

Preface

Why this book?

It was in 2005 or 2006 that Franco Fabbri asked me to produce a book based on some encyclopedia articles I'd written between 1998 and 2000.¹ I was slow to respond because I didn't then see how repackaging that work could have much positive impact on music studies. Two things made me change my mind.

The first was when Franco showed me an Italian music theory textbook. 'Look', he said, 'this is all my students have to go by'. Skimming through its pages I realised that, like equivalents in other languages, it dealt only with *certain* tonal elements of EUROCLASSICAL music² and that it paid particular attention to conventional notions of harmony within that tradition. Glancing through that textbook, I was reminded of a problem I'd often had to confront when writing the original encyclopedia articles: how to talk about common tonal practices that don't conform to the sort of tonal theory taught in many seats of musical learning. Explaining something as common and as ostensibly simple as the *La Bamba* chord loop (as in *La Bamba*, *Guantanamera*, *Wild Thing*, *Pata Pata*, *Twist & Shout* etc.) in terms of tonic, subdominant and dominant had for some time struck me as about as productive as using theories of combustion to explain electricity. And yet some music scholars still try to apply Schenkerian notions of harmonic directionality to tonal configurations in which notions like 'dominant' and 'perfect cadence' are at best questionable, if not altogether irrelevant.³

If restricted notions of tonality were the only problem with institutionalised traditions of musical learning in the West, things would not be so bad. Unfortunately the problems go much deeper because that same tradition has focussed almost exclusively on tonal

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1. See *EPMOW — Encyclopedia of Popular Music of the World — vol. II* (Tagg, 2002).
 2. Throughout this book I use EUROCLASSICAL to refer to *European classical music*; see p. 16 and Glossary (p. 488) for explanation of this term.
 3. See video *Dominants and Dominance* (Tagg 2009c).

issues and tended to steer clear of parameters like metricity, periodicity, timbre, groove and sonic staging, which some scholars still earnestly believe to be of secondary importance. There's no room here to explore conventional European music theory's predilection for harmonic, melodic and thematic parameters that can, at least to some extent, be graphically represented on the page as blobs, lines and squiggles, except to say that Western staff notation developed to scribally encode aspects of music in the euroclassical tradition that were difficult to memorise, rather than to record the specifics of other music cultures. This tonal fixation has promoted a mindset according to which monometric music, whose pitches can be arranged in octaves consisting of twelve equal intervals each, is analysable because it is notatable; other types of music are, so to speak, neither. Indeed, even the downbeat anticipations and 'neutral' thirds often heard in English-language popular music from the twentieth century look incongruous in Western notation, while aspects of sound treatment essential to the expressive qualities of music we hear on a daily basis — echo, delay, reverb, saturation, phasing, etc. — are conspicuous by their absence.⁴ Conventional approaches to music analysis in the West may serve some use in helping us appreciate how a sense of narrative works in sonata form ('diataxis', the 'extensional' aesthetic), but they have done very little to help us understand other equally important aspects of form that exist inside the extended present ('synchrisis', 'intensional' aesthetics).⁵

The first edition of this book was published in 2009 since when I mainly worked on *Music's Meanings: a modern musicology for non-musos* (Tagg, 2013). In that book I also tried to right a few of the graphocentric wrongs just mentioned, but I regret that so much

4. See, for example, the semantic contortion of 'inverse' (♯♯.) v. 'normal' (♮. ♮) in the *Harvard Dictionary of Music* (1958) entry for *dotting*, even though ♯♯. ('inverse' dotting) is identified as 'usual' in certain types of music.
5. *Intensional* and *extensional* are two useful concepts, first coined by Andrew Chester (1970). For short definition of the *extended present*, see Glossary and Tagg (2013: 252-3). *Diataxis* and *synchrisis*, see Glossary and Chapters 11 and 12 in Tagg (2013: 383-484).

more needs to be done. It's a task that would involve several lifetimes of research and result in several books of this size. Still, at least one thing became clear when working on *Music's Meanings*: I would have to rewrite and expand *Everyday Tonality*.

Why 'Everyday Tonality II'?

There are at least seven answers to that question.

[1] Half the first edition of *Everyday Tonality* consisted of reworked encyclopedia entries that were too short to allow for substantial treatment of several of the book's topics. That is certainly the case with the exposé about quartal harmony which has increased in size from a dozen pages in the 2009 edition to a sixty-page chapter in this one. Quartal harmony is simply a much more widespread and multi-faceted phenomenon of everyday tonality than could reasonably fit into just a few pages.

[2] Some common aspects of everyday tonality were not covered at all in the first edition, for example bass lines and hexatonic modes. While bass lines aren't the focus of much attention in this edition either —it's the topic of another book— hexatonic modes *are*. I wanted to understand why terms of structural designation existed for pentatonic and heptatonic but not for hexatonic modes. I never found out why, but at least I'm able in this edition to propose a system for understanding the mechanics of some commonly used hexatonic modes.⁶

[3] The modes discussed in the previous edition were mainly diatonic and heptatonic —the 'church' modes, including the ionian— while others were absent. I felt I had lapsed into a tonally ethnocentric default mode (pun intended) that needed correction if my critique of conventional music theory's ethnocentrism were to have any credibility. That's why this edition addresses some 'non-European' modes, particularly those containing flat twos and/or augmented seconds, in order to explain how they work, including their role as tonal embodiment of an exotic 'Other'. Due to the correction

6. The whole-tone scale is also hexatonic and tonal (it contains six tones) but it is not tonical: it contains no perfect fifth and has no hierarchy of scale steps. Like the octatonic scale, it can only be transposed to one other position.

of this omission, to the theorisation of hexatonic modes and to the improved theorisation of penta- and heptatonic modes, the size of the chapters on (melodic) mode has increased from one twelve-page chapter to two chapters covering more than ninety pages.

[4] The 2009 edition contained a few factual errors and lacunae that have been put to right in this edition.⁷

[5] Due to restrictions of space, time and copyright legislation, the original encyclopedia entries included very few music examples. Even though there were more examples in the 2009 edition than in the encyclopedia articles, I still felt there was insufficient musical meat on the theoretical bone. That's why I've radically increased the number of music examples and reset them using better notation and image-processing software. This expansion of space devoted to 'actual music' will, I hope, make the book more convincing and more fun to read. I've also tried to include, wherever permissible, links to online recordings of the music cited as notation (see 'Musical source references', p. 28).

[6] The 2009 edition contained a few passages where I fell into the trap of terminological inertia and inexactitude. Particularly embarrassing was the occasional use of 'mode' in the absurdly restricted sense of any heptatonic mode except the ionian (whoops!), and the occasional confusion of 'tonical' (having a tonal centre) with 'tonal' (having a tone or tones). Such terminological lapses have been rigorously expunged from this edition.

[7] Most importantly, the concepts of tonality circulating in Western academies of music, whatever their canonic repertoire, are still all too often inadequate, illogical and ethnocentric. They simply don't do much to help music students living in a multicultural, internet-linked, 'global' world to get to grips with the tonal nuts and bolts of all those musics that don't fit the conceptual grid of categories developed to explain certain aspects of the euroclassical or classical jazz traditions.

7. One error concerns my apparent misunderstanding of Glarean's theory about the hypomodes. I have removed that short section from this edition because it's quite peripheral to the issues under discussion (see fnnt. 48, p. 113).

Reason number 7 is also why I try in this book to bring some order into terms denoting important *general* aspects of tonal structuration. To do that I have to explain widely used concepts like *tone*, *melody*, *accompaniment* and *harmony* in ways that relate those phenomena, not just to the music of certain minorities living in certain parts of a certain continent during a certain short period of its history (the euroclassical tradition from c.1730 to c.1910;), but to a much wider range of musics and people. Of course, that tradition is, along with the jazz canon, an essential ingredient in the everyday tonality of millions, and its unique characteristics need clear explanation in a book devoted to the ‘everyday’. But such explanation is also impossible if the specific dynamic of those canonic traditions cannot be understood *in relation to* the panoply of other tonalities in everyday circulation. The difficulty is that the vast majority of those other musics is under-theorised, in the sense that existing music theory often seems to have either misleading terms or no terms at all to designate their specific tonal dynamics.

The reform and de-ethnocentrification of music theory is an uphill battle in the context of institutions whose existence relies on musical traditions that have to be socially dead, or at least moribund, in order for them to become fixed as canons – for example, the euroclassical canon, the jazz canon, the ‘academic safari’ canon and, more recently, the rock canon. Such fixation of repertoire, of its aesthetics and structural theory, is more often than not understood as a necessity in institutions that repeat course content from one year to the next in the name of consistency or cost cutting, and that are subjected to ‘league tables’ of ‘excellence’ that have to be concocted on the basis of a consensus about ‘what everybody does’ or ‘always has done’ to function at all. If EXCEL means to surpass, to stand out, etc., excellence based on league tables is a blatant *contradictio in terminis*. I hope this book can contribute, at least in a small way, to exposing ‘excellence’ as the destructive oxymoron of mediocrity it really is.⁸

8. *Oxymoron*: an intentional *contradictio in terminis* used for comic effect.

Basic terms

Before going any further I'd better explain what I mean by certain terms that recur throughout the book, right from the start, one even in its title. The following list gives no more than terse, temporary definitions of terms explained in greater detail at various points in the book or in the Glossary (p. 479, ff.).

- NOTE: single discrete sound of finite duration in music;
- TONE: *NOTE* with discernible fundamental pitch;
- TONAL: having the properties of a *TONE*;
- TONALITY: system according to which *TONES* are configured;
- TONIC: musical keynote or reference *TONE*;
- TONICAL: having a *TONIC* or keynote.
- MODE: abstraction of *TONAL* vocabulary reduced to single occurrences of its constituent *TONES*.
- MODAL: having the characteristics of a *MODE*;
- POLYPHONY: music in which at least two sounds of differing pitch or timbre are heard at the same time;
- POLYPHONIC: having the characteristics of *POLYPHONY*;
- CHORD: simultaneous sounding of at least two differently named tones;
- TRIAD: *CHORD* consisting of three differently named tones;
- THIRD: pitch interval of three or four semitones (minor/major);
- FOURTH: pitch interval of five semitones ('perfect');
- TERTIAL (of *CHORDS*): based on the stacking of *THIRDS*;
- QUARTAL (of *CHORDS*): based on the stacking of *FOURTHS*;
- SHUTTLE: repeated to-and-fro movement between two chords;
- LOOP: short repeated sequence of typically three or four different chords.

Other recurrent terms requiring initial explanation are EUROCLASSICAL and KEY-CLOCK.

I use EUROCLASSICAL when referring to the European classical music tradition because not all classical music is European (e.g. Tunisian *nouba*, the *rāga* traditions of India, Cambodian court music, the *yāyuè* — 雅乐 — of imperial China, etc; see also Glossary, p. 488). I avoid ART MUSIC labels because these tend to imply that musics without the label involve no art.

I tend to use the expression KEY CLOCK more often than CIRCLE OF FIFTHS because (a) it's shorter; (b) it's easier to use adjectivally, e.g. 'key-clock distance' rather than 'circle-of-fifths distance' or 'distance round the circle of fifths' (see Glossary, p. 493).

Words and expressions like HOMOPHONY, HETEROPHONY, COUNTER-POINT, COUNTERPOISE, RÉ-PENTATONIC, LA-HEXATONIC, HIJAZ, MAJORISED PHRYGIAN are all defined in the GLOSSARY.

Basic conventions for the abbreviated indication of scale degrees and chords are presented under 'Tonal denotation' (pp. 30-37).

Who's the book for?

This book contains many short music examples, so it's really for anyone who can decipher Western staff notation in the G and F clefs. Although not totally essential, some acquaintance with the rudiments of music theory, including conventional euroclassical or jazz harmony, is probably an advantage. In fact, when writing this book, I've mainly had in mind the music students I've met since 1971, and the conceptual problems they've seemed to encounter when they've met me for the subjects I've taught (chiefly related to 'popular' music, including music and the moving image). However, this book should also interest anyone who, with some notational literacy, wants to understand the tonal mechanisms of several widely disseminated types of music.

Caveats about the title and contents

The repertoire I draw on for illustration and generalisation must invariably be music that I'm in some way familiar with because there's no point in writing about things of which I have little or no knowledge. That means, just as invariably, that the 'everyday tonality' in the book's title can never be everyone's everyday everywhere at all times. The problem is that *SOME TONAL ELEMENTS IN WIDELY HEARD MUSIC DIFFUSED IN MAINLY, BUT BY NO MEANS EXCLUSIVELY, ENGLISH-LANGUAGE CULTURES IN THE LATE TWENTIETH CENTURY, i.e. MUSIC THAT PHILIP TAGG HAS PLAYED, SUNG OR HEARD* is not a very catchy book title. I therefore apologise to readers who feel I have shortened the book's title in an untoward manner. However, that abbreviation is,

I think for several reasons, not entirely misleading. [1] Significant amounts of the everyday musical fare of individuals in many parts of the world in the late twentieth century was of Anglo-US origin.⁹ [2] My notion of everyday music is not stylistically restricted: I refer not only to The Beatles but also to Bach and to popular music from the Balkans, Latin America, etc. [3] With substantial experience of non-anglophone cultures, I'm probably able to refer to more non-anglophone music than many other native speakers of my mother tongue.¹⁰

Here I have to include another caveat about this book's content. It concerns the EVERYONE'S AN EXPERT AT SOMETHING syndrome. I mention this because students who are devotees of a particular artist, composer or musical style have sometimes been outraged by the fact that I didn't include their area of expertise or objects of enthusiasm in my teaching, or that their musical interests were under-represented. Confronted like that in teaching situations, I would normally apologise and explain my choices while encouraging their enthusiasm and learning from their expertise. Since that sort of interaction is not viable in the author-reader relationship, I have to apologise in advance if you find my choice of material unsatisfactory. I can only suggest that you write me a short email suggesting improvements that come to mind.¹¹ My only excuse for the omissions that may outrage you is that I've had to cover an extensive range of music and musicians in order to avoid the ethnocentric trap; and that meant investigating music about which I was previously less familiar. Indeed, I should clarify that before rewriting this book I knew precious little about, for example, Arab *maqamat*, Greek *dromoi*, Copland's film music, flamenco, klezmer, the banjo, alternate guitar tunings or extreme metal, and

9. i.e. music for films, teleproducts, video games, and for recordings in, or influenced by, jazz, blues, pop, rock and other related English-language styles.
10. Specialising in 'popular music', I have since 1971 taught music[ology] in tertiary education in Sweden, the UK and Francophone Canada. I have also since the 1980s had frequent contact with colleagues in Italy and Latin America.
11. To contact me, go to  tagg.org, click *Contact* under *Personal*, then, under *Email*, click to send me a short message.

that I needed to improve on that ignorance to write anything at all coherent about, say, the phrygian mode or quartal harmony. Besides that, I felt obliged to try and transcribe relevant excerpts by artists like Sokratis Málamas, Ermálak, King Crimson, The Bothy Band and Joni Mitchell. The sounds I transcribed were always interesting (sometimes also moving) but the process of investigation and transcription was time-consuming. It's in this light that I ask readers outraged by my omission of their favourite music to understand that I've done what I could to widen the repertoire I've qualified as 'everyday'. Besides, I'm only one person and I haven't had any Superman illusions since some time around 1962!

Basic structure and contents

Rationale and reservations

Apart from this preface and the various appendices, which I'll explain shortly, this book consists of fifteen chapters, many of which deal with issues of harmony. That focus might seem odd, given that so many euroclassical scholars have already written so much about harmony. The trouble is that 'harmony' as an institutionalised body of learning in the West was often unable to help with the hands-on music analysis I had to do to make sense of my own 'everyday tonality': I just couldn't apply its theoretical grids and taxonomies to a significant part of what I've played and heard in my life. I had to grapple with preconceived notions about harmonic impoverishment, with assumptions about unitonicity (that you can only have one keynote at a time), unidirectionality (that harmonic motion 'normally' proceeds anti-clockwise round the key clock), and with several value-laden and often misleading terms like 'tonality', 'modality', 'dominant', 'subdominant', 'suspension' and 'perfect cadence'. Of course, those notions can work well if you want to examine the tonality of Mozart quartets, parlour song, *Schlager* or jazz standards, but they can be serious epistemic obstacles when dealing with *La Bamba*, *Sweet Home Alabama*, blues-based rock, folk rock, post-bop jazz, news jingles, *Huayno*, *rebetiki*, *son*, or a twelve-bar blues.

New terms and compromise

I've tried to include as much as possible of useful pre-existing ideas when addressing the problems just mentioned, for example Carlos Vega's concept of bimodality (1944), Allan Moore's useful lists of harmonic departures in rock and pop (1992), Esa Lilja's theory of power chords (2009), etc. Even so, I've had to introduce home-grown terms and ideas in efforts to make some theoretical sense of my 'everyday tonality'. Those efforts inevitably led to neologisms like *tertial*¹² (as opposed to *quartal*), *counterpoise* (tonal counterweight to a given tonic) and *bimodal reversibility* (tonal sequences in one mode which, when reversed, become sequences in another mode). All such terms, including those covered in *Music's Meanings* (e.g. *anaphone*, *genre synecdoche*, *episodic marker*, *diataxis*, *syncrisis*, *extensional*, *intensional* and *the extended present*; see Tagg, 2013) are explained at relevant points in this book and/or given a short definition in its Glossary.

Despite valiant attempts to fuse useful pre-existing ideas with my own observations, I regret that much remains to be done before a comprehensive theory of 'everyday tonality' can be produced. Readers are therefore asked to take this book as 'work in progress' that I hope others, reacting to its probable inconsistencies and definite lacunae, will be able to improve on.

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12. I introduced TERTIAL into my teaching around 1997 and have been using it ever since. It featured in materials about harmony that I put on line in 1999 and which eventually became the *harmony* article in EPMOW (Tagg, 2002). In 2010 I was pleased to discover that others had seen the need to designate chords characterised by the stacking of thirds, but was taken aback to see they'd adopted the word 'tertian' (*sic*) to do the job. Why choose the *-an* suffix when the *-al* in QUARTAL (not 'quartan'!) already existed as the qualifier of chords based on stacked fourths. Adjectives ending in *-tian* or *-cian* are either geo-ethnic — Alsatian, Croatian, Grecian, Haitian, Phoenician, Venetian etc. — or qualify belief systems — Christian, Confucian, etc; *-i|al* endings send no such signals! There's a clear difference between *martial law* or *martial arts* on the one hand and *Martian law* or *Martian arts* on the other. Besides, businesses are commercial, not 'commercian' and most grown-ups have *facial*, not 'facian', hair.

Restriction of subject area

I've also had to restrict, for reasons of space and clarity, the tonal areas I deal with, especially concerning questions of harmony. I chose to omit discussion of medium- and long-term tonal narrative (diataxis) and to *concentrate on harmonic processes containable within the extended present* (syncrisis), more particularly on 'one-chord changes', chord shuttles (two chords) and chord loops (three or four).¹³ There are three other reasons for this focus on 'now sound'. [1] Since these phenomena are, thanks to their alleged harmonic simplicity, unlikely to provoke much interest among conventionally trained musos, they're in greater need of theorisation. [2] Since the same phenomena are widely diffused, their popularity may become less puzzling if they are viewed from a less conventional musicological angle. [3] Since shuttles and loops are phenomena relating to the extended present, they highlight short-term tonal processes less commonly studied in conventional music scholarship. Theorising these issues of *intensional* structuration (Chester 1970; Glossary p.492) brings to light structural detail of importance in the understanding of 'groove' and in the identification of units of musical meaning (*museme stacks*; Glossary, p. 496).

Now, this sort of attention to intensional detail is, I believe, necessary but it does mean that I've not been able to pursue my main musicological interest (semiotic music analysis) because — and it's a vicious circle— I think that better structural theory relevant to the issue needs to be developed. I admit lapsing into semiotic mode on several occasions but I've exercised some restraint and tried to focus otherwise on structural theory.¹⁴

This focus means that I've been unable to consider in any detail longer durational units (MATRICES; see Glossary, p. 494) like the 12-bar blues, the 32-bar jazz standard, or even the 8- and 16-bar tonal units so common in popular music. I also had to abandon my original rash idea to include an overview of what is probably the most

13. For a discussion of *diataxis* and *syncrisis*, see Chapters 11 and 12 in *Music's Meanings* (Tagg, 2013).

14. I tried to confront semiotic issues in *Music's Meanings* (Tagg, 2013).

widely heard source of everyday tonality: film, TV and games music. Finally, I've not been able to include discussion of the CONJUNCT-LINE TROPES (Glossary, p. 483) at the basis of many popular chord sequences; I'm afraid I have to postpone that topic for another publication.

All these omissions are in my view regrettable and unsatisfactory but I hope readers will agree with 10cc (1975) that '4% of something's better than 10% of nothing'.

Surprising discoveries

When rewriting this book I came across a lot of music I'd either never heard before or which I'd forgotten from way back when. Most of this music never made it into the book but it kept me busy and was always interesting. Here are some more personal surprises that may (or may not) be of interest.

- I found next to no systematic theory of hexatonic modes, even though the basically doh-hexatonic tune *It's Not Unusual* (Tom Jones, 1965) is itself decidedly not unusual.
- Since Bartók is one of my favourite composers, I was delighted to find out how many celebrated jazz and prog musicians were also fans of his work.
- I was surprised to discover and saddened to realise how conservative jazz theory can be in its terminology, and how much it seems stuck in the time warp of bebop and II-V-I thinking.
- I was gobsmacked to discover how conservative, ethnocentric and notation-fixated music theory teaching can still be.¹⁵

Overview of chapters

Chapter 1 (pp. 45-64). There is much confusion about very basic terms in music theory. NOTE, PITCH and TONE are three of them. This chapter discusses and defines those terms. Extra attention is paid to cleaning up the conceptual chaos of the words TONAL and TONALITY as they are used in conventional Western music theory.

15. I even heard of students chided for referring to the phrygian minor second in E as $b\hat{2}$ ('flat two') because $f\sharp$ (flat two in E) has no 'b' when notated! See *Troubles with Tonal Terminology* (Tagg, 2013b:) for more.

CHAPTER 2 (pp. 65-84) continues with notions of PITCH, focussing on questions of TUNING and the OCTAVE. This chapter is the most acoustic-physics-orientated of them all and provides a theoretical basis for understanding how *tones* (as in ‘tonality’) work.

CHAPTER 3 — HEPTATONIC MODES (pp. 85-149)— is the first of two about the mainly melodic aspect of modes. It starts with a definition of MODE, raises the issue of IONIANISATION, critiques conventional notions of MODALITY and explains why 7 is such a ‘magic number’ in modal theory. The first half of the chapter is then entirely devoted to the heptatonic ‘church’ modes and includes numerous music examples, as well as a critique of the major-minor ‘happy-sad’ dualism. The second half deals with non-diatonic heptatonic modes, in particular those containing FLAT TWO and/or an *augmented second*. Some rudiments of MAQAM theory, including the theoretical centrality of tetrachords, are presented as useful tools in the understanding of modal richness outside the euroclassical, jazz and related repertoires. There is particular focus on the PHRYGIAN and HIJAZ modes in *flamenco* and *Balkan* music, as well as on ‘Bartók’ modes, including the *lydian flat seven* and its similarity to blues modes. The chapter concludes with a 14-point summary and a short ‘WHAT-IF?’ thought experiment.

CHAPTER 4 (pp. 151-178) is about NON-HEPTATONIC MODES. After a short section on *tri- and tetratonic* melody, the widespread practice of PENTATONICISM, especially its anhemitonic variants, is discussed in some detail. This section also explains the workings of the *doh- and la-pentatonic* BLUES MODES. A systematic theory of tonal HEXATONIC MODES comes next, followed by an overview of non-tonal hexatonic modes (whole-tone and octatonic). The chapter ends with reflexions on the perception of modes.

CHAPTER 5 (pp. 179-203) is on MELODY. After an exposition of its defining characteristics, melody is presented according to two typologies, one based on *contour* (patterns of up and down), the other on *connotation*. Melodic identity is discussed in terms of tonal vocabulary, bodily movement, spoken language, varying patterns of repetition and, using concepts from rhetoric, its varying modes of presentation. The chapter ends with brief section on *melisma*.

CHAPTER 6 (pp. 205-217) is a short chapter on POLYPHONY. It starts by trying to clear up the conceptual mess in conventional Western music theory about what *polyphony* actually means. After that, various categories of polyphony are defined and explained, including *drone-accompanied music*, *heterophony*, *homophony* and *counterpoint*.

CHAPTER 7 (pp. 219-244) is called 'CHORDS'. After the customary definition section, this chapter enumerates, describes and explains how a wide variety of tertial chords can be referred to in two complementary and useful ways: ROMAN NUMERAL designation and LEAD-SHEET CHORD shorthand. The chapter includes several extensive tables, including: [1] a table of all roman-numeral triads in all 'church' modes; [2] a chord recognition chart and a key to over fifty lead-sheet chords, all with the same root note. The principles of both roman-numeral and lead-sheet chord designation are explained in detail, complete with anomalies and exceptions.

CHAPTER 8 (pp. 245-271) is the first of several on HARMONY. A brief definition and history of the concept is followed by a presentation of (European) 'CLASSICAL HARMONY'. After tidying up another conceptual mess relating to notions like '*functional*' and '*triadic*', the essential term TERTIAL is introduced. The basic rules and mechanisms of classical harmony, central to many popular styles, are also presented. Furthermore, the chapter addresses notions of harmonic *directionality*, as well as the principles of the *circle of fifths* or '*key clock*'.

CHAPTER 9 (pp. 273-292) is about NON-CLASSICAL TERTIAL HARMONY, i.e. third-based harmony that does not follow the euroclassical harmony rule book. After a discussion of *non-classical ionian* harmony, it explains things like the importance of *major common triads* in establishing the identity of the 'church modes', the option of *permanent Picardy thirds* in the tonic triad of minor-key modes, and the link between *la-pentatonics* and *dorian rock harmony*. There's also a useful chart of typical progressions in each mode and of some well-known recordings in which they occur.

CHAPTER 10 (pp. 293-351) is devoted entirely to QUARTAL HARMONY. After initial definitions it sets out the basics of quartal triads, how they can be designated and how they differ from tertial triads. The notion of TONICAL NEIGHBOURHOOD is introduced as a way of un-

derstanding the *fluid tonal centrality* of quartal harmony and how that fluidity can be used to generate harmonic movement. The blurring of borders between quartal and tertial harmony as more fourths are added to quartal chords is used as a way of understanding *chords of the eleventh* and their importance in North American music. Distinction is made between quartal harmony and the quartal *voicings* of postwar jazz. Numerous examples illustrate instances of quartal everyday tonality, from Bartók to banjo tuning, from Debussy to Stravinsky to corporate jingles, from McCoy Tyner to Joni Mitchell and King Crimson, etc. The chapter ends with demonstrations of the link between droned accompaniment patterns and quartal harmony, plus an 18-point summary of the chapter's main ideas.

CHAPTER 11 (pp. 353-369) is called ONE-CHORD CHANGES because it shows how one single chord is, in many types of popular music, rarely just one chord. After refuting prejudices about harmonic impoverishment in popular music and describing the theoretical rudiments of the *extended present*, one single common chord —G major— is examined in sixteen different popular recordings and found to consist of between two and four chords on each occasion. I argue that the tonal elaboration of 'single' chords is an intrinsic part of the musician's aural work and essential to the 'groove' identifying both a particular piece and a particular style.

CHAPTER 12 —'CHORD SHUTTLES' (pp. 371-400)— increases the number of chords from one to two. Drawing mainly on English-language popular song, a TYPOLOGY OF CHORD SHUTTLES is presented (*supertonic, dorian, plagal, quintal, submediantal, aeolian* and *subtonic*). Examination of shuttles in several songs, including a track from Pink Floyd's *Dark Side of the Moon* (1973) and the Human League hit *Don't You Want Me Baby* (1981), shows that chord shuttles often involve *ambiguous tonics* and that no overriding key-notes can be established. I argue that chord shuttles are dynamic *ongoing tonal states*, not narrative processes. They are by definition non-transitional and constitute building blocks in the harmonic construction of diataxis in many types of popular song.

CHAPTER 13 — CHORD LOOPS 1 (pp. 401-420)— expands the number of chords from two to three and four. After defining LOOP, the VAMP, one of the most famous loops in anglophone popular song, is examined. Distinction is made between *loop* and *turnaround*. The chapter ends with an explanation of the gradual but radical historical shift from the vamp’s V-I directionality to other, less ionian, types of harmony in rock-, soul- and folk-influenced styles.

CHAPTER 14 — CHORD LOOPS AND BIMODALITY (pp. 421-450)— attacks the problem of understanding how non-classical tertial harmony works, with how the same chord sequence can be heard in two different modes, etc. Starting with distinction and confusion between *ionian* and *mixolydian*, this chapter sets out ways of establishing, where relevant, a single tonic for particular sequences, the role of individual chords within loops, etc. It then examines *aeolian* and *phrygian* loops, and proposes a model of BIMODAL REVERSIBILITY in efforts to conceptualise harmonic practices quite foreign to what is generally taught to music theory students. The chapter’s final section distinguishes between various mediantal loops like the ‘*rock dorian*’, the ‘*folk dorian*’, the ‘*narrative ionian mediantal*’.

CHAPTER 15 — THE YES WE CAN CHORDS (pp. 451-478)— focuses on the chord loop used in the online video supporting Obama’s 2008 presidential campaign. It discusses the *connotative value* of the loop and its contribution to creating the sort of cross-cultural unity that the Obama campaign wanted to forge. The main point is that analysing music’s tonal parameters should not be an arcane technical exercise foisted on music students but instead a contribution to answering the basic question of music semiotics: ‘why and how does who communicate what to whom and with what effect?’.

Appendices

Glossary

The GLOSSARY (pp. 479-504) includes explanations of abbreviations and definitions of terms whose meaning may need clarification. The definitions often refer to pages in the main text for a more detailed explanation. It also contains a few substantial entries that should have been footnotes but did not fit on the relevant page.

Reference appendix

To save space and to avoid confusion about which appendix to consult when checking source references, this book has only ONE REFERENCE APPENDIX (p. 505, ff). Reasons for including ‘everything’ in one appendix are given in *Guidelines for Producing a Reference Appendix for Studies of Music in the 21st Century* ( tagg.org/xpdfs/RefAppxs.pdf). That document also explains the referencing system used in this book.

Internet references

To save space in the Reference Appendix and footnotes, URLs are shortened by replacing the internet address prefixes <http://>, <https://>, <http://www>. etc. with the download icon . Dates of access to internet sites are six-digit strings inside square brackets. Thus, ‘tagg.org [140704]’ means a visit to <http://www.tagg.org> on the 4th of July, 2014.

YouTube references are reduced in length from 42 to 13 characters by using the 11-character code appearing in their absolute URL addresses, preceded by the YouTube icon . For example:

<http://www.youtube.com/watch-v=msM28q6MyfY> (42 chars.)

becomes just ‘msM28q6MyfY’.¹⁶

Index section

The INDEX SECTION consists of: [1] an ALPHABETICAL INDEX (p. 561); [2] NUMERICAL INDEXES listing: [a] *scale-degree sequences* (‘ $\hat{b}2 \hat{1}$ ’, ‘ $\hat{8} \hat{b} \hat{7} \hat{b} \hat{6} \hat{5}$ ’, etc., p. 595); [b] chord abbreviations (e.g. ‘4⁺’, ‘m7^b5’, p. 598); [c] chord sequences (‘I-vi-ii/IV-V’, ‘ \flat VII-IV-I’, etc., p. 599). The ALPHABETICAL INDEX gives page references to all proper names appearing in the book, and to titles of musical works, songs, tracks, albums, films, TV productions, etc. It also includes page references to all major topics and concepts covered in the book’s preface, chapters and glossary. Footnote text is also included in the indexes. Symbols used in the indexes are explained on page 561.

16. If you copy the 11 characters of a unique YouTube file identity (e.g. msM28q6MyfY) and paste it into YouTube’s search box, you will be taken to that video and none other. You will not be told what else ‘you might enjoy’.

Formal and practical

Cross-referencing and order of topics

Some parts of this book are based on encyclopedia articles. This means that insights readers might gain from some parts of this book are more likely to derive from conceptual rather than perceptual learning. That in its turn requires quick access to the meaning of terms other than those under current discussion. That's one reason why this book includes many cross-references.

Another reason is that it's impossible to introduce all terms and ideas in the right order for all readers. For example, although roman-numeral chord shorthand makes a short appearance on pages 36 and 72, it isn't fully explained until page 220, in the chapter on chords. That will cause no problems for familiar with the rudiments of conventional harmony but others may want to read pages 220-225 and to consult Table 14 (p.222) before they go on. Similarly, readers with no knowledge of lead-sheet chord shorthand (E7, F#m7^{b5} etc.) should perhaps read the relevant section (pp.229-244) if they have trouble following those symbols earlier in the book.

Musical source references

Reference system

Musical source references follow the same basic system as bibliographical source references. For example, 'Beatles (1967b)' refers uniquely to publishing details, located on page 510 in the Reference Appendix, for the *Sergeant Pepper* album.

Sometimes it's necessary to refer to a whole string of tunes in the text. For example, instead of writing 'in tunes like *Jingle Bells* (Pierpoint, 1857), *La Marseillaise* (Rouget de Lisle, n.d.) and *Satisfaction* (Rolling Stones, 1965)', I would tend to lighten up the text by just writing 'in tunes like *Jingle Bells*, the *Marseillaise* and *Satisfaction*'. In such cases the title of each tune will be found, listed in alphabetical order, in the Reference Appendix, either complete or with at least cross-reference to the complete publishing details elsewhere in the appendix. Complete publishing details are provided so that readers will know, in cases where more than one recording exists of the

same work, to which version I am referring. Such information is important when I provide timings pinpointing musical events within recorded works.

Accessing and using musical sources

Online recordings

The majority of musical works referred to have at one time or another been published as recordings. In the early 1990s it would have been absurd to expect readers to have access to more than a very small proportion of those recordings. In 2014, however, it is usually a simple matter. Fearing prosecution for inducement to illegal acts, I can't be more precise here than to say that you can hear online recordings of the majority of music I refer to in this book. For example, using Google to search for |Police "Don't Stand So Close To Me" | (with the inverted commas) produced 3,180,000 hyperlinks [2014-08-05], several of which took me to actual online recordings of the original issue of *Don't Stand So Close To Me* (Police, 1980). Using the on-screen digital timer provided by the site hosting the recording, I was able to pinpoint the song's change from the E \flat →Gm to the D→A shuttle at 1:48. The whole process of checking a precise musical event in just one of innumerable songs took me a few seconds. Of course, it should be remembered that while it is *not illegal to listen* to music posted on the internet, *downloading* copyrighted music without payment or permission may well be.¹⁷

I've checked many of the recordings referred to in the book to see if they could be heard online. Some I didn't check at all because I'm certain they'd be easy to find but others I had to put online myself. These 'others' include: [1] short extracts from recordings under copyright that seemed to be unavailable on line; [2] rudimentary audio recordings I produced using my own equipment to illustrate particular points discussed in the text. All these 'other examples' can be accessed via my website at tagg.org. Click *Audio*, bottom right under 'Audiovisual', then *Music examples in "Everyday Tonal-*

17. Thanks to Bob Clarida for clarifying these simple legal points. Clarida is media and copyright attorney at Reitler, Kailas & Rosenblatt (New York) and co-author of *Ten Little Title Tunes* (Tagg & Clarida, 2003).

ity". Then you'll see a list of the relevant audio examples on my site. Click on the relevant title to hear the example you need (mostly in MP3 format, a few as MIDI files). If you object to any posting on grounds of copyright ownership, please contact me and I will remove the offending item or contact my lawyer for advice.¹⁸

Online notation

In order to minimise hard-copy production costs, music examples appear in pocket-score size on the page. The image resolution of notation images is mostly 300 d.p.i and the maximum width of the printed page is 10.3 cm, allowing for an image width of 1220 pixels. Some readers may find the miniature-score format problematic. If so, almost every music example in this book can be viewed at, or downloaded full-size from,  tagg.org/pix/MusExx/MusExxIdx.htm. If you're reading this electronically you can of course just use your device's zoom function to make the notation larger.

'Cit. mem.'

Some notated music examples are marked '*cit. mem.*', meaning that they are cited from (my) memory. I use *cit. mem.* if no single definitive, authoritative or original recording of the piece exists, and if my own memory does not diverge too radically from the essence of how others hear it.

Tonal denotation

As mentioned briefly on page 16, the 'everyday tonality' of this book covers a much wider range of tonal practices than those normally considered in standard Western music theory. The problem is that terms and concepts developed to denote and explain the tonal workings of the euroclassical repertoire cannot realistically be expected to do the same for all other types of tonality. To claim otherwise would be like insisting that concepts developed to explain rules of the English language automatically apply to, say, Chinese or Finnish. The obvious consequence for this book is that

18. You can contact me by visiting  tagg.org and clicking 'Contact' under 'Personal'. My copyright lawyer is Bob Clarida (see footnote 17).

conventions of tonal denotation cannot only be those of standard Western music theory. It means that some of that theory's terminology needs adaptation or redefinition, while some is best avoided altogether. It also means that I have to introduce terms and abbreviations unfamiliar to those raised on Schenker or Riemann.¹⁹ This section of the Preface does little more than summarise, with minimal discussion, the basic conventions of tonal denotation and abbreviation in this book.

Note names

To distinguish between, for example, E as the note E, E as lead-sheet chord shorthand for a tertial major triad with the note E as its root, and E as the key or mode in which the note E is tonic, the following typographical conventions are used. For extra clarity a natural sign (♮) is sometimes added after a note name, e.g. 'a♮, f♮, b♮' instead of just 'a, f, b'.

Table 1. Basic typographical conventions for pitch-specific note and chord names

<i>Denotation type</i>	<i>Symbol</i>	<i>Typography</i>	<i>Example</i>
note	e	lower-case sans-serif	e is a major third above C
lead-sheet chord	E	upper-case sans-serif	... from B7 to E ...
key (<i>Tonart</i>)	E	upper-case serif	...is a V-I cadence in E .

Names of OPEN STRINGS are given according to instrumental convention, e.g. EADGBE for standard guitar tuning and DADGAD for DADGAD, **g'dgbd'** for banjo open G tuning, etc.

Please note that TONIC SOL-FA NOTE NAMES (*doh ré mi fa sol la ti*) are, according to anglophone convention, always relative or movable, e.g. 'Doh=Bb', 'Doh=E', 'ré-pentatonic mode in G'.²⁰ Roman-letter note names (e.g. **a b♭ b♮ c♯ d e f♯ g**) designate pitch in absolute (fixed) terms. For further explanation see p. 45, ff.

19. See authoritative Wikipedia entries for 'Heinrich Schenker' and 'Hugo Riemann'. See also *ftnt.* 25, p. 35, for influential Schenkerian Felix Salzer.

20. RÉ is used in preference to RE so as to avoid eventual misreadings involving the common prefix RE — *repentant, re-pentatonic, repetitive, re-mode, remodel*, etc.

Scale degrees, scale steps and intervals

When dealing with tonality inside and outside the euroclassical sphere of tertial-ianian, major-minor music, *comparison of tonal vocabulary is an absolute necessity*. Such comparison involves reasoning based on the placement of SCALE DEGREES within the octave, which, in its turn, requires a concise way of referring *relatively* to notes and chords. (See also *INTERVALS*, p. 34 and Table 5, p. 70).

As shown in the left column of Table 2 (p. 33), the heptatonic SCALE DEGREES OF INDIVIDUAL NOTES can be expressed as simple arabic numerals topped with a circumflex accent — $\hat{1} \hat{2} \hat{3} \hat{4} \hat{5} \hat{6} \hat{7}$ [$\hat{8}=\hat{1}$]. Scale-degree numbering requires the identification of a tonic (key-note) as scale degree 1 ($\hat{1}$). Since pitch differences between $\hat{1}$ and the other six scale degrees ($\hat{2} \hat{3} \hat{4} \hat{5} \hat{6} \hat{7}$) are variable (see Table 2, p. 33; Fig.16, p. 97), scale degree numbering follows the following conventions (§§ 1-9).

[1] To save space and to avoid confusing readers reared on an ionian diet, CIRCUMFLEXED NUMERALS WITHOUT PREFIX will principally designate SCALE DEGREES PECULIAR TO THE IONIAN MODE. In this way $\hat{2}$, $\hat{3}$, $\hat{6}$ and $\hat{7}$ designate the ionian mode's MAJOR second, third, sixth and seventh respectively, $\hat{4}$ and $\hat{5}$ the PERFECT fourth and fifth; e.g. $\hat{1} \hat{2} \hat{3} \hat{4} \hat{5} \hat{6} \hat{7}$ in C = c d e f g a b, in A = a b c# d e f# g# (both ionian). Divergence from this *default ionian-mode principle* is indicated by the appropriate accidental prefix — b, b̄, #, ^ (§§ 2-4; see also §5, p. 33).

[2] 'b' precedes scale degrees pitched A SEMITONE LOWER than their ionian default value (§1). $b\hat{2}$ ('flat two'), $b\hat{3}$ ('flat three'), $b\hat{6}$ ('flat six') and $b\hat{7}$ ('flat seven') designate a minor second, third, sixth and seventh respectively, e.g. $\hat{1} \hat{2} b\hat{3} \hat{4} \hat{5} b\hat{6} b\hat{7}$ in C = c d e b f g a b b, in A = a b c d e f g (both aeolian). 'b̄' ('flat five') designates a diminished fifth, e.g. $b\hat{5} \hat{4} b\hat{3} \hat{1} = g b f e b c$ in C (blues pentatonic (pp. 161-163)).

[3] 'b̄' indicates that the designated scale degree is pitched ONE QUARTER TONE BELOW the default ionian value, as in 'neutral' renderings of the blues third ($b\hat{3}$), or as in *maqam Rast* (ascends $\hat{1} \hat{2} b\hat{3} \hat{4} \hat{5} b\hat{6} b\hat{7}$).

[4] '#' qualifies only AUGMENTED-INTERVAL SCALE-DEGREE numbers, for example, in C, $\#\hat{2} = d\#$, $\#\hat{4} = f\#$, $\#\hat{5} = g\#$.

Table 2. *Scale degree abbreviations with c and e[ɣ] as tonic (î).*²¹

SCALE DEGREE			TERTIAL COMMON TRIAD						Scale degree
n ^o	î=c	î=e	î=c		î=e		î=c		l as spoken l popularly
	note name		n ^o	MAJOR	n ^o	MINOR			
b $\hat{2}$ 2 (=Δ2) # $\hat{2}$	db dɣ d#	fɣ f# f×	bII II	D \flat D F#	F F#	bii ii	C#m Dm	Fm F#m	'flat two' [major] two' 'sharp two'
b $\hat{3}$ 3 (=Δ3)	e \flat eɣ	gɣ g#	bIII III	E \flat E	G G	biii iii	E \flat m Em	Gm G#m	'flat three' [major] three'
$\hat{4}$ # $\hat{4}$	f f#	a a#	IV #IV	F F#	A B \flat	iv #iv	Fm F#m	Am B \flat m	'four' 'sharp four'
b $\hat{5}$ 5 (=Δ5) #5	g \flat gɣ g#	b \flat bɣ b#	bV V	G \flat G	B \flat B	biv v	F#m Gm	B \flat m Bm	'flat five' 'five' 'sharp five'
b $\hat{6}$ 6 (=Δ6)	a \flat aɣ	cɣ c#	bVI VI	A \flat A	C C#	bvi vi	A \flat m Am	Cm C#m	'flat six' [major] six'
b $\hat{7}$ 7 (=Δ7)	b \flat bɣ	dɣ d#	bVII VII	B \flat B	D D#	bvii vii	B \flat m Bm	Dm D#m	'flat seven' 'major seven'

[5] The simple circumflexed *numeral without prefix* (e.g. '3̂') occasionally refers not to a specifically ionian scale degree but to a GENERIC HEPTATONIC SCALE DEGREE; e.g. a '3̂' that could be 3̂, b3̂, ƒ3̂ or #3̂. To avoid confusion in such instances, *specifically ionian-mode scale degrees* (§1) are preceded by the facultative MAJOR-INTERVAL PREFIX 'Δ'. In these cases Δ2̂, Δ3̂, Δ6̂ and Δ7̂ are CLARIFICATORY ALTERNATIVE SHORTHAND for IONIAN 2̂, 3̂, 6̂ and 7̂ (e.g. dɣ eɣ aɣ bɣ in C).

[6] If preceded by the expression 'scale degree', or if the context is otherwise unambiguous, the scale degree[s] in question may lack the circumflex. 'Scale degrees 1 b2 Δ3' (e.g. c db eɣ in Hijaz C) is in other words the same as just '1̂ b2̂ Δ3̂'. The latter is simply shorter.²²

21. Please note that many of the tertial common triads in this table contain notes outside the euroclassical keys of C and E major and minor, e.g. bII contains two notes foreign to the ionian or 'major key' (b2̂, b6̂), and bii contains two foreign to the euroclassical 'minor key' (b2̂, b4̂). On the other hand, bII is the fully compatible common triad on b2̂ in the phrygian and Hijaz modes.

[7] Since scale degrees 1, 2, 4 and 5 ($\hat{1}$ $\hat{2}$ $\hat{4}$ $\hat{5}$: the tonic, the major second, perfect fourth and perfect fifth) are those least prone to alteration in the tonal traditions covered in this book, they are, as a rule, preceded by an accidental only if the relevant scale degree diverges from those default values, for example $b\hat{2}$ ('flat two') for the Hijaz minor second, $\#\hat{4}$ ('sharp four') for the lydian augmented fourth, $b\hat{5}$ ('flat five') for the diminished fifth occurring in the otherwise basically la-pentatonic ('minor') blues mode.

[8] The properties of scale degrees 3, 6 and 7 vary much more frequently than those of $\hat{2}$, $\hat{4}$ and $\hat{5}$. That's why $\hat{3}$, $\hat{6}$ and $\hat{7}$ are more likely to be prefixed by an accidental ($b\hat{3}$, $b\hat{6}$ and $b\hat{7}$ are very common) and why you are more likely to see Δ specifying $\hat{3}$, $\hat{6}$ and $\hat{7}$ as clarificatory ionian major-interval scale degrees $\Delta\hat{3}$, $\Delta\hat{6}$ and $\Delta\hat{7}$.²³

[9] Like ' $\#\hat{5}$ ', the augmented fifth, the rare augmented third and sixth are preceded by ' $\#$ '. For example, an $a\#$ (not $b\flat$) in F would be ' $\#\hat{3}$ ', thus allowing for distinction between $\hat{1}$ $\hat{2}$ $\#\hat{3}$ $\#\hat{4}$ $\hat{5}$ (f g a# b| c in F) and $\hat{1}$ $\hat{2}$ $\hat{3}$ $\#\hat{4}$ $\hat{5}$ (f g a| b| c in lydian F).

SCALE STEPS, the intervals between adjacent scalar notes in a mode, are expressed in tones: ' $\frac{1}{4}$ ' means a quarter-tone, ' $\frac{1}{2}$ ' a semitone, ' $\frac{3}{4}$ ' three quarters of a tone, ' 1 ' a whole tone (literally 1 tone), and either ' $1\frac{1}{2}$ ' —one-and-a-half tones— or ' $\frac{3}{2}$ ' —three semitones—, i.e. an augmented second or minor third.²⁴

INTERVALS (differences of pitch), are mainly designated as ordinals, qualified where necessary, for example *second*, *third*, *minor third*, *augmented fourth*, *diminished fifth*, *octave*. Intervals and scale degrees specific to the euroclassical and related tonal idioms are sometimes

22. Fonts used here are downloadable at tagg.org/zmisc/FontKeys.html [140308].

23. The accidentals are not those of notation. For example, $b\hat{2}$ in E phrygian is $\flat\hat{2}$ just as it's $b\flat$ in A phrygian, $d\flat$ in C# phrygian, $g\flat$ in F phrygian, etc.

24. The use of $\frac{1}{2}$, 1 , $1\frac{1}{2}$, etc. replaces three other conventions: [1] T = tone, S = semitone; [2] W = whole tone, H = half tone; [3] '1' = semitone, '2' = whole tone, '3' = three semitones. [3] is not as anglocentric as alternatives [1] or [2], but it is counterintuitive to equate a *half*-tone ($\frac{1}{2}$, *semi*, 50%) with the integer 1 and a whole-tone (1 tone) with 2 ($\times 2$, 200% of 1). Besides, ' $\frac{1}{2}$ ' is available on computer keyboards (Unicode U+00bd, ASCII 171). For more information, see tagg.org/zmisc/FontKeys.html [140906].

referred to using the vocabulary of conventional Western music theory (*supertonic, mediant*, etc.). Those labels and their equivalents as numeric scale degrees are set out in Table 5 on page 70.

Octave designation and register

When referring to REGISTER it is sometimes necessary to indicate in which octave notes are pitched. In such cases I've used the MIDI convention of numbering octaves from a_0 at the bottom of an 88-note piano keyboard (27.5 Hz) to c_8 (4186 Hz) (see p. 68, ff.). Octave numerals are subscripted to avoid confusion with the superscripted characters used in chord shorthand, footnote flags, etc.).

Scale degree chord shorthand

SCALE DEGREE CHORD SHORTHAND (ROMAN NUMERALS) follows principles similar to those used for scale degrees (p. 32, ff.). As will become evident, concepts like 'dominant', 'subdominant', 'perfect cadence', 'functional harmony', etc. are irrelevant to much of what most people hear on a daily basis. That's why Salzer's euroclassically focussed *Structural Hearing* (1952) is absent from this book. Nor are readers forced to endure hieroglyphics like 'Sp', 'Dp' or 'DD-9'.²⁵ Nevertheless, the roman-numeral denotation of chords is used extensively (see Table 2, p. 33 and §3, below).

Chords

Three systems are used for the concise denotation of chords: [1] *lead-sheet shorthand*, [2] *quartal chord designation* and [3] the *roman numeral system*.

25. Felix Salzer is largely responsible for establishing the teachings of Austrian musicologist Heinrich Schenker (d. 1935) in the USA where it is still an obligatory part of 'music theory' in the academy. It can be useful for understanding structural narrative in a Mozart symphony but is quite useless if you want to know how the tonalities of rebetiko or redneck rock (and countless other non-euroclassical idioms) work. At the Göteborg (Sweden) College of Music (*Musikhögskolan*, 1971-91), I had to teach harmony from a Riemann-inspired manual (Söderholm, 1959) in which 'Sp' and 'Dp' were abbreviations of 'Subdominant' and 'Dominant Parallel' respectively (e.g. Dm as Sp and Em as Dp in C). 'DD-9' was the the book's weirdest hieroglyphic: it was a 'double dominant' minor ninth chord with its root note deleted, for example, in C, the notes $d\ f\sharp\ a\ c\ e_b$ (without the d), i.e. a bog-standard $F\sharp\dim$ ($\sharp i v^{o7}$).

1. *Lead-sheet chord shorthand*

A LEAD SHEET is a piece of paper displaying the basic information necessary for performance of a piece of popular music (see pp. 229-230). LEAD-SHEET CHORD SHORTHAND is the system of chord symbols used on lead sheets. Lead-sheet chord shorthand for tertial harmony (A, Bm⁷b⁵, Ebm^{A9}, etc.) is explained in detail in Chapter 7 (pp. 229-244) and presented in tabular form on pages 232-233.

All chord symbol root names are in sans-serif capitals while names of keys (*tonalité*, *Tonart*) are, as shown in Table 1 (p. 31), in upper-case serif, for example, [1] ‘Mozart’s Symphony n^o 41 is in C: its final chord is C’; [2] ‘the vocal line of Steeleye Span’s 1970 recording of *The Lowlands Of Holland* (ex. 84, p. 157) is in la-hexatonic C#: its final chord is C#2’.

2. *Quartal chord designation symbols*

QUARTAL CHORD DESIGNATION symbols (C⁴, F⁴, B^{b2}, etc.) are explained separately in Chapter 10 (p. 294, ff; p. 302, ff.).

3. *Roman-numeral chord shorthand*

The ROMAN-NUMERAL CHORD SHORTHAND system is explained in Chapter 7 (pp. 220-225) and set out in Table 14 (p. 223). A ‘HEWN-IN-STONE’ font is used to make these chord symbols easier to spot in the text, even if there’s not much difference between ‘I’ (me) and ‘I’ (roman n^o 1).

Unlike lead-sheet chord shorthand, but *like* scale-degree abbreviations, ROMAN-NUMERAL CHORD DESIGNATION IS RELATIVE, in that each roman number designates, in any key or mode, THE SCALE DEGREE ON WHICH THE CHORD IS BUILT (see Table 2, p. 33). The superscripted arabic numerals indicate alterations to the basic tertial triad built on that scale degree, e.g. I, ii^{7b5}, bIII⁵, IV⁶₅, V⁶₄, V⁷, bVI.

- LOWER-CASE ROMAN NUMBERS indicate a MINOR COMMON TRIAD. For example, ii in C, as a minor triad based on the second degree (on 2̂), is a D minor triad (‘Dm’, containing d-f-a).
- UPPER-CASE ROMAN NUMERALS indicate either a MAJOR COMMON TRIAD or a POWER CHORD. For example, V in C, as a major triad on 5̂, is a simple ‘G’, containing g-b~~1~~-d, while, still with C as

tonic, $\flat\text{III}^5$, as a chord based on the flat third scale degree ($\flat\hat{3}$), is the dyad $\text{E}\flat^5$, containing $\text{e}\flat$ and $\text{b}\flat$.

- **I, ii, iii**, etc. DESIGNATE CHORDS ON THE SCALE-DEGREE POSITIONS of Western music theory's DEFAULT MODE —the IONIAN.
- Chords based on ANY SCALE DEGREE OTHER THAN THOSE INTRINSIC TO THE IONIAN MODE MUST BE PRECEDED BY THE REQUISITE ACCIDENTAL, most commonly 'b', for example $\flat\text{VI}-\flat\text{VII}-\text{I}/\text{i}$ (aeolian cadence) or $\flat\text{II}-\text{I}/\text{i}$ (or $\flat\text{vii}-\text{I}/\text{i}$) (phrygian cadence).

An aside about the ionian as default mode

Euroclassical music theory's preoccupation with the ionian is historically explicable but hardly logical. Taking the seven white notes of a piano keyboard octave — c d e f g a b — and re-arranging them in clockwise order round the circle of fifths — f c g d a e b —, it's clear that the two extremes are separated inside the octave by a tritone ($\text{f}\sharp-\text{b}\flat$) and, more importantly, that C is situated next to the left-hand extreme (f c g d a e b), not in the central position occupied by d (f c g d a e b). With the dorian D -mode as default for the scale-degree and roman-numeral shorthand systems, there would have been three modes sharpwards (aeolian, phrygian, locrian) and three flatwards (mixolydian, ionian, lydian); and the assignment of apposite accidentals would have been more equitable.²⁶

Music examples (notated)

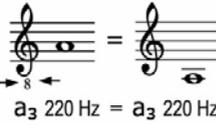
This book contains hundreds of notated music examples and figures containing musical notation. As explained earlier, many music examples cited as notation in this book can also be both heard as audio and viewed in better resolution on line (see p. 29).

I'm not a guitarist. Sometimes I transcribe as a typical keyboard player. I apologise if my voicings of guitar chords are wrong. However, guitarists Diego García Peinazo, Jacopo Conti and Franco Fabbri have helped with the transcription of several guitar-based examples.²⁷

26. It would also have been in line with notions of *modus protus plagalis* and *authenticus*. This historical anomaly may explain the proliferation of \flat s and the paucity of \sharp s in front of roman-numeral chord designations but it doesn't explain why Western music theory became so ionianised in the first place.

8va and 15ma bassa

The TENOR CLEF, familiar to guitarists, is a G clef (♯) with an ‘8’ underneath. It’s USED FREQUENTLY in music examples covering the MID REGISTER. The idea is to save space, cut down on leger lines, and to avoid switching between G and F clefs. Please look for the little ‘8’ (*8va bassa* = octave below): the two notes shown in Figure 1 sound at exactly the same pitch.²⁸ On a few occasions ‘15ma bassa’ is used to indicate notes sounded two octaves lower.

Fig. 1. *8va bassa**Progressions and sections*

Note names or chord designations occurring in sequence are usually separated by HYPHENS or by a simple space (e.g. ‘d g f# a’ or ‘d-g-f#-a’; ‘C Am F G’ or ‘D-Bm-G-A’; ‘I vi ii V’ or ‘I-vi-IV-V’).

To highlight the *unidirectional aspect* of TONAL PROGRESSIONS, a right-pointing arrow is sometimes used, e.g. ‘ii→V→I’, ‘Gm7→C7→F’. A *chord shuttle* (oscillation between two chords) is indicated by a double-headed arrow, e.g. ‘i↔IV’, ‘Gm7↔C’. *Chord loops* — short repeated sequences of usually three or four chords— are delimited by arrows turning through 180° before and after the relevant sequence, e.g. ‘↵I-vi-IV-V↵’, ‘↵F-Dm-Bb-C↵’.

DIAGONAL ARROWS are used to indicate PITCH DIRECTION, e.g. the descending character of an Andalusian cadence $\text{iv}\searrow\flat\text{III}\searrow\flat\text{II}\searrow\text{I}$. They are also used to distinguish between intervallic leaps like $\text{c}\searrow\text{e}$ (a falling minor sixth) and $\text{c}\nearrow\text{e}$ (a rising major third).

Confusion can arise between capital letters indicating key (*Tonart*) and those acting as label for a SECTION in the music under discussion; for example, ‘A is in B and B in A in this AABA tune by Abba’. As a general rule I put *musical section letters in italics between single quotes* (e.g. “the ‘A’ section in [the key of] A” [roman, no quotes]), or refer to it as ‘V’ (for verse), or ‘R’ for refrain, etc.²⁹

27. Drumkit parts are not included in this book about tonality.

28. C clefs are not used in this book.

29. I once used letters from the end of the alphabet to label sections (WXYZ) but it was problematic. Should AABA become WXXW or ZZZZ (reverse order)-

Language and typography

Pronunciation

A phonetic font is occasionally used to suggest the UK pronunciation of words according to the symbols shown in Table 3.

Table 3. *Phonetic symbols for ‘BBC English’*

ɑ:	<u>ah!</u> , <u>harp</u> , <u>bath</u> , <u>laugh</u> , <u>half</u>	ɔ	<u>hot</u> , <u>what</u> , <u>want</u> , <u>Australia</u>
æ	<u>hat</u> , <u>cat</u> , <u>map</u> , <u>Africa</u>	o:	<u>or</u> , <u>oar</u> , <u>awe</u> , <u>war</u> , <u>all</u> , <u>taught</u> , <u>ought</u>
aɪ	<u>eye</u> , <u>I</u> , <u>my</u> , <u>fine</u> , <u>high</u> , <u>hi-fi</u>	ɔɪ	<u>boy</u> , <u>coil</u> , <u>Deutschland</u>
aʊ	<u>down</u> , <u>about</u> , <u>Bauhaus</u> , <u>cow</u> , <u>now</u> (not <i>know</i> [nəʊ]), <u>plough</u> (cf. o: and əʊ)	ə	<u>about</u> , <u>killer</u> , <u>tutor</u> , <u>nation</u> , <u>currant</u> , <u>current</u> , <u>colour</u> , <u>fuel</u> , <u>little</u> , <u>liar</u> , <u>lyre</u> , <u>future</u> , <u>India</u> , <u>confer</u> , <u>persist</u> , <u>adapt</u>
ð	<u>the</u> , <u>that</u> , <u>breath<u>e</u></u> , <u>clothes</u> , <u>alth<u>o</u>ugh</u> , <u>weath<u>e</u>r</u> (cf. θ)	ə:	<u>circumspect</u> , <u>fern</u> , <u>fir</u> , <u>fur</u> , <u>learn</u> ,
dʒ	<u>jazz</u> , <u>John</u> , <u>gin</u> , <u>footage</u> , <u>bridge</u> , <u>Fiji</u> , <u>Dj<u>a</u>ngo</u> (cf. ʒ)	əʊ	<u>no</u> , <u>know</u> , <u>toe</u> , <u>toad</u> , <u>cold</u> , <u>low</u> , <u>alth<u>o</u>ugh</u> , (cf. aʊ, o:)
ɛ	<u>help</u> , <u>better</u> , <u>measure</u> , <u>leisure</u>	ʃ	<u>sh<u>i</u>rt</u> , <u>stat<u>i</u>on</u> , <u>Sean</u> , <u>champagne</u> , <u>Niš</u>
ɛ:°	<u>air</u> , <u>bear</u> , <u>bare</u> , <u>there</u> , <u>they’re</u>	tʃ	<u>ch<u>u</u>rch</u> , <u>cello</u> , <u>fu<u>t</u>ure</u> , <u>Czech</u> , <u>há<u>č</u>ek</u>
ɛɪ	<u>date</u> , <u>day</u> , <u>wait</u> , <u>station</u> , <u>email</u> , <u>pat<u>i</u>ent</u> , <u>hey!</u>	θ	<u>th<u>i</u>nk</u> , <u>th<u>r</u>ow</u> , <u>noth<u>i</u>ng</u> , <u>cloth<u>h</u></u> (cf. ð)
ɪ	<u>it</u> , <u>fit</u> , <u>minute</u> , <u>pretend</u>	ʌ	<u>bu<u>t</u></u> , <u>lu<u>c</u>k</u> , <u>w<u>o</u>n</u> , <u>col<u>o</u>ur</u>
i:	<u>sees</u> , <u>seas</u> , <u>seize</u> , <u>Fiji</u> , <u>email</u>	u:	<u>fo<u>o</u>d</u> , <u>co<u>o</u>l</u> , <u>ru<u>l</u>e</u> , <u>ru<u>d</u>e</u> , <u>throu<u>g</u>h</u> , <u>threw</u>
ɪ:°	<u>hear</u> , <u>here</u> , <u>beer</u> , <u>pier</u>	ʊ	<u>fo<u>o</u>t</u> , <u>loo<u>k</u></u> , <u>b<u>u</u>sh</u> , <u>pu<u>t</u></u>
j	<u>yes</u> , <u>use</u> , <u>Europe</u> , <u>Göteborg</u> , [jœtɛˈbɔrj], <u>Jaroslav</u> [ˈjɑrɔslav]	ju:	<u>u<u>s</u>e</u> , <u>fe<u>w</u></u> , <u>fu<u>t</u>ure</u> , <u>new music</u> , <u>tune</u> , <u>que<u>u</u>e</u> [kju:]
ŋ	<u>sing<u>i</u>ng</u> , <u>synchronise</u> , <u>think</u> , <u>gong</u> , <u>incredible</u> ,	ʒ	genre [ˈʒɑ:nr°], <u>vision</u> , <u>measure</u> , <u>João</u> , <u>montage</u> , <u>Rózsa</u> , <u>Zhivago</u> , <u>Žižek</u>
° = start of stressed syllable		: = long vowel	

Spelling and punctuation

Spelling generally follows the in-house style of the Cambridge University Press journal *Popular Music*, for example REALISE, ADVERTISEMENT, ORGANISATION, COLOUR, TRAVELLED, FOCUSsing, CENTRE, PROGRAMME, etc. (not REALIZE, COLOR, TRAVELER, CENTER, etc.).

Default quotes are single ‘like this’, while quotes within quotes are double, ‘I mean “like this” inside this’.

Capitals and italics

CAPITALS are in general used according to the norms set out in section 6.9 of *Assignment and Dissertation Tips* (Tagg, 2001).

Mode names

In written English, distinction is made between *Roman*, which means relating to Rome or its inhabitants, and *roman*, which does not, as in ‘roman font’ or ‘roman letters’.³⁰ It also applies to the difference between *Lydian*, meaning relative to the province or people of Lydia, and *lydian*, as in the ‘lydian mode’, as well as to the distinction between *Phrygian* and *phrygian*, *Dorian* and *dorian*, etc. Since those cultures and ethnic identities are long gone, the modes named after them have for many centuries been a mere convention bearing no relation to the peoples whose names they once bore. That’s why *ionian*, *dorian*, *phrygian*, *lydian*, *mixolydian*, *aeolian* and *locrian* start with a lower-case letter when qualifying modes. Other mode names like *Gypsy*, *Kurd* and *Hijaz* do relate to existing places, peoples or cultures and *are* spelt with an initial capital.

Small capitals

SMALL CAPITALS are used for four purposes, the first three of which occur in the main body of text, the first of those deriving from their usage in Lakoff and Johnson (1979).

[1] To save space and to avoid having to insert hyphens and inverted commas when introducing a short string of words, often used adjectivally, to denote an integral concept, for example: *THE MUSIC IS MUSIC myth lives on in the jazz conservatoire.*

[2] To highlight an IMPORTANT TERM, especially when it’s introduced for the first time.

[3] To save page space with frequently recurring capital-letter abbreviations, e.g. DVD and MIDI instead of DVD and MIDI.

[4] To facilitate quicker identification of alphabetically ordered entries in the Reference Appendix.

Italics

Italics are in general used according to the norms set out in section 6.10 of *Assignment and Dissertation Tips* (Tagg, 2001).

30. Roman letters are so named regardless of where such script may have originated. *Rōmanji*, Japanese for *roman*, means roman lettering (like here) as opposed to more indigenous types of script (*katakana*, *hiragana*, *kanji*).

Other practicalities

Abbreviations

Abbreviations are explained in the Glossary (p. 479, ff.).

Timings and durations

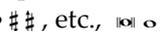
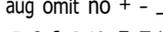
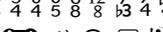
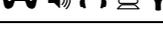
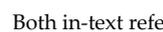
Most recordings exist in digital form and digital playback equipment includes real-time display. That’s why the exact indication of musical events is mainly presented in terms of timecode location. With ‘0:00’ indicating the start of the recording in question, ‘0:56’ means at a point 56 seconds after 0:00. Durations are expressed in the same form, e.g. ‘4:33’ meaning 4 minutes and 33 seconds.

Footnotes

The software used to produce this book, Adobe FrameMaker v8.0, has one irritating bug: if there isn’t enough room at the bottom of the page for the complete text of a footnote, the software puts the entire footnote text at the bottom of the following page, rather than starting the footnote text at the bottom of the correct page and continuing it on the next one. Therefore, if there is no text at the bottom of the page on which a footnote flag number occurs in the main body of text, do not be alarmed. The complete footnote text will appear at the bottom of the next page.

Occasionally the same footnote number³¹ occurs twice in succession, like this.³¹ That is intentional. Both refer to the same footnote.

Fonts

I have been asked about the fonts I use in my writings. I compile them from various sources. They can be downloaded for free. Go to  tagg.org/zmisc/FontKeys.html and look under ‘Four useful home-compiled fonts’. The fonts include such characters as x † # b bb db d b † # #, etc., , etc., , : || ↗ ↘ → ↔ ↗ ↘ - ← ↑ ↓ ↗ ↘ ↗  1 2 3 4 5 6 7 8 9, etc.,  ∅ ∆ maj add dim sus aug omit no + - - 1 1 1 2 2 2 2 2 3 3 3 3 3 3 b # # # #, etc., 4[♯] 4[♭] 4[♮] 4[♯] 5[♯] 5[♭] 5[♮] 4[♯] 4[♭] 4[♮] 5[♯] 5[♭] 5[♮] etc.,  ©     (R) (R) (P) (P)                   etc. You’ll also find a pho-

31. Both in-text references are intended to link to this same single footnote.

netic font [fəʊ'netɪk] (used in 3, p. 39), as well as both a Cyrillic (Кириллица) and a Greek polytonic keyboard (ὁ ῥυθμός, ἡ ἄρμονια, ἡ ᾠδή, ἡ μελογραφία) plus instructions for producing simplified Chinese characters, e.g. 中国音乐通. You can also type *Dvořák* (real Czech name) rather than 'Dvorak' (anglocentric), *leçon* (decent) rather than 'lecon' (obscene), *Ångström* (real Swedish name) instead of 'Angstrom' (anglocentric), etc.

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I'd like to thank Franco Fabbri (Milano) for having persuaded me to start on this book and for encouraging me in my struggle with it. He has helped on several occasions in preparing this edition with his guitar-playing skills, his knowledge of Richard Thompson's oeuvre and with general advice about what and what not to include. He and Bob Davis (Leeds) have been my main 'go-to' people whenever I got stuck or felt unsure if I was on the right track. I'm also indebted to Kaire Maimets-Volt (Tartu) for her critical reading of this edition, for her corrections and constructive suggestions, as well as for encouragement and moral support.

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