

What is Music –

The Naturalism of Tonality

Y.M.Kiely

The Naturalism of Tonality – Part 1:

Tonal Gravity

Music - and music composition - is oft looked upon as an almost divine ability or gift, void of explanation and (often) definition. One point of view is that music is a language, an idea in which I share a similar opinion. Like conventional languages, music has syntax, semantics, grammar, etymology, and even spelling. Rather than discussing archaic topics such as etymology I will focus on syntax, semantics and grammar.

The ultimate question that needs to be answered is “What is Dominant?”. What makes chord V (V7) dominant, and why is it so named. These are all essentially the same questions and have the same single answer. Generally, the answer without any specifics is because of tension and resolution (release) within a perfect cadence. Chord V has a dominating effect over I, precisely because of the tension within the relativity of chord V, especially V7.

What creates the tension in chord V, is what makes tonality natural. Every note, no matter what produces the notes, have a fundamental, and overtones. The first notes of these harmonics are: Root (fundamental), 5th, 8ve, Maj3rd, 5th, b7th. If we even

glance at these notes, we are made aware that these are the same notes that make V7. The notes that must be noted are the only ones that create the tension in the chord, the Maj3rd and the b7th, together creating the tritone, or augmented 4th (diminished 5th). All the pent up tension in the tritone – created by the dissonance of it – have a gravitational need to resolve to chord I (Ti-Do/Fa-Mi). This tension is used and exploited, by composers and is effectively used by many other artists also – obviously not in exactly the same way. Cadences are exactly that: either resolution, tension followed by the inevitable release; or not, tension followed by an increase in tension because of a cadence that implies I but denies the quality release associated with I. The flattened 7th/blue note in Blues and Jazz is effectively the 6th harmonic (5th overtone).

The powerful effect of the tritone, in the Middle Ages, was avoided for its restless nature. It was even described as *diabolus in musicā* ("the Devil in music") by Guido of Arezzo. Organum avoided the interval, as did Fux counterpoint. Lydian music called for the 4th degree of the scale to be flattened whenever used in conjoint with the tonic. But the tritone was eventually exploited (much within the emotional precedent set by the naming of it as *diabolus in musicā*); the fully diminished VII chord (effectively just a V7 b9) ultimately came into popular use.

Essentially, what makes dominant dominating, is the tritone within a note's harmonics (especially when put into context by being followed by dropping of a 5th). The gravitational pull the tritone to resolve, is too great to ignore, and is the only reason why chord V falls to I.

The Naturalism of Tonality – Part 2: Exploitations

"Tonality is a natural force, like gravity," - Paul Hindemith

The reason why there is Tonal Gravity is because of the dominant, but what are ways of exploiting it?, how do imperfect (half), plagal or interrupted (deceptive) cadences fit in with the concept of tonal gravity? Basically, they are there to create tension within the piece – to prolong the dominant - , and to fool the listener.

In reality, there are only three possible chords in tonal music, Tonic, Subdominant, and Dominant. To make music more interesting (as I, IV and V can get laboured after a while), there are variations in these chords. IV can also be iv, ii, or II (among a myriad of others), V and be vii^o, iii7 (and countless others), I can be VI, bVI, to name a few. With chord IV and V, the variants are often just that, variants to make music more interesting, however the latter (I) it more often attributed with attempting to fool the listener. When the listener gets pulled towards the Tonic (through a Dominant chord) and instead finds bIV it is (be it only slightly) a shock of sorts to

there is no logical functionality in the chords if following the bottom interpretation.

The Naturalism of Tonality – Part 3:

Inherent Tonality

"Our peasant music, naturally, is invariably tonal, if not always in the sense that the inflexible major and minor system is tonal. (An "atonal" folk-music, in my opinion, is unthinkable.) Since we depend upon a tonal basis of this kind in our creative work, it is quite self-evident that our works are quite pronouncedly tonal in type. I must admit, however, that there was a time when I thought I was approaching a species of twelve-tone music. Yet even in works of that period the absolute tonal foundation is unmistakable. „ - BelaBartók (1928). The Folk Songs of Hungary, Pro Musica VII (Oct)

With few exceptions, no matter what music we listen to, tonal implications are present. Whether it is the Pythagorean intervals of the whole-tone and twelvetone scales, the modal and pentatonic scales of world music, or the Modes of Limited Transposition by Messiaen, all house some sort of tonal groundwork. Messiaen stayed consciously away from the whole-tone scale in (while listing it as the first in his modes of limited transposition generally stayed away from it in his pieces), purely because of its separation from tonality as the whole-tone scale avoids leading tones (See part 1).

Tonality has been used throughout cultures throughout the centuries, in the Modal music of Persia and Europe, or the Pentatonic Scales of Africa and Asia. The anhemitonic pentatonic

scale especially gets its notes (unintendedly) from the first five keys in the circle of fifths. This domination of 5ths (as every note in the anhemitonic pentatonic scale as it's relative fifth), implies yet another involvement of the Pythagorean Intervals that form tonality. Variants of the pentatonic scale (such as the hemitonic pentatonic scale), are mere variants of the purer anhemitonic scale. However, the semitone in hemitonic pentatonic (C Db Eb G Ab) is related to tonality through borrowing the leading tone from the Ionian scale – the same leading tone that works functionally only because of the tritone discussed in Part I. Almost as endorsement for the tonal origins of pentatonic scales is the relative minor pentatonic scale. Assuming that the anhemitonic pentatonic scale starts on C, the relative minor pentatonic scale will then start on A – Yet another borrowing from traditional tonality.

The medieval modes are evidently closely related to the traditional tonality as they are taken from the scale degrees of any key. Polymodality and Chromatic Polymodality are variants much like the hemitonic pentatonic scale are variants of the anhemitonic pentatonic scale. The inclusion of extra semitones are there purely as a functional leading tone. Like pentatonic scales, modal music has been extensively used by various cultures all over the world. Finally lending to my argument that tonal music, its extensions and variations are more natural than any version of Atonality. This is not to say that all atonal music is unnatural, nor is it to demean atonal music, it is merely to illustrate tonalities consistent part in music. Tonality has always been with music, consciously or not, has survived the tonal crisis of the early to mid twentieth century and is sure to survive as long as we could imagine.

Naturam expellas furca, tamen usque revertit. (You can drive nature out with a pitchfork, she will nevertheless come back) – Horace (65-8 BC), Epistles I.X.24.

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For questions, comments, requests, or reports please contact me at
yagankiely@gmail.com