The Sincerity of a Gesture: Why Even When the Music Stops Our Hands Do Not

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Introduction

The study of gesture and embodiment has been increasingly seen as a useful avenue for music-theoretical discussion (see De Souza 2016; Hatten 2004; Koozin 2011; Lenta 2009; Zbikowski 2017; amongst many others). What is often left out, however, is the role of gesture in the performer's conceptualization and theoretical understanding of the piece, and how these performance gestures might better provide an analytical insight into the work. Since the role of gesture in conceptualizing thought is supported by scholars whose focus lie outside of music (McNeill 1995; Goldin-Meadow 2003), incorporating these concepts of non-musical gestures into music theory is integral and proves to be useful for the analysis and perception of performance.

This paper then foregrounds the role of gesture, particularly non-musical gesture, in performance. Specifically, I argue that gesture is able to serve as a constituent in the performer's cognitive processes and how gesture grounds a performer in musical time, even when musical time is unclear. I also argue that these gestures are made possible because of humans' ability to entrain to music, thereby coupling them with the music in a way that forces them to address any irregularities that might arise. I focus on the different ways in which gesture connects the performer to the work, by examining instances in which gesture can facilitate entrainment in moments in

which the music does not align with the beat. This is all to say: when entrainment fails, gesture is often used to help the performer keep time with the music.

Trajectory

I begin with a gestural analysis of a performer of The 1975's "Sincerity is Scary" from London in 2019. This analysis is able to show how gesture can be used as an analytical tool in music theory. I then give two further analyses: Erykah Badu's "Fall in Love (Your Funeral)", and Fiona Apple's "Fast as You Can," wherein I focus on how gesture interacts with the music in two unique cases; respectively, when the band ceases to play despite the vocalist continuing on, and during moments in the formal structure of the work where the meter changes. With my framework then established, I return to "Sincerity is Scary" and consider four additional performances to show how gesture is used during the same song over multiple performances. Strikingly, even though the ways in which the song's time are problematized differ over each of the five performances, gesture is still used to connect the singer with the original time, highlighting the unique power of gesture in performance.

Sincerity is Scary: Triplets

The 1975's "Sincerity is Scary" is ripe for music theoretical discussion. It stands apart from most of the bands *oeuvre* in that rather than being a guitar driven rock song, the song utilizes piano and a small gospel choir, in addition to the rhythm section. My analytical focus on this song, however, begins with a performance. This performance was hosted by Spotify in London for the release of their record in late 2019. As is the case with many musical performances, there are an abundance

of gestures and movements made by lead singer, in this case, Matty Healy. The primary role of these gestures, as I will argue, is to conceptualize the aspects of the performance that are unclear, thereby facilitating an understanding of the performer's musical environment.

Example 1 marks all gestures and major body movements as they occur throughout the song's first verse, spanning 12 measures. By gesture, I take from Goldin-Meadow and define gestures as the way we move our hands when we speak (2003, 3). I will return to this definition later. What is clear from this example is that some parts of the music are more gesturally abundant than others, the four measures of the verse all consist of some gesturing, and the final five measures of the verse, 8-12. Measures 5-7 of the verse seem to lack any gesturing at all. Further, these gestures (and body movements in the case of the introduction, not presented in the example) are consistently aligned with the beat and its subdivisions. Taking this bird's eye view of gesture and embodiment in performance prompts several questions: Why is the singer moving this much? Why do some parts of the music have more movement/gestures than others? Are these movements more than simply performative?
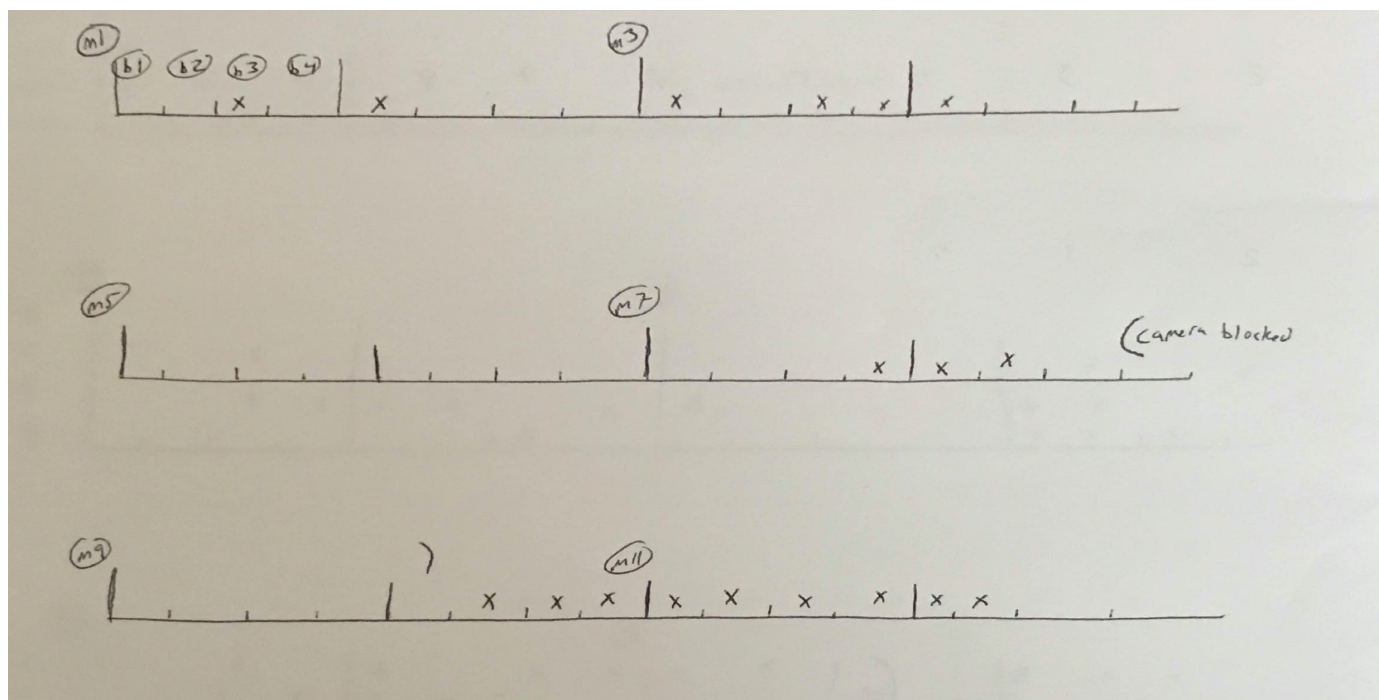
Example 1: Gestural analysis of the Verse of "Sincerity is Scary" from Spotify Release Show

To answer the first question, "why is the singer moving this much" it is helpful to consider the concept of entrainment. Entrainment is a coupling process of two independent agents. Clayton et al. (2005) define it as "two rhythmic processes interact[ing] with each other in such a way that they adjust towards and eventually 'lock in' to a common phase and/or periodicity." Entrainment is biological, and occurs regularly in regard to humans and music. It is the phenomenon where you tap your foot or bob your head to the music going on in the background without even realizing it.[1] Healy's ample movement at the onset of the introduction are a clear example of an individual getting entrained to the music. Entrainment is able to answer the question of why we move to music (it is biological), but why do some parts of the music have more movements than others?

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[1] For a more general overview of entrainment and its relationship to music see Thaut et al. (2015).

Example 2 overlays my transcription of the verse underneath my gestural timeline. This overlay suggests that the largest amount of gesturing falls during measures 8-12, a passage of quarter and eighth note triplets, a section of the verse that is different in character from the rest of the music. I would also posit that this "triplet section," as I will refer to it, is more challenging to sing than the first seven measures of the verse. The challenging nature of these measures is not due to the melodic aspects of the notes, but due to the fact that a song in 4/4 is now requiring a singer to deal with a passage that suggests the meter of 6/8. I argue that this triplet section problematizes our natural ability to entrainment ourselves with the music due to the implied temporary meter. This is a problem that can be solved by gesture. This type of passage would present less of a problem if the music were to switch to 6/8 time, however, since it is only temporary, the performer needs to exist in 4/4.
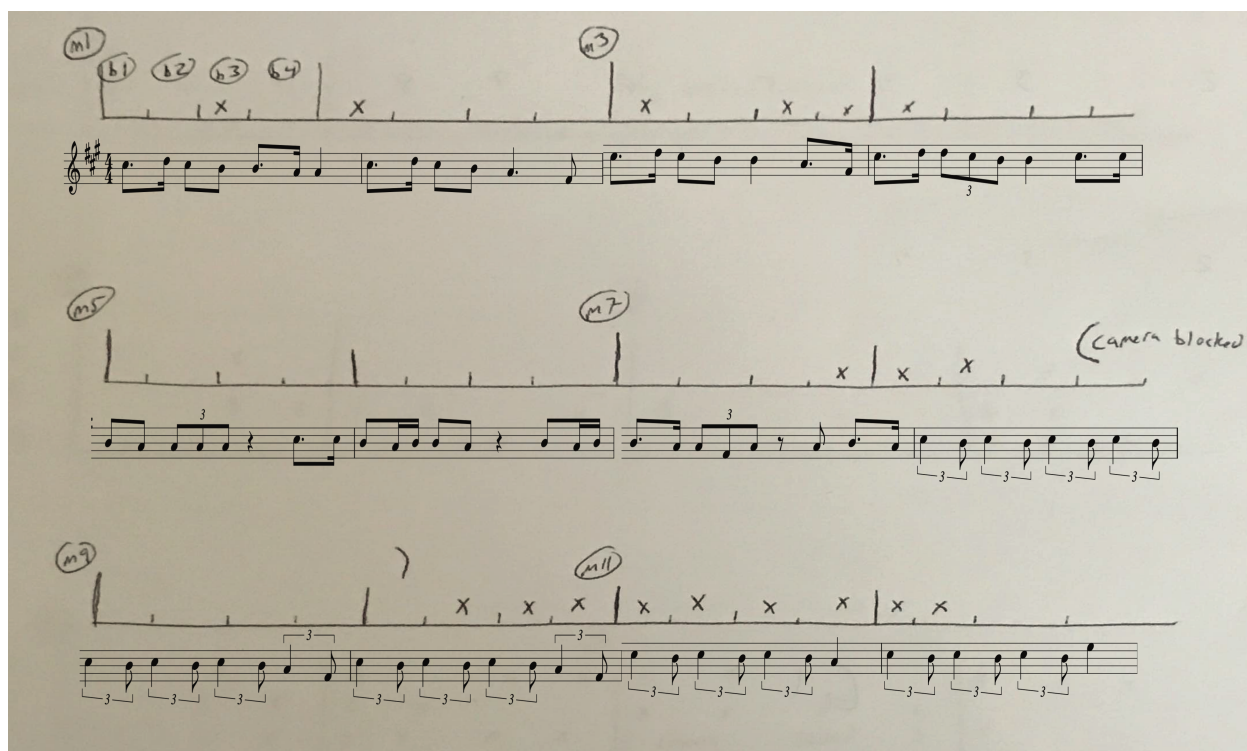
Example 2: Previous Example with Transcribed Verse Overlaid

Gesture is a powerful action that is concurrent with speech.[2] This is because, as both McNeil (1992) and Goldin-Meadow (2003) have argued, gesture and speech are structurally linked to one another. This type of linking allows for gestures to articulate thoughts that we often find ourselves unable to with only speech (Hostetter et al. 2007, Kang & Tversky 2016). Studies have observed that congenitally blind individuals gesture at the same rate as those with sight (Iverson & Goldin-Meadow 1998; 2001), and that when speech is disrupted and delayed, gesture still holds true and correct (McNeill 1992, 273-285). Perhaps the most powerful aspect of gesture is its ability to physically conceptualize difficult to articulate thought (Kita 2000).

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[2] See Kendon 1980, 2004

Given the power of gesture, I argue that the volume of gestures in the "triplet section" is due to Healy conceptualizing difficult to understand information. In this case, his ability to entrain to the music is thrown off by the suggestion of a new meter (that is, the "triplet section"), and the dramatic increase of gestures help keep him in time. On this view, gesture is not a form of embodied music, rather, the body is having to respond to music, particularly difficult parts of the music. Thought, speech and gesture then become linked to one another, and are no longer irreducible to any single part, as suggested by Andy Clark (2008) and Iverson and Thelen (1999). This system, when involving music, is what I call a musical environment. A (non-linear) dynamically intertwined system of sound, speech, and gesture that should something break, would fail. The relationship of this coupled system is seen in the pre-chorus of the song, where the gesturing dies down.

While the gestures that I have covered are used in conceptualization, there are other types of gestures that occur that are not used for this purpose. It is helpful to briefly consider those gestures in order to mark when a gesture is used in conceptualization. The first type of these gestures reference the crowd or lyrics, what are often called *iconic* and *deictic* gestures, respectively (McNeill 1992). The other type of gestures made are those used for energy gain or to entice the crowd to get excited. By nuancing the types of gestures a performer makes, one is better able to pick up on the ones used for conceptualization. In the same way a person might gesture to point at a puzzle, while in the following sentence move their hands as they try to explain why it is so difficult to solve the puzzle, so to can gesture in music exist on this spectrum: functioning as both explanation and conceptualization, but also direct and indirect references.

To be clear, the performer is not aware what their gestures are doing. Most people are unaware of their own gestures they make throughout the day. Goldin-Meadow refers to these

information representing gestures as "spontaneous" (2003). It is for this reason that gesture is able to offer some insight into the performer's mind. Since these gestures are spontaneous, they articulate what is most needed at that moment in time for the performer. While at times, only little might be needed, and they can use their hands to tell a story about the lyrics, the gestures on which I am focusing are the ones that appear in aid.

These spontaneous gestures, made by non-instrumental performing musicians, are able to carry meaning about thought in a way that other gestures made by musicians cannot. While many excellent body based approaches to music theory have been able to articulate how the body interacts with music *making* (Fisher & Lochead 2002; Guin 2005), by considering how the body, and in this case gesture, aids in musical *understanding* one is able to take a wider view of what it means to engage in music. What separates this form of musical understanding from others (Cox 2016; Zbikowski 2017) is that these are literal movements made by a non-instrumentalist. Music exists as both an art and an action. In nuancing these actions from those that are sonic producing, and those that are for conceptualization, one can see how music affects us in physical ways.

Fall in Love: Band Drops Out

Erykah Badu's "Fall in Love (Your Funeral)" offers another look at how gesture is used to conceptualize a performer's thoughts when entrainment fails. In this case, entrainment fails not through the complexity of the rhythms, but by the band cutting out behind the singer. This performance is from a livestream done in April 2020, with Badu sitting on a cushion. "Fall in Love" is a roughly six minute song that consists of a paradigmatic drum part (kick on 1 and 3,

snare on 2 and 4), pulsing E harmony, and this continually high G-sharp. Given this extreme repetitiveness, it seems that Badu motions to her band to stop playing, so as to break up potential monotony in this performance.

The band dropping out from playing presents an interesting phenomenon. The musical environment to which Badu is coupled is now temporarily removed, but she still needs to keep singing. While these moments are short, she still needs to keep entrained to the music so that she can enter and sing at the right times. Whereas the "triplet section" from "Sincerity is Scary" is an example of the internal nature of the song messing up entrainment, "Fall in Love" is an example of an external force foiling entrainment (ironically a force created by Badu).

Example 3 is another mapping of the gestures made to the beats of the song. It focuses on the first chorus along with the post-chorus and the first two measures of the verse while marking the moments where the band drops out from playing in some capacity. Much like Example 2, there are clear delineations between areas with gesture, and areas without.[3] As it can be seen, there are more gestures around the parts of the performance where the band drops out from playing, for example mm 13-14, and mm. 18 - 21. Through either snapping or pointing, Badu's gestures keep her entrained to the music when the band drops away. These gestures stand apart from many of her earlier gestures in that, similar to The 1975, they seemingly make reference to the lyrics or the virtual viewer.

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[3] Not marked in Example 3, but present in the performance, is Badu gesturing substantially at the beginning of the song. As I argued for "Sincerity is Scary" I view this as the performer getting immediately entrained.
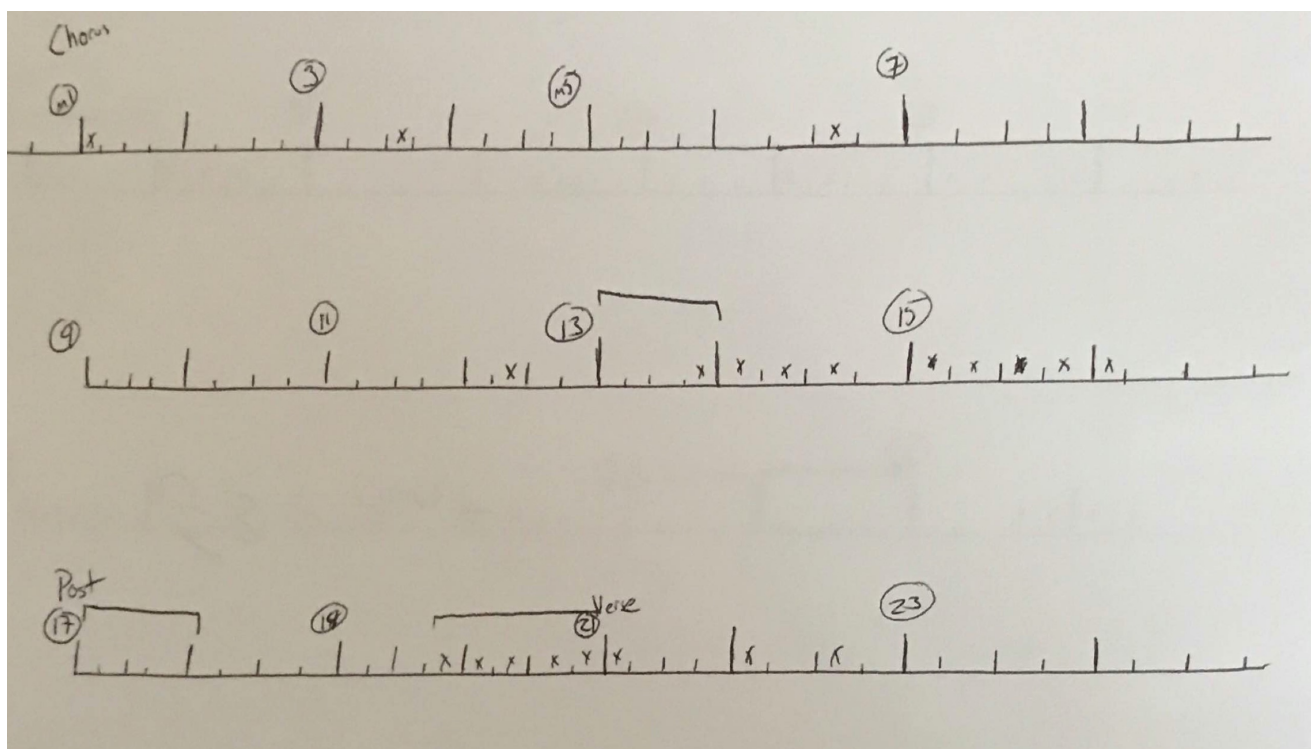
Example 3: Gestural Analysis of the First Chorus and Post-Chorus from "Fall in Love."

What is further striking is that Example 3 also shows a moment, mm. 17-18, where the band drops out, but Badu does not gesture. What should be mentioned here, is that Badu also does not sing during this moment of the song. She does not gesture, but she also does not need to be entrained to the music during that period of time. For a brief moment in time, it is as if she moves out of her musical environment because the coupling is not needed.

Badu's role as the bandleader allows her to control when the band drops out, yet she still gestures in varying capacities. This suggests that the most natural way to deal with a musical "problem" is to gesture. While the gestures made are spontaneous, if she wanted to do something different during the moments where there is no band backing her, she could have. Rather, it seems that she felt the music as she normally would, with gesture keeping her entrained, even when the music could not.
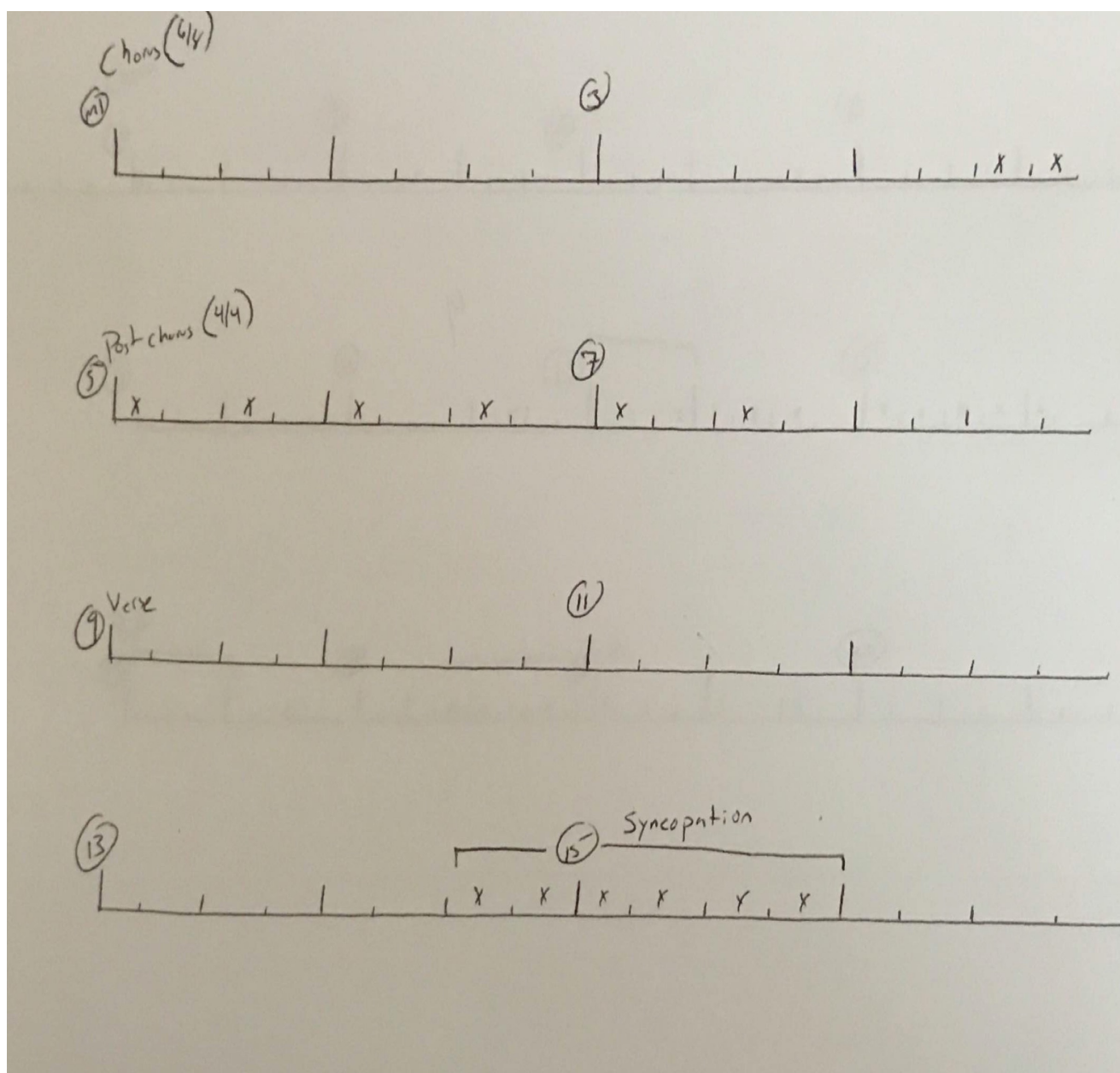
Fast as You Can: Meter

Fiona Apple's "Fast as You Can" presents a third way that we can see how gesture is used to conceptualize aspects of the performance that are unclear. The chorus of the song is in 6/8, but the introduction/post-chorus and the verse are in 4/4. This is a large form example of the "triplet section" from "Sincerity is Scary." Instead of a slight feel of meter change, in this instance, it lasts for an entire formal section. This performance is from October of 2017. Two immediate things are noticeable from this performance. The first is that Apple stands mostly still through the performance, and the second is that when she does gesture, it is with the entirety of her body.

Example 4 presents a gestural analysis of this work, which confirms that most of the gesturing occurs during the post-chorus after the meter changes from 6/8 to 4/4. Gesture in this instance seems to evolve from Apple's hands and to her entire body. While this is uncommon, it does happen. Studies have shown (Goldin-Meadow & McNeill 1999; Sandler 2003) shows that when the hands are occupied, gesture is incorporated into other parts of the body.[4] It seems that Apple's hands are balled into fists, perhaps in concentration. The meter then, seems to be the thing problematizing entrainment, and during mm. 5-7, gesturing evolves to encompass her whole body and is used to completely lock into the new meter. The only other gesture present is seen in her hand during mm. 14-15, and it marks the vocal line as it is syncopated from the beat. Which, much like "Sincerity is Scary" is a difficult thing to sing, and gesture is able to aid the performer in doing so by offloading cognition.

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[4] A similar approach is taken by Zbikowski (2017) in his analysis of Fred Astaire.

Example 4: Gestural Analysis of the Chorus, Post-Chorus, and Verse of "Fast as You Can."

In each of these performances one sees how gesture becomes a constituent in the performers cognitive process keeping them in time with the music, even when the music becomes problematic. Even through different types of problems: meter changes, syncopation, difficult passages, and the backing band cutting out, gesture is continually used to keep the performer

entrained to the music. But, given the nature of live music, do these types of gestures occur again? If gesture is truly used to conceptualize though, then these gestures should return on subsequent performances.

Sincerity is Scary: Longitudinally

In returning to "Sincerity is Scary" I will now consider the gestures made over four additional performances. One would expect any gesturally analysis to reflect Example 1. The performances I analyze are shown in Table 1, all occurring in 2019. By examining this longitudinally, one is able to see if certain moments of the music consistently produce gesture, or consistently produce lack of movement. Further, one is able to see if certain gestures are more habitual or performative. Phrased another way, have certain gestures become a part of the performance?

Table 1: Performance Location and Date

Performance	Date
Lollapalooza Brazil	April 5th, 2019
Pohada Festival	July 11th, 2019
Lollapalooza Sweden	June 29th, 2019
The Garage (London)	February 18th, 2019

Example 5 graphs the gestures of the next four performances on top of one another. Two things are visibly clear. The first is that the "triplet section," mm. 8-12) always seems to have more gesturing than the other parts of the verse. Second, that in the first eighth measures of the verse, gesturing seems to occur in different spots over the five performances. That is to say, those measures do not always lack gesture, rather, the gestures that occur seem to occur naturally. This analysis seems to give credence to the notion that the "triplet section" produces more gestures.

This analysis suggests that it might be odd for a passage that is performed regularly to still be "difficult" and need gesture to aid in conceptualization. On the contrary, this is indicative of one of the strengths of gesture: it is a tool for cognitive offloading. Research shows (Cook et al. 2012; Goldin-Meadow et al. 2001) how gesture is regularly used to make tasks easier, not only tasks that may be perceived as difficult, but also regular tasks like solving simple mathematical equations. Gesture exist to make the life of the individual gesturing easier. While it is easy to see the direct benefit of gestures such as pointing, more abstract gestures play a role in higher level cognition as well. This is all to say, it is not that this passage is continually difficult to perform, rather, this passage is continually made easier by gesture.
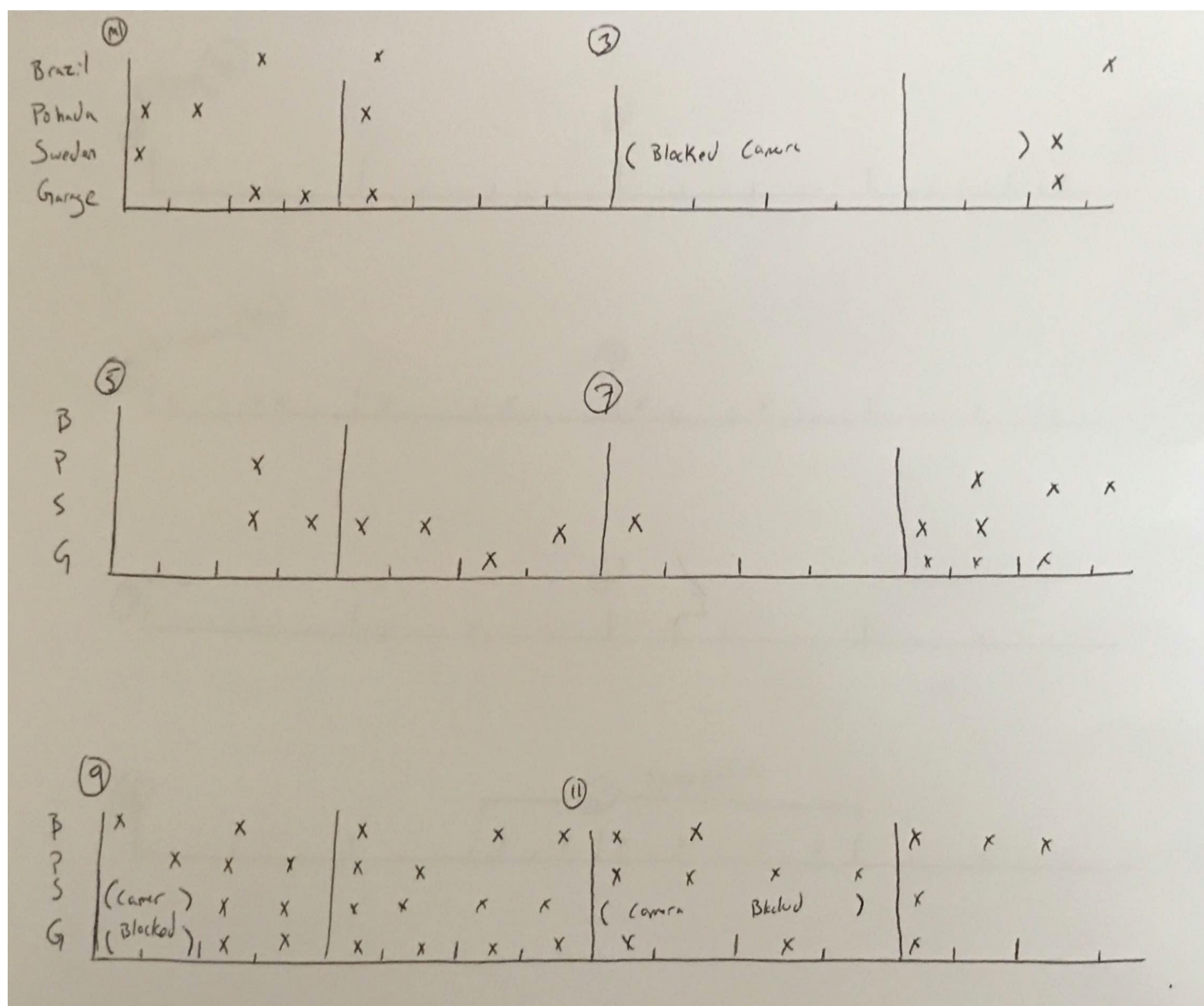
Example 5: Gesture Analysis of Four Performances of "Sincerity is Scary"

These performances highlight that even though the location and performance are different, gesture is still standing in for entrainment should entrainment fail. Further, even though the gestures are at times different, the still serve the same role. "Sincerity is Scary" makes for a case study to look at gesture longitudinally because of the differences in the performances. Through these differences, we can see all the ways and places in which gestures occurs and distill it down

to its meaning, which is conceptualization. While Healy–as the singer and songwriter–knows the music, humans still have a need to entrain to the music, and his gestures are a way to allow him to do just that. Knowing the music and how it is going to occur is different from a biological desire to entrain to the music.

This type of analysis then, one based on gesture and entrainment, allows for analyst to make predictions about areas of the music that might be perceived as problematic. Aspects of music that incorporate meter change, syncopation, or simply more difficult than other areas of the music, would seem to all produce more gestures than other aspects of the music. One could argue then, that these gesture of conceptualization, are written into the score, even though the score never specifies them. More work will have to be done in this area though and is a future direction for this project.

Conclusion

Gesture is an ephemeral action. Similarly, I find so much of the beauty in live music performance is in its ephemeral nature. Gesture then is able to provide a brief glimpse into the mind of the performer and how they think about, and perceive music in real time. As I hope to have argued, the gestures of a performer get coupled with their musical environment, forcing them to address the music as it is presented to them problems and all. But even if the music might "fail," gesture is there to help.

As research into gesture –and embodiment in music more broadly– grows, it is important to consider not only the ways in which the music produces movements, but also the movements produced by music. These gestures I have focused on are exactly that, movements that are in response to the music. In the case of The 1975's "Sincerity is Scary," one sees gesture in response to a difficult passage, with Badu, one can see gesture as a response to the band dropping out, and with Apple, one can gesture in response to a change in meter. In this way, a performer is in active dialogue with the music, and we are able to see how they are conceptualizing the music at a movement in time. Gesture in this way is a window into the musical mind.

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