, with Lil

Baby's "The World Is Yours to Take" sampling Tears for Fears' "Everybody Wants to Rule the World."⁷⁴

The art of sampling has evolved from its experimental origins to becoming one of the most widely used compositional techniques in modern music. Through legal hurdles threatening the culture, and significant cultural shifts, artists such as Grandmaster Flash, J Dilla, and Kanye West not only revolutionized music through the technique, but also used it as a medium for storytelling and cultural preservation. Today, sampling serves as a living testament to the constantly progressing and ever-evolving culture of music.

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