

STOCKHAUSEN'S INFLUENCE ON POPULAR MUSIC:
AN OVERVIEW AND A CASE STUDY
ON BJÖRK'S *MEDÚLLA*

by

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ABSTRACT

Karlheinz Stockhausen's innovations as a serialist and electronic music composer have not only captivated such composers as Brian Ferneyhough and Wolfgang Rihm, but those of popular genres as well. Indeed, such contemporary popular musicians as Björk, for example, cite him as an influence in their work. While there are numerous sources that address Stockhausen's influence, an up-to-date overview of his presence in the popular realm has yet to be written in English. In this thesis, I provide such an overview, surveying the available literature on Stockhausen's influence on popular musicians from the late 1960s to the 2010s. More specifically, I present a case study comparing Stockhausen's work *Stimmung* (1968) to Björk's almost entirely vocal album *Medúlla* (2004), as well as considering his profound influence on her music as a whole. Ultimately, this study will highlight the continuing importance of Stockhausen's musical impact on popular musicians, while investigating in greater depth the specifics of his influence on Björk. As my findings will show, many popular musicians such as The Beatles and Pink Floyd have listed Stockhausen as an influence, but the presence of details of this influence is scarce in scholarly literature. My case study comparing *Stimmung* to *Medúlla* provides an example of such needed details and offers distinct evidence of his direct and indirect influences on Björk and her music.

CHAPTER I

Introduction

As an undergraduate music student, I was particularly drawn to Karlheinz Stockhausen. My composition and theory professor held a weekly meeting for a small group of intrigued music students, so that we could gather to discuss a piece of “new music,” which included everything from well-known twentieth-century compositions to not yet completed work from our fellow students. It was in these meetings that I discovered Stockhausen. For a brief time, I experimented with electronic music composition and was fascinated by the complexity of Stockhausen’s work in the medium. Sometimes I would be reminded of his electronic music when listening to songs such as The Beatles’s “Revolution 9” or Björk’s “Pluto,” both reminiscent of Stockhausen’s experimental electronic works. During my graduate studies, my interest in Björk was resurrected, when searching through potential thesis topics, and again I was reminded of Stockhausen. Though prior to working on this thesis my research into his music and teachings were only surface-level, his musical appeal to me has never waned. This led to a curiosity about his documented influence not only on Björk, but also upon all popular music. After much time spent searching for sources that acknowledge both Stockhausen and popular music, I found that this influence has not been extensively documented.

Much scholarship has been dedicated to the prolific composer, particularly in reference to the art music world. By the time of his death in 2007, the number of his works had reached 376;¹ many of these works are quite lengthy and resoundingly difficult. One such composition was his opera cycle *Licht* (1977-2003), which totals

¹ “Karlheinz Stockhausen: Complete List of Works,” Karlheinz Stockhausen’s official website, www.karlheinzstockhausen.org/complete_list_of_works_english.htm, accessed February 20, 2015.

twenty-nine hours of music. His works have had a large impact on the art music world, and there has been much scholarship dedicated to this perspective of his influence, which can be seen through the extensive bibliography on his official website.² Nonetheless, few sources focus on his impact within the popular music realm and the nature of this influence, and among those few are primarily in German.³ Because of the expansive nature of Stockhausen's compositions within his catalogue, more attention should be directed toward an understanding of particular aspects of his vast and varied works that were influential upon different popular musicians.

Several musicians have credited Stockhausen as an important figure in their musical development, and the genres within popular music are quite varied, including (but not limited to) jazz, rock, and Industrial music. Miles Davis, Masami Akita, Pink Floyd, and Can are just a few specific artists who have referenced Stockhausen as an influence. The objectives of this thesis are two fold. The first objective is to provide an overview of the sources referencing Stockhausen's influence while offering a study on the limitations of the information regarding the specifics of his presence in popular music. The second objective is to concentrate specifically on one particular popular musician (Björk Guðmundsdóttir) and to describe connections between her and the composer. Björk's admiration for Stockhausen has been noted in interviews and articles,

² "Karlheinz Stockhausen: Stockhausen-Bibliography, 1952-," Karlheinz Stockhausen's official website, www.karlheinzstockhausen.org/Stockhausen_Bibliographie_1952-2013_english.htm, accessed February 20, 2015.

³ Marius Braun, "Stockhausens Einfluss auf die Popmusik" (Seminar paper for University of the Arts, Berlin, 2010), <http://www.grin.com/de/e-book/170412/stockhausens-einfluss-auf-die-popmusik>; Ralf Von Appen, "Konkrete Pop-Musik. Zum Einfluss Stockhausens und Schaeffers auf Björk, Matthew Herbert und Matmos," *Samples 2* (2003), http://www.researchgate.net/publication/26411339_Konkrete_Pop-Musik_Zum_Einfluss_Stockhausens_und_Schaeffers_auf_Bjrk_Matthew_Herbert_und_Matmos. These German sources have also recognized and studied Stockhausen's influence on popular music, but this thesis provides an up-to-date overview in English.

but the specifics of their connections have yet to be examined deeply.

An updated overview of Stockhausen's influence on popular music has not yet been written in English.⁴ The aim of the second chapter of this thesis is to provide such an overview, focusing upon the available literature. After providing information about the nature of material available on the composer from such general biographical sources as those found in *Grove Music Online* as well as the official Stockhausen website, I will examine individual writings of significant Stockhausen scholars Jonathan Cott, Karl Wörner, and Robin Maconie. The absence of popular music references from these authors highlights a distinct need for further research on this topic. I will survey Stockhausen's influence on musicians Miles Davis, The Beatles, and Pink Floyd, as well as EDM, Noise, Krautrock, and Industrial music. Another approach will be to acknowledge other secondary sources regarding Stockhausen and popular music, particularly those of Susan McClary, Chris Cutler, and Joanna Demers. The end of the chapter examines Stockhausen's reaction to popular musicians citing him as an influence.

In chapter three, I focus my lens on Stockhausen's influence on Björk. Considering the sources highlighted in the second chapter, the most overwhelming evidence of Stockhausenian influence on popular music has originated from sources regarding Björk. Even the artist herself has been outspoken in regard to the composer and his impact on her career. I begin the third chapter with an examination of Björk's writings and discussions about the composer. The significance of this section lays in my investigation of her 1996 interview with Stockhausen for *Dazed and Confused* magazine, from which I attempt to distill the essence of Stockhausen's influences on Björk. Because of this interview and its impact on her, I direct my attention to an analysis of Björk's style

⁴ See footnote 3 for previous German studies on this topic.

on each of her albums following the interview up until *Medúlla* (2004). I then compare *Medúlla* to Stockhausen's work *Stimmung* (1968), focusing particularly on each composer's treatment of the voice and their behaviors with collaborative performers. Both *Medúlla* and *Stimmung* incorporate primarily the use of voices, with the only exceptions being a softly produced chord (*Stimmung*) and piano with a few electronic beats (*Medúlla*); the similarity of these performance forces suits a comparison between both works. This chapter is arguably my most significant contribution, since I have yet to find any comparative study between the works of Björk and Stockhausen in the extant literature.

In the fourth and final chapter, I provide my conclusions for Stockhausen's effect on popular music and his distinct influence upon Björk, explicating the significance of my findings. In my initial search, I found no English-language scholarship solely dedicated to Stockhausen's impact on popular music; what I did find was a brief mention of Stockhausen within written works dedicated to (a) popular musician(s), or vice versa. Though he has since passed away, Stockhausen's teachings, beliefs, and compositions continue to impact the world of popular music, and I hope that my contribution will promote further inquiry into this area of research.

CHAPTER II

Review of the Literature: Stockhausen and Popular Music

The official Karlheinz Stockhausen website, www.karlheinzstockhausen.org, run by Stockhausen-Verlag and the Stockhausen Foundation for Music, includes an extensive bibliography with sources dating from 1952 to 2013. The majority of these sources are in German, and they cover compositional analyses, biographies, interviews, performers' interpretations, and overviews of electronic music or the classical avant-garde. Noticeable is the scarcity of scholarly work that has been completed on Stockhausen's influence on popular music.

An inspection of Stockhausen's subject entry on *Grove Music Online (GMO)* will show yet another list of sources plentiful with interviews, collected essays, and critical studies dedicated to the composer's musical works, ideologies, and compositional techniques. Again what appears to be missing is the research dedicated to his influence upon popular musicians. Only two sentences in his entry in *GMO* consider his effect on popular music: first, "The level of his penetration into popular youth culture can be gauged from the inclusion of his photograph on the cover of the Beatles's *Sergeant Pepper* album," and second, "At a less official level, some of Stockhausen's later electronic works have had considerable success with young audiences who are also adherents of more commercial forms of electronica."¹ I also searched through *Die Musik in Geschichte und Gegenwart*, but I found nothing connecting Stockhausen to popular music. The *Encyclopedia of Popular Music* has no entry on the composer, but when his name is searched, there appears a list of other musicians who have cited him as an

¹ Richard Toop, "Karlheinz Stockhausen," *Grove Music Online*, www.oxfordmusiconline.com.

influence.² Because so many have regarded him as influential and without a subject entry for him, the need for further research on this topic is evident.

Within his lengthy responses to interviewers, Stockhausen will sometimes insert a brief mention of popular music and his take on a certain aspect of it (e.g., repetition), but he then directs his attention elsewhere. A specific example of his regard to popular music occurs during his 2001 interview with Charles Hazlewood for the *BBC Music Masters* series. Hazlewood mentions that certain popular musicians such as the Grateful Dead, Björk, and Portishead have claimed that Stockhausen was influential to them, and he posits further that they have taken particularly to the composer's "aesthetical sound world."³ Stockhausen tended to agree with Hazlewood, stating:

The crazy sounds. They love the unusual sounds...many of my works are electronic music, so to be part of the electronic age is already something superior, you know. Many groups do that now and call themselves electronic musicians. Or the techno musicians, they call me now the 'papa' of techno. What they really mean is there are these noisy sounds, these crashing sounds, these shooting sounds, which they like in my music. But they don't ask what they're made for, or for the functions of these sounds in my work. They like the effects.⁴

In the extent of my research, I did not find any significant sources in the English language related specifically to Stockhausen and popular music until the mid-1990s with his interview with Björk, which will be discussed in depth in chapter three. Later into my research, I found many references to Stockhausen's influence on The Beatles. Because of these findings, I searched for sources connecting the composer and popular music from as

² This list includes Cristian Vogel, Henry Lowther, Anthony Braxton, Holger Czukay, Fernanda Porto, Agoria, Pat Martino, Hugh Davies, Irmin Schmidt, Jon Hassell, Kraftwerk, Main, Miles Davis, Lou Reed, Shockabilly, and Circle. Some of the subjects listed name Stockhausen as an influence, while other entries insist that the music sounds like Stockhausen.

³ Karlheinz Stockhausen, interview by Charles Hazlewood, *BBC Music Masters: Stockhausen*, BBC, January 11, 2001, 24:56-25:56, <http://www.bbc.co.uk/iplayer/episode/p013s7xf/music-masters-stockhausen>.

⁴ Ibid.

early as the 1970s. There were significant publications about Stockhausen in the 1970s that are often cited in subsequent works about the composer, but none reference popular music. Scholars during this decade were either unaware of the composer's influence on popular musicians at the time, or they were not acknowledging it.

Indeed, most writings about Stockhausen during the 1970s focused on his compositions and philosophies, not his influence on popular music. Authors Jonathan Cott and Karl Wörner contributed significant publications to their Stockhausen studies in 1973, though there is no mention of popular music within these books.⁵ Bill Hopkins revised Karl Wörner's book and provided an English translation. In the introduction, Hopkins writes that Stockhausen's "direct influence has been vast" and that "many of his practical suggestions would be equally welcomed by composers outside of his circle of influence, and even by composers antipathetic to this music and its techniques."⁶ Hopkins goes on to suggest that composers tended to lean toward more complexity in their music, because the gramophone, or record player, allowed listeners multiple hearings of their works. Stockhausen already had over thirty records available at that time.⁷ The gramophone allowed listeners, which likely included popular musicians, to listen to works repeatedly and to pick apart Stockhausen's music to find specifically what they liked about it. Complex music, such as Stockhausen's work, was influential in bringing about more complexity (e.g., experimental sounds) in the popular music realm, thanks to the availability of his recordings and playback devices.

⁵ Jonathan Cott and Karlheinz Stockhausen, *Stockhausen: Conversations with the Composer* (New York: Simon and Schuster, 1973); Karl H. Wörner, *Stockhausen: Life and Work*, trans. Bill Hopkins (Berkeley and Los Angeles: University of California Press, 1973.)

⁶ Bill Hopkins, introduction to *Stockhausen: Life and Work* by Karl Wörner (Berkeley and Los Angeles: University of California Press, 1973): 12.

⁷ Ibid.

After finding scant information on popular music within the realm of Stockhausen during the 1970s, I explored another prolific scholar in Stockhausen study: Robin Maconie, who covered the composer from multiple angles from as early as 1966. Neither Maconie's compilation of Stockhausen's lectures and interviews in 1989 titled *Stockhausen on Music*⁸ nor his more comprehensive 2005 book *Other Planets: The Music of Karlheinz Stockhausen*⁹ provide any information regarding the composer and popular music. In the preface to *Other Planets*, Maconie expresses that research about Stockhausen is inaccessible for many, due to the unavailability of sources in English:

For an English-language readership, however, by far the greatest obstacle to understanding the composer and his music in context has been the lack of essential documentation in reliable English translation. Much of the evidence on which the present text and its conclusions are based has come from sources such as the ten volumes of Stockhausen's collected *Texte*, not to mention essential writings of such key players as Herbert Eimert, Pierre Boulez, Pierre Schaeffer, Olivier Messiaen, and Werner Meyer-Eppler, materials that even after forty years either remain unobtainable in English, or worse, have been rendered in an English incomprehensible to most readers. Given the absence of relevant material to discuss, a lack of vigorous debate is hardly surprising. I have done my bit, I trust, to draw the reader's attention to a fascinatingly rich and under-appreciated resource.¹⁰

In 2007, Maconie authored *Avant Garde: An American Odyssey from Gertrude Stein to Pierre Boulez*,¹¹ and for the first time he references popular music in regard to Stockhausen. Nevertheless, Maconie addresses few items that describe popular musicians' influence upon Stockhausen, rather than the other way around. One example is Stockhausen's work *Heaven's Door* (2005), which is within the collection *KLANG*:

⁸ Karlheinz Stockhausen, *Stockhausen on Music*, compiled by Robin Maconie (London: Marion Boyars, 1989).

⁹ Robin Maconie, *Other Planets: The Music of Karlheinz Stockhausen* (Lanham, MD: Scarecrow Press, 2005).

¹⁰ *Ibid.*, x.

¹¹ Robin Maconie, *Avant Garde: An American Odyssey from Gertrude Stein to Pierre Boulez* (Lanham, MD: Scarecrow Press, 2012).

The Twenty-four hours of the day (2004-2007).¹² This piece, which takes place in the fourth hour, is written for a solo percussionist and evokes either “Martin Luther nailing the ninety-five theses to the Door of Wittenberg Church” or “Black Rod banging on the door of the House of Commons in England.”¹³ Maconie proposed that this piece is “rich in US allusion,” partially for its title reflecting Bob Dylan’s song “Knock knock knocking on heaven’s door.”¹⁴ Later in the book, the author compares the “impish disobedience” of the Rolling Stones’ Mick Jagger lips logo to Stockhausen’s embedded message in *Lucifer’s Dance* for wind band (1983).¹⁵ Though these comparisons are merely general observations, the Dylan recognition shows that Stockhausen was at least acknowledging popular artists of the time.

When recognizing Stockhausen’s influence in the jazz realm, Miles Davis has been one of the most outspoken musicians to regard the composer. Barry Bergstein’s 1992 article “Miles Davis and Karlheinz Stockhausen: A Reciprocal Relationship” examines the ways in which Stockhausen and Miles Davis influenced each other.¹⁶ Even though my focus in this thesis is from a popular music perspective, the information provided within this article led me to consider Stockhausen as an indirect influential figure to close followers of Miles Davis. Bergstein writes that Davis and Stockhausen influenced each other in many different manners, which he divided into eight categories. (See my Table 1 for my list of the influences.)¹⁷ Bergstein also references Stockhausen’s

¹² Karlheinz Stockhausen, *Klang (Sound): The 24 Hours of the Day*, (Kürten: Stockhausen-Verlag, 2004-2007).

¹³ Maconie, *Avant Garde*, 55.

¹⁴ *Ibid.*, 55-56.

¹⁵ *Ibid.*, 263.

¹⁶ Barry Bergstein, “Miles Davis and Karlheinz Stockhausen: A Reciprocal Relationship,” *The Musical Quarterly* 76, no. 4: 502-525, <http://www.jstor.org/stable/742474>.

¹⁷ *Ibid.*, 503. This table is my synthesis of Bergstein’s eight categories and descriptions of Stockhausen’s and Davis’s mutual influences.

work with his son Markus, who is a trumpet player, on his composition *Ceylon/Bird of Passage*. This composition was released on the Chrysalis Records label—a rock label that was noted for its promotion of Jethro Tull and Procol Harum.¹⁸ Bergstein mentions the reviews of *Ceylon/Bird of Passage* that appeared in *Downbeat* and *Melody Maker*, two magazines that were readily available to the populous. This recognition helped to establish a closer connection between the composer and popular musicians.

| | |
|---|---|
| Early influences and contemporaneous cross-cultural inspiration | <ul style="list-style-type: none"> • Early influences of Davis and Stockhausen included both jazz and concert traditions • African influences (Charlie Parker and John Coltrane for Davis and Bartók for Stockhausen) • Indian influences (Hindu rhythms learned though Messiaen for Stockhausen, awareness and potential influence of Indian music on Miles Davis through Coltrane) • The study of rhythm of different cultures affected composition (Davis first witnessed African rhythms while attending Ballet Africaine, and Stockhausen studied Messiaen’s use of Indian rhythms in <i>Turangalila-symphonie</i>) • Stockhausen’s <i>Telemusik</i> was the first of his works to employ exotic music, paralleled the development of Davis’s use of West African rhythmic stratification |
| Electro-acoustic applications | <ul style="list-style-type: none"> • <i>Telemusik</i> was the first of Stockhausen’s compositions that captured Davis’s interest • Both musicians employ splicing techniques (Stockhausen’s <i>Telemusik</i> and Davis’s <i>In a Silent Way</i>) • Both artists used ring modulation |
| Process composition | <ul style="list-style-type: none"> • Stockhausen’s symbolic notation of a spiral (writing in a circle, never ending a song) and Davis’s conception of circular writing (continuous live performance sets) • Both Davis and Stockhausen provide cryptic and abstract process texts/performance instructions |
| Intuition and improvisation | <ul style="list-style-type: none"> • Stockhausen’s “intuitive” music and Davis’s allowance for musicians to essentially create their own parts • Intuition important to both men’s improvisational music • Stockhausen’s <i>Set Sail for the Sun</i> (1974) and the fourth side of Davis’s <i>Agharta</i> (1975) both apply process and intuition, are improvisatory by nature, and share sonic and timbral similarities |

¹⁸ John Covach, “Jethro Tull,” *Grove Music Online*, accessed November 15, 2014, <http://www.oxfordmusiconline.com>; “Procol Harum,” *Encyclopedia of Popular Music*, 4th ed., accessed November 15, 2014, *Oxford Music Online*, <http://www.oxfordmusiconline.com/>.

| Table 1 Continued. | |
|--|--|
| Integration of cross-cultural elements | <ul style="list-style-type: none"> • Similarity in the use of African and Indian elements in Stockhausen's <i>Telemusik</i> and Davis's <i>On the Corner</i>, more specifically, the fading in and out of one culture to the next in Stockhausen's <i>Telemusik</i> and Davis's "Black Satin" |
| Found elements | <ul style="list-style-type: none"> • Stockhausen's <i>Kurzwellen</i> (1968) uses found elements from short-wave radios; Davis's allowance of performers to use "found sounds" of popular musicians such as James Brown (alternating metric patterns) and Sly Stone (slap and funk bass) |
| Jazz hybrids | <ul style="list-style-type: none"> • Combination of vibraphone and keyboard in Stockhausen's <i>Refrain</i> (1959) possibly inspired by Modern Jazz Quartet • Stockhausen's approach to music similar to jazz's timing, intuitive discipline, instrumental combinations, and blend of sonorities • Stockhausen blends jazz and Japanese music in his <i>Der Jahreslauf</i> (1977) |
| Focus on the trumpet | <ul style="list-style-type: none"> • Stockhausen often uses trumpet as solo instrument (his son Markus is a trumpet player) • Davis and Stockhausen both use repeated notes, flutter-tonguing, sputtering notes, glissandi, fall-offs, scoops, notes spit out of the horn, and intentionally missed notes • Both value distinctive timbres; Davis known for his sound with a Harmon mute, Stockhausen used a multitude of trumpet mutes in <i>Licht</i> |

Miles Davis himself acknowledged Stockhausen's influence on his compositional and improvisational development in his autobiography, in which he stated: "Through Stockhausen I understood music as a process of elimination and addition."¹⁹ He also stated his admiration of Stockhausen's use of rhythm and space.²⁰ Another prominent jazz figure who cites Stockhausen is saxophonist Anthony Braxton, who has claimed Stockhausen as one of his greatest influences, which can be particularly heard in his compositions *Wesleyan (12 Altosolos)* (1992) and *Seven Compositions (Trio)* (1989), both of which combine jazz with European modernism, and *Open Aspects (Duo)* (1982) that incorporates techniques similar to *musique concrète*.²¹

A multitude of writings from various musicians appears in the 2004 book *Audio*

¹⁹ Miles Davis and Quincy Troupe, *Miles: The Autobiography*, Paperback edition, (New York: Simon and Schuster, 2005), 329.

²⁰ *Ibid.*, 322.

²¹ "Braxton, Anthony - Wesleyan (12 Altosolos) 1992" and "Braxton, Anthony - Seven Compositions (Trio) 1989"; "Braxton, Anthony - Open Aspects (Duo) 1982," *Encyclopedia of Popular Music*, 4th ed., *Oxford Music Online*, <http://www.oxfordmusiconline.com>.

Culture: Readings in Modern Music, edited by Christoph Cox and Daniel Warner.²² This book “traces the *genealogies* of contemporary musical practices and theoretical concerns, drawing lines of connection between recent musical forms and earlier moments of audio experimentation.”²³ Though I found only little to connect Stockhausen to specific popular musicians, I did find connections between the composer and popular music from different perspectives. In *Audio Culture*, these perspectives are discussed in three chapters: Masami Akita and Noise music, appropriations between “high” and “low” music, and international influences on both classical avant-garde composers and popular musicians.

The impact on Stockhausen’s work on Noise music has been particularly significant. In an interview with Noise artist Masami Akita, he mentions that he became interested in electro-acoustic composers Henry, Stockhausen, Bayle, Mumma, and Xenakis in the 1970s while working as a drummer in a free-form rock band.²⁴ He later mixed his influences from this music with “pure electronic noise.”²⁵ Stockhausen was the first composer to incorporate pure electronic noise (sine tones) alongside sound-spectra in the *musique concrète* studio under Pierre Schaeffer,²⁶ bridging this school with that of Cologne’s *elektronische Musik* school.

In his article “Plunderphonia,” Chris Cutler discusses how the “low” and “high” music realms often appropriate from each other.²⁷ Rather than mere influence, Cutler explains the theft (plunder) of one realm’s musical ideas from the other. The new

²² Christoph Cox and Daniel Warner, editors, *Audio Culture: Readings in Modern Music* (New York: Continuum, 2004).

²³ *Ibid.*, xiv.

²⁴ Masami Akita and Chad Hensley, “The Beauty of Noise: An Interview with Masami Akita of Merzbow,” in *Audio Culture*, ed. by Cox and Warner (New York: Continuum, 2004), 59.

²⁵ *Ibid.*.

²⁶ “Stockhausen: Biography,” Stockhausen official website, accessed December 3, 2014, http://www.karlheinzstockhausen.org/karlheinz_stockhausen_short_biography_english.htm.

²⁷ Chris Cutler, “Plunderphonia,” in *Audio Culture*, ed. by Cox and Warner (New York: Continuum, 2004), 148.

availability of recording equipment and the “climate of experiment and plenitude” further produced the “plunder” mentality.²⁸ Cutler re-contextualizes Hopkins’s concept of increased compositional complexity because of available recording and playback devices;²⁹ the availability of Stockhausen’s recordings, (and in Cutler’s case, Varèse’s and Schaeffer’s recordings as well) brought forth a generation in the 1960s who experimented with noise, electronics, “inappropriate” instruments, and most importantly, recording techniques.³⁰ A collective of this generation, a group called The Residents, appropriated one of Stockhausen’s techniques used in his *Opus 1970* on their album *Third Reich and Roll*:

What Stockhausen had done was to prepare tapes of fragments of Beethoven’s music which ran continuously throughout the performance of the piece. Each player could open and shut his own loudspeaker at will and was instantaneously to “develop” what he heard instrumentally (condense, extend, transpose, modulate, synchronise, imitate, distort.) To different ends The Residents followed a similar procedure: instead of Beethoven, they copied well known pop songs to one track of a four-track tape and then played along with them (transposing, modulating, distorting, commenting on, intensifying), thus building up tracks. Though they subsequently erased most of the source material, you can often, as with *Opus 1970*, still hear the plundered originals breaking through.³¹

Stockhausen’s reaction to plunderphonics is mentioned in Barry Didcock’s article “The Man Who Fell to Earth.”³² Only the name “American producer” is given for the person who contacted the composer to express to him how successful he had become by mixing Stockhausen’s work with popular music. Despite the similarity of *Opus 1970* and plunderphonics, Stockhausen responded to the producer by suggesting that it is better to

²⁸ Ibid.

²⁹ Bill Hopkins, introduction to *Stockhausen: Life and Work* by Karl Wörner (Berkeley and Los Angeles: University of California Press, 1973): 12.

³⁰ Cutler, “Plunderphonia,” 147.

³¹ Ibid., 148.

³² Barry Didcock, “The Man Who Fell to Earth,” *Herald Scotland*, March 27, 2005, <http://www.heraldscotland.com>.

make something new.

The third article from *Audio Culture* relevant to this study is Susan McClary's "Rap, Minimalism, and Structures of Time in Late Twentieth-Century Culture," in which she discusses Asian influences on Stockhausen and popular musicians. Though some classical avant-garde composers such as Stockhausen and Boulez were incorporating "gamelan-inspired textures or foregrounded recitation of Hindu mantras," the general public noticed more the Asian influence of sitars and trance-like passages in The Beatles and Led Zeppelin.³³ Both Stockhausen and popular musicians were heavily influenced by Asian music in the 1960s. Both Asian influences and electronic experimentalism reminiscent of Stockhausen can be heard on *Sgt. Pepper's Lonely Hearts Club Band* (1967). One year before this album, Stockhausen had composed *Telemusik* (1966), which included recorded sounds from all over the world, including but not limited to Japan, Vietnam, Bali, and China.³⁴ Though members of The Beatles were influenced by Asian music from other sources, they likely noticed the presence of Eastern music when listening to Stockhausen's work.

Many scholars have examined the connections between The Beatles and Stockhausen and have supported their claims with evidence such as interviews and musical analyses, and these will be acknowledged later in the chapter; however, there are articles from popular radio station websites and online newspapers that refer to Stockhausen's influence on popular musicians without providing any significant evidence to support their claims. In 2005, *Herald Scotland* journalist Barry Didcock weaves his

³³ Susan McClary, "Rap, Minimalism, and Structures of Time in Late Twentieth-Century Culture," in *Audio Culture*, ed. by Cox and Warner (New York: Continuum, 2004), 293.

³⁴ Daniel Nathan Wyman, "Karlheinz Stockhausen's 'Telemusik'" (PhD diss., University of Southern California, 1974), v.

notes with background information from an interview with the composer. Unfortunately, the background information is given without sources, and some of the information seems to be speculation. He writes that Stockhausen “has been cited as an influence by everyone from Miles Davis to Bjork, via Frank Zappa and Brian Eno,” and modern DJs and dance musicians like Aphex Twin, Didcock posits, “laud” Stockhausen. Nevertheless, in the article “Advice from Clever Children,”³⁵ Richard James (Aphex Twin) hardly “lauds” the composer when responding to Stockhausen’s criticism of his own work, stating clearly, “I don’t think I care what he thinks.”³⁶ Didcock mentions further that when Stockhausen was shown remixes of his music by the French organization Le Disque Du Centre De La Bombe, he called it “garbage.”³⁷ Later in the interview, when reminded of The Beatles citing him as an influence, Stockhausen replied that he thought that The Beatles “had the discs,” perhaps referring to vinyl records of his music.³⁸ He then refers to a missed encounter with meeting the band: “I would have liked to have met them. I was invited to by their manager. I had a few phones calls with him. We wanted to do join concerts in London, but then they went to the States. Then John Lennon was shot. So it didn’t happen.”³⁹ This article is also one of many sources claiming that Paul McCartney admired Stockhausen’s composition *Gesang der Jünglinge* and that Lennon “openly admitted” that *Hymnen* was the inspiration for “Revolution 9.”⁴⁰ McCartney’s comment about *Gesang der Jünglinge* was made in an interview with Mark Lewisohn, where he

³⁵ Dick Witts and Karlheinz Stockhausen, “Advice to Clever Children/Advice from Clever Children,” *The Wire* 141 (1995): 33-35.

³⁶ Dick Witts, “Stockhausen vs. the ‘Technocrats,’” in *Audio Culture: Readings in Modern Music*, ed. by Cox and Warner (New York: Continuum, 2004), 383.

³⁷ Barry Didcock, “The Man Who Fell to Earth,” *Herald Scotland*, March 27, 2005, <http://www.heraldscotland.com>.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

said: “There was only one Stockhausen song I liked actually! We used to get it in all interviews ‘Love Stockhausen!’. There was only one, *Gesang der Jünglinge* – ‘The Song Of The Young’ – that was the only one I ever liked! I thought most of his other stuff was too fruity.”⁴¹ However, this was a contradiction of an earlier statement in the same interview, where McCartney declared that he had been into Stockhausen in the past:

In fact I did a lot of work on the ‘Day In The Life’ crescendo because I was getting interested in *avant garde* things and I was generally the bachelor in London with the far-out interests... John would come in and go “Wow! What’ve you been doing here, putting Beethoven to a home movie?” And I’d be playing him Stockhausen. I never got *known* for being that way because John later superseded me, “Oh it must have been John who was the Stockhausen freak”. In actual fact it wasn’t, it was me and my London crowd.⁴²

The contradicting statements are cause for confusion when trying to understand the nature of Stockhausen’s influence on McCartney’s musical development. It stands to reason that McCartney was attributing Stockhausen to being an inspiration for his musical experimentation during the making of “A Day in the Life,” but as for simple enjoyment of Stockhausen’s music, McCartney was not such a fan. Music critic Alex Ross provides evidence that Stockhausen may have been influential before *Sgt. Pepper’s Lonely Hearts Club Band* (1967), the album that contains “A Day in the Life.” In his online article “The Beatles and the Avant-Garde,” Ross provides two audio clips showing similarities between *Gesang der Jünglinge* and “Tomorrow Never Knows,” a song from The Beatles previous album *Revolver* (1966).⁴³

⁴¹ Paul McCartney, interview by Mark Lewisohn, in *The Complete Beatles Recording Sessions*, (New York: Metro Books, 2013), 14-15.

⁴² *Ibid.*, 14.

⁴³ Alex Ross, “The Beatles and the Avant-Garde,” *The New Yorker*, February 23, 2010, <http://www.newyorker.com/culture/alex-ross/the-beatles-and-the-avant-garde>. Ross has also mentioned these similarities in his book *The Rest is Noise: Listening to the Twentieth Century* (New York: Farrar, Straus, and Giroux, 2007), 515.

In 1998, Markus Heuger examined interactions between Stockhausen and popular musicians such as The Beatles, Holger Czukay, Irmin Schmidt, Miles Davis, Frank Zappa, and Björk in his article “Stockhausen Goes to Town: Der öffentliche Stockhausen.”⁴⁴ Most thorough of these interactions is his investigation of Stockhausen and The Beatles, though this is likely because this connection has been documented far more than connections with other pop musicians. He references the Lewisohn interview mentioned above, as well as other interactions between the band and composer and connections found in their music. To my knowledge, this is the earliest examination of the overview of Stockhausen’s influence on popular musicians. Because the article is in German, it is evident that this topic was recognized in Germany before an English readership had taken notice.

Journalist, composer, and critic Greg Sandow used Didcock’s phrase “from Miles Davis to Bjork” as a title for his article “From Miles Davis to Bjork, They’ve Loved Stockhausen” in *The Wall Street Journal*.⁴⁵ Sandow wrote the article after Stockhausen’s death in December of 2007. He clearly borrows much of his information from Didcock’s column, mentioning again Stockhausen’s appearance on the cover of *Sgt. Pepper’s Lonely Hearts Club Band* album and his composition *Hymnen* being an inspiration for “Revolution 9.”⁴⁶ Sandow regards Miles Davis as being a Stockhausen fan, quoting him as saying “You’ve got Stockhausen now” when telling a live German audience that they should give up on Beethoven.⁴⁷ Stockhausen is given credit here as an influence for

⁴⁴ Markus Heuger, “Stockhausen Goes to Town: Der öffentliche Stockhausen,” *Neue Zeitschrift Für Musik* 159 (1998): 10-15.

⁴⁵ Greg Sandow, “From Miles Davis to Bjork, They’ve All Loved Stockhausen,” *The Wall Street Journal*, December 19, 2007, <http://www.wsj.com/articles/SB119802039672937905>.

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*

Davis's album *On the Corner*, a claim also supported by Bergstein in his article "A Reciprocal Relationship." It is when Sandow generally claims "Frank Zappa loved Stockhausen" that further supporting evidence is lacking as I will show below.

Tim Whitelaw's take on Stockhausen is similar to Sandow's in his article "Karlheinz Stockhausen: Electronic Music Pioneer" in *Sound on Sound* from 2008. He lists Björk, the Beatles, Kraftwerk, Pink Floyd, Brian Eno, Frank Zappa, David Bowie and Miles Davis as having either "noted or paid tribute to Stockhausen's influence on their work."⁴⁸ He also mentions that *Gesang der Jünglinge* was Paul McCartney's *favorite* piece of Stockhausen's, though the origin of this quote labels the piece as "the only song of his I really like."⁴⁹ Hopkins's and Cutler's idea of music becoming increasingly complex due to the gramophone (Hopkins) and playback recording availability is mentioned in Whitelaw's article as well, focusing specific on musicians of the 1970s. But Whitelaw also goes beyond playback audio and extends it to advanced recording equipment, acknowledging that these musicians not only had easy access to Stockhausen's recordings, but they also had access to similar electronic recording devices that could emulate Stockhausen's work. He writes: "By this time [1970s], of course, the liberation of electronic music was well under way; the increasing availability of commercial synthesizers and advanced recording equipment helped to deliver electronic musical creativity to a much wider constituency — who wasted no time in taking it in more readily accessible directions."⁵⁰

Other sources besides Whitelaw provided similar lists of musicians who they

⁴⁸ Tim Whitelaw, "Karlheinz Stockhausen: Electronic Music Pioneer," *Sound on Sound*, March 2008, <http://www.soundonsound.com/sos/mar08/articles/stockhausen.htm>.

⁴⁹ Paul McCartney, interview by Mark Lewisohn, in *The Complete Beatles Recording Sessions*, (New York: Metro Books, 2013 edition), 15.

⁵⁰ Tim Whitelaw, "Karlheinz Stockhausen: Electronic Music Pioneer."

claim have referenced Stockhausen as being influential to their music. A short article on the website for the New York classical music radio station WQXR stated that Stockhausen was “name checked” by The Beatles, Miles Davis, Frank Zappa, Björk, and Animal Collective; this observation, however, says nothing specifically about whether or not he was influential.⁵¹ The point of the article, authored by Amanda Angel, is to question why “Stockhausen’s music is hot” at the time of publication. She furthers her description of these “celebrity endorsements” by calling these bands and artists “fans” of Stockhausen and identifies the composer as a cult figure during his lifetime. Unfortunately, this is the extent of her mention in relation to popular music.

Though Angel, Whitelaw, Sandow, and Didcock proclaim that Frank Zappa cited Stockhausen as an influence, other sources disagree. In Ben Watson’s article “Frank Zappa as Dadaist: Recording Technology and the Power to Repeat,”⁵² the influences of Edgard Varèse and John Cage on Zappa are given more attention. Watson addresses Zappa’s awareness of Stockhausen’s “absolute music” techniques, but he insists that Zappa favored instead a “collage” approach.⁵³ The author also contrasts Stockhausen’s “score-based mathematical procedures” from his serialist era to Zappa’s “weighing [of] sonic actuality” compositional technique. More straightforward evidence of Zappa’s rejection of Stockhausen’s influence is found in David Brackett’s *The Pop, Rock, and Soul Reader: Histories and Debates*, where Zappa is bluntly quoted: “Stockhausen isn’t really an influence.”⁵⁴ Perhaps something beyond influence connected the composer to

⁵¹ Amanda Angel, “Top Five Reasons Why Stockhausen’s Music is Hot,” *Top 5 @ 105*, March 14, 2013, <http://www.wqxr.org>.

⁵² Ben Watson, “Frank Zappa as Dadaist: Recording Technology and the Power to Repeat,” *Contemporary Music Review* 15 (1996): 109-137.

⁵³ *Ibid.*, 123.

⁵⁴ David Brackett, *The Pop, Rock, and Soul Reader: Histories and Debates*, 3rd edition, (New York: Oxford University Press, 2013): 213.

Zappa as is evidenced in the liner notes Frank Zappa's 1966 album *Freak Out!*, where the Stockhausen's name is listed under the heading "These People Have Contributed Materially in Many Ways to Make Our Music What it is. Please Do Not Hold it Against Them."⁵⁵ His "contribution" is not specified, but he is listed alongside other avant-garde composers such as Varèse, Nono, Schoenberg, and Boulez. When Stockhausen was asked if he was interested in Frank Zappa in an interview for *Seconds*, he responded, "Zappa was a lost composer. He wanted to please all sides - which never works."⁵⁶

In 1968, composer and musicologist Michael Nyman attended the premiere of Stockhausen's *Aus den sieben Tagen*.⁵⁷ Three years later, he reflected upon his experience at the premiere in his article "Stockhausen – The Musician, The Machine," which was featured in *Vogue Magazine*.⁵⁸ After reminiscing about the concert, Nyman continued to discuss Stockhausen's music and philosophies and their broader significance of the time. He recognized that the composer was "idolised by pop musicians," not for his music, but instead for his "magical image as the electronic composer."⁵⁹ Nyman went further to say that Stockhausen "ha[d] never attempted a superficial irrelevant alliance with pop – were he to unleash the energy potential of pop into his own music he would rule the musical world."⁶⁰ Either this author did not know of Stockhausen's phone conversations with John Lennon in the late 1960s, or he did not count them as a move toward a true "alliance," since the two men never met in person.

⁵⁵ Frank Zappa and the Mothers of Invention, *Freak Out!*, Zappa Records ZR 3834, 2012, compact disc, liner notes.

⁵⁶ Karlheinz Stockhausen, "Karlheinz Stockhausen," interview by David Paul, *Seconds* 44: 1997.

⁵⁷ Karlheinz Stockhausen, *Aus den sieben Tagen (From the Seven Days)*, 15 text compositions for intuitive music, Universal Edition, No. 26, 1968.

⁵⁸ Michael Nyman, "Stockhausen – The Musician, The Machine," in *Michael Nyman: Collected Writings*, ed. by Pwyll ap Siôn (Surrey, England: Ashgate, 2013), ProQuest ebrary: 109.

⁵⁹ *Ibid.*, 110.

⁶⁰ *Ibid.*

Carlton J. Wilkinson expands on Stockhausen and Lennon in his 2008 essay “John Lennon’s ‘Revolution 9’,” published in *Perspectives of New Music*.⁶¹ Sources such as Greg Sandow and Barry Didcock suggest that Stockhausen (specifically his composition *Hymnen*) was directly influential on Lennon while he wrote the song “Revolution 9” which appeared on the album *The Beatles* (1968). Wilkinson, however, states that the song “cannot be adequately described as a direct descendant” of Stockhausen.⁶² Instead, Stockhausen’s “use of clear, preconceived and composer-controlled form, including time elements” and “improvisational tape loops...in massed textures...within strict parameters” were also elements found within “Revolution 9.”⁶³ Nevertheless, Wilkinson does acknowledge the likelihood that Lennon knew Stockhausen’s works *Hymnen* (1968) and *Gesang der Jünglinge* (1956), and that *Hymnen* and “Revolution 9” are alike “in several significant, if superficial respects.”⁶⁴ Further scholarship on comparison between the works exists within Mark Prendergast’s book *The Ambient Century: From Mahler to Trance – The Evolution of Sound in the Electronic Age*.⁶⁵ Prendergast posits “Lennon effectively paid his respects to Stockhausen” with “Revolution 9.”⁶⁶ Stockhausen is also quoted here, from 1980: “Lennon often used to phone me. He was particularly fond of my *Hymnen* and *Song Of The Youths* and got many things from them.”⁶⁷ Prendergast argues further that “the stylistic similarity between the 1956 work *Song Of The Youths* (*Gesang der Jünglinge*) and *Revolution 9*

⁶¹ Carlton J. Wilkinson, “John Lennon’s ‘Revolution 9’,” *Perspectives of New Music* 46 (2008), <http://www.jstor.org/stable/25652393>.

⁶² *Ibid.*, 227.

⁶³ Wilkinson, “John Lennon’s ‘Revolution 9’,” 227.

⁶⁴ *Ibid.*, 226.

⁶⁵ Mark Prendergast, *The Ambient Century: From Mahler to Trance – The Evolution of Sound in the Electronic Age* (New York: Bloomsbury, 2000).

⁶⁶ *Ibid.*, 194.

⁶⁷ *Ibid.*

was uncanny,”⁶⁸ that both works affected The Beatles, and that his “influence can be heard on the groups extraordinary single ‘Strawberry Fields Forever’...and on the 1967 album *Sgt. Pepper’s Lonely Hearts Club Band*.⁶⁹

Joanna Demers’s 2010 book *Listening Through the Noise: The Aesthetics of Experimental Electronic Music* provides insight into how the avant-garde and experimentalism relate to each other, especially as American experimentalism responded to the Darmstadt school (Stockhausen) and European avant-garde emergence of the 1950s. Demers cites Joaquim Benitez’s 1978 article “Avant-garde or Experimental? Classifying Contemporary Music” and Michael Nyman’s 1999 book *Experimental Music: Cage and Beyond* when describing experimentalism as an “alternative to avant-garde music.”⁷⁰ This is considering that experimentalism in music can be more engrained into mass culture, whereas the avant-garde “by definition (is)...alienated from mainstream society.”⁷¹ However, she continues to posit that the avant-garde must rely on the mainstream to continue its existence, an explanation that supports how Stockhausen’s music is influential to popular musicians; if it is to continue to exist, it must rely on allowing itself to be accessible to the populous. In this way, the experimental nature of some popular musicians (e.g., the Velvet Underground) can synthesize avant-gardism with its own idioms.

Demers also addresses the specialist music collective named Boomkat who released a collection of electroacoustic compositions, *14 Tracks of Early Electronic*

⁶⁸ Ibid.

⁶⁹ Ibid., 51.

⁷⁰ Joanna Demers, *Listening Through the Noise: The Aesthetics of Experimental Electronic Music* (New York: Oxford University Press, 2010): 141; Joaquim M. Benitez, “Avant-garde or Experimental? Classifying Contemporary Music,” *International Review of Aesthetics and Sociology in Music* 9 (1978): 53-77; Michael Nyman, *Experimental Music: Cage and Beyond*, 2nd edition (Cambridge, UK: Cambridge University Press, 1999).

⁷¹ Demers, *Listening Through the Noise*, 141.

Music, which includes Stockhausen's 1953 electronic composition *Studie I*. Boomkat refers to the collection as "life affirming" and inspirational for "contemporary music of all colors."⁷² There is also a reference in this section to Dick Witt's interview with Stockhausen, during which he was asked to respond to the music of such EDM composers as Aphex Twin and Scanner, and he scorns their overt use of repetitive rhythms and loops.

Stockhausen's music has had a rather grand impact upon present-day popular electronic music genres such as techno and electronica. David's 2008 dissertation "Clever Children: The Sons and Daughters of Experimental Music" explores how the "Clever Children," a collective of electronica musicians who had based their experimental compositional techniques on the works of composers like Cage, Stockhausen, and Reich, "appropriate[ed] elements of experimental music and appli[ed] these to new contexts."⁷³ The Clever Children group is comprised of musicians Howie B, DJ Spooky, Scanner, and Aphex Twin. Though his attention is focused on multiple *avant-garde* experimental and minimalist composers, Stockhausen's influence is not understated. Carter's dissertation brings to light the emphasis that Stockhausen's electronic music had on an entire collective of musicians, the Clever Children.

Stockhausen held a residency at the University of California in Davis from 1966 to 1967, and Jonathan Kramer, one of the students under Stockhausen's tutelage during this time, wrote an article in 1998 reminiscing about his experience working with the composer.⁷⁴ Though the article is about Stockhausen's teachings and behaviors while in

⁷² Ibid., 146.

⁷³ David Carter, "Clever Children: The Sons and Daughters of Experimental Music?" (PhD diss., Queensland Conservatorium Queensland University, 2008), iii.

⁷⁴ Jonathan D. Kramer, "Karlheinz in California: A Personal Reminiscence," *Perspectives of New Music* 36

California, Kramer mentions that Stockhausen's "jamming sessions with the Grateful Dead in San Francisco's Golden Gate Park are well known."⁷⁵ Unfortunately, I have been unable to find further evidence of these jamming sessions from other sources. What is known, by Stockhausen's own admission, is that members of The Grateful Dead and Jefferson Airplane attended his lectures while he was in California.⁷⁶

In *Rocking the Classics: English Progressive Rock and the Counterculture*, author Edward Macan mentions that Pink Floyd organist Rick Wright "in particular acknowledged the influence of Stockhausen" and cites Nicholas Schaffner's book *Saucerful of Secrets: The Pink Floyd Odyssey* as evidence.⁷⁷ Indeed, Schaffner mentions a time when Wright began listening to Stockhausen after he switched from guitar to keyboards,⁷⁸ and that what set Pink Floyd apart from other bands playing cover songs in pubs and parties across Britain was the "instrumental breaks, pregnant with distortion, feedback, and possibilities, during which the guitarist (increasingly abetted by the Stockhausen-influenced keyboard player) would drive his stolid little R&B band into another realm entirely."⁷⁹ Later in *Saucerful of Secrets*, music promoter Chet Helms compares Pink Floyd to the band Big Brother and the Holding Company, saying that Pink Floyd "were more influenced by the avant-garde classical composers like Stockhausen", while the [other bands] were "much more musical."⁸⁰ When Macan moves beyond Pink Floyd to the topic of university campuses in England and their role as breeding grounds

(1998): 247-261, doi: 10.2307/833582.

⁷⁵ Ibid., 257-258.

⁷⁶ Karlheinz Stockhausen, "Karlheinz Stockhausen im Interview" by De:Bug, translated by Google Translate, January 2000, <http://de-bug.de/mag/haben-sie-techno-erfunden-stockhausen-ja>; Alex Ross, *The Rest is Noise*, 516.

⁷⁷ Edward Macan, *Rocking the Classics: English Progressive Rock and the Counterculture* (New York: Oxford University Press, 1997) ProQuest ebrary, chap. 6 "Avant-garde Electronic Music."

⁷⁸ Nicholas Schaffner, *Saucerful of Secrets* (New York: Harmony Books, 1991): 25.

⁷⁹ Ibid., 27.

⁸⁰ Ibid., 50.

for progressive rock, he quotes Ian McDonald, one of the founding members of King Crimson. McDonald explains that he and other members of the Canterbury scene would “enthuse over contemporary mainstreamers (Luigi Nono, Stockhausen).”⁸¹

Bands within the German Krautrock movement have also cited influence by Stockhausen. In the article “Neu! That’s What I Call Music,” author Tim Cumming posits that bands as Neu!, Faust, Amon Düül II, Kraftwerk and Tangerine Dream not only were influenced by Stockhausen, but they also “explored the gap” between his music and post-1968 counter-culture.⁸² Kraftwerk, Can, Tangerine Dream, and others, are credited as leading proponents of “kosmische music” (i.e., Krautrock),⁸³ which is defined in *Grove Music Online* as “a fusion of Stockhausen’s avant-garde music with American pop.” Kraftwerk founding member Ralf Hütter said in an interview that growing up with different textures, such as the electronic sounds and tape machines of Stockhausen as heard through Cologne radio led to establishing more electronics in their music in 1968; however, he failed to list Stockhausen as an influence when asked directly.⁸⁴ In his collection of memoirs titled *Kraftwerk: I Was a Robot*, Wolfgang Flür, Kraftwerk’s percussionist, dubs the band the “fathers of electro pop” who created something with “millimetre precision...with the instruments of our technology-hungry generation, constructed on the drawing board from the musical inheritance of minimalists and experimentalists such as Terry Riley, Karlheinz Stockhausen, Moondog and Oskar

⁸¹ Edward Macan, *Rocking the Classics*, 147-148.

⁸² Tim Cumming, “Neu! That’s What I Call Music,” *The Guardian*, August 10, 2001, <http://www.theguardian.com/books/2001/aug/11/books.guardianreview1>.

⁸³ David Buckley, “Kraftwerk,” *Grove Music Online*, accessed February 9, 2015, <http://www.oxfordmusiconline.com/>.

⁸⁴ Ralf Hütter, interview by Jon Savage, *Redbullmusicacademy.com*, August 30, 2013, <http://www.redbullmusicacademy.com/magazine/kraftwerk-interview>.

Scala.”⁸⁵

The Krautrock band that has cited Stockhausen the most has been Can. Irmin Schmidt, one of the founding members of the band, described his and fellow member Holger Czukay’s experiences under the tutelage of Stockhausen while studying in Cologne. Both Schmidt and Czukay credit Stockhausen with teaching them to view music from an architectural perspective. “Thanks to our studies under Stockhausen, Holger and I had quite a similar understanding of music as architecture. It was a common practice in so-called ‘new music’ to create bricolages by cutting up the tape. Stockhausen encouraged us to do so, and we often reassembled at the *Studio für elektronische Musik* in Cologne.”⁸⁶ Schmidt said further than an important element of Can’s sound was that the members came from different backgrounds and forced one another to leave their comfort zones:

[T]he band was by definition a contradiction. We all agreed that we wanted to contribute to Can, but in a totally different way compared to what we’d done before. Previously, I had been a conductor and a classically trained pianist, and I was ready to end that career by starting Can. Jaki didn’t want to play free jazz anymore, he wanted to lose himself in grooves instead. Contrariness was one of the band’s driving forces. I was the one who put the band together, and I saw a high potential in a group that consisted of musicians that came from extremely different backgrounds. For me it was important to have a young rookie playing rock guitar and that he was confronted with musicians who had studied under György Ligeti and Stockhausen.⁸⁷

During their time in the Course for New Music in Cologne, Czukay and Schmidt became acquainted with Jon Hassell, a trumpet player impressed with Stockhausen’s

⁸⁵ Wolfgang Flür, *Kraftwerk: I Was a Robot*, trans. Janet Porteous (London: Sanctuary, 2000), 154.

⁸⁶ “Max Dax Interviews Irmin Schmidt,” *Electronic Beats*, October 4, 2012, <http://www.electronicbeats.net/en/features/interviews/max-dax-interviews-irmin-schmidt/>.

⁸⁷ *Ibid.*

“thoroughgoing out and out musical dedication”⁸⁸ and who later became known for his “integrated aspects of Miles Davis, Stockhausen, La Monte Young...and latter-day Hip-Hop, Trance and Trip-Hop styles.”⁸⁹ In a 2008 column in *Prospect* magazine, Brian Eno, one of the preeminent ambient music composers, noted that members of Kraftwerk, Can, and Jon Hassell were “grateful for the experience” they had under Stockhausen’s tutelage where “he encouraged rigour, discipline, and restraint—rare qualities then in popular music.”⁹⁰ Eno finds conflict in this relationship between Stockhausen’s dislike of musical repetition and his students’ positions as “masters of repetition.” Nonetheless, he contends that this does not matter in regard to Stockhausen’s role as one of the most important 20th century composers.⁹¹

Finally, the industrial music genre owes some of its development to the electronic composers of the mid-twentieth century. In his dissertation “Industrial Music for Industrial People: The History and Development of an Underground Genre,” Bret Woods posits that bands in this genre were drawn to composers like Stockhausen not for their techniques and styles, but instead to the composers’ experimentalism and drive.⁹² This observation is also redolent of Björk, which will be discussed in the third chapter. In general, Woods postulates that *avant-garde* and electronic music composers (and more specifically, Stockhausen) “paved the way” for the genre of industrial music.⁹³

⁸⁸ Prendergast, *The Ambient Century*, 152.

⁸⁹ *Ibid.*, 151.

⁹⁰ Brian Eno, “Brian Eno on Stockhausen’s Gift,” *Prospect* 142 (2008): 6.

⁹¹ *Ibid.*

⁹² Bret D. Woods, “Industrial Music for Industrial People: The History and Development of an Underground Genre” (PhD diss., Florida State University, 2007): 35. Stockhausen’s and other *avant-garde* composers’ experimentalism and drive as an influence on industrial bands are also found to be aspects of influence on Björk as well, which is discussed in the next chapter.

⁹³ *Ibid.*, 39.

Stockhausen's response to being an influence to popular musicians is worthy of mention. In his 2001 *BBC* interview, Chris Hazlewood asked him what he thought about bands listing him as an influence. In Hazlewood's opinion, bands enjoy Stockhausen's music on an aesthetic level, instead of a rigorous one. Stockhausen takes caution in his response; he says that they like the effects and unusual sounds, but they do not care for the reasons or functions of them.⁹⁴ Two exceptions to Stockhausen's careful criticism were John Lennon and Björk, two musicians who had closer ties to the composer because of their contact with him, via phone calls and interviews. Stockhausen acknowledged that they cited him as an influence, but I did not find any record of his criticism of their music. He was more explicit when asked to provide his opinions about individual works by EDM artists Aphex Twin, Scanner, Plastikman, and Daniel Pemberton for *The Wire* in 1995. Stockhausen scorned their overuse of repetition and slow melodic development, and he compared it to "someone who is stuttering all the time, and can't get the words out of his mouth."⁹⁵ He later criticized a song from each individual EDM artist, but he followed each criticism with the suggestion that the artists listen to a work of Stockhausen's. One example was his criticism of a work by Plastikman, about which Stockhausen stated:

It starts with about 30 or 40 – I don't know, I haven't counted them – fifths in parallel, always the same perfect fifths, you see, changing from one to the next, and then come in hundreds of repetitions of one small section of an African rhythm: duh-duh-dum, etc, and I think it would be helpful if he would listen to *Cycle* for percussion, which is only a 15 minute long piece of mine for a percussionist, but there he will have a hell to understand the rhythms, and I think he will get a taste for very interesting non-metric and non-periodic rhythms. I know that he wants to have a special effect in dancing bars, or wherever it is, on the public who like to dream away with such repetitions, but he should be very

⁹⁴ Stockhausen, interview by Charles Hazlewood, *BBC Music Masters: Stockhausen*, 24:40-25:57.

⁹⁵ Witts and Stockhausen, "Advice to Clever Children/Advice from Clever Children," 34.

careful, because this public will sell him out immediately for something else, if a new kind of musical drug is on the market.⁹⁶

Considering his scorn for incessant repetition, it is intriguing as to why he is dubbed by some to be the “papa of techno.”⁹⁷ Stockhausen’s criticisms arguably are rooted in a universal worry about redundancy. In Didcock’s article, he mentioned that an American producer had combined Stockhausen’s work with popular music, and it was successful with the public. Regardless of the producer’s success and an increase in Stockhausen’s public recognition, the composer was not pleased, for he said that it is always better to create something new. Didcock also provided the example of Le Disque Du Centre De La Bombe remixing Stockhausen’s music, to which the composer replied by calling it garbage. “One should not serve any existing demands, or in particular, not commercial values,” Stockhausen has said, “That would be terrible: that is selling out the music.”⁹⁸

Popular musicians from as early as the late 1960s have cited Stockhausen as being one of the key influences to their musical development. As evidence has shown, it is often Stockhausen’s electronic experimentalism that resonates with popular musicians, who appropriate his sounds and techniques into their own music. Many artists simply list his name without specifying the nature of Stockhausen’s influence on their music; nonetheless, few artists, such as John Lennon and Björk, go beyond name-dropping to exemplify the nature of his influence.

⁹⁶ Ibid.

⁹⁷ Stockhausen mentions this in his *BBC* interview, though I have not found anywhere else in the literature that he was given this title. He has, however, been listed as an influence in the development of the techno and electronica genres. For more information, see David Carter, “Clever Children: The Sons and Daughters of Experimental Music,” (PhD diss., Queensland Conservatorium Queensland University, 2008).

⁹⁸ Witts and Stockhausen, “Advice to Clever Children/Advice from Clever Children,” 34.

CHAPTER III

Björk and Stockhausen

Many popular musicians who have listed Stockhausen as an influence on their music tend to focus on his electronic music. Some of them provide no further explanation beyond naming him, lending one to believe that Stockhausen is just being “name dropped.” Distinguishing herself, Icelandic pop star Björk Guðmundsdóttir has been the most outspoken about the composer and his impact on her music. In this chapter, I will provide an overview of the evidence of Stockhausen’s influence on Björk and analyze the direction of Björk’s musical style between 1997 and 2004, the years following her interview with Stockhausen until the release of *Medúlla*. I will end the chapter with comparisons between her album *Medúlla* and Stockhausen’s work *Stimmung*. These comparisons provide new evidence to support my argument for the connections between Stockhausen and such popular musicians as addressed above, notably Björk.

3.1. Stockhausen’s Influence on Björk

Though many artists have cited Stockhausen when asked about their influences, few have been as insistent about his contribution as Björk. Not only has she mentioned him in interviews, as in many of the performers cited above, but she has also interviewed the composer herself and written articles about him.¹ In her 2008 article “Why I Love Stockhausen”, printed in *The Guardian*, Björk expressed that his published lectures about the importance of new music particularly inspired her generation.² She also credited him

¹ Karlheinz Stockhausen, interview by Björk, “Compose Yourself: Björk Meets Karlheinz Stockhausen,” *Dazed and Confused* 23 (August 1996): 42-45, <http://www.bjork.fr/Dazed-Confused-1996-Bjork>; and Björk, “Why I Love Stockhausen,” *The Guardian* (October 29, 2008), <http://www.theguardian.com/music/2008/oct/30/bjork-karlheinz-stockhausen-electronica>.

² Björk, “Why I Love Stockhausen.”

as a musical pioneer who started what she called a “new root” of music with his electronic compositions.³ In 2003, she told author Mark Pytlik for his book *Björk: Wow and Flutter*, “If I were to say who influenced me most, I would say people like Stockhausen, Kraftwerk, Brian Eno, and Mark Bell.”⁴ To articulate Stockhausen’s long-lasting impact on the music world with his electronic music, she enthusiastically wrote: “When Karlheinz harnessed electricity into sound and showed the rest of us, he sparked off a sun that is still burning and will glow for a long time.”⁵

Björk’s aforementioned interview with Stockhausen expands upon this perspective of Stockhausen as a musical pioneer. In her introduction, she revisits her experience in music school as a preteen and how even at an early age she was an outsider from her peers because of her frustration with the “school’s obsession with the past,”⁶ referring specifically to studies emphasizing the works of Beethoven and Bach. When her music teacher, Stefan Edelstein, introduced her to Stockhausen, she remembered the feeling of relief that “someone was finally speaking [her] language.”⁷ Even at an early age, she ventured to create her own avant-garde music by making “beats from a tape of her grandfather snoring and played drums to the sound of a popcorn machine.”⁸

It is an arduous task to interpret Björk’s 1996 interview with Stockhausen since many of her questions—and consequently his answers—are indirect and abstract. Polish writer Łukasz Mikołajewski suggests that there is evidence in the interview connecting Björk’s ideas to Stockhausen’s in his article “Björk: muzyka jak wielka góra,” which

³ Ibid.

⁴ Mark Pytlik, *Björk: Wow and Flutter*, Toronto, ON, CAN: ECW Press, 2003, ProQuest ebrary, 126.

⁵ Björk, “Why I Love Stockhausen.”

⁶ Karlheinz Stockhausen, “Compose Yourself: Björk Meets Karlheinz Stockhausen.”

⁷ Ibid.

⁸ Alex Ross, *Listen to This*, 147.

translates in English to “Björk: Music Like a Big Mountain.”⁹ Before the interview, Björk had already released her first two albums, *Debut* (1993) and *Post* (1995). The aim of *Debut* and *Post*, he writes, was the “creation of popular songs of the living and new.”¹⁰ After her interview with Stockhausen, Björk’s music took a different path, posits Mikołajewski. “It is interesting that after 1996, Björk’s efforts focused mainly on trying to create a new style, a new kind of sound, which surrendered to her songs.”¹¹ Her interview with Stockhausen allowed her to begin to think on a larger scale, changing her focus from her songs to her style from one album to the next.

One learns from the interview what exactly Björk’s admires about Stockhausen: it is not as much the parameters of his music (pitch, melody, etc.) that influence her as it is his views on the meaning of his music,¹² his dedication to composing, and his revolutionary work with electronic compositions. While Björk insists that she frequently feels overwhelmed that she does not have enough time to do all the things that she wants to do with her music, she learns from Stockhausen that it is natural to want to do more than what is possible. Furthermore, when Björk asks Stockhausen (in a rather circumlocutory fashion) whether it is more important to focus all of one’s work and dedication to a single discipline or to explore much more of life’s many opportunities and challenges, Stockhausen is quite concise in his answer: “I just think I couldn’t achieve

⁹ Łukasz Mikołajewski, “Björk: muzyka jak wielka góra,” translated by Google Translate. *Glissando*, no. 2, 2004, <http://www.glissando.pl/tekst/bjork-muzyka-jak-wielka-gora-2/>. This article is in Polish and quite difficult to examine. A better translation would be most desired; however, a more accurate translation beyond Google Translate is unavailable to me at this time. Mikołajewski often incorporates Björk’s quotes in his article, but rarely does he mention when and where she was quoted.

¹⁰ Ibid.

¹¹ Ibid.

¹² An example of this musical meaning is explained during his interview with Björk, when Stockhausen spoke at length about rhythm and offers reasons why he is careful when using periodic rhythm, an element he uses sparingly. He also mentions that he constantly strives for differentiation in rhythm and form to try to always find new aspects of irregularity.

anything that makes sense to myself if I don't concentrate entirely on that one thing [music]. So I miss a lot of what life has got to offer."¹³

Stockhausen's work ethic must have resonated with Björk (he mentioned in the interview that he works in his studio more than eight hours a day),¹⁴ because it is reflected in her illustrious career with its intensive professional schedule; however, the two differed when it came to where to focus their work. Stockhausen insisted that he must focus entirely on his music, yet Björk broadened her focus to include other endeavors. Over the course of her career, she has continued to experiment with new techniques in each new album. She collaborates with a diverse array of musicians, all the while composing, recording, and producing her own music, as well as touring internationally to perform her music for her fans. In 2000, she wrote and produced the score for and starred in the film *Dancer in the Dark*. She is a political activist as well, serving as a lead voice against the destruction of Iceland's wilderness for the sake of aluminum smelting as well as against the foreign corporate take-over of Iceland's economy.¹⁵ In 2011, her concept album *Biophilia* incorporated an educational program for children, exploring the connections between technology, nature, and music. Dubbed the Biophilia Educational Project, it has sparked educational workshops in the United States and several countries in Europe.¹⁶

My interpretations of Björk's connections to Stockhausen are studied through her writings about him and her interview with him, and they are mostly speculative;

¹³ Stockhausen, "Compose Yourself."

¹⁴ Ibid.

¹⁵ Lucy Siegle, "Björk: 'Even Venture Capitalists Understand our Future is in Nature,'" *The Guardian* (June 14, 2014), <http://www.theguardian.com/music/2014/jun/15/bjork-venture-capitalists-iceland-understand-future-in-nature>; Kevin E. G. Perry, "DiS Meets Björk – Part 4: Business," *Drowned in Sound* (October 6, 2011), http://drownedinsound.com/in_depth/4143722-dis-meets-bjork-part-4--business?

¹⁶ Miriam Coleman, "Björk's 'Biophilia' Heading to European Classrooms," *Rolling Stone*, June 15, 2014, <http://www.rollingstone.com/music/news/bjorks-biophilia-heading-to-european-classrooms-20140615>.

nevertheless, it is my intent to add my interpretations to the extant research to this connection, of which there is little. Not only am I adding my thoughts to interpretations such as Mikołajewski's, but I am also contributing understandings not yet acknowledged in the literature.

3.2. Analysis of Björk's Style, 1997-2004

Part of Björk's new style was an attempt to integrate nature and technology. This integration was key to the album that followed her interview with Stockhausen, *Homogenic* (1997). In an article for the *Request* magazine, written by Evelyn McDonnell, Björk regarded her change in direction from *Debut* (1993) and *Post* (1995) to *Homogenic*, as well as her vision of technological elements (in this case, instruments and beats) reflecting elements of nature (the human body):

For me, this album was going back to basics...I went down to saying, what are the three toys that are the most important when it comes to noise things? I would say the voice, because we're all experts in the human voice. I think the voice celebrates oxygen, and that's one network in our bodies. And strings have always had a really good impact on me; I think there must be something very similar in strings to our nerve system. And the beat is the pulse, which is the blood, the heart.¹⁷

The idea of the body as both nature and technology is a recurring theme in Björk's music beginning with *Homogenic*. This is especially noticeable in the music video for her single "All is Full of Love," which depicts robots falling in love. The idea continued in her next album, *Vespertine* (2001), where she described the album as "introverted" and similar to the character she had just played in the film *Dancer in the*

¹⁷ Evelyn McDonnell, "The Saga of Iceland's Fierce Faerie," *Request* (December 1997), <http://www.bjork.fr/Request-1997>.

Dark.¹⁸ The electronic “microbeats” represented what was going on inside of her body: “It’s more about what happens inside me. It’s just sort of what happens underneath my skin, or my interior, or with ‘Hidden Place’ the things that travel outside my nose and inside my mouth and outside—inside my eyes and...so it’s about how I deal with me and my body.”¹⁹

Medúlla was released in 2004, and it was an entirely different endeavor from *Vespertine*. Though both albums dealt with the human body as a thematic element, the musical production goals were on different spectrums. While *Vespertine* relied on sampling and pure electronics, the foundation of *Medúlla* was to aim for the opposite direction: the natural human voice. Her movement to focus upon a nature-technology connection reflects Stockhausen’s “pioneer” identity as the man credited with being the first to compose a work combining the two contrasting types of early electronic music. The first of these is *musique concrète*, which was made from recorded acoustic sources, later manipulated with tape splicing and other methods. The second type was *elektronische Musik*, which was music made from pure electronic signals (e.g., created by oscillators) and recorded to tape.²⁰ *Vespertine* included (but was not limited to) purely electronic and synthesized sounds, and *Medúlla* consisted almost entirely of recorded human voices, later altered electronically; they are compellingly similar to *elektronische*

¹⁸ *Dancer in the Dark*, directed by Lars von Trier, (2000, Denmark: Fine Line Features).

¹⁹ Chris Walker, *Inside Björk* (One Little Indian, OLI517, 2003), YouTube video, 39:27-39:52. <https://www.youtube.com/watch?v=qbjCqnITC7s>.

²⁰ For more information about *musique concrète* and *elektronische Musik*, see Simon Emmerson and Denis Smalley, “Electro-acoustic music,” *Grove Music Online*, accessed January 31, 2015, <http://www.oxfordmusiconline.com/>. The second section titled “Terminology” gives an in-depth description of both the German and French schools of electronic music and how the umbrella term “electro-acoustic music” was later used to describe both. A better understanding of Stockhausen’s specific contribution to electroacoustic music and further exploration of *elektronische Musik* and *musique concrète*, see Gaël Tissot, “The First Electroacoustic Pieces by Karlheinz Stockhausen: Technologies and Aesthetics,” *Organised Sound* 13, no. 3 (12, 2008): 167-175.

Musik and *musique concrète*, respectively.

Rather than a separation between the acoustic instruments and electronic or electronically powered instruments, Stockhausen saw the latter as an “exten[sion] and transform[ation] of traditional [acoustic] sounds.”²¹ Björk’s vision is similar—to embrace the extension, transformation, and integration of natural/acoustic and technology/electricity, rather than trying to keep them as separate entities. When making *Homogenic*, Björk stated: “For me, techno and nature are one and the same” and “I think it [techno] is very natural, like electricity.”²² She combined the use of producer and EDM composer Mark Bell’s complex computerized beats with the open intervals played by the Icelandic String Octet, reminiscent of folk song, especially heard in the song “Jóga” to capture this integration. When recording *Homogenic*, she also attempted to try to connect with her Icelandic roots, saying: “There was an attempt on *Homogenic* to invent Icelandic modern pop music with a volcanic beat and a very over-romantic patriotic strings.”²³ This again is evident of her nature-technology combination.

Stockhausen’s blend of electronic techniques and Björk’s combination of nature and technology in many of her songs is one comparison that connects the two musicians. The similarities between *Medúlla* and *Stimmung*, however, exist within each one’s treatment of the voice in the music and their collaborations with their performers.

3.3. *Stimmung* and *Medúlla* – Vocal Treatments

In both *Stimmung* and *Medúlla*, vocal performers manipulate their voices in order to

²¹Arnold Whittall, “Electroacoustic Music,” *The Oxford Companion to Music*, *Oxford Music Online*, accessed January 31, 2015, <http://www.oxfordmusiconline.com/>.

²²Łukasz Mikołajewski, “Björk: muzyka jak wielka góra.”

²³Walker, 28:12-28:25.

attain a multitude of different noises.²⁴ Björk expounded upon her focus on *Medúlla* during an interview with music critic Alex Ross:

The album is about voices...I want to get away from instruments and electronics, which was the world of my last album, *Vespertine*. I want to see what can be done with the entire emotional range of the human voice—a single voice, a chorus, trained voices, pop voices, folk voices, strange voices. Not just melodies but everything else, every noise that a throat makes.²⁵

Björk's explanation of *Medúlla* in her interview with Alex Ross is redolent of her explanation of *Stimmung* in her article "Why I Love Stockhausen": "...My favourite piece of his, *Stimmung*, is vocal only, using the voice as a sound and exploring the nuances of it in a microscopic way."²⁶

Music critic Michael Heumann also connected the two works when he was reminded of *Stimmung* when listening to *Medúlla*. In his review of Björk's album, Heumann explains how *Medúlla* is similar to Stockhausen's work in the respect that they both transform the human voice into something mechanistic:

Yes, this is an electronic work, even if the only instrument used on the album is the human voice. It's an electronic work in the same way that the diva's song in *The Fifth Element* and Karleintz [sic] Stockhausen's *Stimmung* are electronic works...Stockhausen used electronics to cut up human voices and to transform them into something not quite human. Björk's *Medúlla*, meanwhile, uses electronics and vocals to do something even more daring: create pop music.²⁷

²⁴ I would like to acknowledge Victoria Malawey's thorough analysis of *Medúlla* in "Temporal Process, Repetition, and Voice in Björk's 'Medulla'" (PhD diss., Indiana University, 2007), *Dissertations & Theses Full Text* (304854498). In the sixth chapter of her dissertation, she analyzes the voice, body, and persona, focusing on the songs of *Medúlla*. Though my aim was to find similarities between songs on *Medúlla* and *Stimmung*, her analysis remained an indispensable resource.

²⁵ Alex Ross, "Emotional Landscapes: Björk's Saga," in *Listen to This* (New York: Farrar, Straus and Giroux, 2010), 141.

²⁶ Björk, "Why I Love Stockhausen."

²⁷ Michael Heumann, "Björk Medulla," review of *Medúlla* by Björk, *Stylus*, September 3, 2004, <http://www.stylusmagazine.com/reviews/bjrk/medulla.htm>.

Heumann was not the only critic that connected the two works. Chris Sharp, music critic for the British magazine *The Wire*, also found similarities between the two works, particularly the vocal treatments from the track “Submarine.” He describes the song as opening with a “fluttering, wordless whimpering reminiscent of Stockhausen’s *Stimmung*.”²⁸

Medúlla echoes Stockhausen’s use of *musique concrète* with her electronic manipulations of the human voice; however, some of the vocal effects used on Björk’s album are not altered electronically, which captures the purity of the truly distinct vocal techniques. This is reminiscent of *Stimmung*, which also leaves the voices without electronic manipulation. One such shared technique between *Medúlla* and *Stimmung* can be found in Tagaq’s Inuit throat singing and Stockhausen’s use of singing on the intake of a breath.²⁹ This is particularly evident with the tracks “Ancestors,” “Pleasure is All Mine,” and “Mouth’s Cradle” on *Medúlla* and the alto part in Model 27 of *Stimmung*.³⁰ Inuit throat singing is characterized by its “short, sharp, rhythmic inhalations and exhalations of breath”³¹ and grunting and growling noises. In Model 27 of *Stimmung*, the alto singer is directed to “very continuously connect all syllables, speak inhaling.” The result yields a similar timbral effect to Tagaq’s throat singing. Overtones are often heard in throat singing as well; from Model 1 of *Stimmung*, overtones can be clearly heard in the lower voices, aided by the presence of a pure B-flat ninth chord playing softly on

²⁸ Chris Sharp, “Soundcheck – Medúlla,” *The Wire* 247 (2004): 53-55,

[http://www.exacteditions.com/read/the-wire/september-2004-\(issue-247\)-34959](http://www.exacteditions.com/read/the-wire/september-2004-(issue-247)-34959).

²⁹ *Stimmung* Paris Version, model 27, alto part, instructions “ganz kontinuierlich alle Silben verbinden, auch einatmend sprechen” translated to “very continuously connect all syllables, speak inhaling.”

³⁰ Because of different score versions of *Stimmung*, all of my references to this work will be to the Paris Version of the score. The score editions will be discussed below under the subheading “*Stimmung* and *Medúlla* – Collaborations.”

³¹ “Smithsonian Folkways: Throat Singing,” accessed February 6, 2015, <http://www.folkways.si.edu/throat-singing-unique-vocalization-three-cultures/world/music/article/smithsonian>.

loudspeakers. *Stimmung* is aptly titled, meaning both “tuning” and “atmosphere,” though it also includes the German word for voice—“Stimme.”³²

Whistling is also incorporated into both works. In Björk’s “Where is the Line,” a section occurs where Björk’s solo voice drops out and the beatboxing accompaniment becomes sparse, highlighting the heavy breathing and whistling choir (1:36-1:44).³³ In *Stimmung*, Models 2 (alto), 24 (soprano II), and 51 (tenor I) incorporate either quiet whistling or whispered whistling. Stockhausen’s directions are to “whisper whistle overtones while exhaling.”³⁴

Both Stockhausen and Björk fuse elements from other cultures in each work. Stockhausen scholar Robin Maconie wrote that *Stimmung* is a “continuation of...development into the field of timbre synthesis and the integration...of folk elements from other cultures,—speech acts, and sacred names—into the overriding harmony.”³⁵ Björk’s incorporation of her Icelandic language, Inuit throat singing, and the hip-hop culture of beatboxing, matches the “integration of folk elements from other cultures,” specifically the speech acts, present in *Stimmung*. Björk sings in her native language of Icelandic for three tracks: “Vökuró,” “Öll Birtan,” and “Miðvikudags.” One particular vocal sound incorporated in Icelandic, the alveolar trill (commonly known as the “rolled R”) is a “speech act” featured in *Stimmung*. The soprano I singer pronounces the Magic Name “Rhea” with an emphasized and elongated alveolar trill.³⁶ “Vökuró” is the most obvious example of Björk’s use of the sound, since her solo voice is in the foreground, supported only by a choir singing a harmonic accompaniment on “ooh” and “ahh” sounds

³² Wörner, *Stockhausen: Life and Work*, 64-65.

³³ Björk, *Medúlla*, “Where is the Line”.

³⁴ Stockhausen, *Stimmung*, Models 2, 24, and 51.

³⁵ Maconie, *Other Planets*, 296-297.

³⁶ Stockhausen, *Stimmung*, Model 12.

throughout the song.

Likely the most complex vocal technique on *Medúlla* is human beatboxing provided by Rahzel, Dokoko, and Shlomo. The purpose of the human beatbox is to emulate the sound of a complicated drumbeat or rhythm with the voice and mouth to the point where it no longer sounds human. The beatboxers achieve this effect in *Medúlla* noticeably on tracks 1, 3, 6, 9, 12, and 14.³⁷ Oftentimes in *Stimmung*, the timbres and syllables of the voices will combine to make a distinctly non-human sonic moment. With the help of the underlying B-flat chord to keep the intonation perfect, the human element tends to get lost.

Robin Maconie postulates that when *Stimmung* premiered in 1968, it created a greater “public awareness of voice modulation in world music.”³⁸ Specifically, he refers to the occurrence of Tibetan chant concerts and attention to and acceptance of throat music in the United States following *Stimmung*’s premiere. He further explains that “manipulation of the resonances of the voice [in the Tibetan and throat singing traditions] is often associated with closeness to nature,”³⁹ which is a statement that reminds one of Björk and *Medúlla*. Björk identifies herself as being close to nature, and attributes much of her musical upbringing to the natural influence of her native Iceland.⁴⁰ She has even noted in the documentary *Inside Björk* that she has embraced nature as her religion.⁴¹ The presence of different cultural music traditions on *Medúlla* suggests that *Stimmung* was indirectly influential on Björk, alongside her innate nature influence. Furthermore, her

³⁷ I use my first hearing of *Medúlla* years ago as evidence of the noticeability of the loss of the human element. I was not aware of the concept of the album being mostly vocal, and I initially thought that much of the beatboxing accompaniment was electronic.

³⁸ Maconie, *Other Planets*, 300.

³⁹ *Ibid.*, 300.

⁴⁰ Walker, 2:35-3:39.

⁴¹ *Ibid.*, 31:44-31:57.

2008 article naming *Stimmung* as her favorite Stockhausen work (as well as her description of it, which made it sound much like the concept of *Medúlla*) strongly suggests that the composition was directly influential.

3.4. *Stimmung* and *Medúlla* – Collaborations

Björk collaborated with many musicians for *Medúlla* in order to capture the lifeblood of the album. This included Inuit throat singer Tonya Tagaq, beatboxers Rahzel, Shlomo, and Dokaka, singers Robert Wyatt and Mike Patton, The Icelandic Choir, and “human trombone” Henry Purnhagen. A documentary of the making of *Medúlla*, titled *Björk: Inner or Deep Part of an Animal or Plant Structure* (which is the definition of the word *Medúlla*), was released immediately after the album, and it depicts these collaborations during the making of the album. Björk is filmed showing and explaining the sounds she wants represented on the album to her collaborators; she is portrayed as an easy-going musician who is excited to hear what her fellow vocalists are able to contribute. An example of this occurs early in the documentary, when Björk is describing the vocal sound she wants by showing Tagaq an electronic version on her computer.⁴² Tagaq is understanding of Björk’s vision and is able to imitate what Björk wants while simultaneously adding her own individuality to the sound, and this is shown during Tagaq’s recording of “Ancestors” (2004).⁴³ Her collaborations with Rahzel,⁴⁴ Mike Patton, the Icelandic Choir, Dokaka, and Shlomo are also featured. While observing Björk work with these musicians, it is clear that she wants them to have the freedom to

⁴² Ragnheiður Gestsdóttir, dir., *The Inner or Deep Part of an Animal or Plant Structure*, (Wellhart/One Little Indian. 2004), YouTube video, 8:09-8:39, https://www.youtube.com/watch?v=ZEZeBB_SHWo.

⁴³ *Ibid.*, 9:34-10:26.

⁴⁴ *Ibid.*, 12:37-15:44 & 29:14-30:53 (Rahzel), 17:22-18:10 & 27:54-28:15 & 35:50-38:01 (Mike Patton), 21:34-22:22 (Choir), 31:53-33:15 (Dokaka), 39:19-40:45 (Shlomo).

contribute their individual talents, rather than give them specific directions.

Stockhausen's allowance of performer freedom was similar with *Stimmung*, which was a key aspect of his original version of the work.

Stockhausen's first version of *Stimmung* was published as the Universal Edition (14805) in 1969, and it is number 24 in his complete list of works.⁴⁵ Its original conception incorporated an incredible amount of performer freedom. There were fifty-one "models," and each of the six singers had their own part in each model. The first edition had each model printed on separate sheets, and the performers were meant to cut and reassemble the models to create their own versions within a "fixed harmonic plan."⁴⁶ The group who premiered the work in 1968, Collegium Vocale Köln, created what was later dubbed the Paris Version and continued to use that version for their some three hundred performances. Stockhausen transcribed this performance and released it as the Paris Version of *Stimmung* (Universal Edition 14737); its number in Stockhausen's catalog is 24½. The Paris Version score was bound and acted as a performance score, which limited the original intended freedoms for performers; fundamentally, the Paris Version was a transcription from the premiere performance. In the preface to the Paris Version, Stockhausen insists that he "abandoned an attempt to sing a free version based on a random order of the models...due to the insufficient coherence and to the imbalance of such a version."⁴⁷ In 1977, the British contemporary vocal ensemble Singcircle created a version of their own, the Singcircle Version, recorded in 1983.⁴⁸ Thirty years later, the

⁴⁵ "Karlheinz Stockhausen Complete List of Works,"

http://www.karlheinzstockhausen.org/complete_list_of_works_english.htm.

⁴⁶ Simon Emmerson, review of "'*Stimmung*: Paris Version' by Karlheinz Stockhausen," *Music & Letters* 66, no. 3 (July 1985): 305, <http://www.jstor.org/stable/854615>.

⁴⁷ *Stimmung* score Paris version, x.

⁴⁸ Karlheinz Stockhausen, *Stimmung (Singcircle Version)*, Singcircle. Gregory Rose. Hyperion UK CDA66115, 1987. compact disc. Originally recorded in 1983.

Theater of Voices (under the direction of former Singcircle member Paul Hillier) concocted their Copenhagen Version. These three versions of *Stimmung* are the only successfully recorded performances to date, though the different versions are evidence that Stockhausen's original intent for performer freedom is not entirely absent.

It is unknown which version of *Stimmung* Björk named as her favorite, or even if she knew the original meaning of the work. But even listening to a recording without viewing the score, one can hear the intricacies and subtle changes that are obviously due to the performers' choices. For *Medúlla*, Björk had a vision for how she wanted her songs to sound, a similarity to Stockhausen and his conception of *Stimmung*, but part of the essence of both works is performer freedom and individuality, as well as the co-existence and functionality of the different individualities. *Stimmung* is an appropriate example of the importance of being “in tune” with fellow performers to create a successful collaborative performance.

Little research has been done connecting Björk to Stockhausen, and what has been done is speculative at best. It has been my intent not only to add upon the existing speculations and research of others such as Łukasz Mikołajewski, but also to contribute my own findings and interpretations of these connections. I attempted to reach out to Björk for a brief interview, but I received no response. Though her interview with the composer was nine years ago, I came across a Twitter post by Kickstarter in January of this year 2015, recollecting “that time that Björk interviewed Karlheinz Stockhausen” (Figure 1), providing new evidence that the connection between the two musicians remains discursively present.



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10:35 AM - 23 Jan 2015

Figure 1. 2015 Twitter post about Björk’s interview with Stockhausen.

CHAPTER IV

Conclusions

When beginning my research for this thesis, I anticipated finding a significant amount of evidence supporting my argument for Stockhausen's influence upon popular music. What I did find were many secondary sources, at most merely mentioning Stockhausen's name when regarding popular music. I uncovered a few articles in German discussing Stockhausen's influence on popular musicians; nevertheless, I am able to offer the first thorough examination of this topic in English.

When considering the nature of Stockhausen's influence on pop music, my findings concur with those who have also studied this topic. With some exceptions, it is mostly Stockhausen's electronic music that has been most effective. The exception is with Björk, who, as I have argued above, is also inspired by Stockhausen's dedication to his art and his endearing work ethic; but when most of the pop musicians referenced in this thesis were asked about Stockhausen and his influences on their music, they primarily referred to his electronic compositions.

The significance of this thesis is two-fold: first, providing a thorough and updated overview of Stockhausen's influence on popular music, and, second, focusing my lens on Björk, who has been the most candid about Stockhausen's influence on her music. Despite her repeated references to Stockhausen's music and personality, the connection between the two had yet to be thoroughly examined. To my knowledge, my comparative study of *Medúlla* and his *Stimmung* is the first look at the similarities between the two.

My analysis of the Björk/Stockhausen connections could be used for further research on this topic. For example, one could analyze the influence of Stockhausen in

her other albums, such as *Vespertine* or *Homogenic*, but the framework could be applied to finding influence within the music of other popular musicians as well. A broad overview of the impact of Stockhausen's electronic music in the Krautrock genre has been well documented, but finding specific electronic devices within particular works in Krautrock bands would be most beneficial to the discipline. Because Holger Czukay and Irmin Schmidt were students of Stockhausen, inspecting their later songs for remnants of Stockhausen techniques they might have learned while under the composer's tutelage would allow for a deeper understanding of the specific Stockhausen electronic techniques that came to be so influential in Krautrock. These findings, especially with the inclusion of transcriptions, could also further explain why Stockhausen is dubbed the "Father of Techno" in some circles.

The expansive bibliography listed on Stockhausen's official website include few sources dedicated to popular music, and most are in German. While my thesis directly addresses the need for more research for Stockhausen's influence on popular music for the English readership, my suggestions for future research include more in-depth analyses of specific works, historical timelines, and transcriptions. I chose a non-electronic work by Stockhausen to use as comparison because I heard and saw connections that had not yet been referenced; nevertheless, there are multiple angles and perspectives not yet fully researched. Björk continues to grow in popularity in the pop world, and with this popularity, potentially more research and attention will focus on her and her music. The use of electronics in pop music has also been increasing in prevalence, and these artists have Stockhausen to thank for the use of this medium. Even though Stockhausen has since passed, his music is still well ahead of its time, and it continues to resonate with

popular musicians to this day. The significance of Stockhausen's impact on the popular musical world should not be understated, and it is worthy of more attention in popular music study. The deeper understanding of Stockhausen's influence on popular musicians provided in this thesis is hoped to spur other writers to look at this influence and continue researching in order to discover more in-depth connections between the two.

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