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# The Musical Complexity of The Beatles through their Career

A music analysis of melody and harmony of The Beatles' albums *Please Please Me* (1963) and *Abbey Road* (1969)

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BACHELOR THESIS

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## INTRODUCTION

There was always music in my house growing up, especially from the period in which my parents grew up, the sixties and seventies. So, my love for the music of The Beatles began at a young age and never left. Since I make music too, I also pay attention to the way the songs are built and played. This is why, for this thesis, I chose to listen even more closely and actually analyse some of the songs on complexity. In this thesis, that is what I am going to do for the albums *Please Please Me* and *Abbey Road*.

### INTRODUCTION OF RESEARCH QUESTION

The music of The Beatles has often been analysed before. The focus in these books and articles has been mainly on their oeuvre in total or was focussed on one specific album. However, with my thesis I would like to address the difference between the first and last recorded album, since I think this is a new angle. By looking at this difference I want to research the progress in the complexity of the music. I think it is important to research this because I feel like the statement “The Beatles became more and more complex” is an assumption that people quickly make, and I want to research if this is true. I want to research this with paying special attention to the harmonies and melodies, since I think these are the most important parts of music where complexity – or the lack there of – can be found. Therefore, my research question is “How does the musical complexity, especially in the fields of melody and harmony, of The Beatles album *Please Please Me* (1963) compare with *Abbey Road* (1969)?” This question is a question of comparison and will be testable and operationalized because the theoretical frame of this thesis will make clear why a melody or harmony is complex. The albums are primary sources and widely available, so any other researcher can perform the same analysis. This research question leads to two sub questions. The first sub question is: “How are the melodies in both the albums constructed?” and the second question is: “How are the harmonies in both the albums constructed?”. I am limiting my research to analysing only the melodies and harmonies in the

songs. By analysing these two components I want to discover the changes in complexity in the music of The Beatles during their career.

## LITERATURE REVIEW

Robert Witkin in *Adorno on Popular Culture* says that Adorno says that popular music is not worth analysing, since it is not related to context in any way. He says that when a detail is taken out of context, “the interrelationship among the elements or the relationship of the elements to the whole would unaffected” (100). However, while it might not be related to the context, popular music is still interesting to analyse based on its musical qualities. Adorno says that these qualities are all standard and the same in popular music. He says that popular music is more or less a mechanical arrangement of effects (102). While this can be true, in this analysis I am researching the complexity of melody and harmony. So, I am specifically not looking at the political context during the time The Beatles wrote their music, but at the actual music they were making.

The primary resources I use for this thesis are the two albums of The Beatles. The secondary resources are all found in the University Library or the online library. These resources will provide the basis to analyse the melody and harmony, but they also explain why these are complex, so an answer to the main question can be formulated. Other sources provide theory about melody and harmony, or about the music of The Beatles.

The two components melody and harmony are part of the actual music analysis, where melody is the horizontal aspect of music and harmony the vertical (Charlton 10). To research how the complexity of the melody and harmony have increased, it is important to find out what makes melodies and harmonies complex. Katherine Charlton’s *Experience Music!* provides clear chapters on both the elements of melody and harmony. Charlton describes that the way the phrases are constructed, in combination with the pitch of the phrases makes a melody

complex. An analysis of the songs of both the albums and comparing them with this theory can lead to conclusions about the complexity of the melodies. The same goes for the harmonies. Charlton explains the different components of harmony, such as chord progression, consonance, and dissonance (10). Analysing how these concepts are used in both the albums can also determine the extent to which the albums differ in complexity. In addition to this, *Music Theory Secrets* by Coppenbarger, *Thinking About Harmony* by Damschroder and *Teaching Music Through Composition* by Freedman provide additional theory about melody and harmony. Both these books are written in an explicit way and are clearly structured.

The book *The Cambridge Companion to The Beatles* edited by Kenneth Womack provides different essays in which background, works, history and influence are discussed. Part II of this book includes among other subjects a theoretical analysis of phrase rhythm, which can be helpful in the analysis I am doing in this thesis. Another important book by Womack is *Solid State: The Story of "Abbey Road" and the End of the Beatles*. This book tells the complete story of the making of *Abbey Road* in detail. In addition to this, I consult different books and articles to help me interpret the results. Articles related to The Beatles are "You Can't Do That: The Beatles, Artistic Freedom and Censorship" by Cloonan, "From 'White Christmas' to *Sgt. Pepper*" by Galenson, "Beethoven, Tristan, and The Beatles" by Gauldin, "The Balled Style in the Early Music of the Beatles" by O'Grady and *Please Please Me: Sixties British Pop, Inside Out* by Thompson. All these sources provide analysed information about The Beatles in general, the albums or the songs in specific. In combination with the sources that analyse melody and harmony, this provides the information to interpret the results. The sources that analyse melody and harmony are "A Corpus Analysis of Rock Harmony" by De Clercq and Temperley, "Musical Expression of Emotions" by Juslin and Lindström and "The Melodic-Harmonic 'Divorce' in Rock" by Temperley.

## METHOD

There are different methods for analysing melodies and harmonies, but all the methods are formal analyses of sound. For the melodies I will analyse the key, scale, key transitions, and form. The harmonies will be analysed according to the chord progression. Chord progression is the way chords follow each other up. For this chapter I will write out the chords and analyse the progression. Important here is that the melody in *Abbey Road* is broken up, and the songs are seen as individual songs. When everything is written out, I will compare it to the theories about the complexity of harmony and melody. These theories will be given at the start of each chapter. This method suits the research question since these are the two topics of research. By using this method with this object, I can be specific in what I want to analyse and not lose myself in all the elements of the song

## CHAPTER OVERVIEW

There are three following chapters in this thesis: a chapter about melody, one about harmony and the conclusion. The melody chapter starts with an overview of the theory, after which both albums will be analysed on their melodies according to the method as described earlier. The same will happen in the second chapter, but then for harmony. The conclusion will sum up the main points and provide an answer to the main question. In the two appendixes the tables with the results are stated.

## CHAPTER 1: Analysis of Melody in both albums

In this chapter the first sub question will be answered: “How are the melodies in both the albums built?”. A theoretical framework will give background information on what a melody is, and it will provide the elements with which the analysis will take place. When these elements are clear, the analysis will take place and after that a paragraph about the results will follow. In this paragraph the results of the analysis will be written out, but this data will not be criticized yet. After the results paragraph, a conclusion for this chapter will follow, which will answer the sub question given at the beginning of this paragraph.

### THEORETICAL FRAME

Before the analysis takes place, it is important to find out what the key elements of melody are. The first thing that determines the melody is the pitch, which is the highness or lowness of a tone or note (Charlton 4). Charlton defines melody as “a series of notes that add up to a recognisable whole” (9). Melodies can be broken up into different parts, for example a phrase. When a phrase ends with a “sense of finality” (Charlton 9), it is called a cadence. And if the end of the phrase sounds incomplete, it is called an incomplete cadence (Charlton 9). Melodies become more complicated when there are phrases of different lengths or different pitch levels. The latter is called a sequence. The melody can also contain a theme: “an important and returning melody” (Charlton 15), which can be stated at the beginning of a piece and then restated later in the music (Charlton 9). Melody is the horizontal aspect of music (Charlton 10).

Tonality is a fundamental part of Western music. As Carlton describes it: “Tonal music is characterised by the presence of the tonic, the central note around which a specific musical composition is organised” (12). The tonal functions will be further discussed in the chapter on harmony, but for now it is important to know that the tonic determines the key of the song: when the tonic is C, the melody is in the key of C. If the tonic is in C, the melody uses the notes

from C to C, which is the scale of C major. Another type of scale is minor. Whether a scale is in major or minor is determined by the distance between the steps of notes. This can either be a whole or a half step, for a major scale it is w-w-h-w-w-w-h (w=whole; h=half) and for a minor scale it is w-h-w-w-h-w-w. A minor scale can be described as sad in relation to the happier sounding major scale (Charlton 13). Because of this distance between steps, it is sometimes necessary to raise or lower a note. To raise a note, a sharp (#) is added, for example a C# is a C sharp, which is half a step higher than C. To lower a note, the note is flattened, for example D $\flat$  is a D flat, which is half a step lower than D (Coppenger 22). It is also possible for a key to shift to another key in the same song, this is called a modulation (Charlton 13).

The total structure of melody in a song is called form (Charlton 12). There are many different forms in music, but the two-part form, binary, and the three-part form, ternary, are the most common. These parts are shown by using letters. For the binary form this could be something like AB, or a combination: AAB, AAB or ABB, where the same letter stands for repeating the same melody. For the ternary form there is often a repetition of a part, with a slight variation, which is noted as A'. Examples here are ABA', ABBA', etc. (Charlton 16). If every verse uses the same music, but different text it is called "strophic form", if each verse has new music, it is called a "through-composed" form (Coppenger 113). Coppenger describes another form, called rondo form: "The rondo form consists of a theme that keeps returning with different melodic material in between, diagrammed as ABABA." (113).

## ANALYSIS AND RESULTS

In the last paragraph the different elements of melody are discussed. To analyse the songs in a consistent way there are four categories that will be analysed. First the key and scale of the song will be analysed, also with paying attention to possible key transitions. Last, the form of the song will be analysed. Charlton states that the way phrases are built, in combination with the

pitches of the phrases is what makes a melody complex. In relation with this and for the purpose of drawing a conclusion, this thesis adheres to the fact that a melody therefore is complex if it has an uncommon key and scale, if there are key transitions and if the form is uncommon. To analyse the songs, first the key and the scale are written out. These are then placed in a table that can be found in appendix 1. After that, the key transitions are noted, and last the form is analysed. All this information is placed in one table in the appendix. In this table all the elements of the first album, *Please Please Me*, are written down, then the second album, *Abbey Road*, is written down. The table first shows the key and the scale.

What stands out is that almost half of the album *Please Please Me* is written in E major key, six songs. An important fact here is that in 1950, the emerge of rock and roll separated popular music from musical comedies. Yet, the experimental nature of popular songwriting did not change in the early years of rock and roll, as professional songwriters continued to use vernacular language and simple images to treat common ideas and emotions (Galenson 20). But Miller observed: in the early Sixties, it was customary for rock and roll acts to record songs written by somebody else. That, after all, is how Elvis Presley had done it (qtd. in Galenson 20). So, while it was not unique that The Beatles recorded covers, it needs to have the side note that on these covers, they did not choose their own chords. So, this needs to be taken into consideration for the results. The covers are “Chains”, “Boys”, “Anna (Go To Him)”, “Baby It’s You”, “A Taste Of Honey” and “Twist And Shout” (Zolten 38). While they used covers on *Please Please Me*, by their third album *A Hard Day’s Night* they were “writing the whole thing themselves” (Cloonan 128). Cloonan also says that writing their own work resulted in that from *Sgt. Pepper* onwards their later work became inferior to their earlier work, since that had been produced under much stricter conditions (129).

The Beatles use the D major scale three times, G major twice and C major, B $\flat$  major and F $\sharp$  minor once. Interesting is that none of the songs use a key transition. The Beatles have

used only one minor key on an album with fourteen songs, so only seven percent of songs on the album is in a minor key. On the second album, *Abbey Road*, only three songs use the E major key. There is more variety in this album, but the most dominant keys used are C major and A major, these are both used four times. D major is used three times, and D minor, A minor and C# minor are all used once. Again, there are very few minor keys used on this album, only three out of seventeen. This is seventeen percent of the album. The song written in C# minor is "Because". Paul McCartney commented on this that he was influenced by Beethoven's "Moonlight Sonata" (Gauldin 151). An interesting difference between the first and second album is that the second album does contain two songs with key changes. The second song on the second album, "Something", changes the key to A major in the bridge. At the end of the bridge the song returns to the key of C. From "She Came In Through The Bathroom Window" on, the C major increases in importance, as "Golden Slumbers" uses the circle of 5ths, but in the key of C (Gauldin 151). In retrospect, "Golden Slumbers" symbolically represents The Beatles' "poignant Abschied to the 1960s" (Gauldin 151). The second song with key transitions is "You Never Give Me Your Money". This song has two transitions: first from A major to C major and then from C major to B $\flat$  major it then goes back to C major and the song finishes in A major. Gauldin says "in comparison to most rock albums of that period, the tonal organisation of the second side of *Abbey Road* is nothing less than astounding" (151).

When it comes to form, there is one thing that stands out from the beginning for both albums: The Beatles were not repetitive in their form choices. Almost every song form is different on both albums. The first album, *Please Please Me*, has eight songs that only use A, B or A'. The other six songs also include a C part. There is a great deal of repetition in the form, for example "I Saw Her Standing There" consists of: AB-AB-CAB-CAB. Another example of repetition in form is in "Ask Me Why", which consists of: AABA'-AA'BA (rondo form). This is not an exact repetition, but it relies on the same structure as the first part, with a small change.

Songs that do not use this repetition are: “Misery” (A’AABABAA’; rondo form), “Do You Want To Know A Secret” (BAACA) and “A Taste Of Honey” (BABCABC).

The second album, *Abbey Road*, does not always stop at an A, B, or C part, but in one song even adds a D and an E part. This is in “You Never Give Me Your Money”. This album has songs with (almost) exact repetition, a little bit of repetition, only one repeating part and no repetition at all. An example of the latter is “The End”, which consist of A-B-C. The songs that only have one repeating part, sometimes with a little bit of variation, are: “Mean Mr Mustard” (AA), “Polythene Pam” (AA), “Golden Slumbers” (AA’A) and “Her Majesty” (AA’A). And last the songs with perfect repetition: “Something” (AB-AB-C-AB), “Maxwell’s Silver Hammer” (AABC-AABC-AABC), “Octopus’s Garden” (ABA’-ABA’-ABA’). Gauldin also investigated *Abbey Road* in the article “Beethoven, Tristan, and The Beatles” on key, form, tempo, and text synopsis. He says that, while the latter is speculative, “some sense of narrative continuity seems to emerge, perhaps making this one of the first instances of a ‘rock song cycle’” (149). So, he sees a connection between the songs on *Abbey Road*.

## CONCLUSION

Only on the first album (*Please Please Me*) there are two scales that are slightly more uncommon: the B $\flat$  and the F $\sharp$ m. And only on the second album (*Abbey Road*) there are key transitions in two songs. When it comes to form, many of the songs on *Please Please Me* use a repetitive form with an A, B and sometimes an A’ part. The songs on *Abbey Road* have more variation. This album also has songs that only repeat one part or have no repetition at all, next to songs that have perfect repetition or a little bit of repetition.

## CHAPTER 2: Analysis of Harmony in both albums

The previous chapter answered the first sub question. In this chapter the second sub question will be answered: “How are the harmonies in both albums built?”. To analyse this, it is important to research the background information. This will be provided in a theoretical framework. From this framework the elements for the analysis will be made clear. In the next paragraph the analysis and results of this analysis will be stated.

### THEORETICAL FRAME

As described in the previous chapter, melody is horizontal, and harmony is vertical. This refers to the fact that harmony involves notes sounding at the same time (Charlton 10). An important aspect of harmony is interval, which is the distance between the notes that are sounded together (Charlton 10). Charlton defines harmony therefore as: “a composite sound made up of two or more notes of different pitches that are played or sung simultaneously” (10).

The degrees of a scale influence the way in which a harmony is formed. The tonic note is the first scale degree. As described in the chapter on melody, the tonic determines the scale of the song. The tonic for C major is therefore C. The second degree is called the supertonic, which is one degree above tonic. For the scale of C major, D is the super tonic. The third degree is called the mediant (in the scale of C major: E). This note is halfway between tonic and dominant and therefore also the middle of the triad (which will be discussed later in this chapter). The fourth degree is called the subdominant (in the scale of C major: F). The fifth degree is dominant, the G in C major. This is often seen as the most important degree after tonic. When C-G tones are played, the listener longs for the resolution to C again. Or, in the terms used in this paragraph, when the tonic moves to the dominant, it longs for a resolution back to tonic. After the dominant, the sixth degree is the submediant (in the scale of C major: A). The submediant tone is also the tonic key of the relevant minor scale of the major scale (C

major and A minor). The seventh degree is the leading tone, because the seventh degree leads to the tonic (in the scale of C major: B) (Coppenbarger 50). Each of these degrees can also form a chord; for example, the tonic in C major is the C major chord: C-E-G and the dominant is the G major chord: G-B-D. For major keys, the numbering is as follows: I, ii, iii, IV, V, vi, vii\*. The lower-case letters form a minor chord and the \* is a diminished chord (Coppenbarger 68). For a minor chord, the numbering is as follows: i, ii\*, III, iv, v, VI, VII (Coppenbarger 69).

These chords are groups of notes played together to form the harmony. A series of chords is called a “chord progression”. The simplest chord is the triad, which consists of three notes that are usually spaced one note apart. As described before, the first note of any scale is called the tonic note, and therefore the triad built on the notes beginning with this tonic tone is called the tonic chord. This chord sounds very stable and is “traditionally played at the end of a musical composition in order to supply a sense of conclusion to the harmonic progression.” (Charlton 10). An interesting part of chords is how they can sound the same, but are named different, or can look the same, but sound different. Looking at the pitches C, Em, and G and their chords (C: C-E-G, Em: E-G-B, G: G-B-D), Johann Philipp Kirnberger asserts that “these three consonant chords are really just three different representations of one and the same chords, the perfect triad” (qtd. in Damschroder 1).

To analyse chord progression, it is valuable to look at the most basic triads. These are formed from the first degree of the scale (the I or tonic chord), the fourth degree of the scale (the IV chord) and the fifth degree of the scale (the V chord). Looking at the scale of C major (C-D-E-F-G-A-B-C), C is the tonic, so the first chord, the I chord, is C major: C-E-G. The fourth chord is the F chord: F-A-C and the fifth is the G chord: G-B-D. The most common progressions with these three chords are: I, IV, V, I; I, V, IV, V; or V, I, IV, V (Freedman 172).

The quality of a harmony is determined by its degree of consonance and dissonance. Charlton describes consonance as: “a combination of notes that is considered stable and without

tension” (10) and dissonance as: “a combination of notes that is considered unstable and tense” (10). When a dissonance chord moves to a consonance, this is often called “resolution” (10). According to Coppenbarger consonant intervals are major and minor thirds, sixths, perfect fourth and fifths and any other interval that sounds like this, even if it is spelled different (83). Dissonant intervals are major and minor seconds, sevenths and any other interval that sounds like this (Coppenbarger 83).

## ANALYSIS AND RESULTS

To analyse the harmony on the two albums, two different elements are analysed: the complexity of the chord progression and the presence of consonance and dissonance. For both these elements the first course of action is to determine the tonic of the song and therefore the tonic chord, this is taken from the key analysed in the chapter about melody. Then the other chords matching the tonic are written out. In the theoretical frame it was made clear that there are common chord progressions made up from the first, fourth and fifth chords. The extent to which songs differ from these basic progressions determines their complexity regarding the chord progression. The theoretical frame explains which chords are seen as dissonant. The harmony is considered complex if there are more dissonant chords and if the dissonant chords do not get resolved into a consonant chord.

The results are put in a table, which is in appendix 2. In this table the characteristics of harmony are displayed. First all the elements of the first album, *Please Please Me*, are written down, then the second album, *Abbey Road*, is presented.

The table shows the degree of the scale and the pitches that belong to the scale. In the last column the chord progressions are written down, the numbers relate to the form of the song as discussed in the chapter about melody. The first thing that becomes noticeably clear through this analysis is that The Beatles did not shy away from using the seventh chord on both albums.

The chord progressions of songs on *Please Please Me* are similar to each other. There are four songs that use a standard progression by using the I, IV and V chord. These are “Chains”, “Boys”, “Love Me Do”, and “Twist And Shout”. Three of these four songs however, as seen in chapter 1, are not originals by The Beatles, they are covers of American rock ‘n roll B-sides (Zolten 38).

The most common chord added is the sixth chord, or the submediant. This is used in seven other songs. Next to the songs that only use the standard progression, there are only two songs that only use the chords that appear in their scale: “Misery” and “Baby it’s You”. The other songs use up to six chords that do not belong in the scale. The song that uses six chords that do not belong in the scale is “Do You Want To Know A Secret”. O’Grady says that this song is modelled harmonically after Tony Sheridan’s “Why” (224). He also says that The Beatles wrote in three different styles: pop/rock, of which the song “Please Please Me” is an example, since it contains a “melody that is juxtaposed with the reiteration of the tonic” (223). The second category is blues/rock, of which “I Saw Her Standing There” is an example. The Beatles wrote few original songs in the blues/rock genre (O’Grady 223). Middleton says that blues melody is harmonically conscious to the extent that it usually fits the chord when it is first sounded, but otherwise it is generally independently inclined (qtd. in Temperley 329). He adds that this is a tendency that can be found in rock too, particularly in the early music of the Beatles (qtd. in Temperley 329). Another song that is highly influenced by other artists is “Please Please Me”. Thompson says that this song is a combination of musical influences from Bing Crosby’s “Please” (recorded in 1940 and a favourite of Lennon’s mother) to Roy Orbison’s “Only The Lonely”, with perhaps a touch of the Shirelles (270).

When it comes to dissonant chords, seven songs do not use any. These are again the four songs that use the standard progression, “Baby It’s You”, “There’s A Place” and “Twist And Shout”. Two songs use one dissonant chord, three songs use two. In the songs that use one or

two dissonant chords, these chords all resolve into a consonant chord. “Ask Me Why” uses seven dissonant chords, of which six develop into a consonant chord. “Do You Want To Know A Secret” uses 21 dissonant chords, of which only eleven develop into consonant chords.

None of the songs on *Abbey Road* use a standard progression. This might be because during a few years in the middle of the 1960s, popular songwriting was transformed from an experimental to a conceptual art (Galenson 20). This gave The Beatles more and more freedom to write their own material. And according to Miller, before, rock and roll music had been primarily been a music of revelry. But under the combined influence of marijuana and Bob Dylan, the Beatles would turn it into something else again: a music of introspective self-absorption, a medium fit for communicating autobiographical intimacies, not to dance but to listen (qtd. in Galenson 20). On *Abbey Road*, six songs use only the I, IV, V chords and chords outside the scale. Again, the chords that are used besides the I, IV and V are the sixth and second. On this album, there are only two songs that only use chords in the scale they are written in: “Octopus’ Garden” and “Carry That Weight”. There are six songs that use four, five, or six chords that do not appear in the scale. The other songs use one, two or three chords that do not appear. The dissonant chords for *Abbey Road* can go up to 48 chords (“You Never Give Me Your Money”), and there is only one song that does not use them at all: “Octopus’ Garden”. There are only three songs in which the dissonant chords all get resolved into a consonant chord. These songs are “Oh Darling”, “Golden Slumbers” and “Carry That Weight”. For “You Never Give Me Your Money” only ten dissonant chords resolve into a consonant chord. “Golden Slumbers” was inspired by Golden Slumbers by a poem by Thomas Dekker. McCartney said “I liked the words so much, I thought it was very restful, a very beautiful lullaby, but I couldn’t read the melody, not being able to read music” (Womack 108). So he took the words and wrote his own music (Womack 108). Zolten describes “Something” as “a gorgeous love song of unusual texture and structure” (59). That Zolten describes this song in that way can be explained

by the way the song was “produced” by its technical compositions. This can also be seen in the way that the song uses fourteen dissonant chords and only five of those get resolved. Another explanation can be that the slow tempo, low pitch, and small intervals that this song uses are connected to the emotions of sadness and tenderness (Juslin and Lindström 336). George Martin, when asked about “Strawberry Fields Forever” a Beatle song on *Sgt. Pepper’s Lonely Hearts Club Band* that if Paul McCartney had learned music properly, that that might have inhibited him. The freedom McCartney could experience without the proper knowledge of music technique was a gift (Galenson 21). This could be an explanation why some of the songs have unique chord structures. Another explanation for this could be about what Moore argues. He says that harmony in rock is frequently non-functional, in the sense that chords often do not evoke strong expectations for specific continuations (qtd. in De Clercq and Temperley 48). In addition to this, De Clercq and Temperley say that it is often difficult to categorise rock songs in the common-practice tonal systems of major or minor. Many songs adhere to other modes: not just minor or major but for example Mixolydian (55).

## CONCLUSION

When it comes to chord progression, *Please Please Me* has four songs that use the standard progression and *Abbey Road* has none. On both the albums, the most common chord added is the sixth chord. On *Please Please Me*, seven songs did not use any dissonant chords. While on *Abbey Road*, only one song does not use dissonant chords. The songs that do use dissonant chords on *Please Please Me*, resolve almost all of them into consonant chords. The only exception is “Do You Want To Know A Secret”. For *Abbey Road*, only in three songs all the dissonant chords get resolved.

## CONCLUSION

In this thesis, the complexity of melody and harmony are analysed on two albums of The Beatles: *Please Please Me* (1963) and *Abbey Road* (1969). While a great deal of research has already been done before, the focus has been on the oeuvre of The Beatles in total or focussed on one specific album. With this thesis I want to address the difference between the first and last recorded album by researching the progress in complexity. The research question to do this is: “How does the musical complexity, especially in the fields of melody and harmony, of The Beatles album *Please Please Me* (1963) compare with *Abbey Road* (1969)?” The sub questions are twofold, the first one is: “How are the melodies in both the albums constructed” and the second: “How are the harmonies in both the albums constructed?”

## ANSWER TO THE RESEARCH QUESTION

While Adorno says that popular music is not interesting to analyse because of the standardization, looking at the structure of *Abbey Road* and how people reacted to songs like “Something”, it is safe to say that these reactions were caused by the complexity of the music.

When it comes to the melodies on both the albums there is an increase in complexity in key transitions and form. *Please Please Me* uses mostly common scales, but so does *Abbey Road*. *Abbey Road* however has two songs with a key transition. But the most significant difference is in form of the songs. *Please Please Me* songs use a repetitive form of A, B and sometimes A' and C, while *Abbey Road* songs have much more variation and songs without repetition at all, but also songs with perfect repetition. For melody, the complexity is increased. According to Gauldin, the key and form on *Abbey Road* are perhaps the first instances of a “rock song cycle”, which makes *Abbey Road* an innovating and complex album since it has not been done (often) before.

When it comes to the harmonies on both the albums there is a clear increase in both chord progression and use of dissonant chords. While *Please Please Me* has four songs that rely on the most standard progression, *Abbey Road* has none. Most of the songs on *Abbey Road* use chords outside of the scale they are written in, only two songs only use the chords in the scale. Six songs on *Please Please Me* use only the chords in the scale they are in. On *Please Please Me*, seven songs do not use any dissonant chords. While on *Abbey Road*, only one song does not use dissonant chords. Since dissonant chords make a harmony more interesting and therefore more complex, it is clear to say that the complexity of the harmony has increased. Gaudin says that in comparison to most rock albums of that period, the tonal organisation of the second side of *Abbey Road* is nothing less than astounding. This emerging of this astounding feeling can be explained by the complexity of this album.

The fact that The Beatles were able to write more complex music is among other things because songwriting became a conceptual art for the artists, where it first was normal to record covers. This enabled the artists to write their own music, and therefore evolve as songwriters and artists. Another part that, while it sounds contradictory, was an advantage in writing complex music is that McCartney could not read music. He wrote what he thought sounded good, without being limited with knowledge of scales etc. So, to answer the main research question: according to this thesis, it is now clear that the complexity of melody and harmony has progressed into more complex from the album *Please Please Me* to the album *Abbey Road*. So, the statement “The Beatles became more and more complex” is definitely also based on the complexity of melody and harmony.

## EVALUATION METHOD

For the most part the method in this thesis is sufficient. The method is thorough by first searching the theory for elements of melody and harmony and then analysing those elements.

There are however two aspects that, if changed, would also influence the results of this thesis. The first aspect is the medley on the *Abbey Road* album. For this thesis, the different songs of the medley are viewed as individual songs, since analysing them together would be better scaled in a composition research. However, because these songs are part of a medley, that could influence the results in analysing the chord progression. Sometimes the different aspects of music are not that easy to separate. This does not influence the research in a negative way, but analysing the elements combined could also present interesting data.

### EVALUATION THEORETICAL FRAME

The theoretical frame forms a strong basis for the analysis. As described in the previous paragraph, it provides the concepts on which both the melodies and the harmonies are analysed. The theoretical frame also makes it possible to paint a picture of the concepts used, to explain what melody and harmony is. First it was surprising that there was little musical theory available within the academic field. However, there are several resources that are extensive enough to build the research on. The secondary literature is also more difficult to find than expected. Research is mostly done concerning the lyrics or why The Beatles wrote what they did, or artists did what they did, but not so plenty on the actual chord structures or form of songs.

### SUGGESTIONS FOR FURTHER RESEARCH

The suggestions for further research are based on the changes that could have been made in the method, because the method is sufficient, and the changes therefore should be a new research. For further research, the suggestion would be to combine melody and harmony and to add the composition of music and the technological side. This would also enable the researcher to look at the *Abbey Road* medley as one song, and this may lead to different conclusions. Next to this, for further much more extensive research, it would be interesting to see the development album

to album. The recommendation however is to use the timeline of recorded albums and not the release dates.

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## APPENDIX 1: Table Melody

<i>Please Please Me</i>				
Song	Key	Scale	Key transitions	Form
I Saw Her Standing There	E major	E-F#-G#-A-B-C#-D#-E	None	ABABCABCAB
Misery	C major	C-D-E-F-G-A-B-C	None	A'AABABAA'
Anna (Go To Him)	D major	D-E-F#-G-A-B-C#-D	None	ABABCA'BCA'B
Chains	B $\flat$ major	B $\flat$ -C-D-E $\flat$ -F-G-A-B $\flat$	None	AABABA
Boys	E major	E-F#-G#-A-B-C#-D#-E	None	ABABCABC
Ask Me Why	E major	E-F#-G#-A-B-C#-D#-E	None	AABA'AA'BA'
Please Please Me	E major	E-F#-G#-A-B-C#-D#-E	None	ABABCAB'
Love Me Do	G major	G-A-B-C-D-E-F#-G	None	AABAA'
P.S. I Love You	D major	D-E-F#-G-A-B-C#-D	None	BAABAABA
Baby Its You	G major	G-A-B-C-D-E-F#-G	None	ABABB
Do You Want To Know A Secret	E major	E-F#-G#-A-B-C#-D#-E	None	BAACA

A Taste Of Honey	F# minor	F#-G#-A-B-C#-D-E-F#	None	BABCABC
There's A Place	E major	E-F#-G#-A-B-C#-D#-E	None	A'ABA
Twist And Shout	D major	D-E-F#-G-A-B-C#-D	None	ABABAB
<i>Abbey Road</i>				
Come Together	D minor	D-E-F-G-A- B $\flat$ -C-D	None	AABABAB
Something	C major	C-D-E-F-G-A-B-C	Bridge: to A major	ABABCAB
Maxwell's Silver Hammer	D major	D-E-F#-G-A-B-C#-D	None	AABCAABCAABC
Oh Darling	A major	A-B-C#-D-E-F#-G#-A	None	AABABA
Octopus's Garden	E major	E-F#-G#-A-B-C#-D#-E	None	ABA'ABA'ABA'
I Want You (She's So Heavy)	A minor	A-B-C-D-E-F-G-A	None	AAABBAA
Here Comes The Sun	A major	A-B-C#-D-E-F#-G#-A	None	ABABACBAA
Because	C# minor	C#-D#-E-F#-G#-A-B-C#	None	AABA

You Never Give Me Your Money	A major	A-B-C#-D-E-F#-G#-A	Interlude 1: to C major, Interlude 2: to Bb major	AABCDE
Sun King	C major	C-D-E-F-G-A-B-C	None	ABA'C
Mean Mr Mustard	E major	E-F#-G#-A-B-C#-D#-E	None	AA
Polythene Pam	E major	E-F#-G#-A-B-C#-D#-E	None	AA
She Came In Through The Bathroom Window	A major	A-B-C#-D-E-F#-G#-A	None	ABAAB
Golden Slumbers	C major	C-D-E-F-G-A-B-C	None	AA'A
Carry That Weight	C major	C-D-E-F-G-A-B-C	None	ABA
The End	D major	D-E-F#-G-A-B-C#-D	None	ABC
Her Majesty	D major	D-E-F#-G-A-B-C#-D	None	AA'A

## APPENDIX 2: Table Harmony

<i>Please Please Me</i>								
Song	1	2	3	4	5	6	7	Progression
I Saw Her Standing There	E	F#m	G#m	A	B	C#m	D#dim	I) <b>E7-E7-A7-E7- B7</b> II) <b>E7-A7-C-E7- B7-E7</b> III) <b>A7-B7-A7</b>
Misery	C	Dm	Em	F	G	Am	Bdim	I) <b>F-G-C-Am-G</b> II) <b>Am-C-F-C-F- G-C</b> III) <b>Am-C-Am-G</b>
Anna (Go To Him)	D	Em	F#m	G	A	Bm	C#dim	I) <b>D-Bm-D-Bm- D</b> II) <b>Bm-D-Bm- Em-A-D-Bm-D- Bm</b> III) <b>G-D-D7-G- E7-A-A7</b> IV) <b>D-Bm-D</b>
Chains	Bb	Cm	Dm	Eb	F	Gm	Adim	I) <b>Bb-Eb-Bb-F- Eb-Bb-F</b> II) <b>Eb-Bb-Eb-F7</b>

Boys	E	F#m	G#m	A	B	C#m	D#dim	<p>I) <b>E</b></p> <p>II) <b>A-E-B-A-E-</b> <b>B7</b></p> <p>III) <b>B7-E-A-E-</b> <b>B-A-E-B7</b></p>
Ask Me Why	E	F#m	G#m	A	B	C#m	D#dim	<p>I) <b>E-F#m-G#m-</b> <b>F#m-E-E-F#m-</b> <b>G#m-F#m-E-</b> <b>G#7-C#m-Am-</b> <b>F#-B</b></p> <p>II) <b>E-A-B-E-E-</b> <b>A-B-E</b></p> <p>III) <b>E-F#m-G#m-</b> <b>A-G#m-A</b></p>
Please Please Me	E	F#m	G#m	A	B	C#m	D#dim	<p>I) <b>E-A-E-G-B-A-</b> <b>E-A-E</b></p> <p>II) <b>A- F#m-C#m-</b> <b>A-E-A-B-E-A-B</b></p> <p>III) <b>A-B-E-A-B-</b> <b>E-A-B-E</b></p> <p>IV) <b>E-A-E-G-B-</b> <b>A-E-A-E</b></p> <p>V) <b>A-F#m-C#m-</b> <b>A-E-A-B-E-A-</b></p>

								<b>B-E-A-B-E-G-C-</b> <b>B-E</b>
Love Me Do	G	Am	Bm	C	D	Em	F#dim	I) <b>G-C-G-C-G-</b> <b>C-G-C-G-C</b> II) <b>D-C-G-D-C-</b> <b>G</b> III) <b>G-C-G-C-G-</b> <b>C-G-C-G-C-G-</b> <b>C-G-C</b>
P.S. I Love You	D	Em	F#m	G	A	Bm	C#dim	I) <b>G-Ddim7-D-</b> <b>G-Ddim7-D-G-</b> <i>Ddim7-D-A-D</i> II) <b>D-Em-D-A-</b> <b>Bm-A-B<sup>b</sup>-C-D</b>
Baby Its You	G	Am	Bm	C	D	Em	F#dim	I) <b>C-G-C-G</b> II) <b>Em-Am-G-</b> <b>Em-C-D-G-Em-</b> <b>G-Em</b>
Do You Want To Know A Secret	E	F#m	G#m	A	B	C#m	D#dim	I) <i>Em-Am-Em-G-</i> <b>F-B7</b> II) <b>E-G#m-Gm-</b> <b>F#m-B7-E-Gm-</b> <b>F#m-B7-E-G#m-</b> <b>Gm-F#m-C-E-</b> <b>G#m-Gm-F#m-</b>

								<b>B7-E-G#m-Gm-</b> <b>F#m-B7-A-B-</b> <b>C#m-F#m-B7</b> <b>III) A-F#m-C#m-</b> <b>Bm-A-F#m-</b> <b>C#m-Bm-F#m-</b> <b>B7</b>
A Taste Of Honey	F#m	G#mdim	A	Bm	C#m	D	E	<b>I) F#m-A-E-</b> <b>F#m</b> <b>II) F#m-F#m7-</b> <b>F#m7-B-F#m-</b> <b>F#m7-F#m7-B</b> <b>III) F#m-F#m-</b> <b>Bm-F#m-F#m-</b> <b>B-F#m-B-A-E-</b> <b>F#m</b>
There's A Place	E	F#m	G#m	A	B	C#m	D#dim	<b>I) E-A-E-A-E-A-</b> <b>E-A-E-C#m-B-</b> <b>G#m-A-E-A-</b> <b>C#m</b> <b>II) E-A-E-A-E-</b> <b>C#m-B-A-B</b> <b>III) C#m-F#-E-</b> <b>G#-C#m-F#-E-</b> <b>G#-C#m-E</b>

Twist And Shout	D	Em	F#m	G	A	Bm	C#dim	<b>D-G-A</b>
<i>Abbey Road</i>								
Come Together	Dm	Emdim	F	Gm	Am	B <sub>b</sub>	C	I) <b>Dm-A-G-Dm</b> II) <i>Bm-A-G-A-</i> <b>Dm</b>
Something	C	Dm	Em	F	G	Am	Bdim	I) <b>C-C7-C7-F-</b> <i>D7-G</i> II) <i>Am-Am7-</i> <i>Am7-D7-F-E<sub>b</sub>-G</i> III) <i>A-C#m-</i> <i>F#m7-A-D-G-A-</i> <i>A-C#m-F#m7-A-</i> <b>D-G-C</b>
Maxwell's Silver Hammer	D	Em	F#m	G	A	Bm	C#dim	I) <b>D-D#dim-Em-</b> <b>A-D-A</b> II) <i>E-A</i> III) <b>D-E-A-Em-</b> <b>A-D</b>
Oh Darling	A	Bm	C#m	D	E	F#m	G#dim	I) <b>A-E-F#m-D-</b> <i>Bm-E7-Bm-E7-</i> <b>A-D</b> II) <b>D-F-A-Bm-E-</b> <i>F-E</i>

Octopus's Garden	E	F#m	G#m	A	B	C#m	D#dim	I) <b>E-C#m-A-B- E-C#m-A-B</b> II) <b>C#m-B-A-B</b> III) <b>E-C#m-A-B- E</b>
I Want You (She's So Heavy)	Am	Bmdim	C	Dm	Em	F	G	I) <b>Am-Am7-C- D-F-G-E7-Am7</b> II) <b>Dm-Dm-E7- Bb-A-Dm-Dm- E7-Bb-A</b>
Here Comes The Sun	A	Bm	C#m	D	E	F#m	G#dim	I) <b>D-G-E7-D-G- D-Em-D-A</b> II) <b>D-G-A7-D-G- A7</b> III) <b>A7-F-C-G- D7</b>
Because	C#m	D#m	Em	F#	G#	A	Bmdim	I) <b>D-Ddim-C#m- D#m7-G#-A- C#m-A7-A</b> II) <b>D-Ddim-F#- G#7</b>
You Never Give Me Your Money	A	Bm	C#m	D	E	F#m	G#dim	I) <b>Am7-Dm-G-C- F7-Bm7-E7-Am</b>

								<p>II) <b>C-E7-Am-C7-</b> <i>F-G-C-C-E7-</i> <i>Am-C7-F-G-C</i></p> <p>III) <i>Bb-F-C-Bb-</i> <i>F-C-Bb-F-C-Bb-</i> <i>F-C-Bb-F</i></p> <p>IV) <b>A-B-C-E-A-</b> <i>Dm-G-Dm-G-A-</i> <i>B-C-G-A-C-G-</i> <b>A-C-G-A</b></p> <p>V) <b>C-G-A</b></p>
Sun King	C	Dm	Em	F	G	Am	Bdim	<p>I) <b>C-C7-Gm7-A7</b></p> <p>II) <b>F-D7</b></p> <p>III) <b>C-Em7-C7-F</b></p> <p>IV) <i>F#m7-E</i></p>
Mean Mr Mustard	E	F#m	G#m	A	B	C#m	D#dim	<p><b>E-B7-D7-C#7-</b> <i>C7-B7-C7-C#7-</i> <b>E-C7-B7-E-C7-</b> <b>B7</b></p>
Polythene Pam	E	F#m	G#m	A	B	C#m	D#dim	<p><b>E-D-A-E-D-A-</b> <b>E-G-B7-C-D-E-</b> <i>C-D-E-D-A-E-</i> <b>D-A</b></p>

She Came In Through The Bathroom Window	A	Bm	C#m	D	E	F#m	G#dim	I) <b>A-D-A-D-A-</b> <b>D-A-Dm</b> II) <b>A-Dm-G-C-</b> <b>C7-G-C</b>
Golden Slumbers	C	Dm	Em	F	G	Am	Bdim	I) <b>Am7-Dm-G7-</b> <b>C-E7-Am-Dm7-</b> <b>G7-C</b> II) <b>C-F-C-F-C-</b> <b>E7-Am-Dm7-</b> <b>G7-C</b>
Carry That Weight	C	Dm	Em	F	G	Am	Bdim	I) <b>C-G-C-C-G-</b> <b>C-G</b> II) <b>Am7-Dm7-G-</b> <b>C-F-Dm-Am7-</b> <b>C-G</b>
The End	D	Em	F#m	G	A	Bm	C#dim	I) <b>A-D-B-E-A-D-</b> <b>A</b> II) <b>A7-D7</b> III) <b>A-G-Am-Am-</b> <b>F7-Am-Dm-G-C</b>
Her Majesty	D	Em	F#m	G	A	Bm	C#dim	I) <b>D-Bm-Em7-</b> <b>A7-D-D-Bm-E7-</b> <b>A</b> II) <b>Bm-B-D7-G</b>