

On the Historical and Future Role of the Music Producer

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Abstract

The research completed in this thesis is designed to review the historical role of the music producer and track its evolution into the modern era. Focus on the history of the producer will include formal research from the time and a review of individuals who pioneered significant change in the industry. The thesis will then explore the role of the contemporary record producer and raise questions about the impact of modern technology and practice.

The creative aspect of the thesis will be completed by fulfilling the role of producer for a local artist: coordinating, engineering, mixing, and ultimately producing a four-track Extended Play (EP) project that will include the final professional audio project and approximately ten pages of production documentation organized as a separate document.

On the Historical and Future Role of the Music Producer

The musical world is characterized by the presence of the artist. The artist supports their music through their own image, character, and behavior. Behind the artist, however, is a group of creative individuals who have seen the project from its conceptual state to its finished professional product. This group of individuals typically includes label management, audio engineers, musicians, and producers.

Unlike a producer for theater or film, the music producer acts as a conduit of creativity for the artist. A producer may have limited control over a project due to oversight from the artist, band, label, or whoever may happen to be funding or leading the project. The producer often wears many hats: directing, coordinating, arranging, or engineering in whatever manner best supports the project.¹ In his book *The History of Music Production*, Burgess says, “Music production fuses the composition, arrangement, orchestration, interpretation, improvisations, timbral qualities, and performance or performances into an immutable sonic whole.”² Through the advent of digital music technology and self-distribution, the music business has moved away from the traditional record label and studio construct. This thesis will define the many roles of the historical music producer, analyze recent developments in the field, and draw speculations on the future of the job title.

History of Recorded Music

The first musical recordings were the result of accidental invention during the developmental stages of telephone technology. Thomas Edison, Alexander Graham Bell, and others came to different iterations of the invention during separate experiments from the mid-to-

¹ Sarata Persson, *Technology, Society, Industry and Music Production: The Changing Roles of the Record Producer and the Recording Engineer Since 1970*, (2006), 25.

² Richard James Burgess, *The History of Music Production*, Oxford: Oxford University Press, (2014), 1.

late 19th century.³ Says Chanan of Edison's invention, "...because invention is always a matter of trial and error, it is often characterized by the 'happy accident', and in the second version of the phonograph story the invention is a by-product of Edison's work on the telephone."⁴

Edison's initial uses for the device were more practical than creative. His hope for the mechanically-based invention was to further develop the telephone, transmit letters, record the words of the dying, and other such uses.⁵ Musicians, however, quickly began to realize the usefulness of such a device: "In the course of this process, the age-old dialogue of musical communication was radically upset... [Creating] a distance, both physical and psychic, between performer and audience that simply never existed before."⁶ Edison himself saw the potential societal impact of the invention and predicted that the phonograph would become a strong influence in culture, business, and education.⁷

Electrical recording systems were not developed until the advent of the radio broadcast system. The condenser microphone and accompanying amplifier systems are notable inventions that arrived in the early 1920s.⁸ Lionel Guest and H.O. Merriman made significant strides into the process of electrical recording, while J.P. Maxfield developed an entire recording and playback system for Western Electric based on a condenser microphone, amplifier, and an

³ Raymond R. Wile, "The Edison Invention of the Phonograph," ARSC Journal, 1982, pp. 4-29, <http://arsc-audio.org/journals/v14/v14n2p4-28.pdf>, 7.

⁴ Michael Chanan, *Repeated Takes: A Short History of Recording and Its Effects on Music*, London: Verso, 2.

⁵ Chanan, *Repeated Takes: A Short History of Recording and Its Effects on Music*, 3.

⁶ *Ibid.*, 8.

⁷ Mark Katz, *Capturing Sound: How Technology Has Changed Music* (Berkeley, CA: University of California Press, 2010), 51.

⁸ Chanan, *Repeated Takes: A Short history of Recording and Its Effects on Music*, 56.

electromagnetic recorder.⁹ With these systems, the audio engineer could strive for sonic excellence in an entirely new and powerful manner: “Electrical recording was not just a major step forward in quality; it entailed alterations in both recording practice and the listening experience... What all acoustic sound engineers were striving for was greater faithfulness to the source.”¹⁰ The desire for musical authenticity drove audio engineers to begin experimenting with new methods of recording. It is in these early experiments that history’s earliest record producers may be found.

As the method of recording developed, so did the venue in which it took place. As recording companies began to publish songs, they also established and developed recording studios. The music industry started to realize its potential. It is important to note that at this point in history, however, the fallout of the Great Depression and the approaching Second World War made it difficult to enter a fledgling entertainment industry. Most small companies either folded or merged to form entertainment conglomerates: “The Depression thus oiled a process which began in the 1920s... companies regrouped around the electrical connections between different sound technologies.”¹¹ Business mergers shaped the global music scene. The entertainment based English Columbia company merged with manufacturers Pathe and Gramophone company in a span of few years, ultimately creating Electric and Musical Industries (EMI) in 1931. German manufacturing company Deutsche Gramophon merged with radio company Telefunken in 1937, while RCA controlled the American market.¹² The Great Depression was followed by

⁹ Susan Schmidt Horning, *Chasing Sound Technology, Culture, and the Art of Studio Recording from Edison to the LP*, Baltimore: Johns Hopkins University Press, 2013, 36.

¹⁰ *Ibid.*, 57-58.

¹¹ Chanan, *Repeated Takes: A Short History of Recording and Its Effects on Music*, 86.

¹² *Ibid.*, 87.

World War II, which further deadened the market for recorded musical entertainment. The war did, however, provide the music industry with new innovations. EMI technician Alan Blumlein began to develop stereo sound. In this technique, two speakers are designated as left or right, and the signals sent to either speakers creates a directional sonic field. Following the war, magnetic tape recording became available to studios and revolutionized the possibilities of musical creation.¹³ Magnetic tape made it possible to cut and splice audio, overwrite previous takes, track multiple sources at the same time, and overdub recorded material with new parts to enhance sound: “Together, these technical improvements expanded studio practices and created a greater need for editing and mixing, which promoted the role of record producers to anticipate the choice of takes and supervise the reconstruction of the musical pieces in postproduction.”¹⁴ In the post-war era of innovation, the title of the record producer developed alongside the development of recorded music.

Legendary Music Producers and their Work

In its earliest forms, the producer could fulfill any number of roles. It was immediately necessary for the producer to have a broad and flexible skillset: “...there are no hard and fast lines of demarcation between the jobs of producer, engineer and the traditional A&R man, but... different styles and regimes of operation according to circumstance.”¹⁵ Some producers managed tasks related to arranging, directing, and engineering, but traditionally the producer acted as manager for all studio related events. Joseph Reisman described the role of the producer in 1977:

¹³ EMI Trust, “History of EMI,” accessed February 5, 2021, <https://www.emiarchivetrust.org/about/history-of-emi/#:~:text=In%20response%20to%20this%20new,EMI%20as%20it%20became%20known>.

¹⁴ Amandine Pras, Catherine Guastavino, and Maryse Lavoie, “The Impact of Technological Advances on Recording Studio Practices,” *Journal of the American Society for Information Science and Technology* 64, no. 3 (2013): pp. 612-626, <https://doi.org/10.1002/asi.22840>, 615.

¹⁵ Chan an, *Repeated Takes: A Short History of Recording and Its Effects on Music*, 105.

“A record producer must choose the script (songs or material) and cast (match material with the artist or group), see that the proper arranger, conductor, musicians, and, if needed, singers are hired and obtain technical crew and equipment...”¹⁶

Since the job had never been done before, early producers had the freedom to establish their own career field. They could create individual patterns and workflows, and even pioneer their own recognizable genres and sounds.¹⁷ It is the historical practices of individual producers will uncover a better understanding of what the job title encompasses. The innovations and roles of a few influential producers will define a better understanding of what the title of producer encompasses. Additionally, influential aspects of the role will be considered through historical research of the topic.

Joe Meek (1929-1967): The Innovation of Production

Joe Meek’s legacy is that of a pioneer, jack-of-all trade music producer. He was a self-taught individual whose initial fascination with audio began when he rigged up audio gear to scare birds away from his garden. He began his career as an audio engineer in 1953. He designed Lansdowne Studios in Holland Park, London, and once it was finished, he worked there as an audio engineer.¹⁸ Spencer notes, “Meek was technically adept, autodidactic, and he built some of his own equipment including a spring reverb unit from an old electric fan heater.”¹⁹ After a split

¹⁶ Joseph Reisman, “Record Producer”, *Music Educators Journal* 63, no. 7 (1977), <https://doi.org/10.2307/3395210>, 65.

¹⁷ Christopher Reali, "Helping pave the road to FAME: behind the music of Muscle Shoals", *Southern Cultures* 21, no. 3, (2015), 53-74.

¹⁸ Spencer Leigh, "Joe Meek - the British Phil Spector?" *Goldmine*, Apr 14, 2006. 35, <http://ezproxy.liberty.edu/login?url=https%3A%2F%2Fwww.proquest.com%2Fmagazines%2Fjoe-meek-british-phil-spector%2Fdocview%2F1501152%2Fse-2%3Faccountid%3D12085>.

¹⁹ Burgess, *The History of Music Production*, 89.

with Lansdowne, Meek designed and managed a studio from his flat on London's Holloway Road, using every inch of the space. It was there that he developed a distinctive sound through close microphone techniques, heavy compression, and reverb, factors that helped his music translate to radio. It was here that Meek produced the Tornados' hit "Telstar" and the Honeycombs' hit "Have I the Right?"

Meek was eventually offered an audio engineering job at EMI, but before he could do any significant work with that organization, he committed a murder-suicide in 1967. This at once boosted interest in his productions and irreparably tarnished an otherwise impressive legacy. A writer, engineer, and producer, Meek is remembered most as a creative innovator: "...the studio was his instrument, and, like Les Paul and King Tubby, he often took it apart and put it back together to get the results he wanted, no technical standards being sacrosanct in his pursuit of the sound he sought."²⁰

Phil Spector (1939-2021): Producing a Sound

Harvey Phillip Spector began his career as a music producer as a client of Gold Star Studio in Hollywood, CA in 1957. Having carefully planned the session, Spector pooled his money with some classmates and paid a \$40 fee for a two-hour session. Acting as both musician and producer during the session, Spector played both guitar and piano and introduced a stacked vocal concept. After recording B-side "To Know Him Is to Love Him" for the record, the group dubbed themselves the Teddy Bears and signed with a small independent label. Spector's producing career had begun.²¹

²⁰ Burgess, *The History of Music Production*, 90.

²¹ David N. Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings* (Milwaukee, WI: Hal Leonard, 2004), 4-5.

The subsequent success of “To Know Him Is to Love Him” launched Spector’s career. Of Spector, David Howard says, “He established an instantly recognizable sonic fingerprint, allegedly inspired by his love of Wagner, that became known as the ‘Wall of Sound.’”²² Spector became obsessed with perfecting recordings to match his internal vision. Often a co-writer on tunes that he produced, Spector’s internal musical vision became a guide for every project he worked on: “...Spector would not roll tape until about three hours into the session... he was trying to tire the musicians to suppress their individuality.”²³ This obsession with perfection marked Spector’s desire for musical excellence, even at the expense of the individuals he worked alongside.

Spector quickly made himself a multimillionaire and earned himself the nickname “The Tycoon of Teen” by delivering hit music. Soon splitting time between LA and New York, Spector produced a variety of chart climbing songs, ranging from the Crystals’ hit “Then He Kissed Me”, to the Ronettes’ “Walking in the Rain”, to the Righteous Brothers’ “You’ve Lost that Lovin’ Feelin’”. Spector’s methods were often harsh and rigid. He would drive musicians hard, pushing them for hours until hands bled, shutting off the lights for pitch-black rehearsals, and even contracting full bands to live at the studio for weeks until the product was completed to his standard.²⁴

The studio excellence and prestige were accompanied by a lavish lifestyle and eccentric habits. For all the tyranny, perceived or real, Spector’s productions had earned him international success and nearly 10 million record sales by his mid-twenties. In 1964 Spector was tagged by

²² Burgess, *The History of Music Production*, 86.

²³ *Ibid.*, 86.

²⁴ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 13-15.

Andrew Oldham to co-produce some of the Rolling Stones' earliest sessions. After successful, drug-enhanced sessions with the Stones, Spector was introduced to the Beatles and invited by the band to fly back to the states with them, where the band was set to make their first appearance on *The Ed Sullivan Show*.²⁵

By the mid 1960s, Spector's "Wall of Sound" philosophy and practices had thoroughly revolutionized pop music and the entire recording industry. His commitment to personal style, however, is what ultimately led to his fall from the public eye. Spector increasingly found himself unable to adapt to the popularization of stereo sound, multi-track recording, and other new innovations. During this time, George Martin's work with the Beatles and other bands during began to outperform Spector's efforts. This lack of success caused him to lose his love for the work and in 1966, at the age of 27, announced his retirement from producing, married the Ronettes' lead Ronnie Bennett, and settled down in his Beverly Hills mansion.²⁶ After a few comparatively unsuccessful attempts at re-entering the music scene, Spector got his chance when the Beatles approached him in 1970. Having parted ways with George Martin, the band put their unfinished swansong album, *Let It Be*, into Spector's experienced hands. Following the successful release, Spector went on to work on John Lennon's solo projects and George Harrison's triple albums.²⁷

Spector's philosophy and hardnosed approach to production established his own reputation, but also showed that the recording producer could become a significant player in the pop culture world: "...his best work stands monumental to this day and his records are often

²⁵ Ibid., 19.

²⁶ Ibid., 32.

²⁷ Burgess, *The History of Music Production*, 86.

referred to as Phil Spector records rather than by the artist's name."²⁸ Spector essentially fell off the pop culture grid until 2003, when he was charged with second-degree murder. Spector's obituary in *The New York Times* reads, "Mr. Spector single-handedly created the image of the record producer as auteur, a creative force equal to or even greater than his artists, with an instantly identifiable aural brand."²⁹

George Martin (1926-2016): The Producer of Inspiration

George Martin, commonly referred to as the Fifth Beatle, shaped the sounds that defined the band and an entire era of music. Trained as a classical musician, Martin realized he did not have the skills to make it as a player and instead took simple desk and clerk jobs in the music industry. In 1955 Martin was handed the reins to a floundering Parlophone records after the sudden retirement of a superior. A small label belonging to conglomerate EMI, Parlophone's hit making artists were routinely transferred to Columbia Records. The job did, however, give Martin the opportunity to access recording equipment and work with artists across multiple genres. It was here that Martin began to experiment with overdubbing voices during a session recording "Mock Mozart" with British comic Peter Ustinov: "Without the luxury of multi-track recording, the young producer was forced to record each of Ustinov's four parts one by one, dub it from one tape to another, and mix it together on the fly."³⁰ The subsequent success of the record established the label in the novelty arena, but Martin longed to produce a pop hit that would cement his legacy.

²⁸ Burgess, *The History of Music Production*, 86.

²⁹ William Grimes, "Phil Spector, Famed Music Producer and Convicted Murderer, Dies at 81," *The New York Times*, January 17, 2021, <https://www.nytimes.com/2021/01/17/arts/music/phil-spector-dead.html>.

³⁰ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 6-8.

In 1962 Martin found his hit pop project and signed The Beatles to Parlophone. Almost immediately he began to produce a slew of their earliest hits, including “Please Please Me” and “Can’t Buy Me Love”. Martin directly influenced these projects in both production and arrangement. Buskin notes, “With the Beatles’ straightforward early songs, Martin’s primary responsibilities were supervising the recording sessions and ensuring that the engineer properly capture the session on the tape. He would also make arrangement suggestions...”³¹ With the Beatles’ early success and the subsequent success of other Parlophone productions, Martin’s repertoire made him a worldwide phenomenon and easily the most successful producer Britain had ever seen.

By 1964 The Beatles had already released four studio albums, all under the direction of Martin and all under the Parlophone label. The band’s fifth studio album, *Help!*, brought the need for more innovation from Martin. The introduction of four-track tape machines gave Martin the opportunity to record more sources at once, but also required him to be creative when four tracks failed to capture the vision of the project. Martin used a process called overdubbing, in which tracks instruments could be summed down to one tape, leaving other three tracks available for new additions. On the *Help!* album, Martin also began to make use of his orchestration and arranging skills. The Beatles’ smash track “Yesterday” featured strings entirely arranged by Martin and Paul McCartney.³²

After disagreements with EMI, Martin struck out on his own to form the Associated Independent Recording (AIR) producers group. While the Beatles remained signed to EMI, their sound required Martin’s magic touch and EMI found it necessary to allow him to continue

³¹ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 12.

³² Richard Buskin, *The Complete Idiot’s Guide to the Beatles*, New York, NY: Alpha Books, 1998, 154.

producing the group despite their split.³³ It was during this period that Martin and The Beatles delivered *Rubber Soul*, their most innovative and ambitious album yet. In the studio, Martin provided support, arrangement, performances, and innovative technological solutions to sonic problems that elevated the record. On the song “In My Life”, Martin famously performed the middle section solo with the song at half speed before doubling the speed of the playback.³⁴ As the Beatles moved into their *Revolver* sessions, Martin and his team provided the band with more and more sonic possibilities. Automatic double tracking, use of tape loops, and drum close microphone techniques all provided the sounds of the revolutionary record that included such hits as “Eleanor Rigby”, for which Martin again arranged the score.³⁵

At the time of *Sgt. Pepper’s Lonely Hearts Club Band*, expectations for the Beatles’ music and Martin’s production seemed an insurmountable peak to climb. The band, Martin, and engineer Geoff Emerick exceeded expectations by hiring a 42-piece orchestra and overdubbing the symphony on top of itself four times, creating the cacophonous illusion of 160 players. In order to match the vision of the band, Martin and his team spent over seven hundred hours recording the album by actively summing tracks and instruments down throughout the recording process: “Created on only a four-track recording, Martin and Emerick’s achievements were as miraculous as they were glorious.”³⁶ Martin produced all Beatles’ records until an unceremonious split in 1969, when the band’s work on new album *Get Back* was handed over to Glyn Johns, then given to Phil Spector and renamed *Let It Be*. After his decade-long stint with the Beatles, Martin continued working with AIR. He also worked on Ringo Starr and Paul

³³ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 19-20.

³⁴ Ibid.

³⁵ Ibid., 24.

³⁶ Ibid., 30.

McCartney's solo projects along with other high-profile productions. The release of the collection *In My Life* marked the formal retirement of Martin from the music industry.

What was perhaps the most impressive part of Martin's legacy was his ability to put a room at ease while getting the best out of performers: "He was truly the ultimate producer in the sense that he could make people feel relaxed by taking himself out of the equation and succeed in getting the performance from virtually anyone. That was his genius."³⁷ Womack makes a note that in Martin's productions the listener doesn't hear a particular producer sound as in Spector's works. Instead, the artist is heard through every creative innovation. Martin's influence on the Beatles shaped rock and roll and forever changed the role of the producer. The Fifth Beatle poured his soul into the band's work, present in every orchestration, arrangement, and reel of tape.

Brian Wilson (b. 1942): The Artist as Producer

Brian Wilson's legacy is built around the Beach Boys, as he was a founding member of the group and their sole producer from early on in their success. He got his start in music production at 16 years old when he received a tape recorder for his birthday. Brian began experimenting with recorded harmonies, which would become a standard of the Beach Boys' work and establish the California sound. After an audition for a local record label as the Pendletones, they cut and published "Surfin" and "Luau" on Candix Records and released under the Beach Boys moniker. "Surfin" would peak at 75 on the *Billboard* top 100 chart.³⁸ Howard notes, "'Surfin' ... was the first shot fired in the California Sound revolution."³⁹

³⁷ Kenneth Womack, "Sir George Martin, 1926–2016," *Popular Music and Society* 39, no. 4 (July 2016): pp. 465–467, <https://doi.org/10.1080/03007766.2016.1204806>.

³⁸ Keith Badman and Tony Bacon, *The Beach Boys: The Definitive Diary of America's Greatest Band, on Stage and in the Studio* (Collingdale, PA: DIANE Publishing, 2004), 16–22.

³⁹ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 51.

Wilson's early collaboration with Gary Usher resulted in some of the band's first production innovations. The two wrote the car-rock tune "409", and in its production used the recorded sounds of Usher's actual car. They even went as far as taking a tape recorder to the beach to record the sounds of the ocean. Murry Wilson, the controlling father and manager of the band in its early years, disliked the amount of credit that Usher got from the band's success, and forced him out of the picture. Having signed with Capitol Records, the Beach Boys released their first top ten hit, "Surfin' U.S.A." in 1963. Following this success, Wilson quickly realized that his next move should be to convince Capitol to allow him sole producing control of the band: "...in order to faithfully capture the sounds he heard in his head, he would have to become the Beach Boys sole producer...Wilson was adamant about achieving autonomy, and, after lobbying hard with the Capitol Records executives, he was finally granted his wish. Brian Wilson was barely 21 years old."⁴⁰ Capitol's fears of any immaturity or naivety were quickly put to rest when they heard the resulting "Surfer Girl" and "Little Deuce Coup". The *Surfer Girl* album was Wilson's first full length production. Moving forward, Wilson found himself strongly influenced by Spector's Wall of Sound concept and began to layer sounds.⁴¹ The resulting single "Don't Worry Baby" marked a change in Brian's style that leaned toward the lush and mature. 1965's *The Beach Boys Today!* continued this trend.⁴²

Wilson took the 1965 release of the Beatles' *Rubber Soul* as a challenge. At 23 years old, Brian's desire was to top George Martin's groundbreaking efforts with the British pop phenomenon. With *Pet Sounds*, he achieved his goal. Co-written with Tony Asher and produced

⁴⁰ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 55.

⁴¹ *Ibid.*, 55-56

⁴² *Ibid.*, 56-59.

with studio session players instead of the actual band, the resulting album was heartfelt and introspective:⁴³

...complex, intertwined close vocal harmonies, underpinned and blended with equally sophisticated orchestral arrangements. He combined symphonic instrumentation including bells, sleigh bells, flutes, strings, horns, and timpani with theremin, hand-claps, Hammond organ, and muted upper-register Fender bass playing melodic lines, all mixed with great clarity, dramatic dynamics and generous but judicious use of the reverb chamber. There are tantalizing tastes of Chuck Berry here and there, yet his arrangements feature breakdowns and feel and tempo changes atypical of pop music at the time.⁴⁴

The brilliance of the record was somewhat lost on the public, as the expectation for the Beach Boys was to stick with the formula of beach and car songs that had initially brought them success. “Caroline, No” was Wilson’s only notable commercial song from the project, peaking at 32 on the Billboard chart. Wilson’s innovations on the record did, however, have significant influence on the industry. Paul McCartney tagged *Pet Sounds* as his favorite album and listed it as an inspiration for the Beatles’ *Sgt. Peppers* production. Wilson turned his attention to the single “Good Vibrations”, a song which took months of work and cost Capital \$50,000 to produce. Filled with layers of different sounds, unconventional recording methods, and the use of the theremin in the studio, “Good Vibrations” hit the top of the charts in 1966 and inspired producers to reach for more: “Producing a pop record was now more about shattering musical boundaries than about exploiting existing trends.”⁴⁵

The album meant to follow “Good Vibrations” was titled *Smile*, and although highly anticipated, it failed to meet expectations. The pressures of challenging his own successes had begun to corrupt Wilson, and his use of LSD to stimulate creativity had become a creative

⁴³ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 65.

⁴⁴ Burgess, *The History of Music Production*, 86.

⁴⁵ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 55.

weakness. Innovation had begun to border on madness. For the unreleased song “Fire”, Wilson had string players put on firemen’s caps and lit a real bonfire in the studio to try and emulate the sounds he heard in his head. After real fires began to spring up around Los Angeles, Wilson feared that he had somehow influenced reality too much, and he destroyed the tapes for *Smile*. Re-imagined, the album was released as *Smiley Smile*: “...a pale interpretation of the doomed original, the un-cohesive album recycled several *Smile* snippets...”⁴⁶

Following *Smiley Smile* and the release an album titled *Friends* over which he had less production control, Wilson’s struggles with substances and mental illness reached their breaking point and he checked himself into a mental institution. While he had some minor involvement with the Beach Boys in the decades to come, nothing would equal the efforts he had previously put forth.⁴⁷ Yet, Wilson’s impact on the music industry was already cemented. In less than a decade he had successfully reinvented what it meant to produce pop music, and the role of artistic vision in production: “Wilson’s triumph of creative independence was not only a personal victory, it was an achievement that would wield a tremendous effect on a whole new crop of young, up-and-coming producers.”⁴⁸

Jerry Wexler (1917-2008): The Artists & Repertoire Producer

Jerry Wexler began his musical career after spending time in the military during World War II. Though he was never in action, the structured environment of the military shaped his focus and sharpened his business desires. Earning a degree in journalism from Kansas State, Wexler moved into the world of music by joining royalty-collection service BMI. There he

⁴⁶ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 76.

⁴⁷ Brian Chidester, “Brian Wilson’s Secret Bedroom Tapes,” *LA Weekly*, May 22, 2019, <https://www.laweekly.com/brian-wilsons-secret-bedroom-tapes/>.

⁴⁸ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 56.

began to get to know the music business, and took a job writing for *Billboard* magazine. He is credited with coining the phrase “Rhythm and Blues” to replace what was then known as “Race” music.⁴⁹

Wexler started with Atlantic Records in 1953 as a partner with founder Ahmet Ertegun.⁵⁰ At Atlantic, Wexler oversaw some of the genre defining hits of Soul and R&B music in the 1960s. He produced acts such as Otis Redding, Wilson Pickett, and Aretha Franklin. In the 1970s Wexler continued to make dramatic moves for Atlantic, buying out Duane Allman’s contract with FAME Studios’ publishing branch, signing Led Zeppelin, and continuing to produce hit records.⁵¹ As a producer, Wexler acted as the label representative and producer at the recording sessions, while Tom Dowd, the famed Atlantic engineer and producer, handled the engineering duties of Wexler’s sessions.⁵² Wexler kept artists in the Atlantic fold by providing wonderful studio locations, making sure that sessions ran smoothly, and ultimately ensuring that hits were produced and played on the radio. As a label executive, Wexler reportedly called radio stations and pushed them to play his artists and songs, sometimes even offering monetary compensation for radio play. Following this celebrated stint at Atlantic, Wexler spent a brief time at Warner Bros. Records followed by freelance work with the likes of George Michaels, Bob Dylan, and Carlos Santana until his retirement in the late 1990s.⁵³

⁴⁹ RR, “Jerry Wexler, The Godfather of R&B - Atlantic Records Official Blog,” Atlantic Records Official Website (Atlantic), accessed February 12, 2021, <https://www.atlanticrecords.com/posts/jerry-wexler-godfather-rb-18831>.

⁵⁰ Nick Talevski, "Jerry Wexler", *Pop Culture Universe: Icons, Idols, Ideas*, ABC-CLIO, (2021), <https://popculture2.abc-clio.com/Search/Display/1360649>.

⁵¹ RR, “Jerry Wexler, The Godfather of R&B - Atlantic Records Official Blog”.

⁵² Burgess, *The History of Music Production*, 60.

⁵³ Talevski, "Jerry Wexler".

The business of music revolves around making hit records, making money, and making sure that the people involved in the process stay happy, and Wexler was a master of the craft. He used the innovations of the time and the talents of those around him to build Atlantic into a hit-making empire. A decorated producer, his work as a label partner is largely recognized as a crucial step in the establishment of the modern music industry. Said Glyn Johns of meeting Wexler and Dowd at Atlantic's studio, "...They were always ahead of everyone else, being the first studio to record in stereo and the first to use multitrack recording... I was stepping on hallowed ground as I entered the building..."⁵⁴

Berry Gordy (b. 1929): The Producer of a Movement

Berry Gordy began his musical career as a record salesman and a concession stand worker at the Flame Show Bar in Detroit, where he began to meet bands and artists from the area. It was during these sessions that he met Raynoma Liles, his future wife. The two began writing the hit songs that would establish the Motown Sound. He then began writing, producing, and managing a band front-lined by Smokey Robinson called the Miracles. In 1959 Gordy formed Tamla Records and Jobete Publishing, which later merged to form the Motown company, and fully committed to the music industry. By intentionally producing black artists in a way that could be marketed to white audiences, Gordy found a way to infiltrate the mainstream market: "In short, Gordy's genius was that he presented black music in the entertainment structure that white audiences were familiar, and comfortable with."⁵⁵

⁵⁴ Glyn Johns, *Sound Man* (New York, NY: Plume, imprint of Penguin Random House LLC, 2015), 1-14.

⁵⁵ Larry Schweikart, "Berry Gordy Jr. and the Original 'Black Label,'" *Ideas on Liberty*, May 2003, pp. 40-43, <https://admin.fee.org/files/doclib/schweikart0503.pdf>, 40-42.

Through the following decade, artists streamed through Motown, and Gordy churned out consistent hits. His list of 1960s acts included such prolific artists as the Temptations, Martha and the Vandellas, and the Supremes. Gordy's label saw sixty top fifteen pop tunes chart between 1964 to 1967, fourteen of which were number one hits.⁵⁶ It soon became normal for bands to find success at Motown under Gordy's steady production, and then leave for more lucrative markets. The most notable group to do so was the Jackson 5, who left Motown in 1976. Following the release of "I Want You Back", Gordy realized Michael Jackson's star potential and began to train him for solo stardom: "...like so many others, including [Stevie Wonder], Michael Jackson owed his start to Gordy's genius."⁵⁷ Gordy's strict attention to detail and marketability helped him grow his production empire. Having sold Motown Records to MCA in 1988, Gordy stayed active in the movement's historical efforts until his retirement in 2015 at the age of 89. Motown was America's largest black owned company for years, making Gordy a pioneer not only of pop culture, but industry as well.⁵⁸

Sylvia Robinson (1935-2011): The Godmother of Rap and the Independent Label

Sylvia Robinson began her musical career as a part of a guitar and vocal duo named Mickey and Sylvia. She first produced music in 1960 when she helped Joe Jones create "Love is Strange". Although not credited on the album, Robinson "...claimed that she had run [the recording session] on behalf of Jones' label..."⁵⁹ The song charted well, but Sylvia did not

⁵⁶ Jon Fitzgerald, "Motown Crossover Hits 1963-1966 and the Creative Process," *Popular Music* 14, no. 1 (January 1995): pp. 1-11, <https://www.jstor.org/stable/853340>, 1-11.

⁵⁷ Schweikart, "Berry Gordy Jr. and the Original 'Black Label,'" 43.

⁵⁸ Jem Aswad, "Motown Founder Berry Gordy to Retire," *Variety* (Variety, September 24, 2019), <https://variety.com/2019/music/news/motown-founder-berry-gordy-to-retire-1203347182/>.

⁵⁹ Dan Charnas, "The Rise and Fall of Hip-Hop's First Godmother: Sugar Hill Records' Sylvia Robinson," *Billboard*, October 17, 2019, <https://www.billboard.com/articles/columns/hip-hop/8533108/sugar-hill-records-sylvia-robinson-hip-hop-godmother>.

receive any of the credit she was due. Robinson once again produced without recognition on an early Ike & Tina Turner session that resulted in “It’s Gonna Work Out Fine”. Although she paid for the session, taught the song to the artists, and even played guitar on the recording, credit went to the record company owner.⁵⁷

Robinson finally received accolades as producer on a hit in the summer of 1979, for her work on The Sugar Hill Gang’s “Rapper’s Delight”. Now in her 40’s and a mother of two, Sylvia’s ear for music and talent had not lost its ability. One weekend Sylvia heard a few of her son’s friends performing at a local pizza place. She recruited them to write, and after a few days of composition and rehearsal Sylvia got studio time and planned for the “Rapper’s Delight” session: “The following Monday they came together in the studio and cut rap’s first commercial hit in one day. The record cost Sylvia \$750.”⁶⁰ Although she produced and performed in a handful of other hits, it is this single for which Robinson earned the title “The Godmother of Rap”. She published the song under her own independent label, Sugar Hill Records, which grew rapidly and opened the door for other R&B and rap focused independent labels to break into the music scene: “She’s arguably one of the most consequential producers and label owners of all time. Her business opened the doors for all the independents that followed from Def Jam to Top Dawg, and her music pioneered distinct concepts that set the template for hip-hop’s entire creative arc.”⁶¹

⁶⁰ Samuel Craig Watkins, *Hip Hop Matters: Politics, Pop Culture, and the Struggle for the Soul of a Movement* (Boston, MA: Beacon Press, 2008), https://search-alexanderstreet-com.ezproxy.liberty.edu/view/work/bibliographic_entity%7Cbibliographic_details%7C571042#page/2/mode/1/chapter/bibliographic_entity%7Cdocument%7C571044, 21.

⁶¹ Charnas, “The Rise and Fall of Hip-Hop’s First Godmother: Sugar Hill Records’ Sylvia Robinson.”

Glyn Johns (b. 1942): The Producer as Engineer

Glyn Johns got his start in the music business fresh out of high school when his sister arranged an interview for him at IBC Records, an independent studio near his parents' home. Six weeks after the interview, Johns called the studio manager and found out that a senior engineer had just resigned that very day. Johns began as an assistant engineer the next morning; his very first session was with personal hero Lonnie Donegan. Since IBC was an independent studio, Johns saw many different groups come through town. He began to leverage the opportunity to interface with talented artists and used the studio on the weekends to cut personal projects.⁶²

In 1962, Johns moved out of his parents' house and into a house with blues keyboardist Ian "Stu" Stewart, co-founder of the Rolling Stones. While Stuart didn't last as a member of the Stones past 1963, Johns' involvement was only just beginning. Much to Johns' chagrin, the group ditched him and IBC for producer Andrew Oldham. Still living with Stu, Johns admitted that the Stones "...were already showing signs of the greatness to come as a rhythm section, with Mick and Keith having more influence..."⁶³ Johns initially detested Oldham, begrudging him for stealing the act out from under him. When Oldham called Johns in to engineer for an overdub session, Johns was pleasantly surprised: "I hated to admit it but I owned up to being surprisingly impressed. So he asked if I would engineer for him in the future and I agreed."⁶⁴ This was just the start of Johns' professional career with the Stones and Oldham.

From the span of 1965-1971 Johns had his hands on the engineering and mixing of all Stones' albums -- from *December's Children (And Everybody's)*, to *Let It Bleed*, to *Sticky*

⁶² Johns, *Sound Man*, 1-14.

⁶³ *Ibid.*, 55.

⁶⁴ *Ibid.*, 56-57.

Fingers, and numerous others. During this span, Johns also worked as an engineer for such noteworthy acts as the Steve Miller Band, Joe Cocker, Leon Russell, Led Zeppelin, and Traffic.⁶⁵ The Beatles approached him in 1969, although his efforts on an album titled *Get Back* were later discarded and the album, now titled *Let It Be* was handed to Phil Spector, as mentioned above.⁶⁶ In 1970, having just worked with the Stones on *Sticky Fingers*, Johns stepped away from the band and handed the job of engineer to his brother, Andrew. At this point, he turned his focus to producing and engineering for the Who on their *Who's Next* album.⁶⁷

This marked a shift in Johns' career. While he continued to labor behind the recording desk, it was finally time for the long-time engineer to make producer level decisions. In 1972, with *Who's Next* already a success, Johns was convinced by David Geffen of Asylum Records to work with the Eagles. Now in the producer's chair, Johns experienced the challenges of managing a band that saw itself headed for the stars. After settling a disagreement between himself, the band, and their management, Johns finished the record and the Eagles soon found the success they craved.⁶⁸ Johns' abilities soon found him working with many more top-billing acts, including continued work with the Who and the Eagles, and new projects with artists such as Eric Clapton and the Clash.⁶⁹ These acts served to cement his legacy as not only as a great engineer, but as a great producer on the same level as Oldham, Spector, and Martin.

⁶⁵ Johns, *Sound Man*, 291-300.

⁶⁶ Howard, *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*, 30.

⁶⁷ Johns, *Sound Man*, 180-181.

⁶⁸ *Ibid.*, 190-198.

⁶⁹ *Ibid.*, 291-300.

Glyn Johns revolutionized the role that producers and engineers played in sessions and innovated the creative role of the producer. The most notable of these innovations is his method for drum microphone setup. During a Led Zeppelin session in 1968, the engineer happened upon the what would become known simply as the Glyn Johns Method. Said Johns, "I wondered what would happen if I put them left and right, and made the small adjustment of pointing the floor tom-tom mic at the snare, making the two mics equidistant from it. The result sounded enormous..."⁷⁰ The discovery of this method, the most infamous of his innovations, highlights the engineering instincts that led to and ultimately maintained his success as a producer. Johns' legacy highlights the importance of engineering in the role of the producer.

Recent Developments in Music Production

As music has moved into the digital world, innovations have once again revolutionized the method and means of production. The changes in technology impact workflow and client interaction, to the point that the boundaries between songwriter, artist, engineer, and producer have begun to blur more than ever.⁷¹ Using a Digital Audio Workstation (DAW), it is now entirely possible for a hit single to be written, recorded, and produced from the artist's bedroom. Having experienced significant development since their advent in the early 1990s, a DAW may now be installed on a home studio computer or personal laptop, facilitating efficient and creative songwriting and home production: "...digital technology has not merely improved sound quality but has fundamentally altered the ways in which musical gestures are created, manipulated and interact with one another."⁷² The affordability and mobility of production provided by this type

⁷⁰ Johns, *Sound Man*, 117.

⁷¹ Burgess, *The History of Music Production*, 89.

⁷² Spencer Leigh, "Joe Meek - the British Phil Spector?" *Goldmine*, Apr 14, 2006. 35, <http://ezproxy.liberty.edu/login?url=https%3A%2F%2Fwww.proquest.com%2Fmagazines%2Fjoe-meek-british-phil-spector%2Fdocview%2F1501152%2Fse-2%3Faccount%2Fid%3D12085>.

of software frees the artist, who previously could not possibly have completed all the roles of music production on their own, to work in whatever venue and personal company that they desire. The bedroom studio gives the producer an opportunity to create in a space that is both relaxing and that facilitates professional-grade work.⁷³

In her book *How to be a Record Producer in a Digital Era*, Megan Perry describes the workflow and responsibilities of the producer in the modern age of production. Basic roles of the producer in today's world include providing creative direction, managing artists during recording sessions, recording and engineering the music, keeping the recording process on budget, bridging the gap between artist and label, and delivering the final product.⁷⁴ In these roles, modern producers carry on many of the practices of legendary producers from the last century. Says Perry, "Despite seismic changes in how music is made and distributed, the engine at the core of the business continues to be creative energy and talents of musical artists and the power of music itself to move and touch people's lives."⁷⁵ The role of the producer in the modern era, then, is to serve the art and the artist in whatever manner best suits the project.

The Future of the Music Producer

The future is impossible to predict with absolute certainty, but it is possible to track trends that will likely continue into the next models of music production. The home studio and home producer are the new normal. Influential music has already begun to emerge from this scene. Finneas O'Connell, the 2020 winner of the Grammy's Producer of the Year for his work

⁷³ Brian J. Hracs, "A Creative Industry in Transition: The Rise of Digitally Driven Independent Music Production," *Growth and Change* 43, no. 3 (2012): pp. 442-461, <https://doi.org/10.1111/j.1468-2257.2012.00593.x>, 455.

⁷⁴ Megan Perry, *How to Be a Record Producer in the Digital Era* (Clarkson Potter/Ten Speed, 2008), 3-4.

⁷⁵ Perry, *How to Be a Record Producer in the Digital Era*, 2.

on Billie Eilish's *WHEN WE ALL FALL ASLEEP, WHERE DO WE GO?* is famous for world class self-production with limited resources. Speaking of the availability of production in the music scene, O'Connell says that music production "Kids have tools to do what I'm doing."⁷⁶

In his book *The Art of Music Production*, Richard Burgess suggests that the most impactful effects of the innovation in the music recording industry are its global possibilities. Burgess says, "Only a couple decades ago, internationally successful producers clustered in major music centers like London, New York, Los Angeles, and Nashville. Facilities were a major factor. Excellent records required elite studios."⁷⁷ While studios worldwide provide unique sonic possibilities, a producer no longer needs an expensive studio to create world class art. As digital audio recording provides a noticeably cleaner sound, the desire for analog warmth and harmonic distortion created by gear typically found in studios has also increased. These may now be achieved in the home studio through digital software that emulates analog behavior, or by investment in a selection of analog gear that best meets the need of the home setup.⁷⁸

Modern producers still need to apply the same skills as past studio producers; however, the methods of production and availability of resources have vastly expanded. The ability to independently release music through such websites as Tune Core, Distrokid, and CD Baby has made it possible for artists to work more flexibly with producers of choice.⁷⁹ Artists may even

⁷⁶ Cirisano, "Stepping Out: Producer of The Year Nominee Finneas O'Connell On a Future With --And Without -- Billie Eilish," 1.

⁷⁷ Richard James Burgess, *The Art of Music Production: The Theory and Practice* (Oxford, England: Oxford University Press, 2013), 248-249.

⁷⁸ Anders Kile Groenningsaeter, "Musical Bedroom: Models of Creative Collaboration in the Bedroom Recording Studio" (dissertation, Queensland University of Technology, 2017), pp. 1-88, https://eprints.qut.edu.au/108954/1/Anders%20Kile_Groenningsaeter_Thesis.pdf, 18.

⁷⁹ Tim Ingham, "A New Report Says Independent Artists Could Generate More than \$2 Billion in 2020," *Rolling Stone*, 2020, <https://www.rollingstone.com/pro/features/raine-group-independent-artists-2-billion-in-2020-967138/>.

now entirely fill the role of producer, guiding the vision of a project from its earliest stages to its release.

Perry suggests that there are four archetypes of modern record producer: the creative producer, the technical producer, the songwriter producer, and the all-in-one producer.⁸⁰ The creative producer acts as a guiding force and visionary of a project using technology and instrumental experimentation as a stimulant. The technical producer tends to focus on engineering excellence, staying out of the way of the artist by ensuring technological success. The songwriter producer elevates the actual message of the song over other elements of the production process, developing and writing material as it is produced. The all-in-one producer uses producing, mixing, and engineering to provide a full service to an artist. This style of producer brings their best to each aspect of productions and delivers a tangible and excellent final product.⁸¹ The constantly changing landscape of music will forever require adaptation from both artists and producers as the world of digital music continues to develop. Producers must now find which archetype of producer they fit into, and how to build a client base around their skill set.

Conclusion

The history of record production is necessarily tied to the work of early audio engineers and record producers. Edison's invention of the phonograph sparked a movement of inventors and audio engineers that sought sonic excellence. The commercialization of the music industry following the Great Depression made it possible for the development of new technology during and following World War II. The record producers that emerged after this time changed the

⁸⁰ Perry, *How to Be a Record Producer in the Digital Era*, 16.

⁸¹ *Ibid.*, 16-19.

future of the job title. Joe Meek, Phil Spector, George Martin, Brian Wilson, Berry Gordy, Jerry Wexler, Sylvia Robinson, and Glyn Johns are only a handful of the legendary producers that revolutionized the industry. Future producers will continue to apply the practices of these past producers in new ways as music evolves and new technologies are invented.

The role of the music producer, at its simplest, is to facilitate the creativity of the artist and serve the song being recorded. Whether applying the innovations of past producers, or using technology to create in an entirely new way, the producer's goal is always to elevate the project in question: "If successful producers have a trait in common, it might be that they do what is needed and do it well – no trivial feat."⁸² A producer must take the parts of a song given to them and create a personal vision that galvanize the pieces into a creative and artistic whole.⁸³ Glyn Johns may have said it best: "Someone asked me the other day: What exactly does a record producer do? My answer was: 'You just have an opinion and the ego to express it more convincingly than anyone else.' Every time I start another project I wonder if I am going to get found out."⁸⁴

⁸² Burgess, *The Art of Music Production: The Theory and Practice*, 266.

⁸³ Ian Shepherd, "What Does a Music Producer Do, Anyway?," *California Copyright Conference Newsletter*, October 2012, pp. 1-5, <https://theccc.org/wp-content/uploads/Oct-9-2012-Newletter.pdf>, 1.

⁸⁴ Johns, *Sound Man*, xi.

Bibliography

- Aswad, Jem. "Motown Founder Berry Gordy to Retire." *Variety*. *Variety*, September 24, 2019. <https://variety.com/2019/music/news/motown-founder-berry-gordy-to-retire-1203347182/>.
- Badman, Keith, and Tony Bacon. *The Beach Boys: The Definitive Diary of America's Greatest Band, on Stage and in the Studio*. Collingdale, PA: DIANE Publishing, 2004.
- Burgess, Richard James. *The Art of Music Production: the Theory and Practice*. Oxford, England: Oxford University Press, 2013.
- Burgess, Richard James. *The History of Music Production*. Oxford: Oxford University Press, 2014.
- Buskin, Richard. *The Complete Idiot's Guide to the Beatles*. New York, NY: Alpha Books, 1998.
- Ciriano, Tatiana. "STEPPING OUT: PRODUCER OF THE YEAR NOMINEE FINNEAS O'CONNELL ON A FUTURE WITH--AND WITHOUT--BILLIE EILISH." *Billboard*, January 25, 2020, 154. *Gale Academic OneFile* (accessed March 31, 2020). https://link-gale-com.ezproxy.liberty.edu/apps/doc/A613341089/AONE?u=vic_liberty&sid=AONE&xid=d72ebc6f.
- Chanan, Michael. *Repeated Takes: a Short History of Recording and Its Effects on Music*. London: Verso, 1995.
- Charnas, Dan. "The Rise and Fall of Hip-Hop's First Godmother: Sugar Hill Records' Sylvia Robinson." *Billboard*, October 17, 2019. <https://www.billboard.com/articles/columns/hip-hop/8533108/sugar-hill-records-sylvia-robinson-hip-hop-godmother>.
- Chidester, Brian. "Brian Wilson's Secret Bedroom Tapes." *LA Weekly*, May 22, 2019. <https://www.laweekly.com/brian-wilsons-secret-bedroom-tapes/>.
- EMI Trust. "History of EMI." Accessed February 5, 2021. <https://www.emiarchivetrust.org/a/bout/history-of-emi/#:~:text=In%20response%20to%20this%20new,EMI%20as%20it%20became%20known.>
- Fitzgerald, Jon. "Motown Crossover Hits 1963-1966 and the Creative Process." *Popular Music* 14, no. 1 (January 1995): 1–11. <https://www.jstor.org/stable/853340>.
- Grimes, William. "Phil Spector, Famed Music Producer and Convicted Murderer, Dies at 81." *The New York Times*, January 17, 2021. <https://www.nytimes.com/2021/01/17/arts/music/phil-spector-dead.html>.

- Groenninsaeter, Anders Kile. "Musical Bedroom: Models of Creative Collaboration in the Bedroom Recording Studio." Dissertation, Queensland University of Technology, 2017. https://eprints.qut.edu.au/108954/1/Anders%20Kile_Groenningsaeter_Thesis.pdf.
- Howard, David N. *Sonic Alchemy: Visionary Music Producers and Their Maverick Recordings*. Milwaukee, WI: Hal Leonard, 2004.
- Hracs, Brian J. "A Creative Industry in Transition: The Rise of Digitally Driven Independent Music Production." *Growth and Change* 43, no. 3 (2012): 442–61. <https://doi.org/10.1111/j.1468-2257.2012.00593.x>.
- Ingham, Tim. "A New Report Says Independent Artists Could Generate More than \$2 Billion in 2020." *Rolling Stone*, 2020. <https://www.rollingstone.com/pro/features/raine-group-independent-artists-2-billion-in-2020-967138/>.
- Johns, Glyn. *Sound Man*. New York, NY: Plume, imprint of Penguin Random House LLC, 2015.
- Katz, Mark. *Capturing Sound: How Technology Has Changed Music*. Berkeley, CA: University of California Press, 2010.
- Leigh, Spencer. "Joe Meek - the British Phil Spector?" *Goldmine*, Apr 14, 2006. 35, <http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fmagazines%2Fjoe-meek-british-phil-spector%2Fdocview%2F1501152%2Fse-2%3Faccountid%3D12085>.
- Perry, Megan. *How to Be a Record Producer in the Digital Era*. Clarkson Potter/Ten Speed, 2008.
- Persson, Sarata. *Technology, Society, Industry and Music Production: The Changing Roles of the Record Producer and the Recording Engineer Since 1970*. Lulea University of Technology Music and Media, 2006.
- Pras, Amandine, Catherine Guastavino, and Maryse Lavoie. "The Impact of Technological Advances on Recording Studio Practices." *Journal of the American Society for Information Science and Technology* 64, no. 3 (2013): 612–26. <https://doi.org/10.1002/asi.22840>.
- Real, Christopher. "Helping pave the road to FAME: behind the music of Muscle Shoals." *Southern Cultures* 21, no. 3 (2015):
- Reisman, Joseph. "Record Producer." *Music Educators Journal* 63, no. 7 (1977): 65–67. <https://doi.org/10.2307/3395210>.
- RR. "Jerry Wexler, The Godfather of R&B - Atlantic Records Official Blog." Atlantic Records Official Website. Atlantic. Accessed February 12, 2021. <https://www.atlanticrecords.com/posts/jerry-wexler-godfather-rb-18831>.

Schmidt Horning, Susan. *Chasing Sound Technology, Culture, and the Art of Studio Recording from Edison to the LP* Baltimore: Johns Hopkins University Press, 2013.

Schweikart, Larry. "Berry Gordy Jr. and the Original 'Black Label.'" *Ideas on Liberty*, May 2003, 40–43. <https://admin.fee.org/files/doclib/schweikart0503.pdf>.

Shepherd, Ian. "What Does a Music Producer Do, Anyway?" *California Copyright Conference Newsletter*, October 2012, 1–5. <https://theccc.org/wp-content/uploads/Oct-9-2012-Newletter.pdf>.

Talevski, Nick. "Jerry Wexler." In *Pop Culture Universe: Icons, Idols, Ideas*, ABC-CLIO, 2021. Accessed February 11, 2021. <https://popculture2.abc-clio.com/Search/Display/1360649>.

Watkins, Samuel Craig. *Hip Hop Matters: Politics, Pop Culture, and the Struggle for the Soul of a Movement. Alexander Street*. Boston, MA: Beacon Press, 2008. https://search-alexanderstreet-com.ezproxy.liberty.edu/view/work/bibliographic_entity%7Cbibliographic_details%7C571042#page/2/mode/1/chapter/bibliographic_entity%7Cdocument%7C571044

Wile, Raymond R. "The Edison Invention of the Phonograph." *ARSC Journal* 14, no. 2 (1982): pp. 4-29, <http://arsc-audio.org/journals/v14/v14n2p4-28.pdf>.

Winer, Ethan. *The Audio Expert: Everything You Need to Know About Audio*. New York: Routledge, Taylor & Francis, 2018.

Womack, Kenneth. "Sir George Martin, 1926–2016." *Popular Music and Society* 39, no. 4 (2016): 465–67. <https://doi.org/10.1080/03007766.2016.1204806>.

Appendix

Definition of Terms

Analog Tape Recording – Audio recording that is completed through electrical means. This process does not convert audio to digital data, but rather uses physical, electromagnetic tape.⁸⁵

Close Microphone Technique – Placing a microphone close to a source, rather than leaving it at a distance. The listener hears the source from the perspective of the microphone.

Condenser Microphone – A design of microphone that uses electrostatic properties to generate electrical signal.

Digital Audio Recording – Audio recording that converts analog signal to a digital format that is recorded using a computer or other digital processor.

Double Tracking – The process of recording a second, nearly identical, performance alongside a previously recorded take. This process was famously pioneered by Phil Spector.

Compression – A dynamics based effect by which an audio source's volume level is controlled according to parameters set by the user.

Multi-track Recording – Recording multiple audio inputs simultaneously, a process made possible by devices that have multiple inputs and outputs.

Overdubbing – In recording, the process of recording over a previous take to fix errors.

Reverb – A time based audio effect that adds sustain and decay to an audio source, mimicking many echoes at once.

Stereo Sound – Sound that is transmitted with left and right dimensions to create a perceived sound field.

Tape Looping - The creative process by which a section of magnetic tape is repeated in a pattern or series to achieve a desired effect.

Theremin – An electronic instrument that is controlled without physical contact to the instrument by manipulating electromagnetic fields.

⁸⁵ Unless otherwise noted, all definitions are based on *The Audio Expert: Everything You Need to Know About Audio*. Ethan Winer, *The Audio Expert: Everything You Need to Know about Audio* (New York: Routledge, Taylor & Francis, 2018).