Tritonal crime and ‘music as music’

Paper written in honour of Maestro Morricone’s 70th birthday
(Philip Tagg, University of Liverpool assisted by Bob Clarida, New York)

Music as music (1)

‘Music as music’ is a strange expression implying that some music is less ‘music’ (whatever that may be) than other music. The last time I came across it was in a book I was reviewing. Its authors seemed to be claiming that those who sought to explain music with reference to how people understood it or to what musicians intended by it were treating ‘music as music like a second-class citizen’. The previous occasion on which I heard the expression was in 1990 at a film music symposium in Siena at which Morricone was present: two Italian professors of musicology indirectly rebuked the composer for writing ‘musica di cinema’ rather than, as they put it, of ‘musica — musica’. These musicologists must have had scant knowledge of Purcell’s, J.S. Bach’s, Mozart’s, Beethoven’s or Verdi’s ability to commute between varying types of musical signification, nor did they seem to have taken account of Morricone’s compositions for the concert hall, nor of the fact that much of his work for cinema is issued on disc and widely appreciated without any visual accompaniment by a large popular audience. They also seemed unaware of the process whereby, in the seam between the baroque and classical periods of Central European music history, the dramatic references, values, meanings and structures of music in the opera house or theatre crossed the street into the concert hall. The development of the classical Viennese symphony only makes sense if viewed in this perspective, for, as Rosen (1976:155) points out:

... ‘the application of dramatic technique and structure to “absolute” music’ ... ‘was the natural outcome of an age which saw the development of the symphonic concert as a public event. The symphony was forced to become a dramatic performance, and it accordingly developed not only something like a plot, with a climax and a dénouement, but also a unity of tone, character and action it had only partially reached before’.

It is not the aim of this short essay to offer any definitive refutation of the notion of ‘absolute music’. I will instead concentrate on the changing function of one particular aspect of musical expression in one particular context (tritones in detective themes) in order to illustrate how dramatic context and the skill of composers of music for the moving image make a radical and innovative contributions to the development of our art both inside and outside that field of activity.

Which detective music?

The music shown in examples 1 and 2 was never intended as detective music: A Streetcar named Desire (example 1) is set in New Orleans and tells the story of a repressed Southern widow (Vivien Leigh) who is raped and driven mad by her brutal brother-in-law (Marlon Brando) while example 2, an instrumental number by British rock band Deep Purple, was released on an album whose sleeve made no men-
tion of any dramatic associations at all. Nevertheless, both pieces elicited a highly significant proportion of such responses as ‘crime’ and ‘detective’ when they were played to over one hundred listeners as part of a reception test conducted during the 1980s, mainly in Sweden.¹

Ex. 1 North: A Streetcar named ‘Desire’ (1951): start of main theme

If neither of these two pieces were explicitly used for crime or detective drama, and if all the other music examples heard by the same listeners elicited virtually no such associations, how come so many test respondents saw fit to associate these examples, which they had no memory of hearing previously, with crime and detectives? The obvious reason is that they had heard such music before in exactly those contexts, as examples 3-11, all extremely well known, clearly illustrate.

¹ In January 2008 I learned (thanks to David Dean, London) that the Deep Purple Tune had in fact been used as outro music for the BBC TV spy series Quiller (1975),
Ex. 2 Deep Purple: Owed to ‘g’ (1976): extracts

Ex. 3 E. Bernstein: Clark Street (The Man with the Golden Arm, 1955).
Ex. 4  F Steiner (1955). *Perry Mason* (TV theme)

Ex. 5  Riddle: *The Untouchables* (TV theme, 1959)

Ex. 6  Norman & Barry: *Agent 007* (*Dr. No*, 1962)

Ex. 7  *The Iron Man* (TV theme)²

Ex. 8  Astley: *The Saint* (TV theme, 1963)

2. Thanks to Serge Lacasse (Québec) who remembers this tune from the early seventies. The US television series was probably produced in the sixties and was based on the Marvel Comics figure Iron Man.
The common denominator of dramatic genre for examples 4, 5 and examples 7 through 11 is obvious: they are all extracts from theme tunes for globally disseminated TV police series. Example 3 is an extract from the main theme for a film in which Frank Sinatra plays a drug-dependent Chicago drummer, i.e. the plot touches on crime — its problems and solutions — in a contemporary urban setting, while example 6 (the ‘James Bond theme’) is associated with fantasy crime-solving on a global scale.\(^3\) All examples cited so far (1-11) also share several common denominators in terms of musical structure: (i) they all use a minor mode; (ii) they all show clear jazz influences; (iii) they all contain their fair share of chromaticism; (iv) tritones feature prominently in all of them. It is this last structural trait that constitutes the main focus of this essay and we shall distinguish between two types of ‘criminal tritone’: [1] the melodic tritone in relation to the root of the underlying chord or to the tonic of the piece, or within a melodic phrase; [2] tritones as internal intervals within a chord. The former type of tritone can be found as the c\(^\flat\) in F\(^\#\) minor of example 1, as the bb in E minor in ex. 2 (final bar), as the f\(\flat\) in B\(\flat\) minor of ex. 3, as the f\(\flat\) (D7 chord in bar 2) in C minor of ex. 4, as the b\(\flat\) in F minor of ex. 5, as the g\(\flat\) in C major/C minor of ex. 7, as the a\# in E minor of ex. 8, as the d\(\flat\) in G minor (bars 2, 5) and g\(\flat\) in C minor (bar 12) of ex. 9, as the f\# in C minor of ex. 10, and, finally as the b\(\flat\) in F minor of ex. 11. The latter type of tritone (interval within a chord or melodic phrase) occurs almost as often: as a\#-a\# in the F\#m\(^\text{add9}\) chord of example 1, as c\#-g\# in the Em6add9 chord of ex.2, as a\#-d\(\flat\) in the B\(\flat\)m\(^\text{maj9}\) chord in bars 5, 6, 8 and 9 of ex. 3, as the a\#-e\(\flat\) of the Am7\(^\text{b5}\) chord and the melodic d\#-e\(\flat\) (bar 5) as well as g\#-c\# (bar 9) of ex. 4, the accentuated c\#-g\# between Fm9 and Gb\(\flat\)m9 (bar 3) and the e\#-f of the Ab13+11 (bar 4) of ex. 5, the g\#-c\# in the Em6 chord of ex. 6, etc.

In addition to these tritonal traits, it is worth remarking that several of the exam-

\(^3\) This list of well-known ‘criminal tritones’ from the fifties and sixties could of course be expanded \textit{quasi in aeternam}. See, for example, ‘The Rumble’ and ‘The Jets Song’ from \textit{West Side Story} (L. Bernstein, 1957), \textit{Ironside} (Jones, 1967), \textit{The Avengers} (Dankworth, 1960), or, by John Barry, \textit{The Ipcress File} (1965), \textit{The Persuaders} (1971), etc.
Tritonal Crime and Music as 'Music'

Examples just quoted (1-6) contain ninths added to the minor triad or to the minor triad (madd9) with a major sixth already added (m6add9). It should be clear that these added ninths do not belong to the 'bitter-sweet' category evidenced in Schubert's Gretchen am Spinnrade (1814), Rota's theme for Romeo and Juliet (1968), Lai's title music for Love Story (1970) or Morricone's for Per le antiche scale (1976) where poignant sadness is the dramatic order of the day. The distinction is not discernible in terms of tempo — the range of metronome markings for crime music examples 1 through 11 ranges from 58 to 166 — but through differences in harmonic/melodic idiom, phrasing, instrumentation and timbre (soft/hard, classical/jazz).

Also, many of our examples contain chromatic figures progressing by semitone (the heavy bass anacrusis of ex. 1, the inner parts of ex. 3, the bass line of ex.4, the counter-melody c-c-b-c of ex.5, the well-known b-c#-c motif of ex.6, the g#-f of ex. 7, the d-d-b and f#-g of ex.5, while others use the semitone to further highlight the tritone in relation to perfect fifth or fourth (the c-b of ex.1, the b-c# and b-b of ex.5, the constantly repeated a#-b and a#-a of ex.8, the almost monotonous insistence on f in ex.10 and the main motif of ex.11 revolving around b-c and b-b). This kind of chromatic insistence occurs rarely in pieces containing the 'bitter-sweet' variant of the minor-add-nine chord.

In order to trace the most important changes in the dramatic charge of the tritone in relation to crime stories it is necessary to consider the two main intramusical functions of the interval separately.

**Half-diminished woe**

By the 'half-diminished' chord is meant in this essay any chord constructed as shown in example 12. Structurally speaking, there are two main types of the chord under discussion: [i] the 'minor seven flat five' chord (hereafter abbreviated as “m7-5” or “m7-5” and also known as ‘minor seven minus five’), i.e. the six-five chord of the minor-key supertonic (ii7, Bm7b5 in A minor) or the seventh chord of the major-key leading note (vii7, Bm7b5 in C major); [ii] the first inversion of any m7b5 chord, i.e. a minor triad with an added major sixth or the 'minor six' chord (hereafter abbreviated “m6”), i.e. the 'six-five chord' on the subdominant of the minor key or on the supertonic of the major key (e.g. Dm6 in A minor or C major). It should be remembered that the latter form of this chord is not generally referred to as half-diminished. However, the sonorities have, as we shall see, much more in common than the same constituent notes.

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4. There are also chromatic runs later on in the main titles for A Streetcar named Desire (ex.1), first in the inner brass parts, then as chase motif played by piano and bass.
Starting our discussion of this chord in 1600, we find two half-diminished chords in an extract from that paragon of lugubriousness *Flow My Tears*, or the ‘Lachrymae’ Pavane (Fm6 in ex.13).\(^5\) John ‘Sempre Dolens’ Dowland was quite fond this chord which can be heard prominently in all versions of ‘Lachrymae’, as well as in his mournful *From Silent Night* (1612) and several other songs of pain.

The chord is used in similar lyrical circumstances by Campian (e.g. *Oft Have I Sighed*) and at many doleful points in many Elizabethan madrigals and anthems, such as *Die Now My Heart* (Morley), *Miserere mei* (Byrd), *Cruel, Behold My Heavy Ending* (Wilbye), etc. The well-known ‘suicide’ aria from Purcell’s *Dido and Aeneas* (1690) is also veritably littered with the chord. The same chord is also used extensively by J.S. Bach as second chord in progressions accompanying words of woe: not only does the ‘eleison’ of ‘Kyrie eleison’ usually land on the chord (e.g. Em6 or C#m7\(^5\)) in the B Minor Mass (1737), it also features prominently in the overtures to the passions according to St. John and St. Matthew (1724, 1729), as well as in practically all chorales dealing with contrition or pain (e.g. *Aus tiefer Not ich schrei zu dir, Herr ich habe missgehandelt, Ach wie nichtig*, etc.).\(^6\) But this is not the only function of the chord, as can be heard from example 14.

The half-diminished chord (m6/m7\(^5\)) is obviously also used by Bach and other baroque composers in other ways than the dramatisation of woe. Apart from the well-known syntactical occurrence of m6/m7\(^5\) in all those circles-of-fifths progressions in the works of Bach, Vivaldi, Corelli and others, the same chord comes in quite handy as a modulatory pivot. In bar 2 of example 14 Bach has used an Fm6, not as ii in a tonic-targeted ii-V-I progression in Eb major, but as a subdominantal pivot en route to C minor. Mozart too makes at least dual use of the same kind of sonority, for example as second chord in his G minor symphony (K550, 1788), characterised by Saint-Foix as ‘impassioned and full of grief’,\(^7\) and as quite passionately modulatory in his Sinfonia concertante in Eb (ex.15).

Ex. 14  Bach: Brandenburg Concerto no.6 in B\(^\flat\) (1734), 2nd. movement, bars 19-20.

Ex. 15  Mozart: Sinfonia concertante in E\(^\flat\) major, K364 (1779): 2nd movement, bars 27-28.

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Such dual usage of the chord is also found in nineteenth century classical music. For example, Schubert uses the m6 as second chord in conjunction with the horrific Erlkönig at breakneck speed, with woeful drama in Gute Nacht and with gloomy dejection in Einsamkeit, the last two at a much slower pace, while Wagner either employs the sonority for similar dramatic purposes (ex.16) or as pivot (ex.17).

Ex. 16 Wagner: Alberich’s curse of the ring, from Siegfried (1874)

Ex. 17 Wagner: Tsistan & Isolde (1859):
Overture, bars 1-3

In fact, musicologists have paid no chord greater heed than the enharmonically spelt Fm75 in bar 2 of Tristan and Isolde, their attention often being devoted to the its considerable modulatory potential: it can, after all, be used as a pivot to prepare cadences in practically any key, its ambiguity of harmonic direction rhyming well with Wagner’s programme of Tristan and Isolde’s ‘eternal longing’. In short, somewhere between the late Baroque and the Tristan example, i.e. during the period when the norms of modulation and rhetorical directionality were established in the European classical tradition, the half-diminished chord came also to function as a sign denoting that a change of key may or may not occur, i.e. uncertainty of direction, with all that such modulation might (or might not) entail in terms of heightened musical drama and rhetoric. 8 It is this dramatic charge which exerts some influence on later uses of the half-diminished chord which are relevant to the semiotics of ‘tritonal crime’.

8. There are thousands of other m7-5 subdominants in romantic music. One particularly interesting m7-5 is that which (after the initial C major triplet fanfares) starts (ff) Mendelssohn’s Wedding March from A Midsummer Night’s Dream (1843). Woe is hardly comme il faut as socially affective ingredient in a wedding ceremony. Actually, despite its nº1 position in the phrase, Mendelssohn’s Am6 (F♯m7-5) is just as conjunctural as it is anything else. It is definitely not subdominant: although it is in itself quite dramatic, it initiates a mammoth circle-of-fifths progression which is so secure and unidirectional that it can (like ‘ideal’ marriages) only end happily. (Am6 B7 Em Am Dm G7 C would have been a bit too predictable, so Mendelssohn’s sequence runs Am6 B7 Em F6 C5 G7 C).
One function assigned to m₆/m₇♭₅ in many forms of popular music in the early twentieth century was ‘crisis chord’, i.e. a chord usually placed shortly before the final cadence of a song and in relation to which the end would come across as happy or at least as comfortable, for example the Fm₆ in bar 26 of Charmaine’s 32 bars in Eb major (Rapée, 1926) or the F♯m₇♭₅ near the end of the love theme from Birth of a Nation (ex.18, bar 6). But this was not the only way in which the chord started to be used in and of itself as a sign of dramatic charge rather than as a sign of woe or as a modulatory device. It is, for example, hardly surprising to find that Debussy uses the chord as a quasi-autonomous sonority too, for example to underscore the heroine’s tears in Pelléas et Mélisande (1902), or that Grieg’s equally autonomous use of the chord, this time amplified (ff) and sped up (allegro furioso), was put into the ‘Horror’ section of Rapée’s Motion Picture Moods (1924).

It is in the interwar years that the half-diminished chord seems to take two semiotic directions in relation to music for the moving image. Firstly the chord’s function as a ‘drama and pathos’ device is further distilled to the extent of becoming an ingredient sine qua non of latter-day romantic piano concertos such as Addinsell’s Warsaw Concerto (for the story of a Polish pianist escaping the Nazis and losing his memory in the Battle of Britain) or Rachmaninov’s and Rózsa’s music for The Story of Three Loves, both contained, along with a host of other pieces of that ilk, on the stylistically congruent album Big Concerto Movie Themes (1972). 9 Secondly, the kind of dramatic charge just mentioned was blended with the minor-key variant of the added sixth chord, so popular in the 1920s and 1930s. It is the latter that is most relevant to the question of tritonal crime.

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Ex. 20  Weill: *Alabama Song* (1929)

Ex. 21  Dietz & Rainger: *Moanin’ Low* (1930), as performed by Libby Holman.

Ex. 22  St. James Infirmary

The verse of Weill’s *Alabama Song* (ex.20) and other minor-key tunes from the popular era of jazz, such as *Moanin’ Low* (ex. 21), *St. James Infirmary* (Armstrong 1959, ex.22), *Have You Ever Felt This Way* (Johnson 1944), *Summertime* and *It Ain’t Necessarily So* (Gershwin 1935) all feature the minor six chord (m6). *Alabama Song* is sung by prostitutes, the *Porgy & Bess* numbers by African-Americans living in urban poverty, while the lyrics of *St. James Infirmary* deal with death, violence and mourning. *Moanin’ Low* and *Have You Ever Felt This Way* are also tunes of complaint usually performed by African-American artists. In fact, the last two belong to the particularly poignant type of minor-key blues popularised by Billie Holiday (note the chromatic rise, e♭ to e♭️ to underline the Gm7 chord under the suicidal words ‘decided to end it all’ in example 23).

Ex. 23  Billie Holiday: *Gloomy Sunday* (1941)

A complementary set of connotations for jazz containing the m6 chord can for various reasons be found with such numbers as *Qua-ti Blues* (Simeon 1954), Bechet’s *Petite Fleur* (Barber 1959), Gillespie’s *Cubana Be* and *Cubana Bop* (1947) and Ellington’s *Koko* (1940): African-American heritage, Southern USA, Creole, New Orleans, Caribbean.10 The added sixths and ninths in the harmonies of the Gillespie and Elling-
ton titles in particular bear considerable resemblance to those of *Harlem Nocturne* (Hagen 1940, ex.24), as well as to those of *Clark Street* (E. Bernstein 1955, ex.3) and *The Untouchables* (Riddle 1959, ex.5.). But how do such harmonies contribute to connotations of crime?

It is reasonable to assume that connotations of ‘death’, ‘city’, ‘criminal’ and ‘US urban subculture’ could already be attached by WASP\(^{11}\) culture of the late 1930s to slow minor key jazz numbers like *St James Infirmary*, created and used by a frequently marginalised urban population (US-African-Americans) and often explicitly concerned with murder or untimely death. At the same time white mainstream America was, as suggested earlier, using the same $m6$ ($m7\,5$) chord, embedded not in a jazz context but in the European romantic idiom, for ‘horror’ and ‘worry’ situations at the movies. Moreover, jazz musicians from the South were active in cities like New York and Chicago, where many of them, at least during the prohibition era, played the sort of mob-run smoky dives that were later dramatised in TV series like *The Untouchables* (1959-62). One plausible explanation is therefore that the title tunes and some of the underscore to these gang-busting soaps which frequently depicted criminals hanging out in smoky pool rooms and speakeasies, may in their turn have made connotative reference to such shady places by re-evoking the ‘shadier’ sorts of music, which was either actually on the repertoire of bands in those clubs, or, by stereotypic ‘clean America’ connotations of subcultural behaviour, associated with the sort of people that were presumed to frequent (and later depicted on TV as frequenting) such dives, joints, clubs and bars.

If this genre synecdoche has any validity,\(^{12}\) it would explain why the reception test respondents mentioned earlier found New York/Harlem and Chicago more probable locations for the action of *A Streetcar named Desire* (ex.1) than the New Orleans stipulated in that film’s screenplay. The likelihood of this explanation is substantiated by the fact that the most well-known pieces of jazz-influenced minor key music, Gershwin’s *It Ain’t Necessarily So* and *Summertime* (the latter complete with $m6$ chord too), are actually staged in *Porgy and Bess*\(^{13}\) amongst both poor but honest and petty criminal African-Americans in the New York ghetto on long hot summer nights. All this circumstantial evidence makes quite a reasonable case for Earle Hagen’s choice in dubbing his famous piece for Eb Alto Saxophone Solo and Concert Band (ex. 24) *Harlem Nocturne* (1940). This piece was subsequently reorchestrated for the eighties (still with swooping sax lead) as title theme for the eighties version of the Micky Spillane series (*Mike Hammer*).

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11. WASP = ‘White Anglo-Saxon Protestant’.
12. In this synecdoche the ‘part’ minor-key jazz stands for the ‘whole’ social sphere of connotation in which it could occur at a particular time in US social and musical history.
13. One test respondent actually wrote ‘USA, 1930s, Porgy & Bess environment’.
Ex. 24  Earle Hagen (1940): *Harlem Nocturne*

*Harlem Nocturne* (ex.24) resembles *Streetcar* (ex.1) on several counts, not least in terms of harmonic language. It is therefore hardly surprising that the reception test respondents wrote down a whole host of concepts associable with ‘Harlem’, ‘night’ and the musical style of *Harlem Nocturne* when listening to *Streetcar*: ‘New York’, ‘slum’, ‘crime’, ‘trouble’, ‘dark’, ‘shady’, ‘tense’, ‘struggle’, ‘problems’, ‘poverty’, ‘clubs’, ‘bars’, ‘jazz’. It is also worth noting that a complete repertoire of similar music connoting crime and crime busting, often by night and frequently with bar scenes, including streetwise philosopher detectives and an assortment of high-heeled ‘dames’ in some US metropolis during the jazz era,\(^\text{14}\) had been widely disseminated and audiovisually registered by every TV-watching and filmgoing citizen of Europe and the Americas. I am referring here to music for 1940s radio series like *Nick Carter*, *Michael Shayne*, *The FBI in Peace and War* and *Official Detective\(^\text{15}\) and, more importantly, to themes for such immensely popular US TV crime series, as *Dragnet* (1951-8), *Peter Gunn* (1958-60), *The Untouchables* (1959-62, ex.5), *Perry Mason* (1957-65, ex.4) or *Ironsie* (1967). We are also referring to the well-known *James Bond Theme* (1962, ex.6) whose ‘big band’ release revolves harmonically round an Em\(^6\) chord (ex. 25).\(^\text{16}\) In short, the tritone of half-diminished chords in detective music owes as much to its function as a style indicator of certain types of jazz and as a genre synecdoche of people, places and activities associated with that style as it does to its history of harmonic ambiguity, drama and woe in the European classical tradition.

\(^\text{14}\) i.e. c.1930-1965, before rock definitely became mainstream popular music.  
\(^\text{15}\) All on *Themes Like Old Times* (see List of Musical References).  
\(^\text{16}\) This observation may help explain the relatively high proportion of spy-related connotations provided by respondents to *Streetcar* (ex.1) in the reception test mentioned earlier. The responses also included quite a few ‘Bond’ and ‘Sean Connery’ associations. Even so, *Streetcar’s* detective profile is notably higher than its special agent profile.
The church of the flat fifth

In the interests of space, this section of the essay will concentrate on immediate precursors to the occurrence of tritones in the main melodic line of detective music from the fifties, sixties and seventies. In other words, the semiotics of diabolus in musica (including its use in death and speed metal),\(^{17}\) notions of musica ficta, the practice of avoiding tritones causa pulchritudinis, the connotations of modes emphasizing tritones (e.g. phrygian, lydian, locrian, as well as modes from the Balkans, the Arab world and the Indian subcontinent) will all have to be dealt with in a separate study. We will also have to postpone discussion of the use of tritones in cash registers, in ambulance sirens, on some diesel locomotives, nor will we be examining precadential tritones or tritones of longing.\(^{18}\) Instead, we shall focus on the tritone, mostly in its guise of diminished fifth in jazz-related music, and attempt to explain changes in its dramatic value in connection with the detective genre, mostly between 1950 and 1975.

One year before the release of _A Streetcar named Desire_ (ex.1), sometimes hailed as the first Hollywood film score conceived consistently in a jazz vein, but ten years after the copyright date of _Harlem Nocturne_ (ex.24), composer Frank Skinner (1950:7) contended that ‘some pictures, especially TV detective stories with city locales, lend themselves to jazz treatment.’ Judging from examples 1 through 11 there has not only been a general correspondence between detectives and jazz: there has also been an even stronger link between detectives and jazzy chromaticism, specifically chromatic alterations of the fifth scale degree and specifically in the context of a minor key. This melodic device was relatively rare in pre-World War II jazz, and indeed the bebop school of the mid-1940’s made it such an issue that jazz critics of the 1980s like Gary Giddins were still able to speak of bop as the ‘Church of the Flatted Fifth’.\(^{19}\)

Bop, with its assertion of iconoclastic, spontaneous individual action serving as an antidote to the homogenised, rehearsed routine of the era’s mass-market big bands, may have provided Hollywood composers with a sociomusical mythology appropriate to the alienated lone wolves of late forties film noir, but whatever mystique bop itself may have held for these composers they turned increasingly to the music’s edgy chromaticism as an urban anxiety cue in the postwar period.

Skiles (1976:41) remarks that Gershwin’s late-thirties music, ‘due to its jazz orientation, was limited to lighter film scores’, thus implying an equation in the prewar Hollywood mind between (a) the carefree triviality of jazz vis-à-vis ‘serious’ music and (b) the carefree triviality of escapist (jazz-scored) films vis-à-vis ‘serious’ drama. By the time Elmer Bernstein scored _The Man With the Golden Arm_ in 1955 (ex.3) the situation had changed drastically. This wrenching drama of murder, sex,

\(^{17}\) The latest Slayer CD is entitled _Diabolus in Musica_ (Columbia 1998).

\(^{18}\) In the 1980s, the Swedish Cooperative Society introduced barcode readers that emitted a sine wave tritone every time a commodity was registered by the cashier in their Konsum supermarkets. I have heard ambulance sirens in the UK and diesel locomotives in several countries emit tritones. These ‘signal’ uses of the tritone require investigation. Precadential tritones and tritones of longing are discussed in considerable detail in Tagg (1991).

\(^{19}\) In Jack Chambers’ _Milestones_ (1989:30) the credit for this innovation goes to Dizzy Gillespie: ‘The lesson that Gillespie appears to be proudest of was the playing of...the so-called flatted fifth...it became a feature of every bopper’s style’. 
drugs, betrayal and crime is hardly light fare by anyone’s standard and yet the score is packed with jazz elements from start to finish. It may help that the central character is a would-be drummer, but if jazz had not already shed some of its perceived triviality Bernstein could not possibly have got away with the score and the alienation would have become too Brechtian for a Hollywood production starring Frank Sinatra.20

Unlike the chillingly inappropriate ‘anempathetic’ music which Michel Chion (1985:123) cogently describes, Bernstein’s jazz score provides a sincere, believable accompaniment to Sinatra’s on-screen drug-related depravity.21 This clearly implies that something else, apart from the increased stacking of chords we have just discussed, must have happened to jazz between the thirties and the fifties, otherwise such a radical shift in the perception of jazz and of the extramusical world connoted with jazz would have been impossible. There is no room here to go into its social history of jazz for that period, however relevant that might seem.22 It is enough here to state there were radical changes in its musical structures. What happened in this respect was the ‘church of the flatfifth’.23

By animating the flatfifth and by building his initial melody around it Alex North, composer for A Streetcar named Desire (ex.1), was thus employing a very old tension cue which had recently acquired a new set of references.24 Still perhaps labouring under the lingering Hollywood perception of jazz (even bebop) as a ‘light’ music, he set his flatfifth in a suitably ‘serious’ and ‘dramatic’ string mass, making for a timbral hybrid which later writers would find unnecessary. But if North was reluctant to abandon the orchestral code of Hollywood classicism, he showed no such reticence in his handling of the flatfifth. By making it the first note of his line he was entering nearly uncharted territory: the Barlow/Morgenstern catalogues of song, classical, and opera themes include no entries whatsoever beginning on the flatfifth, and even the most advanced jazz literature of the time usually tucks the interval safely away in the melodic interior.25 Nelson Riddle’s signature for the 1959-62 ABC/Desilu television series The Untouchables (ex. 5: Elliott Ness and his squad of G-Men busting prohibition era gangsters) achieves a melodic effect some-

20. Consider the George Romero film Dawn of the Dead (1979, British title Zombies), in which flesh-eating zombies stalk a shopping mall to the sound of syrupy Muzak; nice dislocation, but hardly suitable for a star vehicle, even in the world of Tarantino.
21. Schmidt (1982:86) makes highly some perspicacious remarks about The Man with the Golden Arm that are of general relevance to both this and the preceding sections’ discussion of jazz underscore connotations. Schmidt (loc. cit.) also points out that similar music is used for similar subject material by L Bernstein (arranging Ellington) in Anatomy of a Murder (1959), by Miles Davis in Ascenseur à l’échafaud (1957) and (less successfully) by Jürgen Roland in his music for the 1960s West German TV thriller series Stahlnetz.
22. Compare the prewar and wartime mass popularity of jazz and jazz-influenced musics with the postwar demise of big bands and the eventual split of jazz into spheres of ‘entrainment’ (popular dancing, jump bands, etc.) and ‘art’ (bebop, literate Beatniks, jazz in education, etc.). See also Gillett (1983:121-168).
23. Note that US jazz musicians tend to refer to the diminished fifth as ‘flatted fifth’. In this essay we will use the equally widespread expressions ‘flatfifth’ and ‘flatfive’ to refer to the same phenomenon.
25. Barlow & Morgenstern (1948, 1950) reference nearly 20,000 themes from Western art music.
what like *Streetcar’s* with an opening of flat sixth to fifth and subsequent emphasis of the tritone ($b6-5$ and $#4-5/b5-4$ in example 5).

Ex. 26  Billy Joel: *New York State of Mind* (1976)

![Musical notation image](image)

Around 1960 there was, so to speak, no problem with the flat fifth. For example, Adderley’s well-known *Work Song* contains one $#4$ and two $b5$-s at the end of the chorus and was regarded as thoroughly cool, at least by my fellow band members in Manchester as late as 1965. Moreover, judging from example 26, this precadential $b5$ function survived until the mid seventies as an indication of streetwise sophistication. However, the precadential $b5$ also survives as a satirical commentary on this same notion, as can be seen in the well-known example 27.

Ex. 27  Mancini: *Pink Panther* (1964).

![Musical notation image](image)

Here the musical plot is as blunderingly obvious as Inspector Clouseau’s magnifying glass, trenchcoat and fedora. Narratively, sartorially and musically the message is that this clumsy detective has delusions of outdated cool. This joke of the flat fifth and its connotations was later used with much subtler comic effect by Marvin Hamlisch in the Woody Allen film *Take the Money and Run* (1969) to provide a cool and bluesy jazz underscore for the scene in which Allen, in order to train himself for a life of hardened crime, starts hanging out with tough guys in smoky pool halls, emerging subsequently to rob stores with the help of a cigarette lighter. In fact, the flat fifth becomes such a well-established archetype of parody that it has recurred in advertising. For example, a US TV spot for Kraft Philadelphia Cream Cheese, appropriately titled *Petty Larceny* (1989, ex. 28), places the interval further forward in the syntax without losing its clandestine, faux-hip references. In this advert a sneaky lunch-counter patron attempts (unsucccessfully of course) to abscond with another customer’s bagel when he spies its tempting smear of cream cheese.

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26. As ‘The Finesilver-Kerr Quintet’ we were obliged to specialise in popular mainstream jazz to find a niche audience; there were just too many pop/rock bands in the English Northwest at the time. Leiber & Stoller’s *Keep Forgetting* (c.1960) provides another example of precadential flat fifths as perfectly acceptable and up-to-date.
Ex. 28  Horowitz: *Petty Larceny* (music for cream cheese advert, 1989)

If, as we have speculated, flat fifths moved to Hollywood some time in the early 1950s as a ‘serious’ jazz device, it should not be at all surprising that later parodies like *The Pink Panther* and *Petty Larceny* dwell so sarcastically on the interval. But the fact that they do so testifies to the sound’s ambivalent status, or maybe to the ambivalent status of the whole cluster of ‘serious’ notions it came to represent. Somewhere between the early 1950s of *Streetcar* and the late 1960s of *Pink Panther* the flat fifth, like the trenchcoat/fedora/cigarette costume of the urban detective, became a bit of an embarrassment.

Broadway theatre was instrumental in expanding the jazz tritone’s associative potential, and thus helped to round off the edges of its previously dark, asocial connotations. Leonard Bernstein’s 1957 score for *West Side Story* made nearly obsessive use of the interval to portray the tough street world of juvenile delinquency (ex.29,30), but applied it with equal zeal to scenes of starry-eyed romantic longing (ex.31). In applying this ‘same’ interval to such disparate purposes, Leonard Bernstein confirms Deryck Cooke’s distinction (1959:90) between the tritone’s function as a leading tone to the dominant and its function as an overt dissonance:

Sharp fourth: As a modulating note to the dominant key, active aspiration. As ‘augmented fourth’, pure and simple, devilish and inimical forces.

Ex. 29  L Bernstein: ‘Cool Boy’ (*West Side Story*)

Ex. 30  L Bernstein: ‘Jets Song’ (*West Side Story*)
What Cooke means by a pure and simple augmented fourth, it seems, is something like Leonard Bernstein’s ‘Cool’ figure (ex.29,30), as opposed to the active aspiration of ‘Maria’. But neither Cooke nor Bernstein (in the above examples) touch on the very different profile this interval can acquire when it functions specifically as 5 in a jazz context. By 1966 Cy Coleman’s *Big Spender* (ex. 32) was able to do just that, and thus to titillate a staid Broadway public by conflating the ‘active aspiration’ and ‘devilish/inimical’ functions into a single referential package: flat fifth equals scheming woman.

Like *Streetcar* (ex.1), *Big Spender* (ex.32) sets up its flat fifth with some preliminary stress on the supertonic and flat mediant degrees and follows it immediately with a descending chromatic inflection to the fourth degree. Also like *Streetcar*, Coleman’s tune is quite brazen in placing the tone on a conspicuous downbeat and returning to it immediately at the beginning of the next measure. Moreover, although *Big Spender*’s flat fifths issue from the mouth of a female character, they express her most ‘unladylike’ ‘active aspiration’ toward an anonymous target whose attractiveness is purely monetary. Even though Leonard Bernstein’s protagonist and his Maria have also just met, the singer is so enraptured by the girl’s name that he can think of nothing else; for Coleman’s singer, the object is a ‘big spender’ and everything else is just verbal apparatus for separating the fool from his money.

Once the flat fifth’s tight referential focus had loosened up enough to include this worldly yet amusing image of a predatory woman, the authority of the flat-fifth protagonist was on its last legs. Sex, after all, makes for a much better joke than violence and once the sexual subtext of the flat fifth manifested itself in a laughably transparent solicitation it was clearly inappropriate for any self-respecting anti-hero’s tight-lipped inner turmoil.
Women had been flatting fifths since Bessie Smith, of course, but not on Broadway; and when Muriel Cigars adopted Coleman’s *Big Spender* as an advertising jingle for ten-cent smokes (‘Hey big spender! Spend a little dime on me’), it was obvious that the times they were a-changin’. By the late 1960’s there were far more provocative musical costumes available for outsiders and far more provocative outsiders available to wear them: *Easy Rider*’s pairing of Steppenwolf’s *Born to Be Wild* (1969) with outlaw bikers, for example. Thus the only consistently credible function of flat-fifth jazz was one of parody, a musical indicator of a character’s delusions of cool: Inspector Clouseau and the would-be cream cheese thief of *Petty Larceny* succumb to the same disingenuous musical flattery with which Gwen Verdon (and Muriel Cigars) sought to con the ‘Big Spender’ — or, as Frank Zappa remarked in 1974, ‘Jazz is not dead; it just smells funny’.27 Peter Fonda and more modern 1960s and 1970s crook hunters like *Hawaii Five-O*’s McGarrett or Rockford, Cannon, Magnum, Kojak and Baretta, whose signatures all lack flat fifths,28 seemed to have had little or no trenchcoat philosophy, no Bogartian loneliness or misunderstood vulnerability and were really all too self-confident, too hip, too self-aware to be taken in so easily. Even most rock patterns which make conspicuous use of the flat fifth (e.g. Iron Butterfly’s *In-a-Gadda-da-Vida*, Cream’s *Sunshine of Your Love*) seem somehow to be trying too hard, with the result that they take on an archaic innocence their composers almost certainly didn’t intend.

This does not mean to say that flat fives disappeared from mass audiovisual entertainment during the sixties. Various degrees of tongue-in-cheek melodic tritone usage have prevailed in super-sleuth circles, as these extracts from the influential and ever-popular *James Bond Theme* (1962, ex. 33) reveal.

The bebop $b5$ potential of the $eb$ in bar 3 of example 33[a] is easy to hear if the reader imagines bar 3’s $eb$-$d7$ as having been transposed up a fourth (from $bb$-$a2$) and the final $ba$-$a$ as transposed up a fifth (from $e$-$d$-$c$), thereby alluding to a standard bebop $bb$-$a$-$c$($d$-$e$) melodic cadence. The aspiring $a#$-$b$ of example 33[b] (at the start of the theme’s middle eight) is clear enough, but this release actually contains a potential bebop $b5$ too — the $eb$-$d$ in bar 1, which can be heard as a sort of pun, since it could have become a good old gangster cliché in $A$ (try the melodic cadence $eb$-$d$-$c$-$a$($g$-$a$)). This possibility makes the $a#$-$b$ immediately following $eb$-$d$-$g$ much more interesting and acceptable than it if had been given a less equivocal lead-in.

Another way of using melodic $b5$s over added minor chords in gangster, spy and detective films of the post-Bond era without sounding hack has been either simply to overdo it, like Sol Kaplan in the theme for *The Spy who Came in from the Cold* (1965), or to make the piece overtly hack, as Goldsmith chose to do for the *Our Man Flint* theme (ex.34), complete with four consecutive title transcriptions of ‘Our Man Flint’, along with minor six and flat nine chords. However, Goldsmith avoids the $b5$-$b3$-1 trap in this music for that US-American attempt to ‘outbond’ Bond by

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28. The $Cm11$ and $Eb\text{m11}$ chords of the *Kojak* theme (Goldenberg 1973) are quartal, post bebop harmonies. The connotations of such chords are accounted for in detail in Tagg, 1979:140-142.
treating what ‘ought’ to have been the \( ab \) of an \( ab-g-f-d \) descent as an ‘unaspiring’ and uninspiring \( g\# \) instead. The effect is comical:

**Ex. 34** Goldsmith: *Our Man Flint* – main theme (1966)

Genuinely hack use of the gangster \( b5-4-b3-1 \) cliché was still quite common in mood music collections of the mid seventies\(^{30}\) but seems, as we have just suggested, to have been avoided or recontextualised by feature film composers since the mid sixties. Particularly interesting use of this melodic gangster stereotype has been made by Morricone in several title themes for thrillers. In *Svegliate e uccidi* (= ‘wake up and die’) neither meter nor the order of melodic events constitute standard gangster music practice, although the presence of \( b5 \) provides the main melodic cue for urban anxiety.

We could also mention the theme for *Il prefetto di ferro* (1978),\(^{31}\) where Morricone’s instrumentation, accompaniment and continuation of the melodic \( b5-4 \) are also in conflict with standard treatment of the same museme. Another illustrative reference is a mysterious gangster chase sequence called ‘La tromba e la sua notte’ (= ‘the trumpet and its night’, a jazzily nocturnal title if ever there was) from *Cosa avete fatto a Solange?* (1972), during which Morricone twists the trumpet’s \#4s and \( b5s \) in almost stereotypic fashion over a fast double bass part that plays parallel tritones apparently unrelated to whatever key the trumpet might be in. This is similar to the way Quincy Jones offsets potential \( b5-4 \) trumpet licks against an atonally unpredictable walking bass in the prelude to *In Cold Blood* (1967). In this way, Jones and Morricone show that it was still possible in the sixties and seventies to use the melodic bebop-gangster \( b5-4 \) stereotype with poignancy, just as long as concurrent parameters of musical expression do not also follow standard bebop norms.

**Ex. 35** Morricone: *Città violenta*, main theme (1970)

Examples 35 and 36 show how musical recontextualisation of the \( b5-4(-b3-1) \) cliché can still work. Example 35 comes from *Città violenta* (‘Violent City’, 1971) in which

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29. ‘Transcansion’: musical sign type involving transfer of the prosodic elements (rhythm, accentuation, intonation but not vowels or consonants) of a word or words from speech into music according to similar principles as those used for talking drums. Transcansions are assigned to instrumental or to wordless vocal parts, e.g. the repeated \( \frac{1}{8} \) or \( \frac{1}{4} \) figure scanning the word ‘Superman’ in the main theme from *Superman*. Transcansions are often used in advertising to musically reinforce brand name identities and product slogans. *Etym.* trans = across (here from words to music), scansion = the prosodic organisation of words.

30. There are flat fifths in a bebop-harmonised twelve-bar blues called *Fari della notte* (Headlights of the Night) on CAM library music album 22. Less convincing are the Pink Panther style flat fifths of the would-be ‘dirty industrial’ composition ‘Oil Bath’ (from *Ruhr Valley Impressions*), immortalised on Selected Sounds SL 238 (German library music collection).

Telly Savalas, Charles Bronson, Alain Delon and Jean Gabin play gangsters all far too hard-boiled for anything coolly depressive or trenchcoat-connotative but whose associations with crime nevertheless warrant flat fifths. The melody seems to be no more than a series of gangster music clichés and the melodically cadential bebop $\flat A-e-d-b\flat$ figure looks like a standard $b5-4-b3-1$ ending in B. The harmonisation puts a completely different light on the matter for the following reasons: (i) all chords are simple, unaltered minor triads; (ii) there is no circle-of-fifths directionality, not even as tritone substitution; (iii) the relation of all root positions to the apparent tonic (A minor) is complex: there are triads on the major second, major third (in a minor key) and on the diminished fifth. In other words, instead of complex triad alteration (major or minor) in a straightforward harmonic context we have only minor triads with no alteration in an unstable harmonic context. In this way the usual type of crime drama melodic line has been put into a new harmonic context that is simultaneously raw (simple triads), unfamiliar and disturbing.

Ex. 36 Morricone: Indagine... (1970), main theme

In example 2-36, from a film about a corrupt and pompous top politician, crooked detectives, etc., there are clear reminiscences of $b5$ cops and robbers (all those $f$s and $d#s$ — or $e$s — descending towards the keynote). Not only is the harmonic idiom ostensibly out of line with standard crime film music this time: the periodicity (the 6/4 bar), the phrasing (onbeat staccato) and, most notably, the instrumentation (harpsichord lead and accompaniment with out-of-key bassoon farts in the 6/4 break) all constitute blatant transgressions of detective music cool. In short: ‘criminal’ $b5$s may still be alive in the same way as films about crime. The only difference is that the $b5$, just like the cops and robbers it underscores, are no longer what they used to be. Their environment, their psychology and our evaluation of their social position and behaviour have all changed. So has their music, at least according to Morricone.

**Music as music (2)**

This essay has discussed one tiny aspect of musical structure (the tritone) in one particular narrative genre (detective) during a very short period of recent history (c.1950-1975). In the course of explaining the larger historical background to the half-diminished chord it became clear that changes in its structural treatment and semiotic value have been consistently interrelated. That significant structural change within music and the concomitant change in the connotations of those structures are influenced by demands made on the composer by dramatic context (words, moving images, actions, narrative, ideology, etc.) is even clearer in the case of the relation between crime drama and the flat fifth of bebop jazz. And if the na-

32. Full title: Indagine su un cittadino al di sopra di ogni sospetto = (lit.) Investigations into a citizen above every suspicion.
ture and ideology of crime and crime solving on TV and at the movies has undergone radical change since the fifties, so has its music. As we have seen, Morricone is one composer who has contributed innovatively to this process, not only because of his skill in the general trade of composition but also through his particular ability to come up with innovative solutions in particular dramatic situations. Apart from his contribution to the tiny area covered in this essay, Morricone has also been as influential as his film-making colleague Leone in turning the concept of the Western and everything that went with it — myths of the frontier, of the pioneer, of civilisation, of ‘America’ and ‘Americans’, of the ‘good’ and the ‘bad’ (not to mention the ‘ugly’) — upside-down. The composer’s extraordinarily eclectic palette of musical styles, his originality of instrumentation and care with details of timbre, phrasing, metre, periodicity, all combined with the enviable ability to write ‘a good tune’, have not only excited several generations of film fans but also influenced many musicians, including those in no way associated with film or TV. Indeed, avant-garde US musician John Zorn’s album *The Big Gundown* (1986) bears eloquent witness to the high regard held for Morricone’s film work in circles where notions of ‘music — as music’ may still prevail.

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33. Bob Clarida and the author are currently producing an extensive discussion of the semiotics of cowboy music. For an understanding of Leone’s relationship to the Western genre, see Frayling (1981). For a later Italian interpretation in words and music of the notion of ‘America’ and ‘Americans’, see ‘Arrivano gli americani’ by the Stormy Six (1975).
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