

Music analysis for 'non-musos'
Popular perception as a basis for understanding
musical structure and signification

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In memory of János Maróthy
— musicologist and humanist

This paper is in two main parts. The first discusses basic problems of conceptualisation in music analysis; the second describes methods of teaching music analysis to students with no formal training in music — the 'non-musos' in this paper's title — and argues that their approach to music may be useful to the development of analytical method.¹

1. The problem we face

1.1. Five contradictions

The basic problems of conceptualisation in music analysis to which I am referring have their origins in a series of at least five interrelated contradictions regarding notions about music in our society.

1.1.1. Social value and institutional status

The first contradiction puts music's empirically verifiable social value in one corner and its institutional status in the other. On the one hand, music seems in our culture to be the most ubiquitous of symbolic systems. Its importance in both monetary and temporal terms is undeniable: our brains register music for an average of four hours a day — 25% of our waking life — and 90% of radio time consists of music, while around half of all TV programming features music either on screen or as underscore.² Indeed, very few people spend more time reading and writing, listening to speech, dancing, or looking at pictures and sculpture, etc.

The other side of this first contradiction is that most institutions of music education and research still tend to put music near the bottom of the academic heap. Music's share of time on the school curriculum and of money to teacher and subject bear little or no relation to its extracurricular importance in terms of either financial or time budgets. Such disparity between the real values of music today and the low status it occupies in the hierarchy of public education can also be observed in cultural politics as well as in higher education and research.³

1. This paper was originally prepared for a conference on Popular Music Analysis, held at the University of Cardiff, 17 November 2001. This version was updated in Montréal on 2009-10-07. For special terms and abbreviations, please see Glossary at www.tagg.org/articles/ptgloss.html.

Muso: slang term denoting a musician, usually someone preoccupied with making or talking about music and relatively uninterested in anything else. In this paper 'muso' is not used derogatorily but as a short word to denote someone with either formal training in music, or who makes music on a professional or semi-professional basis, or who sees him/herself as a musicologist rather than as a sociologist or cultural studies scholar. *Non-musos* are those who do not exhibit the traits just described.

2. For details of music's share in the time and money budgets of citizen's in the industrialised world, see *Music's Meanings*, pp. 2-14 (Tagg 2009a: www.tagg.org/bookxtrax/NonMuso/NonMuso.pdf [2009-10-07]).

1.1.2. Critical analysis

The second contradiction follows directly from the first because, although music is clearly important in our culture, we have yet to develop viable means of understanding how all that music in our mass media actually affects people. The contradiction here is that while, for example, critical reading, or the ability to see below the surface of advertising and other forms of propaganda,⁴ are rightly regarded as essential to independent thinking, and although such skills are widely taught in literary or cultural studies, the ability to analyse musical messages is not. One reason is, as I just intimated, that we have yet to develop analytical method capable of dealing with all that music disseminated via the mass media and used on an everyday basis by millions of people.

1.1.3 Structural nomenclature

The third contradiction is really just another aspect of the second, but it does partially explain why a musicology of the mass media has been so slow to develop. This contradiction highlights disparity between the analytical metalanguage of music in the Western world and that of other symbolic systems. More specifically, it deals with peculiarities in the derivation patterns of terms denoting structural elements in music when compared with the denotative practices applied in linguistics and the visual arts.

To explain this contradiction I shall be using the conceptual polarity *poïetic* – *aesthetic*.⁵ In what follows *poïetic* will qualify terms denoting structural elements in music from the viewpoint of their construction (*poïesis*). Such terms derive primarily from the techniques and/or materials used to produce such elements (e.g. 'con sordino', 'glissando', 'major minor-seven chord', 'analogue string pad', 'phasing', 'anahemitonic pentatonism'). *Aesthetic*, on the other hand, will qualify terms denoting structural elements primarily from the viewpoint of their perception (*aesthesis*), i.e. their received effect or connotation (e.g. 'allegro', 'legato', 'spy chord', 'Scotch snap', 'cavernous reverb').⁶

In the analysis of visual art, it seems, at least from a layperson's point of view, that it is just as common for the identification of structural elements to derive from notions of iconic representation or of cultural symbolism as from concepts of production materials and technique. For example, structural descriptors like *gouache* or *broad strokes* clearly derive from aspects of production technique and are therefore poïetic, while the

3. For example, although Swedish state expenditure on music for the fiscal year 1980-81 was \$50 million, its income from VAT on musical commodities was \$150 million, a 300% profit (K. Malm, editor of *Fonogramutredningen* (Stockholm, 1979), referring to statistics for 1980-81, gathered from *Veckans affärer* and from music industry financial reports, during a lecture at Musik i Väst, Göteborg, November 1981). Similarly, although an international association (IASPM) and journal (*Popular Music*), both devoted to the serious study of music in the mass media, have been in existence for two decades, drawing their membership and readership from a wide diversity of university disciplines and music-related professions, disciplinary and faculty boundaries still present enormous obstacles to those attempting to give music the sort of attention it deserves in cultural studies, mass communication studies, film studies, sociology, psychology etc.
4. Some communications scholars claim that *propaganda* and *advertising* are quite different. I partially base my own my understanding of striking similarity between the two concepts on a statement by consumerist propaganda pioneer Edward Bernays. Interviewed by Adam Curtis in the BBC TV documentary *Century of the Self*, Bernays explains that the term 'public relations' had to be coined because 'we couldn't use the word "propaganda" on account of the Germans using it' [in the first world war].
5. The conceptual polarity *poïetic/aesthetic* derives from Molino via Nattiez. In the original version (2001) of this paper I used the longer but etymologically more user-friendly terms *constructional* (poïetic) and *receptional* (aesthetic).
6. In fact the last two descriptors, 'spy chord' and 'cavernous reverb', mix both aesthetic ('spy', 'cavernous') and poïetic ('chord', 'reverb') modes of denotation.

iconic representation of a dog in a figurative work of art would be called *dog* — an aesthetic term — rather than be given the technical description of how the figure representing that dog was produced. Moreover, 'the dog' in, say, Van Eyck's famous Arnolfini marriage portrait,⁷ could also be considered a structural element on symbolic rather than iconic grounds if it were established that 'dog' was consistently interpreted in a similar way by a given population of viewers in a given social and historical context: e.g. the dog as recurrent symbol of fidelity — an aesthetic term again, this time in a different semiotic mode. Of course, a structural descriptor like 'central perspective' is poietic and aesthetic at the same time in that it denotes both a technique for representing three dimensions on a two-dimensional surface as well as the way in which that surface is perceived as three-dimensional by the viewer.

In linguistics there also seems to be a mixture of poietic and aesthetic descriptors of structure. For example, the phonetic term *voiced palato-alveolar fricative* is poietic in that it specifies the sound /ʒ/ (Gimson 1967:33) by denoting how it is produced or constructed, not how it is generally perceived or understood. On the other hand, terms like *finished* and *unfinished*, used to qualify pitch contour in speech, are both aesthetic and poietic, while central concepts of general linguistic theory like *phoneme* and *morpheme* work both poietically and aesthetically in that they designate structures according to their ability to carry meaning from the viewpoint of both speaker and listener. /ʒ/, for example, understood as a *phoneme*, rather than as a *voiced palato-alveolar fricative*, denotes the structural element that allows both speaker and listener to distinguish in British English between ^hlɛʒə (leisure) and ^hlɛsə (lesser) or ^hlɛtə (letter).

From the perspective just presented it is no exaggeration to say that, compared to the study of visual arts and of spoken language, conventional music analysis in Western Europe exhibits a clear predilection for poietic terminology, sometimes even to the extent of excluding aesthetic categories from its vocabulary altogether.⁸ The complex historical and ideological reasons behind this bias have been discussed at length elsewhere (Tagg & Clarida 2003: 9-92) and cannot be addressed here, but one aspect of the problem constitutes our next contradiction.

1.1.4. Symbolic competence

The ability to understand both the written and spoken word (aesthetic skills) is generally held to be as important as speaking and writing (poietic skills). In music and the visual arts, however, aesthetic competence is not held in equal esteem. For example, young people able to make sense of quite sophisticated intertextual visual references in music videos or computer games are not usually dubbed artistic, nor credited with the visual literacy they clearly own. Similarly, the widespread and empirically verifiable ability to distinguish between, say, two different types of detective story after hearing no more than two seconds of instrumental music does not apparently allow us to qualify the majority of our population as musical. Indeed, *artistic* usually seems to qualify solely poietic skills in the visual arts sphere and *musicality* seems to apply only to those who perform as vocalists, or who play an instrument, or can decipher musical notation.

7. *The Marriage of Giovanni Arnolfini and Giovanna Cenami*; 1434; Oil on wood, 81.8 x 59.7 cm; National Gallery, London. 'The companion dog is seen as a symbol of faithfulness and love', writes Nicolas Pioch [www.iliblio.org/wm/paint/auth/eyck/arnolfini/] in 1996.

8. It is important to note that the denotation of structural elements in the Northern Indian raga tradition is much more aesthetic than in Western Europe (see Martínez 1996).

It is as though the musical competence of the non-muso majority of the population did not count. That is clearly undemocratic. The fifth and final contradiction offers some clues as to a possible remedy.

1.1.5. The institutionalisation of musical knowledge

This final contradiction is really a set of anomalies. Table 1 divides musical knowledge into two subcategories: MUSIC AS KNOWLEDGE and KNOWLEDGE ABOUT MUSIC. By the former is meant knowledge that relates directly to musical discourse and that is both intrinsically musical and culturally specific. This type of musical knowledge can be divided into two sub-types: *poietic competence*, i.e. the ability to *make* music (to compose, arrange, perform, etc.), and *aesthetic competence*, i.e. the ability to *perceive and understand* music (to recall, recognise and distinguish between musical sounds, as well as between their culturally specific connotations and social functions). Neither poietic nor aesthetic competence relies on any verbal denotation and both are more usually thought of as skills or competences rather than as knowledge.

Table 1 Types of musical knowledge

Type	Explanation	Seats of learning
1. Music as knowledge (knowledge <i>in</i> music)		
1a. Poietic competence	creating, originating, producing, composing, arranging, performing, etc.	conservatories, colleges of music
1b. Aesthetic competence	recalling, recognising, distinguishing between musical sounds, as well as between their culturally specific connotations and social functions	?
2. Metamusical knowledge (knowledge <i>about</i> music)		
2a. Musical metadiscourse	'music theory', music analysis, identification and naming elements and patterns of musical structure	departments of music(ology), academies of music
2b. Contextual metadiscourse	explaining how musical practices relate to culture and society, including approaches from semiotics, acoustics, business studies, psychology, sociology, anthropology, cultural studies.	social science departments, literature and media studies, 'popular music studies'

KNOWLEDGE ABOUT MUSIC, on the other hand, is by definition metamusical and always entails verbal denotation. However, *like* MUSIC AS KNOWLEDGE, KNOWLEDGE ABOUT MUSIC is both culturally specific and can also be divided into two subcategories. Table 1's *musical metadiscourse* houses music analysis, 'music theory' and any other activity which entails the ability to identify and name elements and patterns of musical structure. *Contextual metadiscourse*, on the other hand, involves explaining how musical practices relate to the culture and society that produces them and which they affect. This fourth aspect of musical knowledge includes aspects of many disciplines, from music semiotics to acoustics, from business studies to psychology, sociology, anthropology, cultural studies etc.⁹

9. Contextual metadiscourse has until now dominated the proceedings of IASPM (International Association for the Study of Popular Music) and the pages of *Popular Music* (Cambridge University Press). I have discussed the institutional disparity of musical competences in relation to Popular Music Studies in other publications (Tagg 1998, 2000a).

The institutional underpinning of division between these four types of musical knowledge is strong. In tertiary education the first type — *poietic competence* — is generally taught in conservatories, performing art schools, etc., the third — *musical metadiscourse* — in departments of music[ology] as well as in conservatories, and the fourth — *contextual metadiscourse* — in practically any humanities or social science department, less so in conventional musicology departments and performing arts colleges. Yes, the second type of knowledge, *aesthetic competence*, was missing in the previous sentence. That omission was intentional because the ability to distinguish, without recourse to words, between musical sounds, as well as between their culturally specific connotations and social functions — the most widespread and popular form of musical competence — is, with the exception of isolated occurrences in aural training and in some forms of 'music appreciation', generally absent from institutions of learning. Aesthetic competence seems in other words to be a vernacular and largely extracurricular affair.

1.1.6. Summarising the contradictions

It should be clear from the five contradictions just presented that:

1. music's status in education and research is not commensurate with its social, economic and cultural importance;
2. students are encouraged to analyse verbal and visual messages critically but music is rarely taught as if it communicated anything substantial;
3. terms denoting the structural elements of language and the visual arts are both poietic and aesthetic while those denoting the structural elements of music are overwhelmingly poietic;
4. poietic and aesthetic competence are generally accorded equal value in relation to language, but when it comes to music and the visual arts it appears that 'competence' only applies to poietic skills;
5. poietic competence in music and knowledge of musical metadiscourse are housed in institutions of learning for musical experts while contextual metadiscourse is seen as the reserve of other disciplines; aesthetic competence is rare in the sphere of public education and research.

What a mess! In what follows I will start trying to tidy it up a bit. I will also assume we agree that music is a symbolic system and that its communicative power is just as dependent on aesthetic competence among the non-muso majority as it is on the poietic competence of the muso minority. Therefore, if we think that all people should be given the right to understand how music affects their ideas, attitudes and behaviour, and if we follow the basic educational guideline that learning processes are most effective when rooted in the experience of our pupils or students, then we shall need to include and use their widespread aesthetic competence in our music teaching. Such inclusion has far-reaching implications for music analysis.

1.2. The impact on music analysis

According to Table 1 (page 4), analysis belongs to musical knowledge category 2a which relies on verbal denotation of music's structural elements. Now, as we already stated, when discussing contradiction no. 3, conventional music analysis in the West exhibits a predilection for poietic descriptors of those structural elements. Such predilection is obviously a problem for the non-muso majority with their relative lack of poietic competence and we will need to find alternative means of identifying and denoting musical structures from a aesthetic point of departure.

As musicians we are all aware that many poïetically denoted elements can carry connotative signification, for example, the minor major-nine chord as detective or spy sonority.¹⁰ However, many other chords (and chords are poïetically denoted elements of music if ever there were) depend on either their syntactic position or on the idiom in which they occur to carry any meaning at all. For example, a chord of the thirteenth with cadential dominant function at the end of a parlour song might provide an apex of dramatic tension but exactly the same chord as altered tonic or as tritone-substituted double-dominant in a bebop jazz performance would probably do little more than act as style indicator of bebop (Tagg 2001c: 113). The problem should be clear: we can expect no one-to-one link between poïetically denoted structure and the connotative signification of that structure, because the semiotic value of poïetically denoted elements is context-sensitive in terms of both intraopus syntax, for example the two distinct 'meanings' of the same tritone hook in Abba's *Fernando* (Tagg 2001d:50-59), and musical idiom, as exemplified by the thirteenth chord described in the previous sentence.¹¹

Another problem with poïetic descriptors has already been hinted at: they do not necessarily carry any symbolic value. For example, while investigating IOCM¹² for a four-bar chord loop in a modern dance track (The Source 1997) under discussion in a Popular Music Analysis class in September 2001, I found myself having to play along with the CD in a key signature of six sharps — $\text{♩ } \frac{4}{4} \text{ G}\#\text{m}^7 \mid \text{F}\#\text{m}^7 \mid \text{B} \mid \text{C}\# \mid \text{C}\# \text{.}$ ¹³ Before grappling with that task at the keyboard I was sure we were hearing a progression resembling the basic chord shuttle of songs like *My Sweet Lord* (Harrison 1971), *He's So Fine* (Chiffons 1963) or *Oh Happy Day* (Edwin Hawkins Singers 1969). At the keyboard, however, I had to force my hands into shapes which I did not feel corresponded with the musical patterns of those songs which are set in much more common keys. However, when I paused the CD track and continued playing just the $\text{G}\#\text{m}^7 \leftrightarrow \text{C}\#$ shuttle without the intervening chords my students were not slow to hear *My Sweet Lord* or *Oh Happy Day*, even if *my* thoughts were dominated by having to adjust fingers into unusual shapes in order to produce the right sounds. The point here is that the structural change from G minor or A minor to G# minor, insignificant for a guitarist using barré as well as from the aesthetic angle, was highly significant for me, the keyboard player, because I had to construct what listeners hear as 'the same thing' in a radically different way.

Of course, many significant changes of tonal construction do tally with significant changes in reception, for example singing the UK National Anthem in the Hijjaz mode with a *c*# drone instead of using tertial four-part harmony in G Major, but other significant poïetic change, such as the G# minor exercise described above, does not. On the other hand, tiny changes of tonal structure denotable in poïetic terms, like replacing *e*♯ with *e*b in a common triad with C as its root, can have considerable effects on reception. Given these observations, it should be clear that I am in no way advocating abandonment of tonal considerations in popular music analysis.

10. As Emma⁹ it is the final chord in *The James Bond Theme (Dr No)* (Norman 1962).

11. Conversely, the structural consistency of aesthetic descriptors is, as we shall see, subject to radical variation between different listening populations at different times in different cultures.

12. IOCM = interobjective comparison material. See online glossary at [www.tagg.org/articles/ptgloss.html].

13. The analysis class took place on 13 November 2001. The track was *You Got The Love* by The Source (1997). Leo Hatton, who chose the track for analysis, subsequently revealed that he has to tune his synth up a quarter-tone in order to play along to the same CD. This implies that the Steinway in the classroom must have been a quarter-tone flat. However, none of these microtonal tuning adjustments detract from the validity of the argument which follows.

However, an even greater challenge to the development of popular music analysis is the fact that much of the music circulating in the mass media contains many structural elements which, with the exception of conventional instrument nomenclature, lack established poietic descriptors but which nevertheless relate quite clearly to paramusical phenomena. It should be no surprise to discover that most structural elements of this type can be *poietically* determined only if non-notatable parameters of expression are taken into consideration. Here we are dealing with parameters like texture, timbre, volume, acoustic staging, etc., none of which are storable to any significant extent — if at all — in Western musical notation and, consequently, very few of which are systematised at all in conventional musical analysis with its bias for notatable tonal parameters. Of course, many colleagues have already contributed to the development of a popular music analysis which confronts such issues,¹⁴ but the popular music analysis community (if we exist as such) is still a long way from establishing a coherent approach that can be widely applied in the education of musos and non-musos.

2. *Music analysis for non-musos*

2.1. *Sources of 'popular' descriptors*

I would like to start the second half of this paper by suggesting that we can find a rich vocabulary of structural descriptors in everyday uses of popular music. Some of these descriptors may be poietic but, compared to the terminology of conventional music analysis, I think we will find that a larger proportion will be either aesthetic or a mixture of the two denotative types. The types of musical use and manner of registering the popular vocabulary I am referring to can be exemplified as follows.

1. Colloquial dialogue about musical structure can be collected either ethnographically or by: [a] conducting reception tests; or [b] registering students' IOCM and PMFCs in analysis classes.¹⁵
2. Descriptors of electronically produced timbres can be gathered by studying such phenomena as: [a] the preset nomenclature of sounds recurring in similar sonic guise on different synthesisers; [b] the labels given to particular sound samples, loops, etc. available in software packages or on line.
3. Descriptors of sound-treatment parameters (reverb, delay, phasing, distortion, etc.) can be collected and collated by studying template nomenclature on effects equipment.
4. Connotative descriptions abound in library music catalogues. By studying regular patterns of correlation between such written connotations and structural elements recurring in different library music tracks labelled in a similar way it would be possible to both enlarge and refine the analyst's range of aesthetic descriptors.

In none of the four categories just listed is it necessary for the user to be at all fluent in the poietic description of structural elements: no-one need know what diminished sev-

14. e.g. Middleton's work on gesturality (1992), Nicola Dibben's discussion of Björk's *Unison* at the 2001 Cardiff conference and John Richardson's exposé of similarities of string sound in the work of Bernard Herrmann, the Beatles, Stevie Wonder and Coolio (also at the Cardiff conference). I have also tried to contribute to this development (see Tagg in Bibliography). See also Garry Tamlyn's musicological proof, based on an exhaustive analysis of drumkit patterns in pre-1955 rhythm and blues, of the need to radically rewrite the history of rock (Tamlyn 1998), and Serge Lacasse's examination of vocal staging in recordings of pop and rock (Lacasse 2000).

15. IOCM = interobjective comparison material; PMFC = paramusical field of connotation. For explanation of these terms, see online glossary at [www.tagg.org/articles/ptgloss.html].

enths or augmented fourths are, and no-one need understand or recognise what is meant by a circle-of-fifths progression or the mixolydian mode. After all, category one's students might just as well be from Communication Studies as from the Music Department, while the users implied in categories two and three might just as well have acquired their synths or recording software without any formal musical training. Similarly, library music descriptions are formulated, usually by a non-muso member of the record company staff, for stressed-out media producers, also usually non-musos, who need to find the right music with the right mood as fast as possible.¹⁶

Unfortunately, there is no time here to discuss more than one of these four sources of structural descriptors. Indeed I must now for reasons of space put aesthetic descriptor categories two through four into the ever-overflowing in-tray marked 'future research' and focus briefly on how category no. 1 alone can help solve some of the popular music analyst's problems.

2.2. *Music analysis for non-musos*

Since 1993 I have taught music analysis to non-musos. During seven of those years I taught 'The Semiotic Analysis of Popular Music' on a Masters programme at the University of Liverpool.¹⁷ On average, just over half the students opting for that course were non-musos in the sense that they were not notationally literate, nor did have they the first clue as to what a diminished seventh or the mixolydian mode might be. Nor did I see it as a priority to teach them what such terms mean. Indeed, one of the prerequisites for enrolment on that course stated:

'Although formal training in music or musicology is no prerequisite, a keen interest in music and in its sociocultural functions is absolutely essential. You do not need to be notationally literate.'

Moreover, the aims of the half module included:

'To further the systematic understanding of relationships between structural aspects of music (text) and its psychological, social, cultural and ideological qualities (context).'

'To develop musical listening skills and to increase aural awareness in general.'

'To encourage the abilities of lateral and connotative thought' [and] '[T]o relate skills in lateral and connotative thinking to more rationalist modes of discourse.'

During the first third of the module I presented and exemplified the sort of approach to analysing popular music that I had set out in several publications (Tagg 1982, 1987, 1995, 1999). Key topics, concepts and methodological tools covered were:

'Theories and definitions of semiotics. Traditions of music studies and their relation to semiotics. Definitions of *music*. Discussion of musical functions... Connotation and denotation. Communication models, codal incompetence and codal interference. Semiosis and cultural relativity.'

'Musematic analysis: interobjective comparison and hypothetical substitution. Intersubjectivity and paramusical fields of connotation. Musical sign typology: anaphones, genre synecdoches, episodic markers, style indicators. Music and the soundscape. Dualism melody-accompaniment. Parameters of musical and paramusical expression.'

16. See interviews with library music producers in 1980 at [www.tagg.org/articles/intws80v1.pdf], pp. 8, 24.

17. Citations on the next few pages are taken from online course materials: [www.tagg.org/teaching/analysis/semioma.html] and associated (hyperlinked) pages.

This course, which I later adapted to the needs of graduates in music and other subjects in Montréal,¹⁸ starts with a presentation of conceptual and methodological tools that students will need for their own assignment (see below). I usually start with by presenting an analysis myself, sometimes the 'live' version of my book about Abba's *Fernando* (Tagg 2001d). By week four of the course each student has, after consultation with myself and the other seminar participants, chosen a piece of music to analyse.

The middle third of the module is occupied by feedback sessions at which each student

... 'plays his/her chosen music to the seminar and notes feedback from the participants. The ... point of these sessions is to obtain information about the piece's perceived qualities (associations, reactions, descriptions, evaluations, etc.). Feedback from seminar participants, in the form of structural or connotative observations, should be taken into account by the [student] in his/her subsequent analysis work.'

The final third of the module is devoted to analysis presentations by each student and to eliciting further comments from participants that may help each presenter improve his/her written analysis. In order to demonstrate what sort of mental processes the students are subjected to in this module, it is worth quoting extensively from the assignment instructions.¹⁹

'METAMUSICAL VOCABULARY. One of the great difficulties in talking or writing about music is knowing which words to use when referring to its various sounds in such a way that whoever you are addressing will know what you mean. Of course, some style labels may be useful to the extent that terms like "European classical music" or "blues" may give your audience a general idea of the types of sound you are referring to. However, the idea will be no more than that —general— and any further precision of style nomenclature, such as *rococo* or *Memphis blues*, is less likely to be understood by as many people. Even then, a style name does not allow you to pinpoint particular sounds within that one style, let alone within one piece of music.'

... '[M]usicians have developed a whole range of terms denoting particularities of musical sound. Unfortunately, there are two problems with this store of words: one is that there are as many sets of vocabulary referring to musical structure in the world as there are different musical styles, the other that a lot of musician talk about music is incomprehensible to the majority of people in the culture they co-habit.'

'Similar problems of incomprehensibility unfortunately apply to significant amounts of musicological discourse, especially in the typically European regions of pitch specification, i.e. in connection with harmony, counterpoint, tonal vocabulary and, to some extent, rhythm and metre. However, expressions qualifying volume, timbre, space, speed, attack, melodic contour etc. can be used by anyone with a command of their mother tongue, as indeed can several more specialist yet fully understandable terms like *polymetric*, *polyrhythmic*, *polyphonic*, *monophonic*, *heterophonic*, *legato*, *staccato*, *pizzicato*, *glissando*, *crescendo*, *diminuendo*, *drone*, *pedal point*, *pentatonic*, *anacrusis*, *distortion*, *phasing*, *panning*, etc., etc....

'Similarly, many instrumental sounds and vocal types can be easily and correctly identified by anyone with reasonable hearing and a modicum of experience in listening to music in the relevant style. Nevertheless, many of the musical sounds to which you will need to refer cannot be satisfactorily denoted, even if armed with this small arsenal of terms just mentioned. This remaining difficulty can be suc-

18. See *Analyse de la musique populaire*, www.tagg.org/udem/analyse/analmpop.htm.

19. For complete assignment instructions, see www.tagg.org/teaching/analys/semiomaass.html.

cessfully circumnavigated in two ways that need to be employed in conjunction with each other: (i) *aesthetic denotation*;²⁰ (ii) unequivocal *chronometric placement* in a recorded series of sound events.'

'By AESTHETIC DENOTATION is meant verbal identification of certain perceived qualities connoting the sound to be identified. Such an expression may be based on interobjective comparison —for example, *the Bach arpeggio, the gamelan final gong sound, the Hey Jude chord sequence*— or on the analysis object's own paramusical fields of association, i.e. on connotations to the particular sound provided by your respondents, including yourself —for example *steamy, croaking, witch-like, bubbles, sunrise*.

'However, although this type of exercise allows you to refer concisely to particular sounds in your analysis piece, such reference will not be unequivocal because other sounds resembling, say, Bach arpeggios, gamelan gongs, the *Hey Jude* chord sequence, or sounds possibly qualifiable as steamy, croaking, witch-like, bubbles, sunrise etc. will almost certainly exist in many other pieces, probably in a slightly different sonic guise to that occurring in your piece. For this reason, unequivocal chronometric placement is essential.'

'By UNEQUIVOCAL CHRONOMETRIC PLACEMENT in a recorded series of sound events is meant the start and end points of the sound you wish to identify... Unfortunately for this assignment (though fortunately for music in general), music usually consists of several different sounds (or aspects of the same sound) occurring at the same time. Therefore, in order to make the chronometric placement unequivocal, it is often necessary to qualify the sound you wish to identify in relation to other concurrent sounds (e.g. *the kick drum figure at 1:33 or the screeching synth sound at 0:21 or at the word "love" in the third "I love you" of verse 2*). Of course, this necessary step in the identification of a particular sound presupposes that you have noted how far into the piece such (and other) events actually occur. To this end, it is essential that your work includes a graphic score of events in your piece.'

'GRAPHIC SCORE.... If you wish, you may try and transcribe your analysis piece in the form of musical notation. However, this often arduous task is by no means necessary in this assignment. If you do opt to transcribe part or whole of your piece, please remember that notational skills are not a prerequisite on this module and that your presentation may therefore be incomprehensible to some participants.'

'The graphic presentation should include the following parallel lines: (i) time grid; (ii) formal grid; (iii) paramusical events (if applicable); (iv) grid of musematic occurrence. This graphic score should ideally be proportionally chronometric so that equal durations occupy equal amounts of horizontal space.'

'A TIME GRID consists of a horizontal line along which you mark the timing of significant musical events throughout the piece (e.g. 0:44 = 44 seconds into the piece, 3:01 = 3 minutes and 1 second into the piece)...'

'The FORMAL GRID indicates where, in relation to the time grid, the various sections of the piece start and end, e.g. *intro, verse 1, chorus 2, etc.*'

'The PARAMUSICAL GRID contains such events as lyrics, description (or drawings) of visuals.'

'GRID OF MUSEMATIC OCCURRENCE. This grid should contain as many parallel horizontal lines as you identify separately meaningful strands of sound in your piece. The start and end point of each museme should be clearly visible from your presentation.'

20. Before writing this paper, the assignment instructions stated 'phenomenological', not 'aesthetic', denotation. Reasons for this change in terminology are summarised in footnote 5.

All the tasks and processes just mentioned are supposed to focus attention on the constituent meaningful elements of the music under discussion. However, they also function as a series of confidence-building exercises. Firstly, by constructing chronometric grids for their analysis piece — a straightforward task with digital real-time counters in playback hardware and software —, students with little or no prior experience of music analysis can discretise and irrefutably indicate the objective existence of particular sounds. Secondly, the degree of intersubjective agreement in feedback sessions, both about the 'general feel' of the piece and with regard to the connotations of particular sounds, usually turns out to be greater than students expect.²¹ Bolstered with increased confidence in their ability to unequivocally denote a sound within a recording and to describe it in accordance with intersubjective agreement, students are more willing to name such a sound aesthetically, less embarrassed about not being able to do so poetically. Descriptors like *the long eighties synth chord that starts the track* can then be given a short name (e.g. *eighties synth chord*) and students can start writing their analyses.

It is especially during feedback sessions that potentially useful aesthetic descriptors turn up. For example, the names of two musemes in my analysis of Abba's *Fernando* (Tagg 2000d:36-38,41-42) derive at least partially from student input: [1] *tiptoe bass* — the *leggiero* arpeggiated figure that occupies just half of each bar in the verses; [2] the *sunrise motif* — the 'upwards-and-outwards' motif resembling the *immer breiter* figure at the start of Strauss's *Also sprach Zarathustra*. Even simple chord sequences found in well-known pop songs are sometimes recognised by non-musos as 'sounding like *La Bamba*' (or *Guantanamera*, or *Twist and Shout*) and named accordingly, while a recent film music class featured music containing structures referred to by non-muso students as 'the Vivaldi bit' (a perpetuum-mobile arpeggiated violin figure following several chords descending round the circle of fifths, and 'a sort of *Carmina Burana* sound' (unison male voices singing accentuated even crotchets quite loud in a middle-to-low register and accompanied by punctuations from brass and woodwind).²² Students are, in other words, able to suggest quite relevant aesthetic descriptors, either on the basis of gesture, touch, movement, paramusical sound and connotation (e.g. 'sweeping', 'spiky', 'silky', 'rough', 'delicate', 'crazy', 'tense', 'very eighties', 'quite detective-ish', i.e. as PMFCs) or in relation to music they already know (e.g. 'sounds like Bach', 'very Pet Shop Boys', 'like the James Bond theme', 'a bit industrial', i.e. as IOCM).

Now, if stringent analysis is our goal then it is clear that there are problems with the sort of aesthetic descriptors just mentioned. The most obvious difficulty is that they can only be expected to mean anything substantial to those with aural access to, or memory of, the recording in which the structure so named occurs at the point stated by the student. Another problem is that vernacular aesthetic descriptors are much less likely than more centrally established types of vocabulary to be understood outside the relatively restricted cultural sphere in which they have acquired any degree of intersubjective

21. Of course, it is always necessary in feedback sessions to discuss connotations from a musocentric, frequently gestural, starting point. For example, ostensibly disparate connotations, such as 'long hair', 'rolling hills' and 'the beach' have little in common in terms of physical size, texture, etc. Gesturally, however, the fall of long hair, the curves of rounded hills and the sweep of a sandy beach with small waves on the sea all share obvious common denominators. For more on the principles of 'gestural interconversion' and music, see the analysis of *The Dream of Olwen* in Tagg & Clarida (2003:231-266).

22. The class took place on 20 November 2001. If I remember rightly, the 'Vivaldi bit' occurred in the underscore to *Great Expectations* (dir. Alfonso Cuarón, 1998), 'a sort of *Carmina Burana* sound' in a scene from *The Mummy* (dir. Stephen Sommers, 1999).

sense. For example, while it is not uncommon in English to call a reverb 'wet' if its secondary signals create a constant and fairly loud 'wash' (long decay time), the same expression in Italian translated into Italian — *un eco umido* or *un eco bagnato* — would be meaningless. Asked what the Italian for 'a really wet reverb' would be, Franco Fabbri once replied '*un eco di Madonna*' whose literal translation back into English — 'an echo of Our Lady' — would make little or no sense to English-speaking musicians!

Now, the cultural specificity of vernacular aesthetic descriptors does not need to be seen as a major obstacle to the *development* of analysis method. As suggested earlier, such descriptors can be collected and codified: it may even be possible to find patterns of cross-cultural similarity and to establish some common denominators. After all, if aesthetic descriptors like 'legato' and 'allegro' are understood across linguistic and cultural boundaries in the sphere of European art music, there is no real reason to assume that terms like 'medium bounce', 'break beat' or 'detective chord' cannot acquire similar cross-cultural status in the world of popular music.

There is nevertheless one barrier which non-musos rarely seem able to cross: that of denoting tonal structures, especially those of harmony, key, mode, etc. True, some harmonies seem to have reasonably clear connotative traits — the famous 'detective chord', the 'cowboy half-cadence'²³ — while, as stated above, other common ones can be referred to by the name of a well-known pop song in which they occur — the '*La bamba* progression', the '*My Sweet Lord* chords', etc. However, these descriptors hardly scratch the surface of all the connotatively significant harmonies to be found in the music of our mass media. Consequently, non-muso students unable to structurally identify what it is in the harmonies that seems to make a semiotic difference have to ask the experts — the musos — and credit their poietic brothers and sisters in a footnote.²⁴

2.3. *Vocal persona* — "*It's in the voice*"

The final part of this paper, based on observations from eighteen years of teaching popular music analysis, focuses on one area of musical structuration to which non-musos seem to pay close attention: vocal timbre and inflection: 'it's in the voice' is a recurrent comment. Unable to provide poietic descriptors of vocal production techniques (breathing, register, vibrato, tremolo, microphone usage, laryngeal tension, use of buccal cavities, diaphragm, etc.), students initially tend to shy away from describing what it is 'in the voice' they find so meaningful. One way out of this impasse is to ask students 'what sort of person in what state of mind would use that kind of voice?' When exhorted to speak the words of a particular vocal line emulating its approximate pitches, dynamics, timbre, duration, accentuation and rhythm, students are not slow to come up with words which pinpoint a *vocal persona*. The kinds of vocal persona heard in analysis classes tend to receive such vernacular epithets as: 'little girl', 'nice boy', 'complete bitch', 'utter bastard', 'desperate rebel', 'macho git', 'sexy whisper', 'confident woman', 'evil child', 'worried man', 'death voice', 'voice of Satan', 'hound of hell', 'nervous hiccuping teenager', 'suicidal male student', 'angry scream', 'Harpie shriek',

23. The minor major-nine or minor major-seven chord, the final sonority in the James Bond Theme (Norman 1962) is usually heard as 'the detective chord' or 'the spy chord' (see also footnote 10 and analysis of *A Streetcar Named Desire* in Tagg & Clarida, 2003). For details of the 'cowboy half-cadence', see analysis of *The Virginian* in Tagg & Clarida (2002).

24. I try to persuade the students that asking questions and finding answers is a hallmark of good research and that 'not knowing' is a prerequisite for asking the right questions. Besides, such questions help to re-establish confidence among any musos who may be in the class.

'frustrated squawk', 'bedside disco-man', 'football hooligan', 'friend and confidante', 'tired and abused', 'resigned', 'depressed', 'demoralised', 'cynical', 'hysterical', 'out of breath', 'stressed out', etc. The list seems virtually endless and intersubjective agreement in analysis classes about the connotative traits of the vocalist(s) and vocal line in question is usually very high.²⁵

Given the simultaneously wide variety and incontrovertible intersubjective validity of voice types envisaged by students, I would strongly advocate adopting the notion of vocal persona in the development of music analysis method. I would also suggest that it would be fruitful to study in depth the relation between vocal technique and vocal persona, as well as between vocal persona and the formation of subjectivity in our culture as a whole.

For example, I was in the late 1990s concerned about an apparent fixation on 'the girlie voice' in commercial UK pop featuring female vocalists. I found myself asking the following sorts of question. Do none of them want to sound like women? If not, why not? Do male listeners really want all these little princesses with their girlie voices? Are they afraid of real women? Do young women listeners want to be little girls rather than grow up? Are they badgered into emulating female pubescence by the fashion and 'beauty' industries? As an adult female vocalist, doesn't it damage your vocal chords if you have to do the 'girlie voice' all the time and what techniques do you have to use to sound 'girlie' if you have passed the age of twenty? Are any particular kinds of lyrics more common in songs sung by "girlie" voices than by others? What is the relationship between stage act, clothing, artist image and the "girlie" voice? How do these questions relate, if at all, to processes of growing up in today's dog-eat-dog capitalism?

The serious nature of these questions was brought home to me with overwhelming clarity by a friend of my daughter's. In July 2001 she told me that she had, a few years earlier, been offered a six-figure recording contract (in pounds!) and been taken shopping by the record company's fashion consultant to buy skimpy little tops and other girlie garments to the tune of a four-figure sum. She then discovered that, of all the tracks she had recorded, the company intended to release only those few in which she had been instructed to use a girlie voice throughout. Suspicious about how she was to be marketed, she turned down the contract and went back to nursing.²⁶

Here I have definitely jumped the gun because the previous paragraph epitomises what I hope will become research topics that can point music analysis method in useful directions. Whether that type of research materialises or not, it should be clear from this paper that non-musos and their aesthetic descriptors hold considerable potential for the development of concepts and methods of analysis that can help people, musos and non-musos alike, make sense of all the musical messages circulating in our mass media. Who knows, perhaps we shall even be able to help give music a position in education and research commensurate with its undeniable importance outside the institutionalised world of learning. If only we were able to bridge the gap between those two spheres in our own work...

25. For more, see Chapter 9 in *Music's Meanings* (www.tagg.org/booktrax/NonMuso/NonMuso.pdf).

26. I am not at liberty to reveal the identity of this person. She has, however, agreed to put down her experiences of this episode in her life in writing.

Bibliography

- Gimson, A C** (1967) *An Introduction to the Pronunciation of English*. London: Edward Arnold (1st publ. 1962).
- Lacasse, S** (2000) "Listen to My Voice": *The Evocative Power of Vocal Staging in Recorded Rock Music and Other Forms of Vocal Expression*. Liverpool: PhD, Institute of Popular Music, University of Liverpool.
- Martínez, J L** (1997). *Semiosis in Hindustani Music*. Imatra: Acta Semiotica Fennica V.
- Middleton, R** (1992) 'Towards a theory of gesture in popular song analysis'. *Secondo convegno europeo di analisi musicale*, ed. R Dalmonte & M Baroni. Trento: Università degli studi di Trento, Dipartimento di storia della civiltà europea: 345-350.
- Tagg, P** (1982) 'Analysing Popular Music - Theory, Method and Practice'. *Popular Music*, 2: 37-69. Republished in *Reading Pop. Approaches to Textual Analysis in Popular Music*, ed. R Middleton; Oxford University Press, 2000: 71-103 [www.tagg.org/articles/xpdfs/pm2anal.pdf]
- (1987) 'Musicology and the Semiotics of Popular Music'. *Semiotica*, 66-1/3: 279-298 [www.tagg.org/articles/xpdfs/semiotica.pdf]
- (1995) 'Vers une musicologie de la télévision'. *Frank Martin, musique et esthétique musicale. Actes du colloque de La Chaux-de-Fonds 1990*, ed. É Emery. Revue Musicale de Suisse romande: 33-60 [www.tagg.org/articles/gonseth.html]
- (1998) 'Analysing music in the media. An epistemological mess'. *Music on Show: Issues of Performance*, ed. T Hautamäki, H Järviluoma. Tampere: Department of Folk Tradition: 319-329 [www.tagg.org/articles/glasg95.html]
- (1999) 'Music, moving image, semiotics and the democratic right to know'. Article based on paper delivered at conference 'Music and Manipulation', Nalen, Stockholm, 18 September 1999 [www.tagg.org/articles/xpdfs/sth9909.pdf]
- (2000a) 'Notes on how classical music became "classical"' [www.tagg.org/teaching/classclassical.pdf]
- (2001a) 'High and Low, Cool and Uncool: aesthetic and historical falsifications about music in Europe.' *Bulgarian Musicology*, 2/2001, ed. C Levy. Sofia: Bulgarska Akademiya na Naukute-Institut za izkustvoznanie: 9-18. Expanded version of homonymous paper was delivered to the IASPM (UK) conference at the University of Guildford (July 2001) [www.tagg.org/articles/iaspmuk2000.html]
- (2001b) 'Twenty Years After': speech delivered at Founder's Event, 11th International IASPM Conference, Turku, 8 July 2001 [www.tagg.org/articles/turku2001.html]
- (2001c) *Kojak: 50 Seconds of Television Music*. New York: The Mass Media Music Scholars' Press (2nd edition; 1st published 1979 by Musikvetenskapliga institutionen vid Göteborgs universitet) (www.tagg.org/mmmsp/kojak.html).
- (2001d) *Fernando The Flute*. New York: The Mass Media Music Scholars' Press (www.tagg.org/mmmsp/fernando.html).
- & **Clarida, R** (2003) *Ten Little Title Tunes*. New York: The Mass Media Music Scholars' Press (www.tagg.org/mmmsp/10Titles.html).
- (2009a) *Music's Meanings*; online draft at www.tagg.org/bookxtrax/NonMuso/NonMuso.pdf.
- Tamlyn, G** (1998). *The Big Beat: Origins and development of snare backbeat and other accompanimental rhythms in Rock 'n' Roll*. 1998, Liverpool: University of Liverpool, PhD Thesis, Institute of Popular Music.

Musical references

- The Chiffons** (1963) *He's So Fine*: Stateside SS 172 (UK). Also on *Legends of Rock'n'Roll*. Tring TTMC 088 (n.d., c. 1994).
- The Edwin Hawkins Singers** (1969) *Oh Happy Day*: Pavillion 20001 (US); Buddah 201048 (UK). Also on *20 Heavy Hits*, Crystal S-600.
- Harrison, George** (1971) *My Sweet Lord*: Apple R5884 (UK).
- Norman, Monty** (1962). 'Dr No' – main titles (the 'James Bond Theme'). In *Dr No*: MGM / UA Home Video PES 99210 (1992). On *The Best of Bond*: UA UAS 29021 (1975) and on *Il terzo uomo e altri celebri film*: RCA Cinematre NL 43890 (n.d.).
- The Source featuring Candi Staton** (1991). 'You Got The Love — "Now Voyager" mix'. On *Pure Dance '97*. Polygram TV 555 084-2.