Two Concepts of Groove: Musical Nuances, Rhythm, and Genre

Evan Malone

To appear in the *Journal of Aesthetics & Art Criticism* — please cite published version.

Abstract. Groove, as a musical quality, is an important part of jazz and pop music appreciative practicees. Groove talk is widespread among musicians and audiences, and considerable importance is placed on generating and appreciating grooves in music. However, musicians, musicologists, and audiences use groove attributions in a variety of ways that do not track one consistent underlying concept. I argue that that there are at least two distinct concepts of groove. On one account, groove is 'the feel of the music' and, on the other, groove is the psychological feeling (induced by music) of wanting to move one's body. Further, I argue that recent work in music psychology shows that these two concepts do not converge on a unified set of musical features. Finally, I also argue that these two concepts play different functional roles in the appreciative practices of jazz and popular music. This should cause us to further consider the mediating role genre plays for aesthetic concepts and provides us with reason for adopting a more communitarian approach to aesthetics which is attentive to the ways in which aesthetic discourse serves the practices of different audiences.

1. Introduction:

Groove is often called 'the feel of the music' (Roholt 2014; Iyer 2002; Pressing 2002). A track with a groove is liable to compel us to tap our toes in time with the rhythm or to dance along, even if this is despite our better judgement. Groove, as a musical quality, is an important part of jazz and pop music appreciative practices. Groove talk is ubiquitous among musicians and audiences, and considerable importance is placed on generating and preserving grooves in music. Drummer Steve Gadd has said that "[he's] found over the years that the feel overcomes everything. If you get a good groove happening, that carries it along. If it feels good, there's not a lot you have to do" (Modern Drummer 2005). This interest in groove can also be seen in empirical and theoretical work on music as well. A growing body of literature (musicological, psychological, and philosophical) seeks to explain the nature and function of musical groove. However, musicians, musicologists, and audiences use groove attributions in a variety of ways that do not track one consistent underlying concept.

Here, I argue that we should distinguish between at least two concepts of groove. On one account, groove is 'the feel of the music' (groove-as-feel) and, on the other, groove is the psychological feeling (induced by music) of wanting to move one's body (groove-as-movement). That both of these concepts answer to the word groove has led theorists and researchers to pursue an account which unifies what we find interesting about both concepts (or to assume that an account could or should unify the features picked out by both concepts). However, recent work in the empirical sciences casts doubt on the extent to which the two are related. Interestingly, the folk attributions of groove which psychologists have based their operationalizations around may track popular music appreciative practices and ontology where musical groove as understood by music theorists more closely follow features which are central in jazz practices and appreciation. On this account, what it means for a particular musical work to have groove might depend on the genre of the work and the practices which issue from that genre. If this is right, our ability to provide accounts of the nature or normativity of musical phenomena (like groove) or might require us to recognize the ways in which genre mediates our aesthetic concepts.

In the first section, I will characterize groove-as-feel and discuss the places in which it comes up. In the second, I will discuss the work of music psychologists and the musical features that they have associated with groove-as-movement. In the third section, I will summarize two confusions which result from failing to distinguish the two concepts. Finally, I will then argue that these two groove concepts track differences in the genre practices of jazz and popular music respectively and discuss the implications of this for aesthetic concepts for generally.

2. Groove-as-feel:

One popular theory of groove posits the musical quality as 'the feel of the music' which is constituted by the collected effects of various forms of musical nuance (especially with regards to microtiming). Versions of this theory are defended by philosopher Tiger C. Roholt, music theorist Vijay Iyer, and ethnomusicologist Charles Keil. While the three accounts that these theorists offer differ in substantial ways, they are united in picking out microtiming variations as the sonic correlates of groove. Since this commonality is the relevant musical feature of each of these accounts (for our purposes), we can think of them as comprising a family of theories which I will call 'musical nuance theories'.

In Roholt's account, he posits that groove, loosely, is "the feel of a rhythm." (Roholt 2014, 1) This feeling is, for Roholt, primarily the product of subtle variations which occur in microtiming. He tells us that "a successful account of the phenomenon of groove must elucidate the nature of its distinctive affective dimension (the feel), as well as the relationship between the music (the nuances) and the feel." (Roholt 2014, 73) This is to say that the sum of all musical nuances manifest in a performance is the relevant music feature which constitutes a groove. The particulars of this characterization will be important later.

Roholt draws on Diana Raffman's account of musical nuances in fleshing out his own theory. For Raffman, musical nuances are extremely fine-grained features of a performance that are perceptible but too subtle to be articulable in conceptual or linguistic terms (Raffman 1993). These nuances could be that a note is slightly off-pitch, that a note is slightly louder than the preceding note, or (in the case of microtiming) falls ever-so-slightly off of the meter of the beat. On Roholt's view, reliable patterns of microtiming variations allow musicians to 'push' or 'pull' at the beat by varying ever-so-slightly when, for instance, the snare falls within the meter. Thus, while two drummers may play a piece which could be notated (in standard notation), discussed, or even conceptualized identically, the individual idiosyncrasies of each respective drummer, and their reading of what is needed by the song, will manifest in subtle differences in microtiming. For example, a punk drummer might place the snare hits slightly before the beat, creating an effect which seems to drive the music forward, while a funk drummer might place the same snare hits slightly behind the beat (giving it a more laid-back feel). The resultant effect of these differences is the feel of rhythm, or the groove. Because these variations are taken to occur at too small of a timescale to be accounted for in the music's notation, musical nuances (like microtiming variations) are sometimes taken to be ineffable or to occur at a level finer-grained than schematization. Additionally, it is worth flagging that, by Roholt's account, the groove is principally a property internal to the music itself. Music has a groove. The phenomenal feeling which accompanies the apprehending of a groove is not the central explanandum in a theory of groove. The perceived feeling of the groove is a byproduct of our coming to apprehend the music's groove through the body. We perceive, and come to understand, the groove through our own conscious or nonconscious movements as a kind of embodied perception.

Vijay Iyer's formulation of groove differs in some significant ways. While this account again places emphasis on the relationship between groove and bodily movement, it sees the relationship as a causal one in which groove is first perceived and enjoyed, and then causes nonconscious bodily movement. Though they differ in that Roholt's account is firmly grounded in an embodied model of cognition, both Roholt and Iyer see microtiming variations as the musical qualities constitutive of a groove, with Iyer saying that "in groove contexts, musicians display a heightened, seemingly, microscopic sensitivity to musical timing (on the order of a few milliseconds)… these musical quantities combine dynamically and holistically to form what some would call a musician's feel." (Iyer 2003, 398) Again, for both theorists, groove is a cluster of nuances (with particular emphasis on rhythmic nuances) which constitute a particular musical 'feel'.

Finally, there is the theory put forward by Charles Keil (Keil 1995). Keil's theory departs from Iyer and Roholt's in that Keil describes the particular musical nuances that he is interested in as 'participatory discrepancies'. Here, the groove of a performance is found in the interplay between distinct musical lines (usually between two musicians playing two different instruments). Rather than locating the groove in the manner in which one note deviates from the meter (even if reliably), the tension between one musician playing perfectly in time and another playing slightly behind is what generates the feel of the music. Nevertheless, Keil (like Iyer and Roholt) is attempting to provide an account of the feel of the music and does so by appealing to preconceptual variations (albeit, this time those variations are between musicians). Presumably, individual artists playing individual instruments are capable, on Keil's account, of playing with groove, insofar as they are able to generate some tension between what are at least perceived as two distinct musical lines.

However, there is some equivocation in and between musical nuance theories about whether it is a musician, a band, a performance, or a genre that carries a particular groove or all of the above. Some who hold musical nuance theories argue for genres having particular aesthetic standards for the kind of groove appropriate for the music (like in the case of punk), while others focus on a given musician's (or group of musicians') groove. It could also be that performances or sections of performances (either taken in total or with regards to one musician's performance within an ensemble) have groove. These focuses need not be mutually exclusive, as

it may be that a musician or band's groove, as manifest across their catalog of performances, is so successful because it is in line with the genre expectations that the artist(s) is/are operating under. While differences between musical nuance theories can and do run fairly deep in these regards, they have (for the most part) converged on musical nuances as the basis of groove, with special focus on reliable rhythmic nuances like micro-timing variations. In addition, they also have in common the importance that they place on nonvoluntary bodily movement. Here, whether or not this movement is caused by the perception of groove or is a necessary prerequisite for perceiving it (in the case of Iyer and Roholt), and whether or not the nuances are supposed to be deviations from the music as written or from other accompanying performers (in the case of Keil) seem to be wedges which divides musical nuance accounts of groove.

While those interested in groove-as-feel need not be musical nuance theorists, interest in microtiming (as a particular musical nuance) has so-far dominated accounts of this kind of groove. For our purposes, we should just recognize that all of these theorists are giving an account of what gives music a kind of 'driving', 'laid back', or 'on-the-beat' feel, and all answer with some kind of account rooted in musical nuances.

3. Groove-as-movement:

The same nonvoluntary movement featured in Roholt's account also plays a central role in the dominant attempt to operationalize groove as a measurable phenomenon in the empirical sciences. Many psychologists agree with musical nuance theorists that the starting point in an investigation of groove ought to be its phenomenological character but operationalize this by way of artists' and audiences' attributions of groove or their assent to having this particular phenomenology. In this case, groove is frequently defined as the feeling, generated by music, that induces bodily movement. Studies in this space tend to track what features are present when people assent to there being groove present in the music, what claims people assent to about groove, and what musical features are correlated with self-reports of wanting to move to the music. The decision to center the psychological inquiry on the movement inducing feature of groove is well-supported. When researchers ask participants to agree or disagree (strongly or otherwise) with a number of claims about groove, that "groove depends on the extent to which the music makes you want to move" is not only very strongly agreed upon but is also the most strongly agreed upon aspect of groove (Janata, Tomic, and Haberman 2016, 57).

With this construct in hand, the psychological inquiry into groove, which is not pre-committed to any set of musical features, identifies a very different cohort of musical properties as relevant than the microtiming variations picked out by musical nuance theories. Instead, these researchers are only interested in explaining which musical features cause us to move our bodies involuntarily or want to move along to the rhythm. They are, here, after groove as movement induction (or groove-as-movement), and there is no in-principle reason why rhythmic non-voluntary movement should be linked to the feel of a rhythm. This is the sense in which there are, or could be, two concepts of groove. Without a reason for thinking that they should necessarily be tracking the same thing, the extent to which a unified account of groove is possible will depend on the details of what musical features psychologists are able to associate with groove-as-movement and the success of the musical nuance theory as an account of groove-as-feel.

One study began by composing a short piano melody and using an algorithm to transform the melodies such that they differed in degree of syncopation (Sioros et al. 2014). These differences in syncopation are distinct enough that each of the six resulting versions of the melody could be transcribed differently and, as such, are too substantive to count as musical nuances of the kind that Raffman and Roholt describe. Researchers then asked a cohort comprised of lay listeners and professional musicians to rate the extent to which they agreed that groove was an apt description of their experience of the music (where groove is defined as "the sensation of wanting to move some part of your body in relation to some aspect of the music") (Sioros et al., 2014, 4). This study found that moderate levels of syncopation increased participants' attributions of groove while the deadpan track and the track with too dense of syncopation offered diminishing returns. Another study played a series of programmed drum breaks at six different tempos across a wide range and asked music majors to rate the level of groove (without defining it for participants) and rate the extent to which the music made them want to move (Etani et al. 2018). This study found that tempo was correlated with both attributions and concluded that people were most likely to attribute groove to music that fell between 100 and 120 beats per minute. Finally, a third study presented participants with thirty different instrumental musical stimuli from across a wide range of genres (Burger et al. 2012). These stimuli had a consistent time signature, but provided a range of tempos, levels of pulse clarity, and levels of rhythmic complexity. Researchers instructed participants to move in a way

that felt natural as they listened (including dancing should they be so inclined) and observed this movement through motion capture technology. The results of this study indicate that clear pulse (especially in the lower frequencies) and high levels of percussiveness led to greater and more regular movement.

What, then, can we deduce about groove-as-movement from these studies? Instead of positing groove primarily as a musical quality which either acts upon or is understood by the body, groove, here, has been primarily conceived of as a psychological phenomenon. This is, importantly, the feeling within the listener, not the feel within the music. While this operationalization places the principal locus of groove in the listener, it does respect that this feeling is in a relationship with some properties of the music being listened to. What's more, like Iyer, this literature sees the relationship as causative, with the causal chain extending from certain musical properties to a feeling or desire to move and to actual bodily movement. However, it is worth pointing out that a feedback mechanism has been proposed in which the mirroring of the rhythm in bodily movement heightens the perception of the rhythm (perhaps echoing Roholt's embodied account) (Senn et al. 2019). What stands out most about this conceptualization is that the explanandum in the existing psychological literature on groove is the affective or phenomenal dimension of groove apprehension. Instead of understanding groove as a particular cluster of musical nuances, phenomenal theories of groove do not pre-commit themselves to some set of musical properties as groove-inducing features and, as a result, have identified alternative musical properties other than rhythmic nuances like microtiming variations which fulfill that role. Instead of microtiming variations, we find that tempo (between 100 and 120 bpm), high levels of percussivnesss and syncopation, and clarity in the lower frequencies are responsible for groove attributions.[1]

These two accounts seem to have considerable overlap in their respective emphases on the role of the body in groove apprehension, but insofar as this empirical operationalization assumes only the phenomenal character of groove apprehension, the musical qualities which have been picked out as reliably associated with this phenomenal experience differ substantially from the features picked out by musical nuance theories. This seems to raise the question of

[1] Mark Abell identifies a very similar set of features as contributing to groove, which he defines as a "unified rhythmic effect" which renders the rhythm of a 'groove-based' work the primary meaningful component (Abell 2016, 18).

which (if either) theory is actually tracking and explaining groove. That is, if groove is unified (as musical nuance theories take it to be), and a musician's feel is deeply related to nonvoluntary movement in the audience, then we might wonder whether to focus on musical nuances like microtiming variations or on the cluster of musical properties picked out by psychologists.

One response would be to deny the problem all together and assert that while psychologists have found other contributors to groove, this does not rule out the possibility that musical nuances play a role in generating or constituting groove-as-movement. On this view, there would seem to be no inconsistency in claiming both theories to be successfully tracking the same phenomenon because groove is taken to be multiply realizable (with musical nuances being one way to create a groove). One problem with arguing that both, the features picked out by the studies above and rhythmic nuances, contribute to some unified groove concept is that there isn't any evidence that microtiming influences people's willingness to attribute groove-as-movement. For instance, when drummers are asked by researchers to increase the groove of a performance, they tend to increase tempo, and do not introduce variations in microtiming (Kawase et al. 2003). Another similar study found that musicians merely increase syncopation from a deadpan baseline to increase groove and decrease syncopation to decrease groove (Madison & Sioros 2014). This study also verified that the steps that musicians took worked by asking listeners to confirm which performances had more or less groove.

In another study, participants were presented with programmed rhythms reflecting different genres (Davies et al. 2013). Three versions of each rhythm were produced, one with reliable variations in microtiming that reflected the apparent expectations of that genre, one in which the performance was deadpean, and one in which microtiming variations were not reliable. Participants were asked to rate whether their experience of listening to each track could be described as involving "the sensation of wanting to move some part of [their] body in relation to some aspect of the music." (Davies et al. 2013, 502) Interestingly, the stimuli featuring microtiming variations led to a decrease in groove attributions across the board (except in the case of jazz, where it had no effect). That is, systematic variations in microtiming according to genre expectations made listeners less likely to attribute groove-as-movement in almost all cases and never made listeners more likely to attribute it. Returning to the issue of jazz later, these results provide us with some evidence against thinking that the musical nuance theory can be

counted on to provide an account of groove-as-movement the same way that it can for groove-as-feel. Further, the results that cast doubt on the role of musical nuances in groove-as-movement are not the effect of one outlier study. Another study following a very similar methodology found very similar results (Fruhauf, Kopiez, and Platz 2013). This is consistent with the general agreement of audiences and musicians on the sentiment that "groove depends on the precision of timing (i.e., how well the musical events 'line up' in time)", which suggests that deviation from the meter in the form of microtiming variations could detract from groove-as-movement (Janata, Tomic, and Haberman 2011, 57).

With all of this evidence taken together, we have reason to think that whatever phenomenon the psychological theory of groove is tracking, it is not constituted (in part or in total) by musical nuance. If groove is unified such that these studies are after the same groove concept that musical nuance theorists are, and microtiming variations have been shown to have no bearing on whether groove is attributed or not, we have reason to doubt that groove is constituted by microtiming variations.[2] The lesson we should take away from this is that groove can and is construed of in multiple ways, and that the musical features associated with one concept need not (and appear not to) be associated with or constitutive of both groove concepts. A failure to distinguish these two concepts of groove can lead to one of two errors: 1) holding that musical nuances form the basis of groove-as-movement or 2) holding that research from the psychology of groove-as-movement disproves the musical nuance theory of groove-as-feel.

With regards to the first error, when Roholt tells us that "The feel of a groove is the affective dimension of the relevant motor-intentional movements", he is attempting to tie his musical nuance account of groove-as-feel to groove-as-movement (even though he disagrees about the casual process that psychologists are after) (Roholt 2014, 106). The same can be said of Iyer who, in his account of music-as-feel, tells us that "the phenomenon clearly involves regular, rhythmic bodily movement as a kind of sympathetic reaction to regular rhythmic sound…" (Iyer 2002, 392) or that "a musical groove is something that induces motion." (Iyer 2002, 391). This is just to say that musical nuance theorists do often take themselves to be

[2] Importantly, these studies leave open the possibility that musical nuances other than microtiming variations might play a role in groove-as-movement. Empirical work on the role of musical nuances has so far focused on the possible effects of microtiming, so it remains to be seen what role other forms of musical nuance could play. However, given the importance of microtiming for the musical nuance theory, we should take it to be problematic that the evidence weighs against this seemingly paradigmatic musical nuance playing a role in groove-as-movement.

providing an account of both, groove-as-feel and groove-as-movement. However, as we have already seen, musical nuance appears to have little to nothing to do with groove-as-movement.

Notice, however, that these studies cast doubt on the importance of microtiming variations when they 1) ask audiences about having a desire to move to the music, or 2) ask audiences to attribute groove at some level or not. More will be said on audiences' attributions of groove later, but we should notice that the first methodology only tells us that microtiming doesn't seem to be strictly necessary or important for groove-as-movement. These results do not count against the possible importance of microtiming when it comes to groove-as-feel. This leads us to the second confusion that arises when we fail to distinguish these two explanatory projects: taking the evidence that the psychological literature has now provided us with about groove-as-movement as counting against the musical nuance theorists.

This confusion can be seen when music psychologists have argued that "the claim that deviations from isochrony constitute the phenomenon of groove or swing is so counter-intuitive as to be tantamount to a contradiction in terms." (Merker 2014, 1) Here, they argue that groove is characterized by synchronous bodily movement in time with the music (tapping one's toes, swaying to the rhythm, dancing, etc.), so the worry is one of wondering how variations in timing that, by their nature, deviate or distract from the pulse could help or cause us to engage in predictive rhythmic behavior. The problem with this argument is that microtiming variations are supposed to capture groove-as-feel, which need not be tied to the kinds of bodily movement that the author describes. For the same reason, we shouldn't take the studies cited above (which examine the impact of microtiming variations on audience members' desires to move to the music) as evidence against Keil, Iyer, or Roholt (except where they tie their accounts to groove-as-movement).

Indeed, there is robust evidence that, despite not doing it when asked to increase or add groove, musicians do undertake the kinds of modifications and variations that musical nuance theorists describe (Camara 2016; Camara et al. 2020; Polack & London 2014). However, these studies operationalize groove according to the broad definition of groove-as-feel. For instance, one study found reliable microrhythmic variations among drummers who were asked to perform in either a 'laid-back', 'on-the-beat', or 'pushed' style (Camara et al. 2020). While the extent to which these findings vindicate any particular theory of groove-as-feel might depend on the

details of whether the microtiming variations that researchers are looking at qualify as musical nuances on Raffman's account, these findings do suggest that microtiming variations (of some kind) play a very important role in generating and preserving certain musical feels (grooves on the groove-as-feel model).

We might, then, expect that artists will introduce microtiming variations when asked to make a song more laid-back or more driving but increase syncopation and pulse when asked to increase or add groove (where groove isn't specified as to a particular feel). This suggests that artists can move back and forth between both groove concepts and different musical features track which concept is being employed. This is just to say that musical nuance theory does seem to capture how musicians produce certain 'feels'. Although we should take the evidence of psychology to tell us that musical nuances don't play an important role in groove-as-movement, we should not take those same studies to show that it doesn't play a role in groove-as-feel.

This also points to a linguistic difference when it comes to attributing groove-as-feel and groove-as-movement. Musicians pursue groove-as-movement strategies when asked to increase or add groove but seem to switch to groove-as-feel strategies when told to add a particular kind of groove (like a driving or laid-back feel). It seems that there is a general sense of groove-as-movement, but groove in the sense of groove-as-feel must be of a particular kind. If this is right, then we should expect that asking musicians to add or increase groove will produce results more closely matching the psychological literature on groove-as-movement but asking musicians to play with a particular feel will often involve altering the microrhythmic profile. This is consistent with the results discussed above.

4. Genres, Performances, and Tracks:

One interesting feature of these two different accounts of groove and the musical phenomena they pick out is that these differences seem to track differences between jazz and popular music appreciative practice. A standard distinction is made in the philosophy of music between the song, the track, and the performance. (Burkett 2015) As an example, a songwriter writes a score for a piece of music (in popular music, these are usually songs), and an artist performs it. We might then evaluate the songs written by the songwriter as well as the performances of the work undertaken by various artists. Further, we might decide to record an artist's performance and evaluate the resulting track that this recording process produces. This

leaves us with a model in which, for any given track, we can evaluate and appreciate that track as a song, the individual performances it incorporates, and/or as the final recorded track.

Recall that, for the musical nuance theorists, a groove (that is, a feel) is typically thought of as the sum of all musical nuances manifest in a performance. The musical nuances that Raffman, Iyer, Roholt, and Keil have in mind are not apparent in notation, so to the degree that the song is what is captured in notation, musical nuances seem to be primarily performance and track level features.[3] This is especially clear in the case of Raffman (and Roholt who draws on her work). For instance, when Roholt discusses Ringo Star and Andy White's respective performances on The Beatles' "Love Me Do", he points out that the recording that Ringo is featured on feels different than the recording that Andy White is on (that is, White's performance has a forward-leaning groove and Ringo's does not) (Roholt 2014, 13). By maintaining that the two performances are correctly notated identically and that both are playing the song correctly, it is, then, not the song (or even the drum part of the song) that has the relevant kind of groove. While songs do not have groove on the musical nuance model of groove-as-feel, and performances do, we are not excluded from attributing groove to track-level features. Indeed, research into microrhythmic profiles has been used to generate 'humanizing' algorithms which can be applied to computer programmed layers of tracks in the studio to give that instrumental line a more 'human' feel. That is, a significant portion of the interventions available at the track-level which might generate groove-as-feel are deliberate attempts to make programmed parts seem as if they were performed by humans (taking the relationship between a notated song and a given performance as its model). That is, we can certainly imagine differences in microtiming (or other kinds of nuances) that emerge in recording or as part of the post-production process. However, performance-level decisions still seem to offer the most opportunities for introducing new musical nuances, and the musical nuances that these theorists take as paradigmatic all seem to be performance-level features.

By contrast, the musical features that psychologists have pointed us to in order to explain groove-as-movement are not as limited or focused in this way. These features range from

[3] While any musical nuance theorist who adopts the view that the relevant musical nuances necessarily occur at a level that can't be captured by notation will agree that groove doesn't occur at the song-level, they need not hold that groove is necessarily a feature of performances (even if they take performance-level nuances as paradigmatic). Others, like Garry Tamlyn, take the stronger stance, arguing that "groove emanates from musical performances (including recorded performance), not from a musical score…" (Tamlyn 2003, 610).

performance-level attributes to track and song-level attributes. For instance, while percussiveness might be (at least partially) a product of performance level decisions, many more of the features picked out by the psychological literature on groove-as movement avail themselves to emerging or being amplified in the recording studio or as a product of post-production mixing and mastering than those picked out by the musical nuance theory of groove-as-feel. As an example, low frequency pulsing can be increased in the studio through the use of an audio production technique known as 'sidechaining' in which the volume of the bassline is tied to the kick drum. When the kick drum hits, the bass drops down in volume and returns between kick drum hits. This creates a pulsing effect between the two. However, this is just one of many ways in which things like pulsing, tempo, percussiveness, and syncopation are alterable at the track level. Likewise, syncopation is easily notated in standard musical notation systems and, thus, can be modified at the song-level.

This is just to say that it is less that groove-as-movement focuses on track-level features over performance-level features, but that the features it picks out are more conducive to being introduced or amplified at the track and song-level than those picked out by groove-as-feel and groove-as-movement researchers do not always (or even typically) center performance-level interventions in their investigations or analysis. Likewise, syncopation and tempo are musical features which can be transmitted via notation, allowing for groove-as-movement to emerge at the song-level as well. Depending on the particulars of a researcher's definition, groove-as-feel is either necessarily a feature of performances or manipulated most easily at the performance level, whereas groove-as-movement can freely be altered at any level more easily.

This difference is especially interesting if, as it has been argued elsewhere, rock and popular music are musical styles driven by or focused on recorded tracks (Grayck 1999). It might then make sense that the popular conception of groove corresponds to the groove present in popular music and made easier by the production techniques of popular music (Grayck 1996; Kania 2006). Here, the fact that folk attributions of groove track the features and conceptualization that goes with groove-as-movement might issue from concept's doing more work when it comes to engaging with and appreciating the more predominant forms of popular music. Since they are mostly listening to track-centric forms of music, the folk of today tend to assume a more track-amenable concept of groove. Likewise, if Dan Burkett is right in arguing

that rock music takes the song, performance, and track as key works to be evaluated, then groove-as-movement allows us to appreciate groove across all three ontological levels of a work (Burkett 2015).

By contrast, it is worth revisiting the fact that groove attributions were not diminished by microtiming variations in jazz while they were in other genres. Andrew Kania has argued that, while rock music may be a track-oriented musical style, jazz is a performance oriented one (Kania 2011). Recordings of jazz are expected to be transparent, accurately representing performances with minimal alteration taking place in post-production. In this case, it could be that while the psychological theory of groove-as-movement is tracking the concept common to musicians and laypeople generally, the musical nuance theory is tracking a term of art primarily used in performance-centric genres like jazz (where groove is a feature of performances). Keil even acknowledges that he takes jazz music practices to be paradigmatic in his account of groove, saying that "since the 1950s [he has] been trying to figure out exactly how a groove is created or crafted by jazz drummers and bassists." (Keil 2010, 2) This could explain why groove attributions were higher in instances of jazz featuring microtiming variations than those in other genres. That is, there could be a confounding effect of jazz listeners having two notions of groove and dealing with the ambiguity that goes with that. Likewise, this being a term of art might explain why musicians and sophisticated theorists so readily endorse the theory while lay audiences and other musicians don't. The differences between musicians' attributions could track differences in the genre expectations and norms that those musicians work in.

5. Aesthetic Concepts & Genre:

If the account I have so far given is correct, and our concept of musical groove picks out different musical features and for different reasons depending on genre, then we should wonder to what extent this might be true of other aesthetic concepts. To be clear, it is not just that some genres might have a higher threshold for attributing a certain sonic quality than others based on that genre's conventions (the way that a track might be funky for a punk song but fail to stand out as funky when compared to funk tracks). Instead, the term 'groove' is actually doing different work in jazz and popular music appreciative practices. In jazz music's performance centered practice, in which we spend considerable time appreciating the ways that particular performances (and transparent recorded tracks of those performances) differ from a notated

standard song, groove talk allows us to better think about the ways in which individual musicians can leave their mark on the genre's many standards. In popular music practice (like in the case of rock, pop, and funk), groove talk allows us to communicate more effectively about the ways in which musicians can make their songs, performances, or tracks more danceable or more sonically infectious.

This suggests that accounts of aesthetic concepts should be sensitive to their functional role within the aesthetic practices of a given community. Insofar as we pursue analyses of aesthetic concepts from the starting point of individual aesthetic experience (as is often the case for groove-as-feel) or from private phenomenological experience (in the case of groove-as-movement), we might fail to see the interaction between features of works, individual aesthetic experience, and the function that those features and experiences play within a community's appreciative practice. Besides revealing the ways that these two groove concepts come apart, understanding aesthetic concepts in terms of communities of aesthetic practice might also help us better understand the aesthetic value that those features add. For instance, groove can be a good thing to have in jazz music because it serves as an individualizing marker for the performer in a world of versions of standard songs. Yet, groove can be good in pop music because it makes a song easier to dance to or more readily invites the listener to dance. I take this to provide us with some reason for favoring communitarian approaches to aesthetics that are sensitive to community or social aesthetic practices (Riggle 2017; Riggle Forthcoming; Nguyen 2019a; Nguyen 2019b; Kubala 2020) over more individualistic hedonist accounts (Van der Berg 2019). Without being properly sensitive to the differences appreciative practices between genre communities, we might fail to notice the ways in which we should be pluralists about other aesthetic concepts.

6. Conclusion:

To briefly summarize, I have argued that music theorists, philosophers, and musicologists have sought to give an account of groove which takes the concept as it is understood in jazz practices (groove-as-feel) as paradigmatic. Meanwhile, psychologists have focused their efforts on investigating groove as it is understood in popular music appreciation (groove-as-movement). The fact that these two projects have identified two different sets of corresponding musical features gives us reason to think that there is no unified groove concept. Failure to distinguish

between these two concepts of groove has 1) led theorists to think that the musical features that they are interested in are responsible for both kinds of groove and 2) led psychologists to think that they have debunked the account of groove-as-feel that musical nuance theorists have offered. Both of these strike me as errors which have resulted from failing to notice the different roles that groove plays in the appreciative practices of different genres.

Likewise, there is some precedent for thinking that there are multiple groove terms which refer to distinct concepts (even within music). For instance, drummers frequently refer to a drum part in a section of a song as a groove the way that guitarists refer to a section of the guitar part in a song as a riff. Further, even outside of music, it is not uncommon to hear people talking about being in a/the groove when they are engaged in a flow-state. This kind of groove could also extend to music. That is, musicians could say that they were in a groove when they were playing while in a flow-state without necessarily feeling anything like a pleasurable phenomenology associated with non-voluntary bodily movement (though these two things could be correlated). This is just to say that there are already a number of concepts which answer to 'groove', and at least three are employed in discussions of music among musicians. Why not, then, add another musical groove concept by divorcing discussions of musicians' feels from discussions of involuntary rhythmic movement?

Finally, that groove talk does different work in the practices of different genre communities should give us reason to consider whether the same might be said of other aesthetic concepts. Understanding the nature and value of aesthetic predicates might require us to reconsider the approach which takes individual engagement with works to be paradigmatic and to, instead, focus our attention on the appreciative practices that communities find valuable.

References

Abell, Mark. Groove: An Aesthetic of Measured Time. (Boston: Brill, 2016).

Burger, Birgitta, Marc R. Thompson, Geoff Luck, Suvi Saarikallio, and Petri Toiviainen. "Music Moves Us: Beat-Related Musical Features Influence Regularity of Music-Induced Movement." *Proceedings of the 12th International Conference on Music Perception and Cognition and the 8th Triennial Conference of the European Society for the Cognitive Sciences of Music*, (July 2012): 183–187.

Burkett, Dan. "One Song, Many Works: A Pluralist Ontology of Rock." *Contemporary Aesthetics* 13 (2015).

Camara, Guilherme Schmidt. "Swing in Early Funk and Jazz-Funk: Micro-rhythmic and Macro-structural Investigations." M.A. thesis, (University of Oslo, 2016).

Camara, Guilherme Schmidt, Kristian Nymoen, Oliver Lartilot, and Anne Danielsen. "Timing is Everything… Or Is It? Effects of Instructed Timing Style, Reference, and Pattern on Drum Kit Sound in Groove-Based Performance." *Music Perception* 38, no. 1 (2020): 1–26.

Davies, Matthew, Guy Madison, Pedro Silva, and Fabien Gouyon. "The Effect of Microtiming Deviations on the Perception of Groove in Short Rhythms." *Music Perception* 30, no. 5 (2013): 497–510.

Etani, Takahide, Atsushi Marui, Satoshi Kawase, and Peter E. Keller. "Optimal Tempo for Groove: Its Relation to Directions of Body Movement and Japanese *nori*." *Frontiers in Psychology* 9, (April 2018): 1–13.

Fruhauf, Jan, Reinhard Kopiez, and Friedrich Platz. "Music on the Timing Grid: The Influence of Microtiming on the Perceived Groove Quality of a Simple Drum Patterm Performance." *Musicae Scientiae* 17, no. 2 (2013): 246–260.

Grayck, Theodore. *Rhythm and Noise: An Aesthetics of Rock* (Durham: Duke University Press, 1996).

Iyer, Vijay. “Embodied Mind, Situated Cognition, and Expressive Microtiming in African-American Music.” *Music Perception* 19, no. 3 (Spring 2002): 387–414.

Janata, Petr, Stefan T. Tomic, and Jason M. Haberman. “Sensorimotor Coupling in Music and the Psychology of the Groove.” *Journal of Experimental Psychology: General* 141, no. 1 (2016): 54–75.

Kania, Andrew. “All Play and No Work: An Ontology of Jazz.” *The Journal of Aesthetics and Art Criticism* 69, no. 4 (Fall 2011): 391–403.

Kania, Andrew. “Making tracks: The Ontology of Rock Music.” *The Journal of Aesthetics and Art Criticism* 64, no. 4 (Autumn 2006): 401–414.

Kawase, Satoshi, Toshie Nakamura, C. Nagaoka, M.R. Draguna, T. Kataoka, and M. Yuki. “Music Psychology Research into the Origin of Groove Within Music Performance.” *Proceedings of the Human Interface Symposium (Tokyo)* (2003): 473–476.

Keil, Charles. “Definiing ‘Groove’.” *PopScriptum* 11 (2010): 1–5.

Keil, Charles. “The Theory of Participatory Discrepancies: A Progress Report.” *Ethnomusicology* 39 (1995): 1–19.

Kubala, Robbie. 2020. “Aesthetic Practices and Normativity.” *Philosophy and Phenomenological Review*.

Madison, Guy, and George Sioros. “What Musicians do to Induce the Sensation of Groove in Simple and Complex Melodies, and How Listeners Perceive It.” *Frontiers in Psychology* 5, (August 2014): 1–14.

Merker, Bjorn. “Groove or Swing as Distributed Rhythmic Consonance: Introducing the Groove Matrix.” *Frontiers in Human Neuroscience* 8 (June 2014): 1–4.

Modern Drummer. “Steve Gadd: Opens Up.” *Modern Drummer* (2005).

Nguyen, Thi C. 2019a. “Autonomy and Aesthetic Engagement.” *Mind* 129 (516): 1127 – 1156.

Nguyen, Thi C. 2019b. “Monuments as Commitments: How Art Speaks to Groups and How Groups Think in Art.” *Pacific Philosophical Quarterly* 100 (4): 971 – 994.

Pressing, Jeff. 2002. “Black Atlantic Rhythm: Its Computation and Transcultural Foundations.” *Music Perception: An Interdisciplinary Journal* 19 (3): 285–310.

Polack, Rainer & Justin London. “Timing and meter in Mande Drumming from Mali.” *Music Theory Online* 20, no. 1 (2014). https://mtosmt.org/issues/mto.14.20.1/mto.14.20.1.polak-london.html.

Raffman, Diana. *Language, Music, and Mind* (Cambridge: The MIT Press, 1993).

Riggle, Nick. 2017. *On Being Awesome: A Unified Theory of How Not to Suck*. London: Penguin.

Riggle, Nick. Forthcoming. “Toward a Communitarian Theory of Aesthetic Value.” *Journal of Aesthetics and Art Criticism*.

Roholt, Tiger C. *Groove: A Phenomenology of Rhythmic Nuance* (New York: Bloomsbury, 2014).

Tamlyn, Garry. “Groove.” In *Continuum Encyclopedia of Popular Music of the World, Volume II: Performance and Production* (London: Continuum, 2003).

Sioros, George, Marius Miron, Matthew Davies, Fabien Gouyon, and Guy Madison. “Syncopation Creates the Sensation of Groove in Synthesized Music Samples.” *Frontiers in Psychology* 5 (September 2014): 1–10.

Van der Berg, Servaas. 2019. “Aesthetic Hedonism and its Critics.” *Philosophy Compass* 15 (1): 1 – 15.