The Urgent Reform of Music Theory

Contribution to *Festschrift* in honour of Jean-Jacques Nattiez
by Philip Tagg

Intro

In this text I argue for an urgent overhaul of music theory terminology. I try to explain the inadequacy of some widely used concepts and to suggest alternatives to the misleading and ethnocentric confusion they can cause. I will also highlight some aspects of structural denotation sidelined or absent in conventional music theory.

The main reason for my insistence on reform in this area of study is that from 1971 until 2009 I taught the history and analysis of popular music (including music for moving images), and that I could not explain the workings of such musics using solely the concepts of the music theory I’d been taught (Tagg, 2014: 1-6). Since retiring in 2010, I’ve had time to reflect on, and become increasingly troubled by, the inability or reluctance of conventional music theory to address these issues.

Since my ‘campaign’ for reform has so far focused mainly on problems of TONAL terminology, I’ll give here no more than a brief overview of some of those. Then I’ll summarise a few issues relating to TIMBRE and FORM, omitting, for reasons of space, matters of metre, rhythm, duration and aural staging. I’ll end with some reflexions on the progress of my efforts to bring music theory out of the nineteenth century. But first I need to clarify a few basic issues.

-----------------------------------

1. This article was completed in September 2015 and accepted by the editors for inclusion. It does not appear in the *Festschrift* because I was regrettably unable to sign the publishing contract which required me to relinquish rights to use my text as I saw fit and to not make it publicly available before its appearance in the volume. It was too late: I’d already put it on line! Besides, other conditions in the contract were contrary to principles of knowledge accessibility that I’ve explained in ‘The Academic Publishing Protection Racket’ ([tagg.org/rants/AcPubPizzo.html](tagg.org/rants/AcPubPizzo.html)) and ‘Pay for knowledge: why?’ ([tagg.org/articles/PayForKnow2.html](tagg.org/articles/PayForKnow2.html)) [both 160418].

2. See instead Tagg (2013: 281-303) and Lacasse (2000, *passim*).
Basic definitions and abbreviations

**MUSIC THEORY** is itself a strange term. It’s part of musicology but distinct from anthropological, political, semiotic, social or any other theory of music involving a dynamic between music as sonic materiality and its uses in human society, rather than the identification and systematisation of musical structures *per se*. In fact, the meaning of ‘music theory’ may be even more restricted.

‘Most commonly, the term describes the academic study and analysis of fundamental elements of music such as pitch, rhythm, harmony and form’.

Defined in this way, ‘music theory’ shares a lot in common with what the French used to call *solfège* in that both subjects focus on notatable musical structures (‘pitch, rhythm, harmony and form’) detached from their cultural meanings and uses. Now, while it’s clear that theories of sonic structure are essential to the identification of elements in a tripartite model of music semiotics (Nattiez, 1990), it’s obviously unsatisfactory if such identification is based on false premises. It’s those false premises that I try to expose in this text whose aim is to advocate not the abandonment but the radical reform of ‘music theory’. That’s why I have to distinguish between **MUSIC THEORY** in general, reformed or unreformed, and, with apologies for the clumsy expression, **CONVENTIONAL [MUSIC] THEORY** that is in acute need of reform.

To save space and avoid confusion, I will use the abbreviations of tonal designation presented in tables 1 and 2.

**Table 1. Abbreviations for note, chord and key names (e.g. ‘E’)**

<table>
<thead>
<tr>
<th>Denotation type</th>
<th>Symbol</th>
<th>Typography</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>note</td>
<td>e</td>
<td>lower-case sans-serif</td>
<td>e is a major third above C</td>
</tr>
<tr>
<td>lead-sheet chord</td>
<td>E</td>
<td>upper-case sans-serif</td>
<td>From B7 to E (major triad)</td>
</tr>
<tr>
<td>key (Tonart)</td>
<td>E</td>
<td>upper-case serif</td>
<td>constitutes a V-I cadence in E.</td>
</tr>
</tbody>
</table>

*Lead-sheet and roman-numeral chord abbreviations* follow the conventions set out in *Everyday Tonality II*, pp. 223, 231-233.\(^4\)

Space-saving reference symbols (𝄪, ♩, ♩♭, ♩♯, ♩♮, etc.) are explained at the start of the Reference Appendix. Please note that all source types are included in that single appendix.5

Table 2. Common scale degree abbreviations

<table>
<thead>
<tr>
<th>Scale degree</th>
<th>note in C</th>
<th>Popular verbalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>c</td>
<td>one</td>
</tr>
<tr>
<td>b2</td>
<td>a2</td>
<td>#2</td>
</tr>
<tr>
<td>b3</td>
<td>a♭3</td>
<td>e♭</td>
</tr>
<tr>
<td>4</td>
<td>#4</td>
<td>f</td>
</tr>
<tr>
<td>b5</td>
<td>5</td>
<td>#5</td>
</tr>
<tr>
<td>b6</td>
<td>a♭6</td>
<td>ab</td>
</tr>
<tr>
<td>b7</td>
<td>a♭7</td>
<td>bb</td>
</tr>
</tbody>
</table>

I also have to posit axiomatic definitions of some very basic terms. 

- **NOTE** (n.): a single, discrete sound of finite duration.
- **TONE** (n.): a NOTE with audible fundamental pitch.
- **TONAL** (adj.): having the characteristics of a TONE or of tones.
- **TONIC** (n.): reference TONE, keynote.
- **TONALITY** (n.): system or pattern, explicitly codified or not, according to which TONES are configured.6
- **MODE** (n.) **TONAL vocabulary** (often abstracted and arranged in scalar form for theoretical purposes) of a piece or extract of music.
- **MODAL** (adj.): having the characteristics of a mode.
- **EUROCLASSICAL** (adj.): relating to or having the characteristics of European classical music.7

4. These pages can be viewed on line without downloading the whole book: tagg.org/bookxtrax/FFabBk08/EvTon07ChordsSample.pdf.
5. For full explanation, see ‘Producing a Reference Appendix for Studies of Music in the 21st Century’ at tagg.org/xpdfs/RefAppxs.pdf [150919].
6. In neo-Latin languages tonalité, tonalità, tonalidad etc. mean Tonart (German) or KEY (English). I used to advise my francophone students to keep tonalité in the sense of key and to use idiome tonal to cover Tonalität and TONALITY.
7. The EURO prefix avoids confusion with non-European classical traditions, e.g. Tunisian nouba, Indian rāga, the yāguè of imperial China; see Tagg (2014: 488).
Tonality

The central problem with tonal terminology in conventional theory is encapsulated in the two false and mutually contradictory pairs of opposites TONAL v. ATONAL and TONAL v. MODAL.

Tonal v. atonal (?!)

Here I’m assuming, in line with binaries like historical/ahistorical, typical/atypical, etc., that the initial A in atonal is an alpha privative, i.e. that atonal means without tones, non-tonal. If so, it’s small wonder that Schönberg disliked the label ‘atonal’ applied to his music because most of it followed the tonal rules of twelve-tone composition. Besides, neither he, nor Berg nor Webern were famous for their use of hi-hat, snare drum, sampled traffic or other non-tonal (= atonal) elements in their œuvre. Indeed, it’s hard to understand how euroclassical music theorists managed to confuse the notion of music full of tones but with no intended TONIC, as in the work of twelve-tone composers or in music for the shower scene in Psycho (Herrmann, 1960), with music containing no tones, as in, say, taiko drumming (e.g. Kodō, 1985) or the cue ‘Crows attack the students’ from The Birds (Herrmann, 1963). Music theory needs to distinguish between TONE and TONIC. Just as clinical things occur in clinics, just as musical things happen in music, and just as rhetorical devices, like this ‘just as’, are used in rhetoric, music featuring a TONIC should be called TONICAL and tonal music with NO INTENDED TONIC should be called either ATONICAL or NON-TONICAL.

Tonal v. modal (?!)

TONAL v. ATONAL may be a preposterous binary but it’s certainly no sillier than TONAL v. MODAL. For example, asked to comment on the song cited in example 1, my students often replied ‘it’s modal’. ‘Which mode, with what as tonic?’, I would retort. ‘Dorian in C’ was a good guess, I thought, but still wrong, because the dorian consists of scale degrees \(1 \ 2 \ b\#3 \ 4 \ 5 \ #46 \ b\#7 \ (c\ d\ e\b\ f\ g\ a\ b\b\)\ in\ C\) whereas The Female Drummer contains no third, neither \(b\#3\ (e\b)\) nor

8. I am neither the only nor first scholar to object to the absurdities explained in this section; see, for example, Berger (1963) and Thomson (1966, 2010).
‘What mode are we in, then?’ was perhaps an unfair question because the music theory my students had learnt didn’t have a name for it. Nor did I at the time. Unable to find any theory of even the most common tonical hexatonic modes I had to invent a system to classify tunes like It’s Not Unusual (Tom Jones, 1964: doh-hexatonic), Jolene (Dolly Parton, 1973: la-hexatonic) and The Female Drummer (ré-hexatonic). Moreover, euroclassical music theory’s notion of ‘pentatonicism’ was limited to two anhemitonic specimens, its ‘heptatonicism’ to just the seven ‘church modes’.

Ex. 1. Steeleye Span: The Female Drummer (Eng. trad., rec. 1971)

9. Of course, the whole-tone scale is hexatonic, but it is not tonical (no 4, no 5). For a systematic theory of tonical hexatonic modes, see Tagg (2014: 165-173).
10. Only the doh/major and la/minor pentatonic modes were at all familiar to my students. The thirdless ré- and sol-pentatonic modes were totally unknown, as were hemitonic pentatonic modes. Even the ‘church modes’ were unfamiliar to many students, and common heptatonic modes like Hijaz and Niavent (Tagg, 2014: 112-145) were unheard of.
Now, if it can be agreed that mode names like ‘ionian’, ‘dorian’, ‘ré-hexatonic’ and ‘Hijaz’ denote configurations of particular tonal vocabularies, then modes must be intrinsically tonal. No one mode can therefore be qualified as more or less tonal (or modal) than any other. However, that’s exactly what conventional music theory seems to assume: the ionian (1 2 3 4 5) and the ionianised minor heptatonic modes (1 2 3 4 5 6 7) are thought of as ‘tonal’ and as constituting ‘tonality’, while others — for instance 1 2 3 4 6 7 (dorian) or 1 2 4 5 7 (ré-pentatonic) — are called ‘modal’ and categorised as exemplifying ‘modality’.

It’s hard to explain such bizarre categorisation in other terms than either ignorance of, or unwillingness to recognise equal importance in, several different types of tonal configuration (tonality). Circumstantial evidence of this blind spot abounds in institutions of musical learning and in the culturally restricted repertoire[s] from which their terminologies derive. It’s a conceptual blind spot that is to all intents and purposes ethnocentric because it effectively relegates all types of tonality other than that of the euroclassical and classical jazz repertoires to the ‘non-tonal’ rag-bag of ‘modality’. Little wonder, then, that my students could do no better than identify the entirely ré-hexatonic Female Drummer as ‘modal’ (not ‘tonal’) while at the same time labelling the entirely ionian first eight bars of The Blue Danube as ‘tonal’ (not ‘modal’). Students should not have to put up with such nonsense.

Conversely, failure to conceptualise the ionian as just one mode among many others has at least two serious consequences. [1] If the ionian is not considered a mode, it cannot be readily compared with others in efforts to discover how its particular characteristics became so central to European culture in the age of Enlightenment during the rise of the bourgeoisie. [2] The more the ionian and the ionianised minor-key modes are regarded as the tonal normality from which other types of tonality are thought to diverge, the more

11. C5 is played as an ‘open’ 5th dyad c-g, B♭-f, etc. The tune, as sung and as played on fiddle, varies slightly from verse to verse.
difficult it becomes to hear and understand the dynamic of those other tonalities. Here are seven examples of that problem.

1. **Notions of dominant, subdominant and perfect cadence** become irrelevant or misleading, as with IV, V and I in *Guan-tanamera, La bamba* (I-IV-V), etc., or in V-IV(-I) blues progressions, or mixolydian chord loops ((I-)♭VII-IV-I), etc.

2. **Other harmonic cadence labels** become absurd; for example, ‘interrupted’ and ‘half’ cadences are often final or complete.\(^{12}\)

3. **Bimodality**, shuttling between two tonal centres, modal counterpoise etc. are ignored as key factors of tonal construction.\(^{12}\)

4. **Full, final phrygian cadences** are not heard as final.\(^{13}\)

5. Many common modes are either misnomers (e.g. ‘phrygian’ and ‘lydian dominant’ scales with no dominant function, ‘frigio mayorizado’ instead of Hijaz) or not named at all (e.g. ‘ré-hexatonic’, ‘doh-hexatonic’, ‘la-hexatonic’).\(^{14}\)

6. Given the existence of tonal traditions other than the tertial euroclassical before, during and after the historical period covered by conventional music theory’s ‘tonality’ (e.g. pentatonicism), the concepts ‘pretonal’ and ‘post-tonal’ make no sense.

7. **Quartal harmony** is radically undertheorised.

The seventh point demands some clarification.

*Quartal tonality*

Put simply, **quartal** qualifies tonality featuring fourths and their octave complement, fifths, rather than thirds (and sixths). The first conceptual problem here is that quartal sounds, like the non-ionian[ised] modes discussed earlier, have in conventional music theory largely been seen as divergent from a culturally restrictive notion of ‘tonality’. They have required identification as an ‘Other’ (‘quartal’, ‘modal’), whereas euroclassical tonality has unilaterally been assumed to need no such categorisation. However, as soon as

---


\(^{13}\). *Final phrygian*: see Tagg (2009: 15:05-19:00; 2014: 436-442).

\(^{14}\). See Tagg (2014: 421-450); see also Tagg (2009). Lydian and phrygian ‘dominants’ are misnomers used mainly in jazz theory.
the concept of tonality had to become field-dependent, the previously absolute norm also needed a label to distinguish it from the ‘abnormal’. At least four bizarre labels for third-based, euroclassical harmony resulted from this process: tonal, diatonic, functional and triadic. The label tonal harmony is useless because it merely reiterates the old absolute norm. Diatonic is absurd because it erroneously implies that no quartal polyphony ever visited all notes in a diatonic heptatonic mode. Functional harmony is no better because it implies that quartal harmony has no functions. Finally, triadic harmony is, as shown next, a seriously flawed concept.

Ex. 2. Four tertial and five quartal chords

Example 2 shows nine chords, the first four based on stacked thirds, the last five on stacked fourths. Chord numbers 1, 2, 4, 5, 6 and 7 are triads because each contains three differently named tones, chords 3 and 8 are tetrads (four differently named tones) and chord 9 is a pentad (five). Chords 5, 6 and 7 are quartal triads, chord 8 a quartal tetrad and chord 9 a quartal pentad. Since chords 1, 2 and 4 are neither more nor less triads than chords 5-7, and since harmony based on stacked fourths is called QUARTAL, harmony characterised by the stacking of thirds should be called TERTIAL. In short, the binary TRIADIC v. QUARTAL is false because it confuses two distinct criteria of designation — the number of notes in a chord (‘triadic’, ‘tetradic’, etc.) and the principle of interval stacking in a chord — TERTIAL for thirds, QUARTAL for fourths. Chords 1, 2 and 4 are therefore tertial triads, chord 3 a tertial tetrad. As such, chords 1-4 belong to the sphere of tertial harmony and are indicative of tertial rather than quartal tonality.

15. i.e. when it became necessary to compare one type of tonality wish another on an equal footing. Field-dependent argumentation: see Toulmin (1972).
16. It’s as if Béla Bartók, McCoy Tyner, Clarence Ashley, Joni Mitchell or Sokratis Málamas has never made music.
Quartal ubiquity and structural theory

Quartal sounds abound in everyday tonality. Not only are they a feature of vernacular chorality in rural Russia, of Central Asian komuz accompaniment, of Appalachian banjo playing, of various styles of folk and prog rock, of news jingles, of library music for corporate modernity, and of signals for digital devices; they also feature prominently in recordings by jazz artists like McCoy Tyner, as well as in the work of Stravinsky, Copland, Hindemith and Bartók.17 As with its apparent disregard for tonical hexatonicism, conventional music theory has also, it seems, failed to deal systematically with the widespread practices of quartal tonality. Unfortunately, there’s no room here to explore border areas between quartal and tertial harmony,18 but it is worth drawing attention to a few key aspects of quartal tonality.

The most obviously false label applied to quartal tonality is ‘sus’ (suspension) because no quartal chord can be a suspension in a quartal context any more than 3 can be dissonant in a tertial chord. In quartal harmony, no 4 needs ‘resolving’ to 3 and any 2, 9 or b7 will almost certainly be intrinsic to the quartal consonance of which it is part. The notion of an ‘omitted’ third is also meaningless in quartal harmony. These basic truths affect quartal chord designation so that, for example: [1] the ‘open fifth’ dyad a-e should be abbreviated as A5, not Aomit3, because nothing is omitted; [2] the triad a-d-e should be A4, not Asus4, and [3] the triad d-e-a should be D2, not Dsus9 because nothing is suspended.19

Another cardinal difference between tertial and quartal chords is that the former can preserve their tonical identity in inversion: both C/3 (e-g-c, first inversion) and C/5 (g-c-e, second) are heard as

17. It could also be argued that quartal elements are present in music by Mussorgsky, Debussy and Dvořák. For more on this topic, see Tagg (2014: 306-349).
18. For example, the contribution of chords of the eleventh (from Dvořák’s New World Symphony and Burleigh’s arrangements of spirituals via Copland to gospel harmony and film/TV underscores) to a sense of US-American tonal identity in the twentieth century; see Tagg (2014: 306-315).
19. For more, see Tagg (2014: 293-294). N.B. The notions presented here, including the chord abbreviations, are not part of standard music theory teaching.
variants of C (c-e-g, root position), so to speak. Quartal triads don’t work that way because a triad like c-f-g (C4) inverted as f-g-c will sound like F2 and, inverted to g-c-f, it becomes G4. The idea that the tonal centre of quartal chords can float up to two positions round the key clock without upsetting their basic sense of tonal rootedness can also be understood by comparing the progress of tertial and quartal triads round the circle of fifths (example 3).

Ex. 3. Tertial (1) and quartal (2) triads flatwards round the key clock

Five key points can be gathered from example 3.

1. While each tertial progression (1) involves holding one and changing two of the triad’s constituent notes, proportions are inverse for each quartal change (2).

2. One of the note changes in the movement of tertial triads involves a semitone, e.g. from e to f, a minimal pitch distance but all of five steps away on the key clock. That’s what gives 3 its strong leading-note directionality towards 4 (equivalent to 7/8=1 in the target triad). In quartal triad progressions, the single replacement note is only three key-clock steps away at the minor third (e.g. g replaced by bb).

3. Quartal harmony has to shift tonal centre by three key-clock steps to sound like a ‘new key’. A tonal area covering three key-clock positions functions as a TONICAL NEIGHBOURHOOD.

20. For explanation of quartal chord symbols, see Tagg (2014: 293-296).
4. All notes in a tertial triad have disappeared just two ‘hours’ later round the key clock. Each quartal triad note lasts for three.

5. Quartal triads contain notes related to each other by a fourth and/or fifth. Notions of V or 5 as ‘dominant’ and IV or 4 as ‘subdominant’, as well as of modulation between I and IV or V, are therefore meaningless. ‘Major’ and ‘minor’ keys, as well as ‘perfect’, ‘plagal’, ‘interrupted’ and ‘half’ cadences are also largely pointless.

These are just a few of the key theoretical points that can help explain the workings of widely used tonal idioms qualifiable in general terms as ‘quartal’.21

**Timbre**

Timbre is probably the parameter of musical expression most frequently singled out by popular music scholars as conventional music theory’s most serious blind spot. This observation derives from such evidence as: [1] timbre’s conventional relegation to the status of a secondary parameter;22 [2] conventional theory’s lack of systematic vocabulary descriptive of timbre; [3] the paucity of timbral data in the notation that is conventional theory’s preeminent form of musical reference, storage and retrieval. These three interrelated symptoms are part of a vast problem complex involving such issues as unawareness of the relative importance of different parameters of expression in different musics and insufficient problematisation of the notion of a musical work and of its commodity form. There’s no room here to discuss this problem complex any further, but I will suggest two lines of inquiry — one more structural, the other relating to the binary POIÉSIS v. AESTHESIS — that may shed some light on the matter.

21. Many important features of quartal tonality are absent from this account, e.g. [1] the confusion, in jazz theory, between quartal harmony and quartal voicing; [2] the quartal character of much ‘droned’ music using open tunings and its tonal kinship with anhemitonic pentatonicism, especially the quartal (thirdless) ré and sol modes.

22. See, for example, Meyer (1989: 14-22).
Power chords

Example 4 illustrates a more structural approach. It shows the full pitch content of a power chord, in this case the dyad A5 played on distorted electric guitar. Although only two notes — a (110 Hz) and e (165 Hz) — are actually played by the guitarist, the full sound produced consists not only of those two fundamentals and their overtones but also of an acoustically quantifiable difference tone at a=55 Hz — the distortion fundamental — plus all of its overtones. Analysis of this sound suggests that power chords are extremely stable tonal entities thanks to the harmonic series consisting of partials defining them and by the actual acoustic presence of a difference tone. This tonal rootedness makes the power chord an essential constituent of heavy metal, industrial and grunge music because it allows for the unequivocal statement of substantial ‘tonal elsewheres’ in relation to the tonic (I5). The bII5 of many phrygian heavy metal pieces illustrate this phenomenon, as do the bold harmonic steps in Nirvana’s Lithium and Teen Spirit (1991).23

Ex. 4. Basic power chord harmonics for A5 (a2 110 Hz, e3 165 Hz)24

It should be noted that there are no clear-cut borders between tone and timbre in these heavy metal and grunge contexts. Timbre cannot be considered as a secondary parameter to tone; it should instead be understood as a co-determinant in the production of tonality in the repertoire of which it is part.

23. Phrygian heavy metal examples: Powerslave (Iron Maiden, 1984); Wherever I May Roam (Metallica, 1991). Nirvana sequences: Lithium: D5 F♯5 B5 G♯5 C5 A5 C5 in D; Smells Like Teen Spirit: F5 Bb5 Ab5 Db5 in F.

24. Figure 4 is a based on Lilja (2009: 104-114, esp. p. 113), in its turn based on research conducted at Helsinki University of Technology’s Department of Signal Processing and Acoustics.
Poïetic and aesthetic descriptors

As noted above, conventional music theory lacks a systematic vocabulary descriptive of timbre. It also relies on notation as its primary mode of storage, which, as already stated, encodes little or no timbral data. Moreover, since notation must normally be performed for it to be heard, it can be considered an intrinsically poïetic medium. These observations seem to suggest that structural descriptors of timbre may, at least at the time of writing, be easier to create on an aesthesis rather than poïetic basis. Indeed, I’ve found that students with little or no knowledge of music theory — ‘non-musos’ — have generally been less inhibited than their ‘muso’ peers when it comes to characterising aspects of non-notatable sound. This tendency has been particularly striking in discussions of vocal timbre where persona descriptors, be they psychosomatic/emotional (e.g. over-the-top, edgy, cheeky) or demographic and archetypal (e.g. young, working-class, Celtic folk virgin, suicidal student), occur more frequently than do more directly sound-descriptive concepts (e.g. high-pitched, rasping, indistinct). It’s also worth underlining that aesthesis descriptors can also connect with notatable parameters of expression, for example the final minor major nine chord at the end of the James Bond theme (Em⁷⁹, a poïetic descriptor) referred to as a ‘spy chord’, ‘detective chord’, ‘danger chord’, etc. (aesthetic descriptors).

The obvious problem with aesthetic descriptors is that they rely on linguistically and culturally specific patterns of metonymy. For example, ‘wet echo’ as an aesthetic descriptor of reverberation lasting, say, 3½ seconds with in- and output signals set to the ratio

25. Poïesis and aesthesis are concepts deriving from Molino via Nattiez (1976). Their meanings are adapted here as follows. POIETIC DESCRIPTORS are those that designate terms denoting a structural element of music primarily from the viewpoint of its construction (e.g. con sordino, glissando, major minor-nine chord, analogue string pad). AESTHETIC DESCRIPTORS are terms denoting structural elements primarily from the viewpoint of how they’re perceived (e.g. allegro, spy chord, Scotch snap, cavernous reverb).


27. The original name of the Dr No title theme is actually 007 (Norman, 1962).
65:35 (poëtic description) makes no sense translated literally into Italian as un eco bagnato, just the culturally more adequate rendering of ‘wet echo’ as un eco della Madonna would be meaningless if translated back into English as ‘an echo of Our Lady’. However, not only can aesthetic descriptors of this type work well inside local areas of cultural reference: they can also be compared with each other. Their commonalities of spatial, gestural, tactile and kinetic connotation could be investigated and, together with studies of lexical patterns used in the naming of loops, sound effects templates and synthesiser presets, could form the basis of a more transculturally viable vocabulary of aesthetic descriptors.

**Form**

According to the *Oxford Concise English Dictionary* (1995), form means the shape or pattern into which different parts or elements are arranged, ordered, or otherwise combined into a whole. Contemplate, if you would, this bush.

The bush’s constituent elements (stem, branches, twigs, etc.) have been intentionally cut and trimmed (arranged) into a form resembling that of a mushroom. It may have taken a long time to produce that form but its perception as a form is virtually instantaneous. Now please consider example 5. It lasts for four seconds (8 beats at $\text{♩}=120$) and is heard several times in succession, with a few minor variations, before being replaced by a slightly different groove. It contains several constituent elements — the $\text{♩♩ ♩ ♩}$ on guitar and bass, $\text{♩♩♩♩}$ on violins and flute, $\text{♩♩♩}$ on trombones plus hi-hat and kick drum patterns (not shown). All these elements have been combined into an identifiable whole (Ge-
stalt) that repeats as a single ongoing unit. It has, in short, a form.

Ex. 5. Museme stack (excl. drumkit) in *Shaft* (Isaac Hayes, 1971)

The mushroom bush and example 5 illustrate another conceptual conundrum in conventional music theory which, despite the dictionary definition, is unlikely to consider example 5 as form. Instead it reserves the term to mean the way in which episodes or sections are ordered ‘horizontally’ along the unidimensional axis of passing time to create longer patterns of musical change and recurrence. ‘Sonata form’, ‘rondo form’, ‘da capo aria’, ‘32-bar jazz standard’ and so on exemplify that use of the term. Now, of course, the narrative or episodic aspect of arranging, ordering or otherwise combining parts into a whole is an essential aspect of form in music, but it is certainly not the only one. Indeed, if scholars seriously wish to investigate form as form rather than as ‘form’, they will need to consider at least two equally important aspects of the phenomenon: [1] its extensional, episodic, narrative, diachronic, ‘horizontal’ properties — its DIATAXIS — and [2] its intensional, synchronic, ‘vertical’ properties — its SYNCRISIS. 29 Syncritical form is, as illustrated in the four seconds of example 5, perceptible within the limits of the extended present;30 and, in many types of popular music, both intended and heard as a composite of aurally staged,31 simultaneously sounding motifs, riffs, chords, instruments, voices, timbres, pitches, rhythms, etc. in a particular metre at a particular

speed and dB level, etc. Syncrisis is in other words a batch of ‘now sound’ that involves more the shape and form of a dynamic state than of a process or narrative, of a ‘being’ rather than of a ‘becoming’. As such, it constitutes the ideal formal unit for examining museme stacks that may, through repetition, occupy entire episodes but which can also function as building blocks in larger formal units (periods, episodes, sections, entire pieces, etc.).32

Conventional music theory’s conceptual monopolisation of ‘form’ is in other words similar to its hijacking of ‘tonality’. The main difference between the two is that while the conceptual falsification of tonality gives rise, as explained earlier, to a seriously confused and flawed terminology — ‘tonal’ as opposed not only to ‘atonal’ but also to ‘modal’, ‘pretonal’ and ‘post-tonal’ —, its inability or reluctance to deal with form other than diataxis constitutes an error of conceptual omission. There is in other words no valid reason why narrative processes in music (diataxis) should be prioritised at the expense of music’s dynamic states (syncrisis), especially in relation to musics where the latter may be of primary interest.

29. DIATAxis (διατάξις) means ‘order of service’ in Byzantine Orthodox liturgy. As a chronological ordering of constituent episodes into an overall form, diataxis can be used to designate what concepts like ‘sonata form’ and the ‘32-bar jazz standard’ have in common. SYNCRISIS (σύγκρισις) literally means a putting together, an aggregate, combination, etc. Syntax can be considered to constitute a third and equally essential type of musical form. For further explanation of points in this footnote, see Tagg (2013: 383-385; 417; 586, 603).

30. The EXTENDED PRESENT (also misleadingly called the ‘specious present’) lasts no longer than a musical phrase, or an exhalation, or a few footsteps, or a short gestural pattern. It’s a duration experienced as a single unit (Gestalt) in present time, as ‘now’ rather than as an extended sequence of ideas. The extended present can also be imagined as the human brain’s equivalent to a computer’s RAM where information is processed immediately, rather than as its hard drive (longer-term memory) where access and retrieval times are longer. For further explanations, see Tagg (2013: 19-20, 272-273, 588).


32. For explanations of durational hierarchies in music, see Tagg (2013: 281-288).
Que faire?

Since October 2011 I’ve conducted a mini-campaign aimed at convincing colleagues and students that something needs to be done about the sort of conceptual chaos described in this text. Progress has been slow and I’ve had to resort to several tricks of persuasion to further the cause. I have, for example, distilled some of the issues down to simple requests, like ‘please distinguish between tone/tonal and tonic/tonical’, ‘please distinguish between triad/triadic and third/tertial’, ‘please treat all types of form as form’, ‘please help create a viable vocabulary for timbre and aural staging’, etc. Then I’ve delivered different versions of my ‘Troubles with Tonal Terminology’ presentation in numerous places and tried to reach a wider audience by producing a video called What (the Hell) is Tonality? I’ve also added other, equally problematic, factors to the mix, such as conventional theory’s inadequate conceptualisation of metre, rhythm, syncopation, periodicity, polyphony, counterpoint and duration (including the extended present). I’ve even tried appealing to a collegial sense of pride in musical scholarship in the hope of minimising the intellectual and ethical embarrassment that music theory’s terminological disorder can cause in interdisciplinary contexts. For example, I’ve had to point out that no self-respecting linguist would ever conclude that, say, English or Spanish were grammatical languages and that, say, Chinese or Russian were not, just because definite and indefinite articles are key features of syntax in the former but not in the latter, whereas many music theorists seem quite happy to think in that way about tonality: one type of tonality with its particular traits is called ‘tonal’ but others, with different traits, are not. I’ve repeatedly expressed astonishment at the absence of any outcry in my discipline against such foolishness.

Moreover, if musics other than those in the euroclassical and classical jazz traditions remain uncodified, the terminology of conventional euroclassical music theory will stay unchallenged and

33. 9ZE-DpkRYb0 [150919].
continue to marginalise, trivialise or falsify any type of music exhibiting important traits for which that theory has either flawed concepts or no concepts at all. Not only would such neglect prolong the undemocratic disrespect and ethnocentric ignorance it seems to show towards so many musics used by a majority of the world’s population; it would also, as argued earlier, obstruct efforts to understand what made the musical tradition on which it based that same terminology so influential and unique.

Final reflexions

Reactions to my little ‘campaign’ have generally been more positive than negative. Here are just two of them.34

‘I’ve taught analysis in my university for 25 years and I’ve met the same problems as you… We even tried to set up a musical terminology commission ten years ago but’...

‘I was raised in a wide range of musical traditions. Then I recently studied musicology, so had to confront all those [strange terms]… Well, with the [local/regional/national] musical traditions I know… Wow! A lot of those terms just don’t work at all.’

Some reactions have been more guarded, for example:

‘Of course you’re right and what you say is perfectly logical but there’s not a hope in hell that anything will come of it!’

I fear that this opinion, expressed by a senior professor of composition after one of my presentations on the topic, may be a realistic assessment of the situation. Two closely related types of reaction have prompted me to think along such lines. One is the compact silence I met on several occasions when presenting the sort of issues discussed here. ‘They think you’re causing unnecessary problems’, a young researcher told me outside the venue at a particularly soul-destroying music analysis event in Italy. ‘They just want you to disappear so they can get back to “business as usual” in their ivory towers’.35

34. I received these comments by email in late 2013 from a senior music professor in Venezuela and from a musician and musicology student in Colombia.
35. I regret not having noted the student’s name. I just wrote down his comments.
As with the SHUT UP AND GO AWAY strategy just described, the other
type of negative reaction is also characterised by a complete lack of
will to enter into any sort of dialogue: I’m not even presented with
any counterarguments refuting my line of reasoning. This second
type of strategy is, however, more aggressive than the first. I inter-
pret it as a rearguard action mounted by those who feel threatened
not just by budget cuts to the arts and humanities but also by those
of us who advocate real reform. The problem is that instead of safe-
guarding the future of our discipline by addressing the multicultu-
ral internet reality in which students actually live, these fellow
scholars regress into the illusory safety of an institutional past with
its single time-honoured repertoire and a storage technology dat-
ing back to the fifteenth century.36 These knights of the musicolog-
ical rearguard, keen to protect their notions of music, including its
structural theory (not to mention their jobs) from attack, then pull
up the drawbridge and shore up the defences of their fiefdoms, en-
suring that only those who defer to their authority can enter. They
form alliances with others in similar fiefdoms and banish from
their realms anyone who commits the heresy of questioning their
legitimacy. These acts of excommunication are often accompanied
by derogatory rumours circulated about the heretic and his/her
followers, who are then willfully kept out of the institutional loop
of academic exchange and employment.37 This sort of behaviour is
exacerbated by the managerialisation of university life, by bar-
rages of Kafkaesque audits and assessment exercises, as well as by
subjection to ‘league tables’ that can logically function as a compe-
titive comparison mechanism only if there’s a consensus about
‘what everybody does’ or ‘always has done’. Those bizarre mecha-
nisms favour seats of musical learning which focus on traditions

36. Gutenberg (1398-1468) introduced Europe to the printing press with movable
type. Petrucci (1466-1539) is often cited as the father of music printing.

37. The situation is particularly serious in Italian institutions of musicology (see
‘Popular Music Studies in Italian Universities — a petition’ tagg.org/html/
Petition1405.html [150918], especially about the baronie academiche and settori
disciplinariae). We are currently preparing a new report on irregularities in the
field of Italian musicology.
that have to be socially dead, or at least moribund, in order for them to become fixed as canons — for example, the euroclassical canon, the jazz canon, the ‘academic safari’ canon and, more recently, the rock canon. Such fixation of repertoire, of aesthetics and structural theory, is more often than not understood as a necessity in institutions that have to repeat courses from one year to the next in the name of course content consistency or cost cutting. All these mechanisms encourage stagnation and generate a climate of fear detrimental to reform and innovation. To survive short-term in the system you need to toe the line and keep a low profile. To secure funding, you and your institution have to chase brownie points, tick the right boxes and submit to the academic publishing protection racket.\textsuperscript{38} If you don’t feed the management monster in these ways you’ll incur its wrath and be visited by its inquisitors.\textsuperscript{39} 

Heresy, inquisition, excommunication? Who knows how far things can go in a university system under the pall of market fundamentalism?\textsuperscript{40} Maybe, now that students are ‘customers’ and teachers ‘service providers’, we’ll soon have to sell degrees like indulgences.\textsuperscript{41} When that happens and enough of us are excommunicated, our universities can be left entirely in the hands of accountants. Then, like Luther and the German peasant rebels of the 1520s, we can have a full-blown reformation of university life. In the meantime, we cannot do much more than expose flaws in the current system and pin our theses to the door of musical learning.\textsuperscript{42} This text is intended as just one such thesis.

\textsuperscript{38} See ‘The Academic Publishing Protection Racket’ (\url{tagg.org/rants/AcPub-Pizzo.html}) [160418].

\textsuperscript{39} I was subjected to a management inquisition at Liverpool University; see \textit{Audititis: a rampant contagion} \url{tagg.org/rants/audititis/audititis.html} [150919].

\textsuperscript{40} See George Soros: \textit{The Crisis of Global Capitalism} as reviewed by Beams (1998).

\textsuperscript{41} Thanks to Goffredo Plastino (Newcastle) for the indulgences analogy and to Kaire Maimets (Tartu) for reminding me of the perversion of the student-teacher relationship into that of buyer and seller.

\textsuperscript{42} Luther is said to have nailed 95 theses to the door of the \textit{Schlosskirche Allerheiligen} in Wittenberg in 1517, thereby igniting the Protestant reformation. If only Luther had supported the peasant rebels instead of condemning their actions!
References

This appendix contains all types of reference. To save space, the following symbols are used: ☐ bibliographical source (written word); ☐ auditory-visual source; ☐ audio recording; ☐ internet reference; ☐ YouTube file. Please note that ☐ replaces <http://www.youtube.com/watch?v=> so that, for example, ‘☐ rWlt9Is1nms’ means the URL <http://www.youtube.com/watch?v=rWlt9Is1nms>.


☐ HERRMANN, Bernard (1960) Psycho (Colonna sonora originale). RCA Cinematheque NL 33224 (1975) ☐ hplpQt424Ls (0:42, fl.) [131229].

☐ — (1963) ‘Crows attack the students’ from The Birds ☐ hplpQt424Ls (0:42, fl.) [131229].


NORMAN, Monty (1962)43 ‘Theme from Dr No’ (a.k.a. ‘James Bond Theme’, a.k.a. ‘007’). The Best of Bond, United Artists UAS 29021 (1975).

PARTON, Dolly (1973). Jolene (single); also on Jolene; RCA Victor AFL10473 (1974).


TAGG, Philip (2009) Dominants and Dominance [150919].


43. Norman’s legal authorship is no longer legally disputed, but it’s possible that the theme may be musically as much the work of John Barry and Don Black.