

Musical meanings, classical and popular. The case of anguish.

Italian version to be published in l'*Enciclopedia della musica*, edited by J-J Nattiez and published by Giulio Einaudi editore, Torino (written 041230-050102).

Philip Tagg

The big picture

Since the advent of TV and home video, more people living in the media-saturated culture to which I belong hear more music in conjunction with moving pictures than in any other way. The fact that computer games, with their more or less constant music, generate greater global sales than those of the music industry reinforces this tendency. Yet music analysis, as it is still generally taught, pays little heed to such facts. Indeed, it is no longer just works from the Euro-classical canon that music academics dissect as if their sonic structures had no meaning beyond their syntactic relation to each other: even pop songs are now given the Schenkerian crossword-puzzle treatment. If music analysis is to be of any use to the majority of people living in the same culture as I do, it must clearly deal with music *as if it meant something beyond itself*. This article argues that the notion of a museme can, despite its problems, help scholars tackle this semiotic task.

Musemes and structures

It was Charles Seeger (1960:76) who invented the term museme.

[It is a] 'unit of three components — three tone beats — [which] can constitute two progressions and meet the requirements for a complete, independent unit of music-logical form or mood in both direction and extension.... It can be regarded as... a musical morpheme or museme.'

There are two main problems with Seeger's notion: [1] its comparison with the morpheme of (verbal) language derives from linguistic theory of its time; [2] it is syntactically defined without reference to semantics or pragmatics. These problems are interrelated.

Seeger (1960) was not the only musicologist of his time to draw linguistic parallels. Nettl (1958) and Bright (1963) also referred to linguistic

models which still accorded semiotic primacy to the written word, to denotation and to the arbitrary or conventional sign. These parallels were criticised by such musicologists as Nattiez (1975, 1987), Imberty (1976, 1979), Lerdahl & Jackendoff (1977) and Keiler (1978) who drew attention to differences between musical and linguistic semiosis. More recently, denotative primacy has been challenged by linguists arguing that prosody and the social rules of speech (timbre, diction, intonation, volume, facial expression, gesture, etc.) are as intrinsic to language as verbal denotation (Atkinson, 1984; Bolinger, 1989; Cruise, 1988; Eco, 1990; Kress, 1993, etc.). In simple terms, the statements DON'T WORRY ABOUT ME said nonchalantly and DON'T WORRY ABOUT ME spoken with bitter resentment mean no more the same thing than do the first line of your national anthem played by a symphony orchestra and the same passage sung out of tune by someone with a foreign accent accompanied by two drunks on kazoo and accordion playing bebop chords in time with techno drum loops. Since the three first tone beats (however those are defined) of your national anthem can carry such different meanings when performed so differently, it is impossible to accept that a museme, at least as defined by Seeger, constitutes the musical equivalent of a morpheme.

The main problem with Seeger's definition is that it relies on tonal syntax in the same way as a morpheme is conventionally understood to consist of temporally ('horizontally') contiguous phonemes without consideration of its paradigmatic ('vertical') elements — intonation, volume, timbre, etc. If a morpheme, within the context of any one language, is a minimal unit of speech that is recurrent and meaningful, then a museme should, within the context of any single musical culture, own similar properties. The difficulty here is, as the two renditions of your national anthem illustrate, that the sound of a symphony orchestra, or of a kazoo, or of a drunk singing out of tune, or of techno drum loops etc., is each, in semiotic practice, inseparable from the tonal material of which it is part when *heard* in performance as opposed to merely *read* in notation. Of course, with any form of polyphony the notion of minimal units of musical meaning becomes even more complex.

This article does *not* aim to solve the mystery of what constitutes a minimal unit of musical meaning, but it is clear that such minimal units of musical meaning, if they exist, must be considered as paradigmatic as well as syntagmatic phenomena (Nattiez, 1975). If musemes do exist as minimal units of musical 'code', then each one must be a cul-

turally specific musical structure, named or unnamed, that different members of the same music-making community can consistently identify and produce; it must also be recognisable as having a consistently similar function when heard by different members of the same general music culture to which the musicians producing that structure also belong. It would, however, be premature at this stage of research —and an act of intellectual alchemy— to try and distill the theoretical essence of ‘The Museme’ without first providing concrete examples of how the construction (poïesis) and reception (esthesis) of different individual musical structures are demonstrably linked within the same general music culture. Such concretion, which by its very nature involves detailed consideration of musical semantics and pragmatics, meets two serious stumbling blocks in conventional Western musicology: [1] syntax fixation does not favour semantic models based on paradigmatic reasoning; [2] notions of what constitutes a ‘musical structure’ are one-sided and/or unproblematized.

The historical causes of the syntax fixation which still dogs music studies in the West are too complex to explain in this article (see Tagg & Clarida, 2003: 9-32). Suffice it here to say that syntax fixation is so entrenched in institutionalised music scholarship that many scholars parading under the banner of semiotics seem to abandon semantics and pragmatics as irrelevant to their subject (*ibid.*: 47-57). It is no easy matter to convince those whose research career involves a semiotics by name but not by nature that theirs is, as Eco (1990: 256, ff., 266) put it, a ‘perverse discipline’. Unfortunately, syntax fixation also perverts concepts of musical ‘structure’, including notions of what constitutes a minimal unit of musical meaning.

In conventional musicology it is much more common to designate musical, especially tonal, structures in constructional (poïetic) terms — ‘pentatonicism’, ‘C major’, ‘bVII’, etc.—, rather than from a receptional (esthetic/phenomenological) viewpoint —‘detective chord’, ‘grace note’, ‘bitch voice’, etc. Whereas discourse about the visual arts allows the commentator to refer to objects in a painting in terms of what they (appear to) signify rather than of how they are constructed, descriptors of *musical* structures often come across as technical gobbledygook to listeners whose receptional competence is unquestionable (e.g. Francès, 1958; Stefani, 1982; Tagg & Clarida, 2003). If semiotics, according to Morris (1938), is a matter of semantics and pragmatics, as well as of syntax (Eco, 1990: 256, ff.), then scholars interested in musical signifi-

cation face a serious problem because the signifiers they study are rarely designated in relation to their signifieds in the culture of which both are a part (Tagg, 2001: 2-7).

To summarise: music's signifiers (musemes) cannot logically exist unless related to their signifieds and those signifieds cannot be examined without some kind of empirical underpinning, not just in terms of musical syntax but also, and more urgently, in terms of paramusical phenomena demonstrably and consistently linked, in a given cultural context, to the musical structures under discussion. In short, musical semantics and pragmatics need to be prioritised and conventional musicology's obsession with syntax needs to take a back seat in order to redress the semiotic balance.

'Anguish'

As a minute contribution to a less syntax-fixated music semiotics, this article considers one broad semantic field. An obvious question here is *which* semantic field to select, but that question begs another: *how* to select any semantic field if no definition of musical signifiers can exist without considering their signifieds and if studies of musical reception providing empirical evidence of those potential signifieds are so rare. The short answer is that no aspect of musical semiosis can be identified without testing hypotheses based on observations of at least two types of consistency: [1] interobjective or intertextual, i.e. the same or similar musical structure (designated at this stage of research in constructional or poietic terms) used in different works by different musicians belonging to the same basic music culture; [2] the same or similar paramusical phenomena linked by different individuals, belonging to the same basic music culture, to the same or similar musical structures (receptional or esthetic designation).

What follows is therefore based on intertextual and intersubjective procedures set out in *Ten Little Title Tunes* (Tagg & Clarida 2003: 94-152), a study which addresses structural, theoretical and ideological issues of musical semiosis. 'Ideological' refers here not only to overtly political categories (e.g. gender, normality, ethnicity, military) but also to other general semantic fields which, when examined historically in terms of patterns of subjectivity, appear no less ideological (e.g. heroism, urgency, speed, fashion, family, violence, love). This text presents a brief discussion of one such covertly ideological semantic field which, for want of a better label, we shall call *anguish*. In fact, the hundreds of respondents (mainly Swedish, some Latin-American) who provided

empirical reception data for the research reported in *Ten Little Title Tunes*, when asked to describe the scenarios and moods they imagined as corresponding to each of those tunes, never once mentioned anguish. The general connotative field they envisaged was expressed in such terms as *difficulties, problems, trouble; against the will of..., despite..., external obstacles; destiny, fate; pain, suffering; sad, tragic; lonely, abandoned; melancholy, longing, languishing; parting, separating* etc. Such connotations occurred in response (and in varying degrees) to only four of the ten tunes included in the study.

Although slow tempo and, in three of those four tunes, minor key were among the structural common denominators of the music eliciting the sort of response just enumerated, they were not the main tonal determinants of the ‘anguish’ connotations just listed. Three other tonal elements were more operative in distinguishing ‘anguish’ from other other semantic fields —*funeral, dirge, depression*, for example— which, in mainstream Western culture, also rely on slow tempo and minor mode. The three *tonal* elements recurring in the four tunes heard by respondents as connoting ‘anguish’, but absent in the six other tunes giving rise to no such connotations, were: (1) the ‘minor add 9’ sonority (abbreviated m^{add9}); (2) the half-diminished chord, i.e. ‘minor seven flat five’ ($m7b5$) and its inversion as ‘minor six’ ($m6$, i.e. a minor triad with added major sixth); (3) a ‘tortuous tune’, i.e. a melody characterised by disjunct profile and/or emphasised melodic dissonance.

Fully aware of other parameters of expression operative in producing sonic ‘anguish’ —taut or grating timbre, strained vocal or instrumental register, irregular patterns of accentuation, for example— we will nevertheless concentrate on the *tonal* traits just mentioned for three practical reasons: [1] this article would swell to unwieldy proportions if all relevant parameters were to be treated in equal detail; [2] Western music notation allows for at least some graphic representation of many important tonal parameters on the printed page, while no satisfactory or generally accepted equivalent exists for, say, variations of timbre or accentuation: an accompanying CD would then be necessary to make sense of this text; [3] while various conventions of structural denotation already exist for music’s tonal aspects, they have yet to be established for description of timbre and accentuation: treating these latter aspects would require extensive sections of text devoted to the establishment of a viable terminology.

Minor add nine

There is no room here to give more than a few examples of the m^{add9} chord's long history in the West. [1] As a minor triad with suspended major ninth (m^{sus9} is paradigmatically the same as m^{add9}), it dominates the final section of the Agnus Dei from Byrd's Mass in 4 Parts (ex. 1). [2] It is a common device for madrigalistic woe, underscoring words like 'wherewith I mourn and melt' (Byrd's *Wounded I Am*) and 'Ay me! I sit and cry' (Morley's *Fire! Fire!*). [3] It occurs in poignant Dowland songs like *Unquiet Thoughts* and *I Saw My Lady Weep*. [4] It often turns up in J S Bach's harmonisations of such penitent or agony-related chorales as *Christ lag in Todesbanden* or *Ach, wie nichtig! Ach, wie flüchtig!* [5] Schubert uses it (as m^{add9} , not m^{sus9}) in the accompaniment to Gretchen's bitter complaining (ex. 2).

Ex. 1 Byrd: Agnus Dei from Mass in 4 Parts (1600)

Ex. 2.
Schubert:
*Gretchen
am
Spinnrade*
(1828)

Ex. 3. Rota: *Romeo & Juliet* (1968):

- (a) initial 5-b3-2 motif;
(b) piano accompaniment m^{add9} .

The m^{add9} chord is no stranger to film scores. It plays a prominent part in three of the four tunes connoting 'anguish' to several hundred respondents, for example Rota's theme for Zeffirelli's *Romeo and Juliet* (ex. 3; see also ex. 6). It is also a favourite of Morricone's in situations where poignant sadness, tragedy, separation or bitter fate are on the narrative menu, as in the 'Ophelia' cues from *Hamlet* (1990), in the

theme underscoring the death of young Cockeye in *Once upon a Time in America* (1984), in the cues ‘Abduction’ and ‘Death of Oahn’ for *Casualties of War* (1989), or in the title theme from *Lolita* (1997), or in ‘Nostalgia of the Father’ from *Marco Polo* (1982, ex. 4), to name but a few.

Ex. 4. Morricone: ‘Nostalgia of the Father’ from *Marco Polo* (1982)

The same sonority also turns up in connection with lyrics of fateful sadness in postwar popular song. For example, the Bovary-like ‘Madame’ of Alain Bashung’s *Madame rêve* (1991) dreams longingly and hopelessly of *un silence si long* and of *un amour qui la flingue* to the accompaniment of the same minor-key semitone dynamic between major second and minor third. In *Western Eyes* (1997), Portishead’s Beth Gibbons whines ‘I’m breaking at the seams just like you’ with the minor-add-nine’s semitone between degrees 2 and $\flat 3$ ($9 \leftrightarrow \flat 10$) pulsating in the background. The same m^{add9} semitone device is treated more melodically than harmonically both in Radiohead’s *Life in a Glasshouse* (2001) — ‘again I’m in trouble with an old friend’ — and in Elvis Costello’s *For Other Eyes* (1993) — ‘I don’t know what I should do’; ‘It’s over and done’. Among the most striking pop-rock examples of the m^{add9} semitone crunch’s semantic field are Aerosmith’s *Janie’s Got A Gun* (1989, ex. 5) at ‘Run, run away-ay-ay’ (from the pain of sexual abuse) and the piano track heard for at least 25% of Lionel Richie’s *Hello* (1985) whose vocal persona sadly regrets never ‘getting the girl’ (ex. 5).

Ex. 5. (a) Aerosmith: *Janie’s Got A Gun* (1989); (b) Lionel Richie: *Hello* (1985)

As stated above, m^{add9} featured prominently in three of the four title tunes respondents connected with ‘anguish’, including Rota’s *Romeo and Juliet* theme (ex. 3). Even though the other two, the title music for

A Streetcar named Desire (1951, ex. 6a, 20a) and Deep Purple's *Owed to 'g'* (1975, ex. 6b, 20b), produced a response profile of crime and its detection in rough urban settings which differed markedly from *Romeo and Juliet's* with all its tragic love set in a rural past, all three tunes shared both m^{add9} and a significant response rate for *adversity, difficulty, problems, trouble; away from, departure; lonely, abandoned*.

Half-diminished

The two urban tunes just mentioned featured *both* m^{add9} and the second of the three tonal traits linked with 'anguish' responses —the half-diminished chord or its inversion as 'minor add six' (m6, ex. 6).

Ex. 6. Tonal accompaniment to (a) North: *A Streetcar Named Desire* (1951); (b) Deep Purple: *Owed to 'g'* (1975).

We are in other words treating $m6$ and $m7\flat5$ paradigmatically as mutually invertible variants of the same half-diminished sonority (ex. 7).

Ex. 7. Mutual invertibility of $Dm6$ and $Bm7\flat5$

Ex. 8. Wagner's *Tristan* chord as $m7\flat5$ or $m6$

Now, it may seem sacrilegious to consider the famous *Tristan* chord, about whose syntactical complexity so many eminent scholars have written so much, as a mere $m7\flat5$ or $m6$, but syntactical ambiguity is, as we shall see, only one of its semiotic aspects.

Like m^{add9} , the half-diminished sonority has a long history in music cultures of the West. For example, John ‘*semper dolens*’ Dowland uses it in such anguished circumstances as the *Lachrymae* Pavane (*Flow, My Tears*) and at ‘consumed with deepest sins’ in *From Silent Night* (1612), as does Campian to underscore the breaking of vows in *Oft Have I Sighed* (1617). The chord also features prominently, as both a $Cm6$ and an $Em7b5$, in the famous suicide aria from Purcell’s *Dido & Aeneas* (ex. 9). The verbal accompaniment to these and other English instances of $m7b5/m6$ is quite tragic: living or dying forlorn, broken friendship, disclosing shame, etc.

Ex. 9.
Purcell: aria
‘When I am
laid in earth’
(*Dido &
Aeneas*, 1690)

There is of course nothing anguished in the Baroque tradition about a half-diminished chord in the middle of an run of sevenths anticlockwise round a virtual circle-of-fifths: as $m7b5$ or ii^7 , it just links VI^7 to V^7 in a progression like $(i -) iv^7 - VII^7 - III^7 - VI^7 - ii^7 - V^7 (- i)$. However, ii^7 or iv^6_5 in the minor (and vii^7 or ii^6_5 in the major key) have considerable semantic value in at least three other syntactic contexts: [1] as second chord after an initial tonic; [2] in precadential positions; [3] as pivot.

Restricting the Baroque part of this story to the works of J.S. Bach, the half-diminished ‘second chord’ turns up repeatedly in the first Kyrie of the B minor mass (‘Lord, have mercy’) as well as in the opening chorus to both the St. Matthew and the St. John passions. It also occurs in the same position or precadentially in at least 36 settings of chorales with the following sorts of text: *Herrn, ich habe mißgehandelt; Wo soll ich fliegen hin?; Ach! Was soll ich Sünder machen; Ach wie nichtig, ach wie flüchtig!; O Traurigkeit; Jesu Leiden, Pein und Tod; Durch Adams Fall ist ganz verderbt; Christ lag in Todesbanden; Herr, straf mich nicht in deinem Zorn; O Haupt voll Blut und Wunden; Meines Lebens letzte Zeit*. Add to this barrage of second-chord and precadential woe the vii^7 -s or iv^6_5 -s accompanying ‘his disciples forsook him and fled’, ‘the price of blood’ and Peter’s denial ‘I do not know the man’ (all from the *Matthew Passion*) and we are back to an anguished semantic field unambiguous enough to survive in instrumental works of the rococo and classical periods. Indeed, if we accept Rosen’s description of sonata form as ‘a dra-

matic performance' (1976: 155), it will come as no surprise that Mozart's 40th symphony (K550), with Cm6 as its prominent second chord, was characterised by early 19th-century commentators as 'impassioned grief', ranging from 'the saddest' to the 'most exalted' (Stockfelt, 1988: 21-22).

Turning to the pivot aspect of our diminished-fifth tetrad, it is worth noting that C.P.E. Bach (1974: 38) considered 'no chord... more convenient'... than the diminished seventh, 'as a means of reaching the most distant keys more quickly and with agreeable suddenness'. We would hold that the half-diminished chord is pretty useful too, especially for modulating to related keys, as the Fm6/Dm7b5 (ii⁶₅/vii⁷ in E \flat major, iv⁶₅/ii⁷ in C minor) in bar 2 of example 10 demonstrates.

Ex. 10. J.S. Bach: Brandenburg Concerto no. 6 in B \flat major (BWV 1051, 1734); second movement, bars 19-20.

The musical score for J.S. Bach's Brandenburg Concerto no. 6, second movement, bars 19-20, is shown. The score is in B \flat major, 3/4 time, and includes parts for violin 1 and 2, viola, and continuo. The tempo is Adagio ma non troppo. The key signature has two flats. The score shows a chromatic progression of chords: Eb, Cm, Fm6 (Dm7b5), G7, A, Fm (Fm6), G7, Cm. The Fm6 (Dm7b5) chord is highlighted as a pivot chord.

Mozart often uses the half-diminished chord as pivot, for example in a impassioned chromatic progression in the development section (bars 26-29) of the slow movement in his E \flat Sinfonia concertante (K364). Schubert puts second-chord half-diminished semiosis to good use in his nerve-racking *Erlkönig* chase music, in the tragically listless *Einsamkeit* and, most markedly, to accompany the travelling stranger on snowy roads in an inhospitable world where mad dogs howl outside their masters' homes (ex. 11).

Wagner's famous Tristan chord is both potential pivot *and* prominent second-chord if the anacrusic cello arpeggio is heard as an initial D minor tonic (see ex. 8). While it is possible, using a couple of intermediate chords, to complete a perfect cadence in any key from *Tristan*'s initial Fm7b5, its immediate continuation into another two accentuated half-diminished 'second-chords' (the last one repeated to boot) with no intervening modulation is evidence that the sonority had, at least for Wagner in 1859, a semantic charge of its own. Indeed, it was a dramatic device that he used again, for example when presenting Alberich's curse of the ring to the tune of a rising F \sharp m7b5 arpeggio (ex. 12).

The same sort of non-modulatory, quasi-autonomous harmonic device

is used at break-neck tempo by Grieg to start the 'Abduction of the Bride' section of the *Per Gynt* suite (ex. 13). The anguished Dm7b5s of that Grieg extract may well have played a part in establishing half-diminished pathos as an element of musical code in the modern mass media because those four bars constitute the *only* 'Horror' entry in one of the silent film era's most widely used anthologies (Rapée, 1924: 173).

Ex. 11. Schubert: 'Gute Nacht' (*Winterreise*, 1827)

Ex. 12. Wagner:
Alberich's curse from
Siegfried (1874;
cited in Donnington,
1976: 314)

Ex. 13. Grieg:
'Abduction of the
Bride' from
Per Gynt (1891)

Half-diminished chords are two a penny in European romanticism where they seem to work less technically as links to other keys, more like signs that a modulation *could* occur, with all the uncertainty of direction that such ambiguity might entail in terms of heightened drama

and rhetoric. In the final reprise of Liszt's *Liebenstraum* (1847), for example, every other chord is half-diminished in a chain of chromatic slides. It is worth noting that the harmonic language and orchestration of Liszt's tone poems resurface in many of Max Steiner's film scores, not least in *Gone With the Wind* (1939), the half-diminished chord appearing in the languishing first bridge section of the film's overture (ex. 14), as well as in the cue 'Scarlett walks among the dead'.

Ex. 14. Steiner: Modulatory bridge in overture to *Gone with the Wind* (1939)

Chord progression: F7 (sus4→3), G7(4→3), B♭m6, B♭dim, E♭m6, F-9, D♭, C, F#dim

Tempo: *port.*
 Dynamics: *mp*, *f*, *f*, *f*, *f*, *f*, *mp*
 Performance instructions: *cantabile*, *mp*, *p*, *mf*

Tchaikovsky and Rachmaninov show a particular penchant for the precadential half-diminished chord. The way they use the device in crisis-chord position, i.e. at a point about 75% of the way through a particular period or section (Tagg & Clarida, 2003: 211-4), is common and familiar (ex. 15). It is also important, for two reasons, in the development of widely understood notions of pathos in mass-mediated music.

Ex. 15. Tchaikovsky: Piano Concerto B♭ minor, Op. 23 – m7♭5 at crisis point.

Chord progression: D♭, G♭6, A♭, D♭, G♭6, Cm7♭5, F, B♭, E♭

Tempo: *mp*
 Dynamics: *p*, *mf*

Firstly, the Tchaikovsky theme cited above has been used and abused too many times as the sonic representation of 'deep feelings' on radio, TV and film to mention here, while Rachmaninov's second piano concerto in C minor fulfilled so convincingly a 'passionate-but-hopeless-love' function in *Brief Encounter* (1945) that its connotations could be parodied a decade later in the Marilyn Monroe box-office success *The Seven Year Itch* (1955). The popularity of ivory-bashing popular classics like these gave rise to a series of piano-concertante clones that were used in films, many of which were produced in the UK during World War II, and which film critics Halliwell & Purser (1986) review in terms like 'harrowing', 'gripping', 'tearjerker', 'romance suffused with tragedy',

etc. Addinsell's Warsaw Concerto (ex. 16) was one such clone, composed for *Dangerous Moonlight* (1941), an 'immensely popular wartime romance'... in which 'a Polish pianist escapes from the Nazis and loses his memory after flying in the Battle of Britain' (*op. cit.*).

Ex. 16.
Addinsell:
Warsaw Concerto
(1941),
bars 1-2

ad. lib. (quasi cadenza)

Example 17's anacrustically catapulted Cm7b5 is far from the only m7b5/m6 in the piece and the *Warsaw Concerto* is not the sole representative of a genre in which half-diminished chords recur so often as to act as one of its style indicators. That repertoire also includes, for instance, Rota's music for *The Glass Mountain* (1949), Rózsa's *Spellbound Concerto* (1940) and Brodzsky's score for *RAF, The Way to the Stars* (1945). All these films fit the melodramatic pathos bill alluded to earlier and all appear on the album *Big Concerto Movie Love Themes* (1972).

Ex. 17.
Breil: 'The Love Strain is Heard' from *Birth of a Nation* (1915), bars 9-17.

Leno. Amoroso

Secondly, half-diminished tetrads occur precidentally as melodramatic crisis chords in many a prewar popular tune, and in the usual sort of position, for example at bar 26 (of 32) in Tierney's *Alice Blue Gown* (1920), Rodgers' *Manhattan* (1925) and Rapée's *Charmaine* (1925), or at bar 14 (of 17) in Breil's 'Love Strain' (ex. 17), etc. Crisis chords in this position do not need to be half-diminished but they have to contain four or more different pitches, at least one of which must be key-extrinsic (e.g. E7+, Fm6, F#dim, Ab7 or F#mb5 in bar 14 of ex. 17). The whole point is to insert a touch of melodrama offsetting the subsequent V-I

cadence's 'happy ending'. The fact that half-diminished chords often fulfil such a function confirms their status as signifiers of drama and pathos in highly familiar types of popular music.

One category of half-diminished tetrads has yet to be discussed: the 'jazz' minor six (m6) chord, as quoted in example 6. Superficially the chord seems to be little else than a colouristic alteration of a standard minor triad; after all, major sixths can be added to minor triads other than the tonic, as, for example, in Ellington's *Koko* (1940) or in Billie Holliday's recording of *Gloomy Sunday* (1941), or in Gershwin's 'Summertime' and 'It Ain't Necessarily So' (*Porgy & Bess*, 1935). If so, Debussy's 'autonomous' Fm7b5s underscoring the heroine's tears in *Pelléas et Mélisande* (ex. 18) ought also to be qualified as colouristic, but that is hardly likely since the composer's choice of harmony is clearly related to the expression mark *plaintif* he has written in the score. Although technically correct from a syntactical viewpoint, the notion of harmonic 'autonomy' just presented misses the semiotic point on at least two counts.

Ex. 18. Debussy: *Mélisande crying*
(*Pelléas et Mélisande*, 1902), cited
by Cooke (1959: 66)

The image shows a musical score for oboes and clarinets. The tempo is marked 'Modéré' and the expression is 'plaintif'. The score features a melodic line with a half-diminished chord (Fm7b5) and a dynamic marking of 'p'. The score is for oboes and clarinets.

First, the sonority contains the same array of pitches as those half-diminished chords which are, as argued earlier, often treated with relative syntactic autonomy in film music and popular song. It is highly improbable that musicians exposed to such widely disseminated music as Tchaikovsky's first piano concerto, or Rapée's *Charmaine*, or Steiner's score for *Gone with the Wind* would be oblivious to the obvious connotative charge of its half-diminished chords.

Second, the jazz minor six chord was, in the hegemonic WASP (= White Anglo-Saxon Protestant) mentality of inter-war years in the USA, often associated with music performed by particular people (mostly African-American) in particular places (e.g. smoky dives and speakeasies). It was also linked either with lyrics dealing with death and crime (e.g. *St. James Infirmary*) or with other aspects of a 'threatening' subculture (e.g. Ellington's 'jungle' style). Due to these connections, the chord came to function as genre synecdoche (Tagg & Clarida, 2003: 99-103) for a semantic field including such phenomena as seedy US urban locations, African-American subculture, night, danger and crime. It is therefore no coincidence that Gershwin used plenty of minor triads

with added major sixths for *Porgy & Bess* scenes located in an African-American slum, no wonder that *Harlem Nocturne* was the title chosen by Earle Hagen for his C minor piece ‘for Eb saxophone and concert band’ (ex. 19).

In short, the jazz minor-six chord embodies a dual semiosis in which the synecdochal particularities of its inter-war usage in the USA combine with the general melodramatic pathos value of the classical and popular classical half-diminished chord to reinforce rather than contradict one another. However, the semiotic interaction between classical and popular tonal idioms in dealing with anguish does not stop with m^{add9} and $m7\flat 5/m6$.

Ex. 19. Hagen: *Harlem Nocturne* (1940)

‘Tortuous tunes’

Harlem Nocturne (ex. 19) contains all three of the ‘anguish’ traits discussed in this text: [1] m^{add9} , complete with semitone crunch between 2 and $\flat 3$; [2] a half-diminished chord (as $m6$); [3] a melody characterised by disjunct profile and/or emphasised melodic dissonance — a ‘tortuous tune’. All three traits also feature prominently in two of the four tunes eliciting the ‘anguish’ connotations that enabled us to posit the general semantic field in the first place. The harmonic traits, cited in example 6, accompany the melodic lines shown in example 20.

Ex. 20. Initial melodic phrases from (a) North: Title music for *A Streetcar named Desire* (1951); (b) Deep Purple: *Owed to 'g'* (1975).

In addition to all the adversity, crime, danger and seedy locations envisaged by respondents hearing these tunes, 'detective' was another common connotation, i.e. the individual, usually a white male, supposed to bring some semblance of order and justice into his inimical surroundings. The only trouble is, at least in a stereotypical *film noir* plot, that the detective's own life is such a mess: apart from the consolatory whisky bottle in the desk drawer of his ramshackle office, he is usually out of pocket, beaten up by hoodlums, thwarted by 'jobsworth' police officials, and often unhappily but passionately involved with the *femme fatale* implicated in the web of deceit he has to unravel, only to end up alone in stake-outs, alone tailing suspects, alone philosophising about the evils of this world. The 'anguish' of such a P.I.'s theme tune is therefore just as much 'his' as the listener's, not least because the relationship between the visual narrative's foreground figure (the P.I.) and his environment can also be identified in the melody-accompaniment dualism between melodic figure and 'backing' parts. Since we have discussed these and other aspects of detective music semiosis at length elsewhere (e.g. Tagg, 1998) we will do no more here than cite two of the most familiar English-language TV detective themes (ex. 21) and add that *Harlem Nocturne* (ex. 19) was revamped as theme for the CBS TV detective series *Mike Hammer* (1983).

Ex. 21. (a) F Steiner: *Perry Mason* (1957); (b) Riddle: *The Untouchables* (1959)

Of course, 'tortuous tunes' in the minor key, with their altered fifths, sharp sevenths, 'dissonant' ninths, etc. are by no means exclusive to TV

detectives. Marconi (2001: 66-110) cites enough musical outbursts of anxiety, complaint, desperation etc. to substantiate a long history of similar semiosis in the European classical tradition, including examples from Mozart's *Don Giovanni*, Verdi's *Il trovatore* and *Aida*, and Bach's *Matthew Passion*. In musical-rhetorical terms of the Baroque period, we are dealing with phenomena that might well have been given such labels as *pathopeia*, *saltus duriusculus*, etc. (Bartel, 1997: 357-62; 381-2), i.e. the sort of tortuous line to which Bach sets Peter's remorseful tears after denying Christ in both the *Matthew* and *John Passion* ('und weinete bitterlich'), or the anxious penitence of the Kyrie eleison fugues in the B Minor Mass, including their half-diminished and Neapolitan chords, or the F# minor aria *Ach, Herr! Was ist ein Menschenkind?* with its minor-sixth and diminished-seventh leaps concurring with the Lord suffering such great pain to bring about the redemption of the wayward 'child of Man'.

Ex. 22. J.S. Bach: *Ach Herr! Was ist ein Menschenkind?* Cantata 110 (1725)

Ach, Herr! Was ist ein Menschenkind daß Du sein Heil so schmerz-lich such-est?

Although it may seem sacrilegious to lump divine suffering for the redemption of humanity together with the urban *Angst* of private detectives, it is clear that their musical and paramusical commonalities are quite substantial.

Musemes and ideology

In this article we have presented evidence of consistent correspondence, within the broad context of Western musical traditions over the last few centuries, between certain tonal structures and certain paramusical phenomena. Since we focused on the particularities of musical structures connected with the general semantic field we labelled 'anguish', the discussion might be termed musematic in the same sense that the deconstruction of (verbal) language into its meaningful constituent parts could be qualified as phonematic. However, it is clear that we are still a long way from defining 'museme' because, as is evident from differences in timbre, orchestration, rhythmic articulation, accentuation, etc. between most of the extracts cited, and because these differences are also meaningful (for instance, madd9 yelled by a rock vocalist in ex. 5a compared to its discrete articulation in the piano part of ex. 2), different occurrences of the same tonal structure in different

works belonging to the same broad music culture do not necessarily have the same meaning. Nevertheless, just as structural and paramusical commonalities demonstrably exist between minor-key detective themes and grief-stricken Bach arias, so they do between the Aerosmith and Schubert examples (5a and 2): both prominently feature m^{add9} and both express some aspect of anguish. If, for the sake of argument, we posit m^{add9} as a museme in both instances, we will also have to consider the rock yelling and the particular articulation of the Schubert piano semiquavers, regardless of their tonal specificities, in equally musematic terms. The only problem is that musicology, though terminologically well-equipped to deal with most aspects of tertial tonality, is poorly prepared for the analysis of musical timbre and the subtleties of rhythmic-dynamic articulation. The development of models able to fill these and other methodological lacunae is unfortunately an issue well beyond the scope of this article.

Despite the problems just mentioned, it is possible, using the sort of approach sketched above, to demonstrate some important aspects of musical semiosis in our culture. Not only can such an approach contribute to the development of musicological method: by highlighting musicogenic categories of meaning it can also raise issues of ideology relating to the social patterning of subjectivity under changing political and economic circumstances.

For example, we have argued elsewhere (Tagg, 1994) that the decline of foreground melodic figure and the relative prominence of backing loops in some kinds of techno music not only represented a radical departure from the basic compositional strategy of Western music since Monteverdi—the melody-accompaniment dualism—; we also argued that the abandonment of such a central element of musical structuration in our culture (‘what Haydn and AC/DC have in common’) corresponded with a rejection of ‘the big ego’ (of melodic presentation in opera, jazz and rock, for example) which, in its turn, related to a rejection of the perverted self of capitalists let loose under Reagan and Thatcher.

Similar questions need to be asked about recent changes in the musical representation of ‘anguish’. If, for the increasing number of marginalised members of our society (including our ex-students who, despite their education, are unable to find satisfactory employment), there is little credibility left in bourgeois notions of the individual (e.g. the

'American Dream', the 'self-made man', the opera diva, the big rock star, the greedy capitalist), how can impassioned musical statements of the deep anguish such marginalisation surely causes be made or heard? Worse, where are this society's 'successful' role models from whom we 'lesser mortals' can take a lead in recognising the injustices of the system under which we all try to survive and in expressing appropriate remorse for all the pain and suffering it causes? Worse still, how can individuals express any kind of anguish if they fail to develop, through learning the social skills of guilt and reparation, the object relations that enable humans to distinguish between self and environment (Klein, 1975)? It is a learning process under constant threat from all that advertising which regularly exploits a psychotic symbiosis that is quite normal in two-year-olds but that is (or, at least, was until recently) considered a symptom of social disorder in adults.

These questions need to be addressed from a musicological viewpoint too, because it has been possible recently to discern a certain reluctance to give Hollywood movies, whose story lines veritably seethe with anguish, an underscore bearing any resemblance to the sort of impassioned grief that the on-screen characters clearly have to live through. *American Beauty* (Newman, 1999), *Monster's Ball* (Asche & Spencer, 2001) and *The Life of David Gale* (Parker, 2003) are three such films: although their visual-verbal narrative is full of pain, injustice, dignity, bitterness, loneliness, etc. 'against all odds', their scores are generally conceived in a restrained, ambient vein, tinged by the occasional insertion of subdued accompanimental dissonances. Is this lack of complementarity a contrapuntal distancing device to make the on-screen anguish and sense of injustice more poignant; or is it just an emotional self-censorship mechanism echoing tendencies to repress reactions of anger and indignation against the societal causes of grief and pain? Is this a new sort of musical 'anguish management' strategy?

Whether the tendency just mentioned can be verified or not, it would have been impossible to ask any of these questions about the musical expression of anguish in the current cultural climate without examining the phenomenon in terms of musical signifiers and signifieds. That examination is facilitated by the existence of the term 'museme' because, even though it may have no satisfactory definition, it at least focuses attention on musical-structural detail and on the relation of such detail to life 'outside' music. By paying attention to such detail it is possible for musicology to start mapping musically determined categories

of thought which, in their turn, may contribute to a much broader understanding of how patterns of subjectivity are formed in this media-saturated society.

Understanding the expression (or non-expression) of anguish as a musical category may be an important step in developing strategies to deal with the alienation and disempowerment felt by so many members of our society. This article has only scratched the surface of that issue. One thing is sure: if, as musicologists, we fail to meet the challenge such uncompleted work implies, we may well find ourselves having to express serious amounts of remorse to those who are most likely to be affected by our neglect.

Verbal references

- BACH, CARL PHILIPP EMMANUEL (1749). *Essay on the True Art of Playing Keyboard Instruments*. London: Eulenburg. (Original: *Versuch über die wahre Art das Clavier zu spielen*, Berlin: 1753, 1762).
- BARLOW, HAROLD & MORGENSTERN, SAM (1948). *Dictionary of Musical Themes*. New York: Crown.
- BARTEL, DIETRICH (1997). *Musica Poetica. Musical-Rhetorical Figures in German Baroque Music*. Lincoln: University of Nebraska Press.
- BOLINGER, DWIGHT (1989). *Intonation and its Uses: Melody in Grammar and Discourse*. London: Edward Arnold.
- BRIGHT, WILLIAM (1963). Language and music: areas for co-operation. *Ethnomusicology*, 7/1:26-32.
- COOKE, DERYCK (1959). *The Language of Music*. London: Oxford University Press.
- CRUISE, D A (1988). *Lexical Semantics*. Cambridge University Press
- DONNINGTON, ROBERT (1974). *Wagner's "Ring" and its Symbols*. London: Faber.
- ECO, UMBERTO (1990). *I limiti dell'interpretazione*. Milano: Bompiani.
- FRANCÈS, ROBERT (1958). *La perception de la musique*. Paris: J Vrin (reprinted 1972).
- IMBERTY, MICHEL (1976) Le problème de la médiation sémantique en psychologie de la musique. *Versus - Quaderni di studi semiotici*, 13: 35-48.
- (1979). *Entendre la musique*. Paris: Dunod.
- KEILER, ALLAN R (1978). 'Bernstein's "The Unanswered Question" and the problem of musical competence'. *Musical Quarterly*, 64: 195-222.
- KLEIN, MELANIE (1975). *The Writings of Melanie Klein* (ed. R Money-Kyrle), vol. 1: 'Love, Guilt and Reparation and Other Works, 1921-1945'. New York, Free Press.
- KRESS, GÜNTHER (1993). 'Against arbitrariness: the social production of the sign as a foundational issue in critical discourse analysis'. *Discourse & Society*, 4/2: 169-192.
- LERDAHL, FRED; JACKENDOFF, RAY (1977). 'Toward a Formal Theory of Tonal Music.' *Journal of Music Theory*, 1: 111-172.
- MARCONI, LUCA (2001). *Musica, espressione, emozione*. Bologna: CLUEB.
- MORRIS CHARLES. (1938). *Foundations of a Theory of Signs*. Chicago University Press.

- NATTIEZ, JEAN-JACQUES (1975). *Fondements d'une sémiologie de la musique*. Paris: Ugé.
- (1987) *Musicologie générale et sémiologie*. Paris: Bourgeois.
- NETTL, BRUNO (1958). Some linguistic approaches to music analysis. *Journal of the International Folk Music*, 10.
- ROSEN, CHARLES (1976). *The Classical Style*. Haydn London: Faber.
- SEEGER, CHARLES (1960). 'On the moods of a musical logic'. *Journal of the American Musicological Society*, XXII. Reprinted in *Studies in Musicology 1935-1975*; Berkeley: University of California Press (1977: 64-88).
- STEFANI, GINO (1982). *La competenza musicale*. Bologna: CLUEB.
- ; MARCONI, LUCA (1992). *La melodia*. Milano: Bompiani.
- STOCKFELT, OLA (1988). *Musik som lyssnandets konst*. [Music as the Art of Listening]. Göteborg: Musikvetenskapliga institutionen vid Göteborgs universitet.
- TAGG, PHILIP (1994) 'From refrain to rave: the decline of figure and the rise of ground'. *Popular Music*, 13/2: 209-222. Also as 'Dal ritornello al "rave": tramonta la figura, emerge lo sfondo'. *Annali del Istituto Gramsci Emilia-Romagna*, 2/1994 (ed. E Collini, S Granelli): 158-175 (1995).
- (1998) 'Tritonal crime and "music as "music"'. *Norme con ironie. Scritti per i settant'anni di Ennio Morricone* (ed. S Miceli; L Gallenga; L Kokkaliari): 273-312. Milano: Suvini Zerboni.
- (2001) 'Music analysis for "non-musos": Popular perception as a basis for understanding musical structure and signification' |<http://tagg.org/articles/xpdfs/cardiff01.pdf>| (040429).
- TAGG, PHILIP & CLARIDA, BOB (2003). *Ten Little Title Tunes*. New York and Montréal: Mass Media Music Scholars' Press.

Musical references

- ADDINSELL, RICHARD (1942) The Warsaw Concerto. *Big Concerto Movie Themes* (q.v.).
- AEROSMITH (1989) Janie's Got A Gun. *Pump*. Geffen 924 254-2.
- ASCHE & SPENCER (2001) *Monster's Ball* (soundtrack). Lion's Gate DVD 50103 (2002).
- BACH, JOHANN S. (1721). Brandenburg Concerto No. 6 in B♭ Major, BWV 1051 (ed. Arnold Schering). London: Eulenburg (n.d.).
- (1724) Passion according to Saint John (ed. Ivor Atkins, transl. T. A. Lacey). London: Novello (1929).
- (1725) 'Ach Herr! Was ist ein Menschenkind?' *Was mein Gott will, das g'scheh alzeit*, (Cantata 110 no. 4, Christmas); cited in Barlow & Morgenstern (1948: see bibliography).
- (1729) Passion according to Saint Matthew (ed. E. Elgar, I. Atkins; transl. T. A. Lacey), revised edition (1938). London: Novello.
- (1891) *The Organ Works of J. S. Bach, Volume 10: Toccata, Preludes and Fugues* (ed. Sir Frederick Bridge and James Higgs). Toccata and Fugue in D Minor: p. 196.
- (1931) 371 Harmonized Chorales and 69 Chorale Melodies with Figured Bass (ed. A. Riemenschneider). London: Chappell.
- BASHUNG, ALAIN (1991) Madame rêve. *Climax*. Barclay 543 648.
- Big Concerto Movie Themes* (1972). Music For Pleasure MFP 4261.
- BREIL, JOSEF CARL (1915) The Love Strain Is Heard. *Filmmusik – Musik Aktuell-Klangbeispiele*. Bärenreiter Musicaphon BM 30 SL 5104/05 (1982).
- BRODZSKY, N (1945) RAF, The Way To The Stars. *Big Concerto Movie Themes* (q.v.).
- BYRD, WILLIAM (1589) 'Wounded I am.' *Invitation to Madrigals*, 2 (ed. Th. Dart). London: Stainer and Bell (1962, p. 44).

- (1605) *Mass for Four Voices* (ed. E.H. Fellowes). London: Stainer and Bell (1922).
- CAMPION, THOMAS (1617) *Third Booke of Ayres* (ed. E. H. Fellowes). London: Stainer and Bell (1925). 'Oft have I sighed' (p. 2)
- COSTELLO, ELVIS (1993) For Other Eyes. *The Juliet Letters*. Warner Brothers 45180.
- DEEP PURPLE (1975) Owed To 'g'. *Come Taste The Band*. Warner Brothers PR 2895.
- DOWLAND, JOHN (1612) *A Pilgrimes Solace* (ed. E. H. Fellowes). London: Stainer and Bell. (1923). 'From silent night, true register of moan' (p. 41).
- (1925) *Fifty Songs, Book 1* (ed. E. H. Fellowes). London: Stainer and Bell. 'Flow, my tears', a.k.a. 'Lachrymae Pavane' (p. 36); 'I Saw My Lady Weep' (p. 34); 'Unquiet Thoughts' (p. 1).
- ELLINGTON, DUKE (1940) Koko. *Take the 'A' Train*. Success 2140CD (1988).
- HAGEN, EARLE (1942) *Harlem Nocturne*. New York: Shapiro & Bernstein.
- HARRISON, GEORGE (1971) *My Sweet Lord*. Apple R5884.
- HOLLIDAY, BILLIE (1941) Gloomy Sunday (Lewis/Seres).
Billie Holiday - the Original Recordings. Columbia C32060 (2001).
- MORRICONE, ENNIO (1982) *Marco Polo*. Ariola 204699.
- (1984) *C'era una volta l'America*. Mercury 818 697-1.
- (1989) *Casualties of War*. CBS 466016 2.
- (1990) *Hamlet*. Virgin Movie Music 3010.
- (1997) *Lolita*. Milan Records 35840 (1998).
- MORLEY, THOMAS (1594) 'Fire Fire!' *Invitation to Madrigals, 8* (ed. Th. Dart, E. H. Fellowes). London: Stainer and Bell (1976).
- MOZART, WOLFGANG A (1788) Symphony N°40 in G Minor, K550. London: Eulenburg. (1930).
- NEWMAN, THOMAS (1999) *American Beauty*. Dreamworks DVD 85382 (2000).
- NORTH, ALEX (1951) A Streetcar Named Desire. *Fifty Years of Film Music*. Warner 3XX 2736 (1973).
- PARKER, ALAN & JAKE (2003). *The Life of David Gale* (soundtrack). DVD: Universal.
- PORTISHEAD (1997) Western Eyes. *Portishead*. Go Beat 314-359 189-2.
- PURCELL, HENRY (1690) *Dido and Aeneas* (ed. W. H. Cummings). London: Novello (1887).
- RADIOHEAD (2001) Life In A Glasshouse. *Amnesiac*. Capitol 32764.
- RAPÉE, ERNÖ (1924, ed.) *Motion Picture Moods for Pianists and Organists*. New York: Schirmer; facsimile reprint by Arno Press, New York (1974).
- (1926) *Charmaine*. New York: Miller; reprinted in WHITCOMB (1975).
- RICHIE, LIONEL (1985) Hello. *Back to Front*. Motown 530 018-2 (1992).
- RODGERS, RICHARD (1925) *Manhattan*. New York: Francis Day & Hunter.
- ROTA, NINO (1968) *Romeo and Juliet* (theme); covered by Tony Hatch on *Hit the Road to Themeland*, Pye NSPL 41029 (1974).
- SCHUBERT, FRANZ (1814) 'Erlkönig' (Op. 1, *Ausgewählte Lieder*). Schubert (n.d., p. 170).
- (1815) 'Gretchen am Spinnrade' (Op. 2, *Ausgewählte Lieder*). Schubert (n.d., p. 176).
- (1829) 'Einsamkeit' from *Winterreise*. Schubert (n.d., p. 90).
- (n.d.) *Gesänge für eine Singstimme mit Klavierbegleitung nach den ersten drucken revidiert* (ed. Friedländer): Band I - Ausgabe für hohe Stimme. London, New York, Frankfurt: C F Peters. *Winterreise* (Op. 89), pp. 54 - 121 *Ausgewählte Lieder*, pp 170-260.
- STEINER, MAX (1939) *Gone With The Wind*. RCA GL 43440 (1974).
- TIERNEY, HARRY (1920) *Alice Blue Gown*. New York: Leo Feist; also in WHITCOMB (1975).
- WHITCOMB, IAN (1975, ed.) *Tin Pan Alley - A Pictorial History (1919-1939)*. New York: Paddington Press; London: Wildwood House.