Analysis of "Strawberry Fields Forever" by the Beatles

Music is an important part of many people's lives. It can bring people together and can be a huge part of people's culture. Music has always been a big part of my life as I grew up playing the clarinet and ukulele. Most people listen to music casually while some take it up as a lifestyle and devote their life to it. One group who devoted their life to music was the Beatles. One of the songs they wrote was "Strawberry Fields Forever", which is one of my favorites by them. In this essay, their work will be analyzed through spectrogram, chord analysis with a Tonnetz, and a rhythm clock.

Figure 1 shows a very interesting piece in the beginning of the piece. In the highlighted box there is a frequency bar that is swinging downwards. This is also heard when listening to the piece as what I believe to be a guitar swings from one note down to another. It is also interesting to note that the first harmonic is a D_4 while the upper harmonics of the instrument are more prominently seen on the spectrogram. The first of the highlighted harmonics is a D_7 .

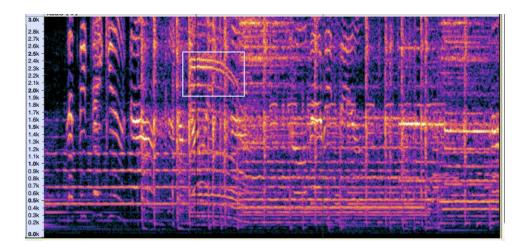


Figure 1: Spectrogram of "Strawberry Fields Forever" intro highlighting a change in note frequency.

Figure 2 shows some very interesting things about the introduction of the song as well. In the light green box, you can see the precision of the notes being played as they both start and stop at the exact same time. You can also see that these notes make a chord, but that will be discussed later. In the white box, some vibrato can be seen in the instrument being played. The double arrows point to an interesting feature which is again the same notes from the light green box but instead the lower note is being held longer than the higher note, yet they still end at the exact same time. Looking at both the double arrows and the light green box, you can see almost a vertical bar at the end of those, signifying that they really are ending very abruptly at the same time.

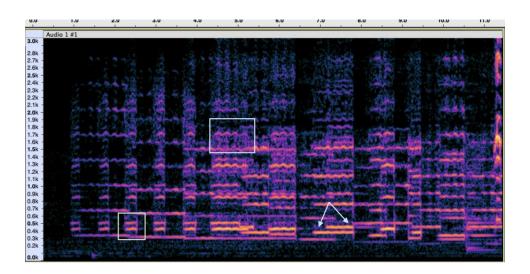


Figure 2: Spectrogram of the instrumental introduction of "Strawberry Fields Forever".

The chords for a guitar were found at https://tabs.ultimate-guitar.com/tab/the-beatles/strawberry-fields-forever-chords-728419. The key is in B-flat, and it starts with the following progression for the introduction: E-Emaj7-E7. Putting this onto a Tonnetz, we get the following in Figure 3. Comparing that with the second chord progression, which is f#-E-D-A, as seen in Figure 4. It can be

seen that in Figure 3 the chords stay within the same hexagon while the chord progression in Figure 4 goes outside of the hexagon by a great amount. The chord progression in Figure 3 has a consonant sound as it stays within the hexagon. The chord progression in Figure 4 has an arrow connecting two separated hexagons, making a dissonate sound. This makes for an interesting analysis because of the choice of using a consonant and a dissonate sound right after each other, creating an interesting combination.

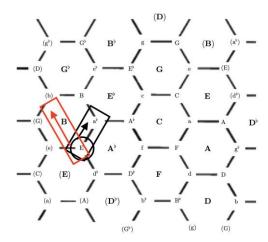


Figure 3: Plot of the first chord progression of the introduction on the Tonnetz. The black rectangle shows the movement from the E to Emaj7 chord, and the red rectangle shows the movement to the E7 chord.

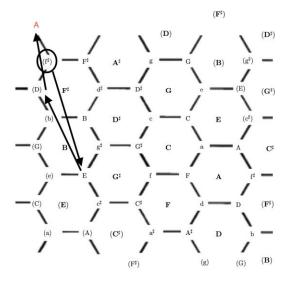


Figure 4: Plot of the second chord progression of the introduction on the Tonnetz.

The score for the music was taken from

https://www.musicnotes.com/sheetmusic/mtd.asp?ppn=MN0214371, as shown in Figure 5. A rhythm clock of the first measure can be seen in Figure 6 and the second measure can be seen in Figure 7. They both have some similarities and differences in the rhythm clocks. They almost line up except for the bottom score, shown in the red color, which the first measure has two circles, due to the two half notes, while the second measure has only one red circle as there is a whole note in the score. The black circles also line up even though the score shows that they do not have the same notes. This is interesting because they have the same rhythm with different notes.



Figure 5: Score of "Strawberry Fields Forever" with credit to

 $\underline{https://www.musicnotes.com/sheetmusic/mtd.asp?ppn=MN0214371}\ .$

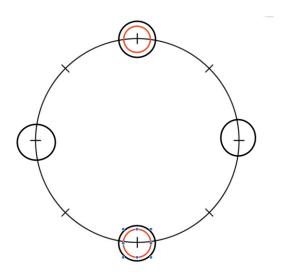


Figure 6: Rhythm clock showing the first measure of the score given in Figure 5. The black circles are the upper staff, and the lower circles are the lower staff.

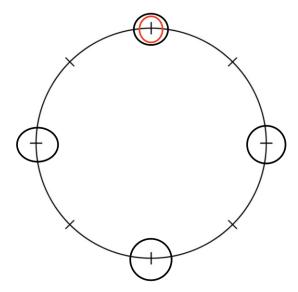


Figure 7: Rhythm clock showing the second measure of the score given by Figure 5. The black circles are the upper staff, and the lower staff is in red.

"Strawberry Fields Forever" is a musical experience that has a ton of analyzing to do. Just the introduction was analyzed in this essay, but more can be made of the entire song. Knowing the theory behind the music can really make one appreciate it more. Overall, this song has been shown to be incredible by analysis of a spectrogram, Tonnetz, and rhythm clocks.