

Tonal Centre, Music's Predicate by Vida Chenoweth

Preface

In western terms, tonal centre is aptly called the "key". Every musical composition has a tonal plan, and it is this tonality which gives dynamic force and organisation to music. All pitches relate to tonal centre in their progression and degree of attraction. Tonal centre may be likened to a predicate in that all melodic components relate to it. In a sense, tonal centre functions as governor and generator of melody's tonal plan.

Serial arrangement, or syntax, in its relation to a tonal plan is the domain of grammar, and grammar's focal point is tonal centre. An investigation of tonal centre is essential to a description of any unwritten music system. "Unwritten" music system is a term preferred over "unanalysed" to emphasize the fact that the music's theory may be unknown, even to the participants, but a logical ordering of components is assumed. We cannot know that the underlying logic is "aural" in conception, we know only that this logic is somehow inherent. Peoples who learn to speak unwritten languages are responding to a similar logic in that they are not conscious of the linguistic relationships within their speech. To merely describe such relationships as "meaningful" lacks content. Is not every human action meaningful in some respect? The term "meaningful" provides no information.

Definition

Before defining tonal centre, it is necessary to define music's grammar so as to understand the role of tonal centre within it. "Grammar" refers to the known elements of a music system and their distribution in relation to each other and in relation to larger units of which they are components (Chenoweth: 1972). For example, intervals relate to one another in their serial distribution, and they also relate to the formation of phrases. Grammar may also be thought of as that inherent logic underlying music's serial arrangement (syntax) and grouping. It is through this common logic that a society both learns and invents its music. And further, music's grammar takes into account the inter-relationship between the serial arrangement of significant units (the syntax) and a tonal framework (tonality). It is the latter, the tonal framework, which gives dynamic force to the melodic syntax. The focal point of melody is the tonal centre, and in exotic music systems, its location is often evasive. Several expectations aid in locating it:

1. It occurs in positions which are rhythmically strong.
2. Its distribution within melody has few restrictions; that is to say, it may be approached and left by the greatest variety of tones.
3. It is often the cadential tone. (Chenoweth: 1979)

Tonal centre may or may not occur more frequently than other tones. As in language, words most frequently used are not necessarily focal points (e.g., the word "the" in English). Tonal centre is more akin to a predicate, which governs activity. When the first three propositions agree in their conclusions, then frequency of occurrence may offer further confirmation.

In analysing the structure of any unwritten music or linguistic system, solutions are rarely found in chronological order. Only the end product can hope to have elegant description. Not infrequently the analyst may remain undecided about a song's tonal centre until there is a body of data sufficient to establish statistics that will reveal a tendency of occurrence.

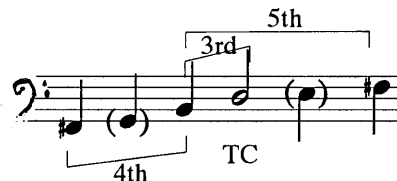
To illustrate how grammar may affect a decision, suppose that in the majority of cases tonal centre in music system X, co-occurs with pitches a perfect 4th below and a minor 3rd above it. Further statistics show the constant presence of a perfect 5th above tonal centre along with two optional pitches (expressed here in parentheses); the optional pitches occur together or separately in a song. So, we have a song with a tonal inventory of at least 4 pitches, but 6 are possible if both optional pitches are present.

Ex.A (fig.1)



Common pitch occurrence in songs of music system X

Ex.B (fig.2)



Different pitch occurrence within the same music system

The analyst followed the 3 postulates for determining tonal centre and designated D as tonal center in figure 2. However, in most songs a 4th at the lower end of the pitch series was rhythmically strong as was the melodic 3rd contiguous to it. Overwhelming grammatical statistics established this as a common tendency and caused the analyst to reconsider in favor of B, the one pitch held in common by the two strongest intervals.

In some systems there are dual tonal centres where the two seem to have equal importance. In such a case, the tone on which the song concludes may take precedence over the other option. There are occasions too in which an entirely different tonal framework may indicate a contrastive style within the system or that a song has been borrowed from another region.

Endnotes

(In correspondence with linguist Dr Lichtenberk, Auckland University:)

Despite the many references to linguistics, "lexical" is not one of them for it implies one-to-one correspondence, fixed meaning, and one of the joys of music is that it has no fixed meaning.

I coined the term "predicate" when searching for a word to convey the dynamic control which tonal centre exerts. This is the relationship of linguistic "predicate" and music's tonal centre as I see it:

predicate, an assertion made on the subject
tonal centre, a dynamic assertion on the melody

predicate, relating the action of other parts of speech to the subject

tonal centre, relating the action of all intervals to the melody, or theme

In the major-minor music system of Europe, each note in the scale has a relationship to tonal centre which can be measured in terms of tension. Tension can be calculated vertically, when two or more tones are sounded together (harmonic intervals), or horizontally, when one tone precedes another (melodic intervals). Tension is expressed musically in terms of consonance and dissonance: unison and octave are the most consonant, followed by perfect 5th, perfect 4th, all 3rds and 6ths, then major 2nds respectively and on to the most dissonant intervals of minor 2nds and major and minor 7ths. A melody's dynamic activity is determined by that tension between tonal centre (the "predicate") and each tone in the scale or tonal inventory.

The white notes in figure 3 are passive and more stable than the black notes because western scales are based on triadic harmony. So, in any melody where C is tonal centre, the triad CEG is basic. The black notes in figure 3 are active and strongly attracted to the adjacent white notes. The strongest degree of attraction is that of the 7th degree or "leading tone" to tonal centre above it, and likewise the 2nd degree to tonal centre below it. As melody progresses in this system, tension is constantly being resolved in a continuous shifting between passive and active tones. Such an exchange of tension and relaxation gives the impression of movement forward toward a destination, the most satisfying of which is the tonal centre which typically terminates a melody.

Ex.C (fig.3)

