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PROCEEDINGS

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The Power of Long Notes: Pedal Points, Drones, and Expectancy Theories

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Abstract

Pedal points and drones appear in music in a variety of ways, and they can have diverse effects on listeners. This paper outlines the ways in which expectations are built in the perception of long notes, as well as the ways in which this perception influences perceptions of other musical parameters. As a conceptual frame, I have considered the writings of Elizabeth H. Margulis (2005) and David Lewin (1986). The perspective of expectancy theories proves to be fruitful for exploring the differences in the effects of long notes. The expectancy rate seems to be one of the most influential parameters in the perception of long tones (another is their sonority). A pedal point with a high expectancy rate can even vanish into inaudibility (or just be implied) while simultaneously maintaining tension. A pedal point with a low expectancy rate might be perceived as a layer in the overall texture, as a drone. The current paper offers a new definition of harmonic pedal point and drone, as well as a new terminology to refer to their subtypes.

Introduction

Long notes – called pedal points, organ points, drones, or bourdons – exist in all musical genres and styles, including folk music on all continents.[1] Long notes are broadly described as *sustained sound*. Although there is no strict differentiation between the terms *pedal* (or pedal point) and *drone*, nor there are clear definitions, the former is often used in the context of western art music, whereas the latter is typically employed in the context of non-western music or western folk music.

Despite the similarity in their appearance in the score, pedals (drones) can sound in a variety of ways – including being (almost) silent. Compare, for example, the "folk drones" of Beethoven's *Pastoral Symphony* to the tonic pedal under the fugue of Brahms' *A German Requiem*, or the rhythmic pedal of Chopin's mazurkas to the dominant pedal just before the recapitulation of a classical sonata-allegro form. Aside from differences in their sound, and in their function and place in music, these long notes can have very different effects on listeners. Some can build enormous tension, while others can provide stability.

This variety is not reflected in the way in which long notes are mentioned in the analysis of a musical piece. Usually, a long note is described by noting its pitch, duration, and harmonic function (if the harmonic language is tonal-functional). I believe that this discrepancy is a consequence of not having an appropriate terminology that could help articulate and distinguish among the many affective aspects of long notes.

The aim of the current research was to explain the perceptual differences between many instances of pedals (drones) and thereby provide insights and terminology that can be applied in music analysis. As a conceptual frame, I have applied expectancy theories, especially those of David Lewin (1986) and Elizabeth Margulis (2005). This perspective was fruitful as it helped to answer my main question: Why are some pedal tones so exciting, while others do not exhibit this quality at all?

Conceptual Frame

At the core of expectancy theories is the idea that musical sounds acquire meaning when they refer to, are connected with, or indicate other

[1] In the Garland Encyclopedia of World Music (Nettl, Stone, Porter, & Rice, 1998), all of the volumes (world regions) include music with drones.

musical sounds. This relationship between tones is perceived in the musical ears of the listener. When listening to music of a style with which one is acquainted, the listener groups the single tones and understands them as forming various patterns. Once the listener has recognized these patterns (as they are unfolding), expectations are created regarding subsequent tones on the basis of this recognition (i.e., the listener expects the pattern to continue). Some expectations are based on certain general laws, such as the *law of good continuation* or the *law of Prägnanz* (Meyer, 1956), or on principles such as the expectation of stability (e.g., of key) or the expectation that the next melodic interval will follow a certain direction (Margulis, 2005). Other expectations are a product of one's acquaintance with the aesthetics of the style. These different-level expectations are combined and work according to certain "hierarchic rules" (Margulis, 2005).[2] The current study claims that the power of certain pedal tones is derived from the listener's expectation of a resolution. This power is present even when we know that the pedal tone will be resolved only several beats later.

In his legendary book, *Emotions and Meaning in Music*, Leonard Meyer (1956) primarily focused on expectations based on the knowledge of stylistic norms. According to his theory, emotions are aroused when these expectations are not met, i.e., when music deviates from the usual procedures. In her theory, Elizabeth Margulis (2005) emphasized the types of tension that are aroused as a consequence of expectations and their denial. Although her research was specifically related to pitch, the theoretical model she developed is applicable to other musical parameters as well. Margulis defined three types of tension. *Surprise-tension* refers to the "tension deriving from unexpectedness [and] registers not as a conscious experience of shock, but rather as a subtle experience of intensity and dynamism. It motivates closer attention from the listener" (Margulis, 2005: 693). *Denial-tension* "correlates directly with implicative denial. High denial-tension creates a sense of will, intention, or determinedness" (Margulis, 2005: 693). "Denial" here refers to situations in which a non-expected element (Margulis refers to pitch) appears instead of an expected one. Lastly, "a third tension type, expectancy-tension, pertains not to the degree to which an event satisfies or denies expectations created by preceding events, but to the strength of expectation generated by an event about future ones . . . Events that trigger strong expectations generate high expectancy-tension, but events that generate mild expectations generate low expectancy-tension. Expectancy-tension creates an impression of strain and desire in a melody" (Margulis, 2005: 694–695). As we shall see, the current study drew on this categorization to suggest that expectancy-tension is the main factor in the experience of harmonic pedal tones.

David Lewin (1986) developed a model of perception based on four parameters: event, context, expectations, and theoretical language. Musical stimuli (events) are always (musically) understood in a certain context (related to a motif, progression, sonority, style, etc.). Any musical event can be seen in a variety of contexts; however, in each context, the meaning of the event will be different. The relation between the event and the context incites expectations about consequent events. Any event is thus related to both previous events and anticipated future events. Past expectations are integrated in perceptions of any event: any event could be that what was expected (confirmation of expectations) or it can be different from what was expected (denial). Any relation between events is constituted through "language". "Language" contains known concepts and patterns. Lewin defined "language" as a list of statements that one can make about a particular event. In the current research, for example, a long tone in the bass can be recognized as the dominant (involves a context in which we know which tone is the tonic) or as the goal of the harmonic

[2] There are also expectations based on one's acquaintance with a particular musical piece. Expecting a particular melodic movement (or another musical event)–because we know how it will sound–can conflict with our schematic expectations related to that same event. Margulis (2005) suggested that this conflict can explain the affective quality of certain melodic progressions (even in well-known pieces).

progression (involves understanding the bass line as a particular pattern), or it can be recognized as the pedal point (involves a context in which its harmonic function is not shared with the other voices). Language makes it possible to perceive an event as an instance of any of the known concepts.

Expectancy, as an idea, is already present, implicitly or explicitly, in music analysis, especially in the analysis of musical form. Whenever the perception of music is considered being significant in music analysis, the listener's expectations (in this case, the analyst is herself the listener) guide the analytical process. What one expects to hear can tell us a lot about how one understands a particular phrase, fragment, or whole piece (i.e., in which *context* the listener understands the musical events being heard). Experiential knowledge of stylistic norms here represents an important factor because the listener is constantly recognizing the musical patterns she already knows (*the language*). All the current events are understood in the light of the supposed pattern, which in turn triggers expectations of the consequent events. When it turns out that the consequent events do not confirm one's assumptions (i.e., refutes the listener's "reading" of the musical events), new assumptions are made. Theorists like Janet Schmalfeldt and Hepokoski and Darcy demonstrated the variety of ways in which late eighteenth- and early nineteenth-century composers played with formal conventions (deceiving listeners' expectations). Schmalfeldt (2011) showed how elements of form can change their role and become something else in the structure – as such, form is *in the process of becoming*. James Hepokoski and Warren Darcy (2006) placed emphasis on a *dialogue* between any current piece and other pieces. An individual piece of music is in dialogue with generic norms and expectations (this happens in the minds of the composer and also in the musical ears of the listener). The current essay proposes a similar view concerning listeners' understandings of any long note: As a particular pattern, a long note is heard "through a dialogue" with known pedal points and drones (from any known style, in general, and from any known piece, in particular). Through the process of generalization, a listener's aural vocabulary is constantly being enriched and refined.

Pedals (Drones) Through the Perspective of Expectancy Theories

Traditional textbooks on the subject of harmony teach us that a pedal point is a non-chord tone, and is thus dissonant; as such, it will ultimately be resolved. Sometimes, however, the listener might feel that the harmonies above it are dissonant. Music analysis embraces both interpretations. For example, in a musical piece with a pedal tone in the inner voices (such as in Mozart's piano sonata KV 331/i), harmony is often analyzed independently from the pedal tone, with the suggestion that a pedal tone is that which is dissonant (or does not belong). Yet, more often, we encounter the opposite situation – for example, when the tonic or the dominant pitch in the bass is sustained, and the harmony is analyzed as the "prolongation" of the tonic or the dominant. The whole progression is then considered to represent one harmonic function (I or V), and the chords above the bass that do not share the same function are considered to be dissonant.[3]

The term *dissonance* does not necessarily refer to dissonant intervals. Živković (1996) indirectly explained the *dissonant nature* of the pedal point: "Even when pedal tone belongs to the harmony of the upper voices, it does not follow their movement, but rather awaits the resolution of the harmonic progression that has digressed from the pedal-foundation and will (in most cases) return to it" (p. 220).

In any of the mentioned cases, the involvement of a pedal point is considered to be a deviation of some kind, a deviation that is temporary and could thus be expected to end at some point. The following image (Figure 1) depicts a typical pedal point in a tonal piece with functional harmony.

[3] Koslovsky (2012) pointed to the significance of the pedal point as a form-generating and framing device, and consequently, to the necessity of paying more attention to this musical element in (the teaching of) music analysis.

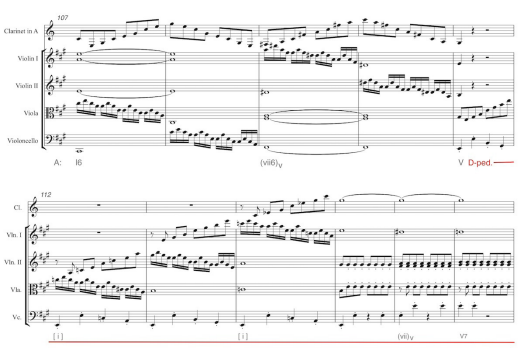

Figure 1. W.A. Mozart, *Clarinet quintet KV 581*/i.

The harmony in mm.109–110 prepares the arrival of the E-Major chord in m.111. From this moment, until m.118, the bass tone E is repeated on each downbeat. The harmonic space divides into two harmonic layers: a repeated bass tone that prolongs the dominant harmony, and the harmonic progression above, moving away from this harmony. The two harmonic layers are competitive. This splitting can be perceived as a deviation in texture, and also as harmonic dissonance, one which would be expected to ultimately be resolved. In this case, there is a departure from a stable harmonic point, and there could also be the expectation of a return to this point.

An experienced listener will mentally tie all the downbeats into a prolonged E and will recognize a pedal point within it – as this musical event is quite common in tonal music (we have it in our *language*). Moreover, this event is accompanied by a procedure, one that is expected by the listener and which is built on stylistic norms. In this case, the procedure comprises three stages: (1) the harmony and the bass will reunite at a structurally significant point; (2) after this reunion, the pedal tone will be terminated; finally, (3) the tonic chord will follow – because after the prolonged dominant, the tonic chord is felt like the final resolution. The recognition of the repeated tone "E" as a harmonic event, one that we call the pedal point, is accompanied by all three expectations at the same time, as a complete procedure, unfolding in stages. The final goal is an A-major chord, the tonic (m.118). Its arrival is prepared but at the same time delayed by this pedal point. There is no existing rule to tell the listener how long a pedal tone will be. Still, as harmony and form are closely related in this musical style, we very often have a feeling that the pedal tone could end in a particular measure – whereas in another measure, probably not. In this example, harmonic rhythm above the pedal tone accelerates, as compared to the preceding bars. The harmony and the bass are reunited several times. A sense for proportions could tell the listener that the pedal tone will not end on the first such occasion, in m.113; the next possibility, in m.115, is more plausible. As David Huron (2006: 9) explained, preparing for an expected event typically involves both motor preparation (arousal) and perceptual preparation (attention). The listener is prepared for the expected events, but as she does not know when exactly it will happen, the arousal and the attention are maintained. Throughout the pedal fragment, the listener experiences expectancy-tension.

There is yet another expectation, related to the same pedal point, that an experienced listener can have: knowing that one is in the development section of a classical sonata, it could be expected that, after this pedal, the recapitulation will follow. The dominant pedal point often announces important thematic material: the return of the main theme or the arrival of the second theme.

As we have seen, the expectation itself raises expectancy-tension. This tension is stronger when the expectation is more direct – when we know exactly *what* to expect and *when* the expected event will most likely occur. If the expected resolution is delayed, then the pedal point can feel even more powerful because of the denial-tension and the sense of determinedness that it can incite. However, too much delay can have quite the opposite effect: it could weaken the form of the pattern and as such weaken the expectations. Take, for example, Bach's Prelude in C.

After a long predominant area, the cadential dominant arrives in m.24. Instead of the expected resolution to the tonic, the dominant is prolonged by the pedal point above which the tonic chord sounds. After the initial surprise, the listener will recognize the dominant pedal and

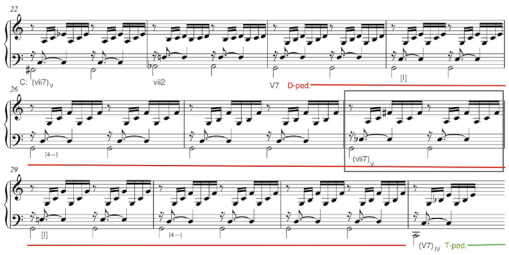

Figure 2. J. S. Bach, *Prelude in C. WTC I.*

will likely expect the unification of the pedal tone and the harmony in m.26, as well as the termination of the pedal tone in m.27. In this scenario, the tonic chord in m.25 is understood as a neighboring chord. However, the resolution of the harmony is realized in two steps (first, the 6th moves to the 7th, and only then is the 4th resolved in the 3rd). This small delay of the final dominant is understood as an extension of the assumed harmonic pattern, i.e., as an element meant to put even more weight on the dominant resolution (end of the pedal) and thereby also place more emphasis on the expected post-pedal resolution into the tonic in m.28. When the expected dominant indeed arrives in m.27, as a confirmation of the expectation, the belief in the tonic's arrival (and the termination of the pedal point) in m.28 is high. However, the pedal point is still present, and instead of the tonic, there exists above it a dissonant harmony. The listener will be surprised by this prolongation and will most certainly experience an emotional response due to a large contrast between the expected and the outcome.[4] From this point, two different scenarios could be expected. In the first, the listener will focus on the new denial and the new extension, will be able to perceive the surprising moment as part of the pattern and will believe that, this time, the procedure will be executed. The denial-tension amplifies the expectancy-tension. The second possibility is the converse of the first: the listener's expectations will decrease in intensity because it will seem as though she cannot make accurate predictions very well. The shape of the harmonic pattern might feel less "good", and thus less predictable. It might even feel like this pedal is "too long".

High versus Low *Pedal-ness*

As we have seen, the level of expectation involved in the perception of a long tone is closely related to the tension that this long tone arouses. Introducing a parameter that indicates the level of expectancy-tension could provide the means to better describe any long tone in a piece. I suggest introducing the parameter of *pedal-ness* for this purpose. Harmonic pedal points, especially those on the dominant, usually have a high pedal-ness rate.

Not all of the long notes incite expectations. This is mostly due to the musical style and the patterns that the listener associates with it. Take, for example, bagpipe music. Long accompanying notes are inherent to this instrument; these drones provide its characteristic sound. They are not a "deviation that comes with a procedure", but rather a stable ingredient of bagpipe music. The listener does not expect them to stop.[5]

The drone could be felt to be an anchor, one to which the melody will always return. In some sense, such a drone is a physical representation of the tonic.[6] A similar effect can be "artificially" created to, for example, centralize an otherwise neutral tone collection, such as a whole-tone or 12-tone scale (e.g., Debussy's *Voiles* or Webern's String quartet Op. 5, No. 3). These drones (in western art music, we usually label any kind

[4] Huron (2006) wrote that "the magnitude of the emotional response is amplified when there is a large contrast between predicted and actual outcome" (p. 22).

[5] McCullough (1977) explored traditional Irish music and concluded that in fiddle music, the players are distinguished and praised or comment mostly on the sound. The use of drones (next to, e.g., a bowing technique) is considered to be one of the elements of sound. Thus, sustained tones are not perceived as a tension that must be resolved, but rather as an element contributing to the overall sound.

[6] In traditional Indian music, a drone is an essential element. "It is the drone which functions to unambiguously establish the tonic. The continuous sounding of one or more notes provides the harmonic base for the performance. This not only clarifies the scale structure, but actually makes it possible to develop amazingly complex modes" (Jairazbhoy, as cited in Courtney & Courtney, 2019).

of persistent tones as pedal points) are not implicative and do not incite any particular expectations. One composition that is often referred to as "the drone piece of classical music" is the prelude for Wagner's *Das Rheingold*. The perfect 5th, Eb-Bb, is held in the low register for 113 bars. While it is harmonically consonant, it opposes the other events (the whole network of nature-motif imitations) by its immobility, by its firmness. The most dynamic parameter is the texture, and the drone stands out as a low textural layer. In the 1970s, drones were especially loved. On the one side, this was inspired by Indian music (e.g., Charlemagne Palestine); on the other, by the possibilities of the electronic studio (e.g., Ligeti).

Long notes in drone music have very different effects from harmonic pedals. In the comparison of these two extreme cases, we can arrive at a clear differentiation between and definition of at least two categories: implicative pedal points and non-implicative drones. A pedal point could be seen as a harmonic event that arouses certain expectations. One of its parameters is its pedal-ness – that is, the measure of expectancy-tension that it arouses. A drone can be defined as a textural layer with low pedal-ness. Its most important parameter is its sound. Through these definitions, we can easily understand the workings of an implied pedal point (e.g., a long note on a harpsichord that has vanished into inaudibility, or a sudden rest in the bass line). Although there is no sound, we still feel the presence of such pedal points in the expectancy-tension that grows. The extreme case of this is a concerto cadenza, which is often placed near the end of the movement, in the middle of a very important cadence, between the cadential 6/4 chord and its resolution into V (followed by the final, tonic chord, and a closing section played by the orchestra). The resolution of the implicative cadential 6/4 chord is denied, but the listener knows that the orchestra will at some point pick up from where they have stopped playing. The dominant in the bass thus continues to exist as an implied pedal point, one that will follow the procedure for the harmonic pedal.

Pedal/Drone Types

In the foregoing discussion, we have observed the ways in which expectations are formed in the perception of long notes. We have seen that through this perspective, it is possible to distinguish between two major categories: low-implicative drones, as sounding musical layers; and high-implicative pedal points, as harmonic events. Drones will have, as their main parameter, sonority. Pedals will have, as their main parameters, harmonic function and expectancy rate (pedal-ness).

This perspective provides us with the tools to approach the analysis of long notes. However, as it immediately becomes clear, most long notes will have, to a certain extent, characteristics of both pedal points and drones – as I have defined them. Most long notes, whether pedals or drones, will actually sound, and will as such add to the overall texture and sonority of the music. Similarly, even in music not based on functional harmony, many long notes will project at least some kind of tension related to the other voices, the tension that will increase or decrease as the other voices move away or toward it. This fluctuation of tension could result in expectations of a "consonant" moment (of any kind). As a result, any long note will probably possess both pedal-ness and drone-ness to a certain extent.

Still, one of the two parameters is usually more prominent than the other. For "western ears", which are accustomed to music based on functional harmony, it is probable that a long note is first "checked" concerning its pedal-ness. If its pedal-ness is low, the long note will be understood as a drone. The significance of the sonorous qualities of a long note will be greater when the harmonic implications are lower. This means that expectancy-tension represents a parameter whereupon we can decide whether a long note is a pedal or a drone.

Within these two categories, we can discern and define a number of types. For example, a *metrical pedal* in Beethoven's Ländler No. 5 (from Sieben Ländler WoO.11): its pedal-ness is certainly not low – still, if we were to tie all its bass notes into one long note, we would see that its main effect disappears. A metrical pedal provides the downbeat to dance. Thus, although

this pedal point could be categorized simply as a harmonic pedal on the dominant (its pedal-ness is perceivable; the listener expects it to be resolved at a structurally significant moment), labeling it (also) as a *metrical pedal* says more about its character and function.[7]

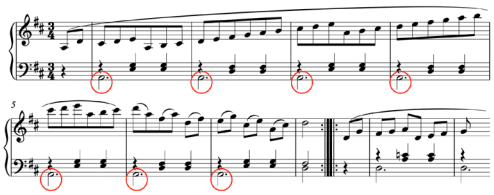

Figure 3. L. v. Beethoven, *Ländler No. 5. WoO.11.*

Similar to this, a *rhythmic pedal* (usually in the inner voices), such as the one in Chopin's *Raindrop* prelude or in Schubert's *Die liebe Farben*, provides a steady pulse (next to the pitch). The *pedal-ness* of such pedal tones is low, which, to a certain extent, has to do with the fact that they are consonant with the harmony throughout nearly the whole piece (as if the whole piece is composed around them). More importantly, being in the middle of the texture, these tones do not have the same harmonic power as the bass tones have. They are essential for the character of the music, but their effect is different than the effect of harmonic pedals. Perceiving a repeated, consonant pitch still as a pedal tone is the result of the persistence of this voice, against the free movement of the other voices, in the context of style in which such treatment is not the norm. There could be an expectation that its repetition will stop at a structurally significant point. In this case, it would not mean a harmonic resolution, but rather a "textural resolution". This pedal type requires more investigation, as its omnipresence could also be perceived as a drone.

In the category of *harmonic pedal* (the "default" type of pedal point in western art music), we can discern several distinct subtypes: *opening dominant pedal* or *announcement pedal* (e.g., Chopin's *Grande Valse Brillante* Op. 18), *opening tonic pedal* (e.g., Brahms Op. 60/i), *closing tonic pedal* (many of Bach's fugues), and *sectional dominant pedal* (often in Classical minuets).[8] Each of these subtypes is accompanied by a particular procedure, and thus each is associated with specific expectations. For example, when the first completed period (or phrase) of a musical piece is followed by new material above the dominant pedal, the listener might understand the pedal point as a *sectional pedal*, which suggests a rounded structure (e.g., *aba'*) and projects an expectation of the return of the opening phrase after the pedal section. Such is the case in Mozart's quartet KV 421, where the dominant pedal in mm.9–12 suggests that the first phrase is in a small ternary form, although a return of the opening phrase is ultimately denied.

As another example, if a piece begins with the relatively fast repetition of a single pitch, the listener might assume that this is an *announcement pedal*, which implies understanding this pitch as the dominant and projecting an expectation of the tonic a perfect fourth above.[9]

Opening tonic pedal suspends the flow of the phrase. The other voices are moving but cannot go far, as the pedal tone pulls them back to the beginning. The experienced listener knows that this is a temporary state, that the pedal tone will let the bass move on, thus releasing the harmonic flow. This will not happen at an arbitrary moment: usually, the pedal will give way to the cadence (often half cadence), or it will stop to mark the half of the phrase. The expectation that such a pedal tone will stop is especially obvious in a piece in which this does not happen. In Bach's Toccata in F major, BWV 540, the

[7] In the chapter on saturation in music, Meyer (1956) wrote about ostinato: "The listener understands that the function of the pattern is to establish a continuous and repeated ground against which other, more clearly articulated figures are to be projected" (p. 137). Applying these thoughts to a *metrical pedal*, we could expect that experienced listeners will not listen to this pedal point in the same way as they listen to another type of harmonic pedal.

[8] For more details, see Vujović (2017).

[9] When hearing just one pitch, listeners will most easily be able to imagine it being the tonic, and slightly less easily the dominant (Huron, 2006: 65). While, in general, the chance is slightly greater that a single tone will be perceived as the tonic, in the case of recognizing an announcement pedal, listeners will assume it is the dominant.

structural groupings and the harmonic progression likely incite an expectation that the opening pedal will be terminated on the downbeat of m.9. When this does not happen, the expectation-tension will transform into denial-tension and a new expectation-tension, which will in time decrease, before the pedal point turns into a foundational drone.

Pedal/Drone Implications

We have seen that understanding a long note as a particular type of pedal point or drone usually projects certain expectations related to the other musical events in the piece. Mistaken judgments, in this case, will have some implications. Let me illustrate this with two examples.

1. A pedal point in tonal music is, in most cases, either the tonic or the dominant. This is especially true in the case of harmonic pedal points in the bass. These two types (and their subtypes) are a part of the "language" of most listeners that are acquainted with western art music. While there are musical pieces featuring the pedal point on the mediant, and even on other scale degrees, it seems that these do not promote their own harmony, one that could compete with the harmony of the other voices. The conflict is thus not so much in the domain of harmonic function as it is in the domain of sonority. In any case, harmonic pedal points on a pitch other than the tonic or the dominant seem to not have been conceptualized, and they are thus not a part of the "language" as distinct items. Since there is no specific procedure associated with such a pedal point (like that another, particular pitch will follow, or that the pedal tone will stop at a particular moment), there are no strong expectations related to it. When something other than the tonic or the dominant pitch is sustained in the bass, the listener has the following options: (a) classifying it as one of the known two types (meaning assuming that it is nevertheless the tonic or the dominant), (b) understanding it as one of the drone types (for example, a textural drone, which implies a devaluation of its harmonic influence), or (c) ignoring it as a strange element without obvious meaning in the context of the piece (it turns into a kind of independent sound or even just a noise).

In Tchaikovsky's 6th symphony, 2nd mvm, the musical ears of the listener meet such a challenge. The first (compound) part is in D Major and finishes on the tonic chord. The bass tone D is thereafter prolonged; in the second part, it remains as the pedal point. But this section is now in B-minor. It is exactly the pedal point that blurs the new key, and it might take a couple of seconds before the listener realizes that it is no longer the tonic. The real tonic wins the competition, and when it does, the pedal tone remains without a clear identity, thereby losing its harmonic power. There is no established procedure for mediant pedal points, and thus there is no clear scenario about which one could have expectations. The rhythmic pulsation of the D continues to sound, coloring the B-minor tonic with a bit of "relative-major-ness". Deprived of its implicativeness as a harmonic pedal, it turns into a textural layer, a drone. Its rhythmic property adds to its own texture—but at the same time, it also adds to the character of the whole section.

2. The last section of the 3rd movement of Brahms' *A German Requiem* is a fugue. The chance that its wholeness will not be perceived is great, meaning that the listener will miss the beginning of the fugue. The misleading factor, in this case, is the tonic pedal point under it. Just before the fugue, the previous section closes with a rather strong dominant pedal and an authentic cadence. The expectation-tension was high, especially because of the delayed resolution of the cadence. The final tonic is prolonged by means of a tonic pedal. This situation is common for the ending of a tonal piece. The pedal point is then recognized as the *closing tonic pedal*, and in such cases, there are usually a couple of codettas, or perhaps a small coda, above. Whichever of the two, we are actually already at the end, and the pedal point will provide the time and (harmonic) space to load out the energy of the dominant pedal. In the Requiem, the listener will probably do exactly that: exhale and relax. And so, she will miss the beginning of the fugue. This is because what she thought would be the end is actually the beginning of a

new part. When the piece has not ended after several bars, the listener will again focus attention and realize that it is a fugue. Thereafter, the pedal point (sounding throughout!) will change its identity several times, from being the tonic pedal point to being the dominant to even being a textural drone (when the music modulates to the dominant key).

Conclusion

Investigating the world of pedal points and drones through expectancy theories has led us to their differentiation into two distinct groups: those that arouse more or less strong expectations, and those that do not. The first group is populated by pedal points, with their main representative being a harmonic pedal point on the tonic or the dominant, in the bass. The second group is populated by various textural drones, with their main representative being long notes in music featuring non-functional harmony and long notes in music where the pitch is not the main parameter. Although the harmonic language of a musical piece is the context that essentially contributes to the perception of its long notes, it is possible to experience a non-implicative drone in tonal music as well; and in general, to recognize a pedal/drone pattern that is "borrowed" from another musical style. The indicator of one's musical "reading" or understanding of the music is her expectation of the consequent musical events. Expecting a long note to resolve at a certain moment means that the listener understands it as a type of pedal point. Having no expectations related to a prolonged note in a tonal piece means that the listener does *not* understand it as a pedal point. This opinion differs from the usual view on pedal points and drones, a view which considers them to be one and the same musical element, with the former belonging to the context of western art music, and the latter belonging to the context of non-western music and western folk music. From the perspective of this research, pedal points and drones are different concepts, both of which can be perceived in western art music as well as in other musical styles and genres as *distinct* types.

Besides by their *pedal-ness*, the character of long notes is formed also by their other properties, such as their rhythm, the register or the texture of the music. In this sense, the realm of long notes differentiates yet further into discernable sub-types of pedal point and drone. Some of the expectations that they incite are shared across the group; other expectations are specific and often relate to musical structure. A kind of "proof" that these sub-types actually do exist in one's musical ears, emerges in situations when the listener recognizes a particular pattern in a piece that does not feature it at all (we consider the pattern being *implied*). Starting from this "recognition", a logical next step is matching the analytical language with the aural "language". Although, luckily, music always escapes categorizations, having these categories could help develop a better understanding of the exciting phenomenon of long notes.

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