

Second Edition

How Music

REALLY Works!

The
ESSENTIAL
HANDBOOK for
songwriters,
performers, and
Music Students



**Wayne
Chase**

How Music **REALLY** Works!

**The Essential Handbook
for Songwriters, Performers, and Music Students
SECOND EDITION**

Wayne Chase



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CONTENTS

PART I THE BIG PICTURE

Introduction:

Yes, You Can Create Compelling, Emotionally Powerful Music and Lyrics ... If You Know What You're Doing 3

Intro.1 Music Notation? Not Here!... 3

Intro.2 An Essential Skill Songwriters and Performers Lack... 5

Intro.3 Technique First, Then Emotional Abandon... 5

Intro.4 What You Need to Know to Understand Everything in This Book... 8

Intro.5 The Territory Ahead... 8

1 What Music REALLY Is, Who Makes It, Where, When, Why 11

1.1 What Is Music?... 12

1.2 Who Makes Music?... 13

1.3 Where Does Music Come From?... 16

1.4 When Did Music Get Started?... 53

1.5 Why Is There Such a Thing as Music?... 71

2 What the Popular Music Industry REALLY Is, and Where It Came From 101

2.1 Origin of Popular Music as an Industry... 102

2.2 African American Dominance... 104

2.3 Your Musical Roots: How the Major Genres Emerged... 106

2.4 Why There's No Such Thing as "Progress" In the Arts, Including Music... 111

2.5 Musical Genres as Cultural Infrastructures... 117

2.6 A Brief Look at the Major Genres of Western Popular Music... 120

PART II

ESSENTIAL BUILDING BLOCKS OF MUSIC

3 How Tones and Overtones REALLY Work **147**

3.1	<i>Tones and Their Properties.</i>	147
3.2	<i>Overtones: The Harmonic Series.</i>	154
3.3	<i>How Musical Instruments Work (Including the Voice).</i>	162
3.4	<i>Tone Properties and Their Emotional Effects.</i>	171

4 How Scales and Intervals REALLY Work **177**

4.1	<i>Scales: Brain-averse, Brain-friendly.</i>	177
4.2	<i>Intervals.</i>	192
4.3	<i>Interval Dynamics.</i>	208
4.4	<i>Emotional Effects of Intervals.</i>	221

5 How Keys and Modes REALLY Work **223**

5.1	<i>Scales from Around the World.</i>	223
5.2	<i>The Modes: Scales of the Diatonic Order.</i>	230
5.3	<i>Keys, Major and Minor.</i>	241
5.4	<i>Tuning, Temperament, and Transposing.</i>	259
5.5	<i>Modulation and Tonality.</i>	266

PART III

HOW TO CREATE EMOTIONALLY POWERFUL MUSIC AND LYRICS

6 How Chords and Chord Progressions REALLY Work **283**

6.1	<i>Where Chords Come From.</i>	283
6.2	<i>Triads and Sevenths: The Foundation of All Western Tonal Harmony.</i>	290
6.3	<i>Introduction to Chord Progressions.</i>	305
6.4	<i>The Nashville Number System.</i>	308

6.5	<i>The Four Types of Chord Progressions</i>	316
6.6	<i>Scales of Chords? Yes!</i>	327
6.7	<i>Inside the Circular Harmonic Scale</i>	348
6.8	<i>Chase Charts: Chord Progression “Maps”</i>	362
6.9	<i>Chase Charts of the Four Types of Chord Progressions</i>	371
6.10	<i>Examples: Chase Charts of Great Songs without Modulation or Chromatic Chords</i>	382
6.11	<i>Examples: Chase Charts of Great Songs without Modulation, with Chromatic Chords</i>	407
6.12	<i>Modulation Ways and Means</i>	420
6.13	<i>Examples: Chase Charts of Great Songs with Modulation, without Chromatic Chords</i>	429
6.14	<i>Examples: Chase Charts of Great Songs with Modulation and Chromatic Chords</i>	443
6.15	<i>When Chord Progressions Go Bad</i>	449
6.16	<i>What About Chord Progressions Based on the Church Modes?</i>	453
6.17	<i>Chords and Chord Progressions: Maximizing Emotional Impact</i>	462
6.18	<i>10 Chord Progression Guidelines</i>	466

7 **How Beat, Pulse, Meter, Tempo, and Rhythm REALLY Work** **473**

7.1	<i>Evolution, the Brain, and Rhythm</i>	473
7.2	<i>Your Brain’s Evolved Memory Functions</i>	475
7.3	<i>Beat vs Pulse</i>	484
7.4	<i>Types of Pulse</i>	489
7.5	<i>Meter and Time Signature</i>	494
7.6	<i>Varieties of Meter</i>	498
7.7	<i>Tempo</i>	514
7.8	<i>Rhythm, the Soul of Melody</i>	522
7.9	<i>Meter and Rhythm in Popular vs “Classical” Music</i>	532
7.10	<i>Meter, Tempo, and Rhythm: Unity and Variety</i>	536

8 **How Phrase and Form REALLY Work** **541**

8.1	<i>Distinguishing Between VM (Vocal-melodic) Phrases and Structural Phrases</i>	541
8.2	<i>Why Binary Structure Is the Soul of Great Popular Song Form</i>	545
8.3	<i>Other Matters of Phrase and Form</i>	558
8.4	<i>Form: Unity, Variety, and Emotional Impact</i>	563

9 How Melody and Melody-harmony Integration REALLY Work 567

9.1	<i>Evolution, Music, and Emotional Arousal.</i>	567
9.2	<i>Melody, Memory, and Memes.</i>	575
9.3	<i>Melodic Unity and Coherence.</i>	578
9.4	<i>Tune and Chord Progression.</i>	580
9.5	<i>VM Phrases Within Structural Phrases: From Weill and Brecht to Bowie and Beck.</i>	585
9.6	<i>10 Techniques for Creating Emotionally Powerful Tunes (#1): Don't Let Your Comfort Zone Select Certain Song Elements.</i>	598
9.7	<i>10 Techniques for Creating Emotionally Powerful Tunes (#2): Recognize the Primacy of Rhythm Patterns.</i>	602
9.8	<i>10 Techniques for Creating Emotionally Powerful Tunes (#3): Use Sequences.</i>	604
9.9	<i>10 Techniques for Creating Emotionally Powerful Tunes (#4): Use the Same Rhythm Pattern with Multiple Melodies.</i>	607
9.10	<i>10 Techniques for Creating Emotionally Powerful Tunes (#5): Mix Up Steps, Leaps, and Repeats.</i>	609
9.11	<i>10 Techniques for Creating Emotionally Powerful Tunes (#6): Mix Up Note Values.</i>	614
9.12	<i>10 Techniques for Creating Emotionally Powerful Tunes (#7): Use Modulation.</i>	616
9.13	<i>10 Techniques for Creating Emotionally Powerful Tunes (#8): Use Non-chord (Non-harmonic) Tones on Accented Beats.</i>	617
9.14	<i>10 Techniques for Creating Emotionally Powerful Tunes (#9): Use Modal Scales with Diatonic Chords.</i>	621
9.15	<i>10 Techniques for Creating Emotionally Powerful Tunes (#10): Incorporate a (Repeating) Melodic Climax.</i>	623
9.16	<i>Putting It All Together: A Suggested Approach to Composing Tunes.</i>	628
9.17	<i>Melody: Unity, Variety, and Emotional Impact.</i>	636

10 How Lyrics REALLY Work 641

10.1	<i>Evolution and Language: The Biology of Lyrics.</i>	641
10.2	<i>Lyrics in Semantic Space: The Central Importance of EPA.</i>	645
10.3	<i>Lyrical Emotion: Choice of Words.</i>	650
10.4	<i>10 Techniques for Creating Emotionally Powerful Lyrics (#1): Use Four Essential Tools.</i>	658
10.5	<i>10 Techniques for Creating Emotionally Powerful Lyrics (#2): Use a High Proportion of Personal Words.</i>	659
10.6	<i>10 Techniques for Creating Emotionally Powerful Lyrics (#3): Use a High Proportion of Personal Sentences.</i>	663
10.7	<i>10 Techniques for Creating Emotionally Powerful Lyrics (#4): Prefer Concrete Symbols and Imagery to Abstract Ideas and Concepts.</i>	666

10.8 10 Techniques for Creating Emotionally Powerful Lyrics (#5):
*Sail Beyond the Horizon of Logic and the Real World—But Use
the Wundt Curve to Chart Your Way*..... 668

10.9 10 Techniques for Creating Emotionally Powerful Lyrics (#6):
*Know How to Proportion Unique Content-words, Function-words,
and Repeated Words*..... 674

10.10 10 Techniques for Creating Emotionally Powerful Lyrics (#7):
Live for Parallel Construction, Die for Parallel Construction..... 676

10.11 10 Techniques for Creating Emotionally Powerful Lyrics (#8):
Find Time to Rhyme..... 683

10.12 10 Techniques for Creating Emotionally Powerful Lyrics (#9):
Adhere to the Accent-matching Law (for the Most Part)..... 696

10.13 10 Techniques for Creating Emotionally Powerful Lyrics (#10):
Don't Hesitate to Revise..... 704

10.14 *Putting It All Together: A Suggested Approach to Composing Lyrics*... 706

10.15 *Lyrics: Unity, Variety, and Emotional Impact*..... 732

11 How Repertoire, Signature, and Performance

REALLY Work **737**

11.1 *Repertoire*..... 737

11.2 *Your Signature Sound and Style*..... 745

11.3 *Performing Live*..... 765

11.4 *Performing in the Studio*..... 774

PART IV: MAKING A LIVING IN MUSIC

12 How the Music Business and Music Entrepreneurship

REALLY Work **779**

12.1 *Starters*..... 780

12.2 *Your Public Image*..... 787

12.3 *Your Own Label*..... 797

12.4 *Indie Labels and Major Labels*..... 809

Epilogue..... 821

RESOURCES AND REFERENCES

Appendix 1: Roedy Black's Chord Progression Chart..... 825

Appendix 2: Useful Websites and Resources..... 829

Appendix 3: Winners of the Moose Nobel Prize in Music, 1901-2006. 831
Notes. 839
References. 847
Index. 869

INTRO.4

WHAT YOU NEED TO KNOW TO UNDERSTAND EVERYTHING IN THIS BOOK

In short, not much. Here's a list:

- How to count to 32 (well, maybe all the way up to 64).
- How to locate and play the notes A, B, C, D, E, F, and G on a piano or guitar or other instrument.
- Roman numerals from "I" up to "VII".
- The meaning of simple ratios, such as "2:1", as in "At the Wrong Ranch Saloon, Moosehead beer outsells Diet Coke 2:1".
- How to find, explore, and exploit the *Gold Standard Song List* (hint: it's at www.GoldStandardSongList.com).
- What songs to play on your mouth organ for your horse as you ride along in the Deep Purple of Twilight Time through the Blue Shadows on the Trail.

The farther you travel, the more you will need to get acquainted with the *Gold Standard Song List* and the instructions at that website on how to listen to free, legal excerpts of songs, and how to get the lyrics for any of the songs.

INTRO.5

THE TERRITORY AHEAD

All songs spring from songwriters' information-processing brains. Great songwriters reveal in their songs (both music and lyrics) an intuitive understanding of the evolutionary biology of music. That's the subject of Chapter 1.

Songs become timeless classics if they tap into shared human universals, aspects of evolved behaviour that have not changed in tens or hundreds of thousands of years. As you go through this book, you'll learn how to apply insights about how your brain works in the process of creating and performing your songs. And how your listeners' brains work when they hear your songs.

Is it tough to learn?

In a word, nah. It ain't rocket science.

1

What Music REALLY Is, Who Makes It, Where, When, Why

Information is not knowledge. Knowledge is not wisdom. Wisdom is not truth. Truth is not beauty. Beauty is not love. Love is not music. Music is the best.

—FRANK ZAPPA

1.0.1

PIQUING THE POLARIZED

Chapter 1 addresses these five basic questions about music:

1. WHAT is music?
2. WHO makes music?
3. WHERE does music come from?
4. WHEN did music get started?
5. WHY is there such a thing as music?

The other question, “HOW does one go about creating music worth listening to?” takes nine chapters to answer—Chapters 3 through 11, the main part of the book.

Tackling the five “Ws” of the phenomenon of music necessitates delving into Darwinian natural selection and sexual selection. If you have a strong religious faith,

TABLE 1 Brain Lateralization In Music Processing

Left hemisphere (connected to right ear and right side of body) processes:	Right hemisphere (connected to left ear and left side of body) processes:
<ul style="list-style-type: none"> • Time-based elements of music (rhythm) using sequence-processing modules • Rhythmic aspects of melody • Rapidly-changing information such as speech—<i>sequences</i> of words. 	<ul style="list-style-type: none"> • Pitch-based elements such as the shape of a melody (melodic contour) and tonal patterns • Harmony; the right hemisphere is better at spatial cognition; in a sense, the right hemisphere processes pitch and harmony as “spatial” elements of sound • The emotional tone of voice (via the left ear, which is connected to the right hemisphere) better than the left hemisphere

Brain Lateralization and Music Mixing

Record producers and recording engineers, if they know what they’re doing, take into account brain lateralization in producing a stereo mix:

- Rhythm-heavy tracks sound more natural if biased a little to the right speaker (right ear; left brain hemisphere).
- Harmony-rich tracks sound better if biased a little to the left speaker (left ear; right brain hemisphere).
- Tracks requiring both melodic and rhythmic processing, such as lead vocals (including rapping, which has a lot of melodic content), sound better in the middle.
- If lyric intelligibility is a problem, right-speaker bias may help, as the right ear is connected to the speech- and sequence-processing left hemisphere.

sophisticated enough. It's because the music itself amounts to pretentious, meaningless rubbish.

1.3.24

MUSICAL UNIVERSALS

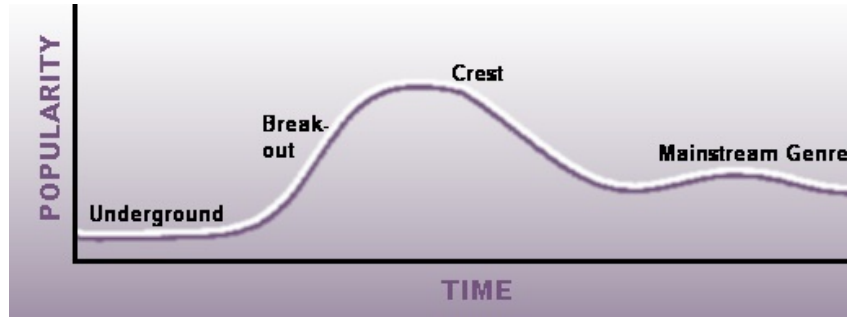
Similar musical elements show up to some degree in the music of all cultures. For example, Westerners listening to Hindustani music report feeling the same specific emotions as the emotions Hindustani musicians report they are intending to convey. Similarly, young children specify the same emotions elicited by a piece of music as do adults. If you could time-travel, you would find the same musical universals in the music of cultures that went extinct tens of thousands of years ago.

Today, music likely tops the list of all the artistic activities humans practise globally. Here are some musical universals (Table 3)—musical traits found in all musical cultures worldwide (not necessarily characteristic of every *individual*, but in pretty much all cultures):

TABLE 3 Some Musical Universals

Cadence	Music used in ritual or religious practice
Children's music as its own genre	Music used to mark important events
Dancing to musical accompaniment	Musical instruments
Emotions aroused by the same musical information are the same emotions (i.e., not dependent on previous exposure or knowledge of the music being played)	Phrase as the basic unit of musical structure
Harmonic sensing automatic (i.e., ability to sense a note and relate it harmonically to other notes)	Resources and time dedicated to music are substantial (applies as much to industrial societies as to hunter-gatherer societies)
Infants' ability to discriminate differences in pitch and timing	Rhythm based on isometric beats
Intervals with small-integer frequency ratios, such as octaves, fifths, and fourths	Rhythmic pulse groupings of 2 or 3 beats
Melody, and grouping of melodic notes into sequences	Scales of 7 or fewer different pitches to the octave
Music considered as art	Scales with unequal steps, such as the pentatonic scale
Music listening involves rhythmic bodily movement (entrainment)	Song classification/categorization
Music not a rare talent	Songs with short repetitive phrases within a range of a perfect fifth
	Symmetry in musical structure/Form
	Vocal music, practised by both men and women

FIGURE 2 Genre Popularity Over Time



1. Origins, or “Underground” Phase

- Typically, a musical genre begins as an underground movement. This formative phase often lasts many years, even decades.
- New genres and sub-genres emerge in several ways. Among them:
 - Musicians from outside a geographical region move in and bring new instruments and new styles of playing, singing, and songwriting to an established local musical tradition.
 - A genius comes along and decides to shake things up (Charlie Parker, Bob Dylan).
 - New technology makes it possible to create new sounds.

2. Breakout

- At some point the genre breaks out as a widely recognized musical phenomenon in popular culture.
- The new style attracts the attention of masses of people, including musicians just getting started, musicians working in other genres, music consumers, and music business people.

- Suddenly, performers everywhere are playing in the new style. Lots of the new music get recorded and sold. Over a comparatively short period of time, the new genre or sub-genre becomes all the rage.

3. Crest

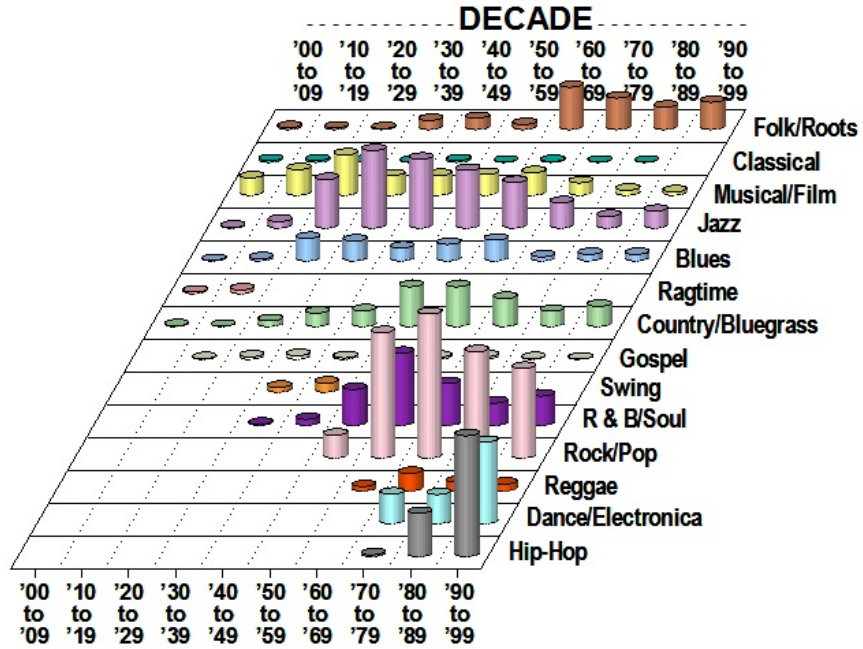
- Inevitably, within a decade or two, the popularity of the genre crests and starts to subside.
- Along the way, it spins off numerous sub-genres.
- The original one does not go away.

4. Mainstream Genre

- Instead, with few exceptions, it remains a permanent mainstream genre, co-existing, influencing, and being influenced by, many others. For example, when bluegrass was “invented” in the 1930s and 40s, it did not replace traditional country music. Neither did “new country,” a couple of generations later. When hip-hop and electronic dance music came along, they did not replace mainstream pop or rock.
- So many people accept and adopt the elements of the genre that it becomes a *cultural infrastructure* (more on this a bit later). It settles into the mainstream of popular culture—not as popular as it once was, but permanently accepted and established.
- Every so often a long-established mainstream genre experiences a period of renewed popularity (“revival”) that may extend for some years.

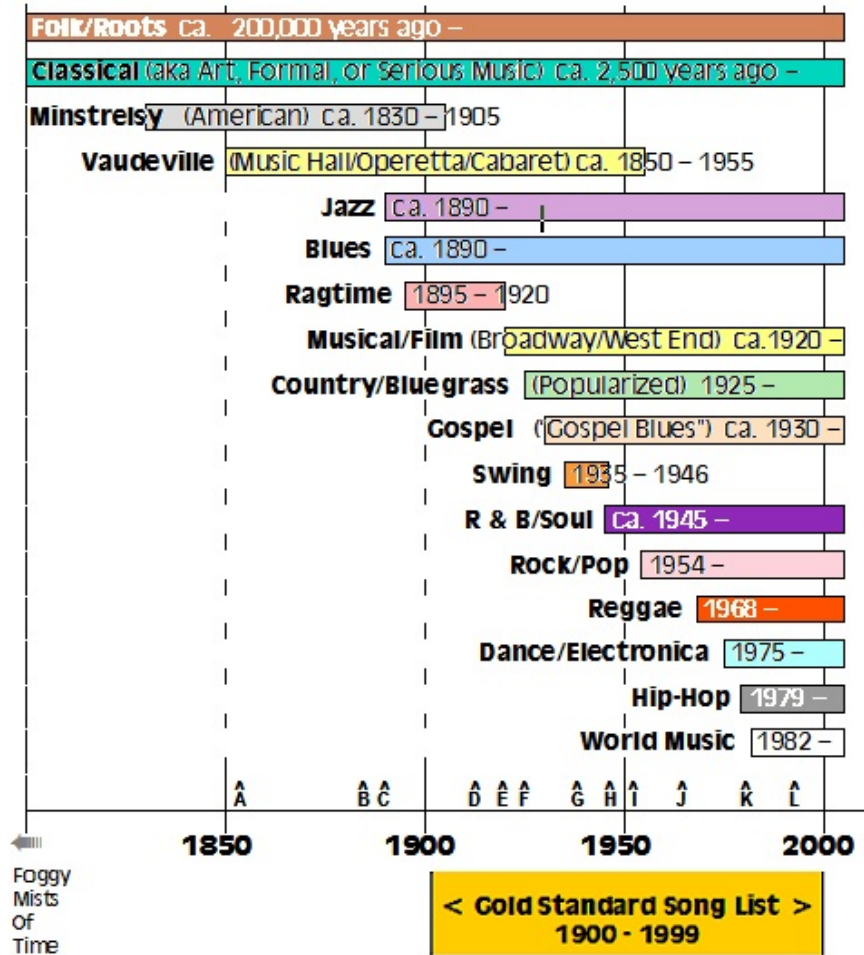
The Gold Standard Song List (GSSL) a sample of 5,000 songs over 100 years, provides a visual representation of genre popularity profiles over time (Figure 3):

FIGURE 3 Gold Standard Songs by Genre and Decade



Today, many young people, while identifying mainly with *their* music (the music of their youth), like to sample music across genres and eras. On a single iPod you might find the Clash, Beethoven, Aretha Franklin, Eminem, Iggy Pop, Bjork, Frank Sinatra, Johnny Cash

FIGURE 4 Genre Breakouts In Historical Perspective



A FEW SIGNIFICANT DATES IN THE HISTORY OF POPULAR MUSIC

- | | |
|--|---|
| A 1850s Stephen Foster's greatest hits | G 1939 BMI established |
| B 1886 Berne Int'l Copyright Convention | H 1948 Regular network TV begins |
| C 1890 Commercial recording begins | I 1950-54 Fender Tele & Strat; Gibson Les Paul |
| D 1914 ASCAP established | J 1964 Moog synthesizer |
| E 1920 Commercial radio begins | K 1981 MTV begins |
| F 1926 First movies with sound | L 1994 Internet becomes mainstream |

Occasionally, a major genre, after flourishing for a time, becomes extinct, such as ragtime and American minstrelsy. Usually the reason is that another genre comes

3.4

Tone Properties and Their Emotional Effects

3.4.1

EMOTIONAL VALENCE AND INTENSITY

To close out this chapter on tones and overtones, a word or two on the emotional effects of tone properties.

Chapter 9 goes into considerable detail about music and emotional arousal. However, every chapter from this one through Chapter 10 discusses the emotional effects of some element or elements of music (including lyrics). Emotions have a couple of properties:

1. Valence

Valence just refers to kinds of emotions, such as anger, sadness, or joy, and whether they're *positive* or *negative*. (Emotions aren't neutral.)

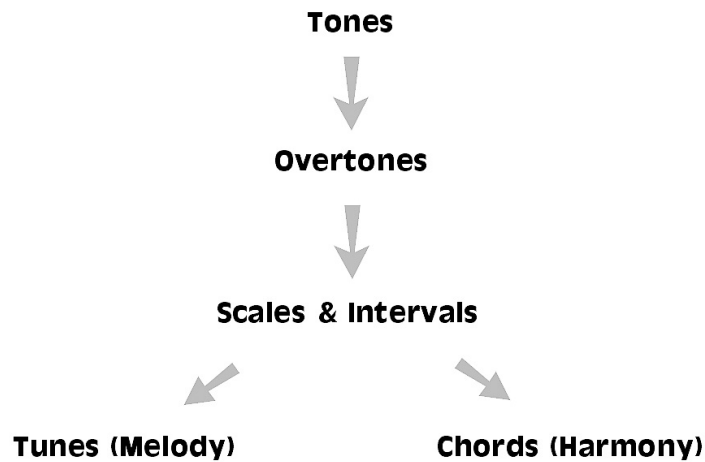
- **Some positive emotions:** adoration, tenderness, amusement, glee, delight, bliss, gratitude, serenity
- **Some negative emotions:** depression, despair, anxiety, panic, abhorrence, bitterness, embarrassment, guilt

As discussed in Chapter 1, emotions evolved as adaptations. They tend to manifest automatically, usually in response to some kind of surprise. Sometimes they spark quick action, not only in humans but in many species—for example, the universal fight-or-flight response to something in the environment that engenders rage or fear, respectively.

Only when you get to intervals does the possibility of music even arise.

Here's a little flow diagram that summarizes these relationships (Figure 17). The arrows mean "give rise to":

FIGURE 17 Pathway to Tunes and Chords



4.3 Interval Dynamics

4.3.1

MUSICAL DRAMA

Recall that an interval is a *relationship* between two pitches. Why the stress on "relationship"? Because that's where the "music" in tunes and harmony comes from. Each note in a scale, and, ultimately, in a tune, sounds restful or restless, relaxed or tense, depending on the note's position with *respect to the other notes* in the scale or tune. These note-to-note relationships, the urges and forces your brain perceives when it hears a tune, are called *interval dynamics*.

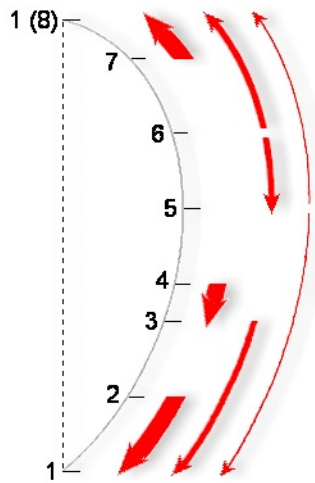
When you play a single note, that's all your brain perceives. Just a note. Not music (ignoring, for the time being, the tiny little matter of rhythm). But when you play at least two successive notes that are different from each other—an interval—suddenly you have at least the possibility of music.

In Figure 20 below, the arrows show the tensions, the unrest your brain perceives in the relationships between the tones (that is, the intervals), as you play the scale up or down.

The term *interval dynamics* refers to the fact that, once your brain understands which note is the tonic note, it perceives the succession of tones as *energized, dynamic players that move in force fields*—not as static, lifeless beads on a string. Without interval dynamics, there'd be no music.

In Figure 20, the thicker the arrow, the greater the dynamic tension or unrest.

FIGURE 20 Interval Dynamics: How Your Brain Actually Hears the Major Scale



4.3.5

INTERVAL DYNAMICS: MUSICAL ROAD TRIPS

Recall that simple ratios of frequencies gave rise to a scale in the first place. However, some frequency ratios within the scale are simpler than others. When your brain

Here's another way of looking at the way the tones of the major scale gravitate towards the tonal centre (Figure 21):

FIGURE 21 Interval Dynamics: "Gravitational Force" of the Tonic Note

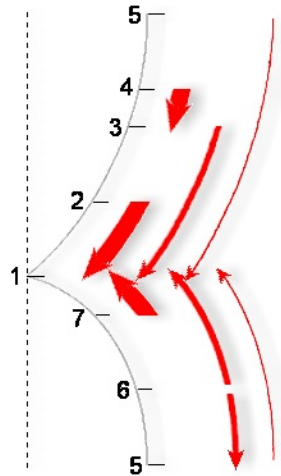


Figure 21 illustrates the appropriateness of the term “diatonic.” All the notes of this type of scale ultimately relate to each other *diatonically*—“through” or “by” the “tonic” note.

When you play a simple major scale, how does your brain automatically figure out and interpret what it’s hearing? Table 20 below shows the basics. You need context. Your brain needs to process all of the notes successively for you to feel these effects.

4.4

Emotional Effects of Intervals

Table 21 below lists some reported emotional effects of various types of intervals, and specific intervals.

Keep in mind that the emotional effects of the intervals listed below, like the emotional effects of other musical elements, vary with the musical context—the succession of preceding intervals, the prevailing chords and chord changes, rhythmic variables, instrumental tone colors, and so forth.

TABLE 21 Emotional Effects of Intervals

Interval or Interval Type	Associated Emotions
Consonant intervals	Pleasantness, generally positive emotional valence; not as strong or active as dissonant intervals
Dissonant intervals	Generally negative emotional valence, strength, activity
Major intervals	Brightness, strength
Minor intervals	Dullness, weakness
Large intervals	Power
Small intervals	Weakness
Minor second	Melancholy, displeasure, anguish, darkness
Major second	Pleasurable longing, displeasure (neutral as a passing tone; see Chapter 9)
Minor third	Tragedy, sadness
Major third	Joy, happiness, brightness
Perfect fourth	Buoyancy, pathos (neutral as a passing tone; see Chapter 9)
Tritone (<i>diabolus in musica</i>)	Violence, danger, tension, devilishness (of course!)

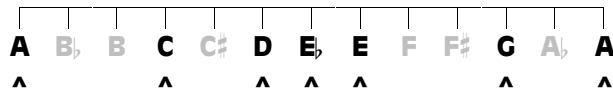
Perfect fifth	Cheerfulness, stability
Minor sixth	Anguish, sadness
Major sixth	Winsomeness, pleasurable longing (neutral as a passing tone; see Chapter 9)
Dominant seventh	Irresolution, displeasure, mournfulness
Major seventh	Aspiration, displeasure, violent longing
Octave	Lightheartedness (i.e., sudden melodic leap)

5.1.5

BLUES SCALE

The blues scale (Figure 26 below) is almost the same as the minor pentatonic scale, except that it has an extra note in the middle. The addition of that extra note, sometimes called a *blue note*, gives this scale a considerably different sound from the minor pentatonic.

FIGURE 26 Blues Scale (6 Intervals, 7 Notes)



5.1.6

AN ARABIC SCALE

Figure 27 below shows a scale used in the Middle East. Try playing it on your guitar or piano.

Compare this Arabic scale with the familiar major diatonic scale (all the white keys on the piano, beginning with C). The Arabic scale has four semitone intervals, including two consecutive semitones as you pass through the tonic note. These dissonances give the scale an exotic, other-worldly sound to Western ears.

You can play this scale starting with any note on your guitar or piano. As usual, just make sure you preserve the *order of the intervals*, like this:

- semitone ● aug 2nd ● semitone ● tone ● semitone ● aug 2nd ● semitone ●

FIGURE 27 An Arabic Scale (7 Intervals, 8 Notes)



5.1.7

INDIAN OR WHOLE TONE SCALE: AN EQUAL-INTERVAL SCALE THAT WORKS

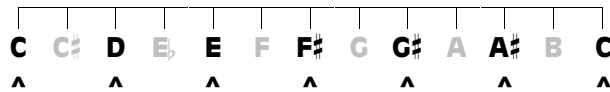
Normally, an equal-interval scale sounds like rubbish. But here's an Indian equal-interval scale that sounds musical (Figure 28). It has a dream-like, fanciful quality. Almost surreal.

This scale contains consonant intervals with simple frequency ratios (major thirds, minor sixths) and dissonant intervals (major seconds, tritones, minor sevenths).

This whole tone scale below is one of many scales used in Indian music. Another divides the octave into 22 “microtones”—intervals smaller than a semitone.

Impressionist composers such as Claude Debussy used the whole tone scale in many compositions.

FIGURE 28 An Equal-interval Indian or Whole Tone Scale (6 Intervals, 7 Notes)



5.1.8

A CHINESE PENTATONIC SCALE

The major pentatonic scale (Figure 23 above) is the same as the Chinese Mongolian scale.

The following pentatonic scale is also widely used in China (Figure 29):

FIGURE 29 A Chinese Scale



The Church modes have occasionally found their way into popular songwriting. Here are a few examples of tunes that use Church modes as scales (some recordings of these songs may be in keys other than the original modal key):

Dorian mode (D to D, white piano keys only)

- “The End” (The Doors)
- “What Shall We Do With A Drunken Sailor” (traditional)
- “Scarborough Fair” (folk song popularized by Simon and Garfunkel)
- “Smoke On The Water” (Deep Purple)
- “The Way I Feel” (Gordon Lightfoot)
- “Green Onions” (Booker T & the MG’s)
- “Oye Como Va,” “Evil Ways,” and numerous others as performed by Carlos Santana (“King of the Dorian Mode”)

Phrygian mode (E to E, white piano keys only)

- “White Rabbit” (Jefferson Airplane)

Lydian mode (F to F, white piano keys only)

- “The Simpsons” theme

Mixolydian mode (G to G, white piano keys only)

- “Norwegian Wood” (The Beatles)
- “Satisfaction” (Rolling Stones)
- “The Wreck of the Edmund Fitzgerald” (Gordon Lightfoot)
- “Sweet Home Alabama” (Lynyrd Skynyrd)

If you’re unfamiliar with some of these songs, go to the *Gold Standard Song List*. The website (www.GoldStandardSongList.com) has details on how to get the lyrics and how to listen to excerpts.

Locrian mode (B to B, white piano keys only)

- The Locrian is a theoretical mode, too unsettled-sounding for practical melodic use. It differs from all of the other modes in that its fifth degree is not

Slap the lower and upper halves together, and what do you get? An all-purpose handy-dandy *10-note minor scale*. It slices! it dices!

A B C D E F F# G G# A

This scale contains all of the notes of all three minor scale types. (Tables 25, 26, and 27). What's it called? Why, the *Grand Minor Scale*, of course.

Go ahead, play it on your guitar or piano. Play it ascending, play it descending. You may think it sounds more "minor" than any of the other three minor scales.

You'll find the Grand Minor Scale most useful in the discussion of melody in Chapter 9.

We owe the 10-note Grand Minor Scale to Stephen "Digger" Souza. (No, not the guy who fronted the heavy metal bands Testament and Exodus.) Digger Souza is a musician from Massachusetts who, in his rush to get a ride home from a concert one time, crashed over some chairs and dug his face into the rug, picking up some burn marks and a nickname at the same time.

BLUE NOTES

Now that you know all about scales, pay another visit to the beginning of this chapter, the section on the blues scale, where the term *blue note* was introduced.

A blue note can be a **flat third**, **flat fifth**, or **flat seventh** scale degree of the diatonic major scale.

For example, the C *major* scale consists of these notes:

C	D	E	F	G	A	B	C
1	2	3	4	5	6	7	1(8)

The C *blues* scale consists of these notes:

C	E \flat	F	G \flat	G	B \flat	C
1	\flat 3	4	\flat 5	5	\flat 7	1 (8)

The blues scale has **all three** traditionally-recognized blue notes, commonly heard in blues and jazz, and to a lesser degree in rock, hip-hop, and British and Celtic folk.

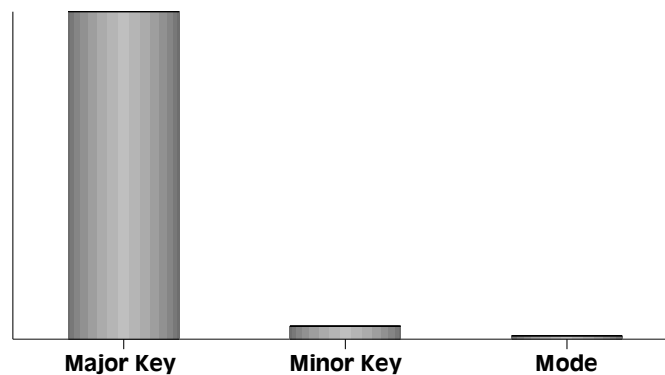
The blues scale has only six notes and no leading tone. However, all those chromatic notes stick out and grab listener attention. (More on this in Chapter 9.)

5.3.9

RELATIVE NUMBERS OF POPULAR SONGS IN MAJOR KEYS, MINOR KEYS, AND MODES

So far, Chapter 5 has focussed on major keys, minor keys, and Church modes. In popular music, by far most songs are written in major keys, followed by minor keys, followed by modes. Figure 39 gives you a rough idea of the proportions.

FIGURE 39 Relative Numbers of Popular Songs In Major Keys, Minor Keys, and Church Modes



Suppose you're a performing songwriter, and you want to distinguish your songs from everyone else's. Most songwriters write pretty much all of their songs in major keys. So ... why not specialize in writing your songs in minor keys? Even some songs in Church modes?

Minor-key songs can be wickedly effective. Here are half a dozen classic examples:

- "London Calling" (The Clash)
- "Summertime" (words by Du Bose Heyward, music by George Gershwin)
- "I Heard It Through the Grapevine" (words and music by Norman Whitfield and Barrett Strong)
- "House of the Rising Sun" (traditional)
- "Ghost Riders in the Sky" (words and music by Stan Jones)
- "All Along the Watchtower" (words and music by Bob Dylan)

PART III

HOW TO
CREATE
EMOTIONALLY
POWERFUL
MUSIC AND
LYRICS

6

How Chords and Chord Progressions REALLY Work

*I've heard there was a secret chord
that David played to please the Lord
but you don't really care for music, do ya?
It goes like this: the fourth, the fifth,
the minor fall, the major lift;
the baffled king composing Hallelujah!*
—LEONARD COHEN ("Hallelujah")

6.1

Where Chords Come From

6.1.1

WHAT'S A CHORD?

For practical purposes, think of a chord as *three or more* different-pitched notes played or sung simultaneously. Not two. Consider *two* notes, whether sounded simultaneously or in succession, an *interval*.

6.6.3

HARMONIC “SCALE NEIGHBOURS”

Just as scale degrees 7 and 2 are scale neighbours of the tonic note in melody, so in harmony the V chord is the scale neighbour of the tonic chord.

And that means the chord change V – I is the *smallest scale move* you can make in harmony. The V chord and the I chord are, therefore, *harmonic scale neighbours*.

This is *precisely the opposite* of the situation in melody.

For example, in the key of C major:

- Melodically, the notes B and C are close together. They’re melodic scale neighbours. The notes C and G are as far apart as you can get—definitely not melodic scale neighbours.
- Harmonically, the chords C major and G major are close together. They’re harmonic scale neighbours. But the chords C major and B major are far apart—definitely not harmonic scale neighbours.

WANTED: MUSICAL MARRIAGE COUNSELLOR

Think of harmony and melody as opposite sexes.

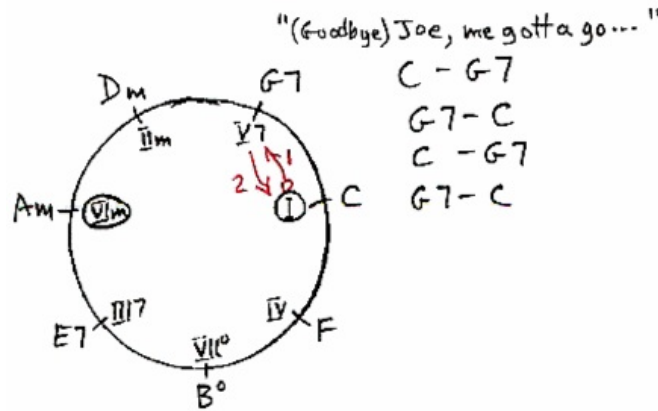
In melody, the fifth is the *furthest* note from the tonic. But in harmony, the fifth is the *closest* chord to the tonic.

Opposites in a fundamental way.

When they’re together, harmony and melody usually get along. Sometimes they fight. Paradoxically, such fighting often sounds delightful.

When they divorce, melody functions fairly well on its own. But harmony does not. By itself, poor harmony flounders, and must find a way to reconcile with melody.

FIGURE 78 Chase Chart of “Jambalaya (On The Bayou)”
(Words and Music by Hank Williams, Sr., 1952)



Chord progressions don’t get any simpler. And yet, over the centuries, that I – V7 – I progression has taken on all the other chord progressions in harmony and arm-wrestled them into submission.

In “Jambalaya,” fully half the song has unstable dominant seventh harmony, which keeps the listener on edge, expecting resolution.

In this song, Hank’s doing some interesting things melodically, too, which is why everybody knows the tune. It’s way, way easier to write a boring ol’ country song with a I – V7 – I chord progression than a great classic country song with a I – V7 – I. Chapter 9 discusses in detail what goes into making a memorable tune.

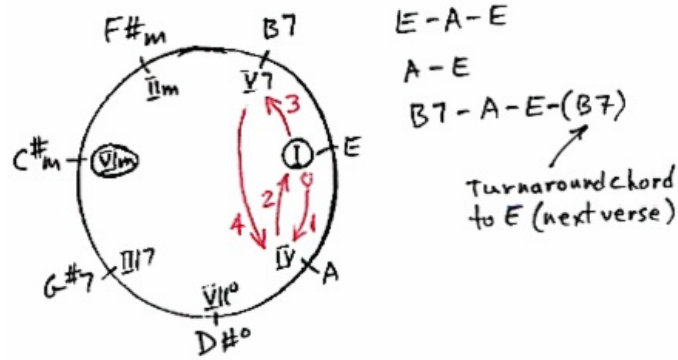
6.10.6

TWELVE-BAR BLUES: DECEPTIVE CADENCE AND “TURNAROUND”

You saw how the chord changes in “Heartbreak Hotel” and “Tracks Of My Tears” simply orbit the tonic chord. Same thing with zillions of songs. Usually the orbit goes clockwise.

But sometimes the orbit reverses itself (Figure 79):

FIGURE 79 Chase Chart: 12-bar Blues



The final four-bar phrase of a 12-bar blues tune usually contains a deceptive cadence. That is, the V7 chord (B7 in the above example) does not resolve directly to the tonic.

The progression instead takes a detour through the IV chord (A in this example), comes to rest briefly on the tonic, then immediately “turns around” on the V7 chord to start the cycle over again. This keeps the tune driving on.

A cadential chord formula of this nature, usually in the last bar or two of a section, is called a *turnaround*. Some players call it a *turnback*.

6.10.7

“WHEN A MAN LOVES A WOMAN”: ANOTHER KIND OF DECEPTIVE CADENCE

The Chase chart of the verse of this song maps another way of using a deceptive cadence to keep your brain in suspense and the progression moving right along (Figure 80).

- “Soul Man” (Sam & Dave recording)
- “You Are The Sunshine Of My Life” (Stevie Wonder)

Great songs, aren’t they?

But wait.

Shift modulation has a problem. It was relatively novel up to the 1950s and 1960s. But since then, it has been done to death.

Shift modulation is the easiest way to change keys. Even a complete dolt of a songwriter or arranger can shift modulate. Consequently, that’s exactly what has happened over time.

Today, shift modulation is the mark of a rank amateur.

Don’t do it.

Well ... don’t do it unless you have a good reason, or you *really* know what you’re doing.

Here are two examples of shift modulation done well, both by the great Johnny Cash (and both, incidentally, from the 1950s, when the technique had not yet been completely abused):

- “***Five Feet High And Rising***” ... In this tune, Cash keeps shifting the tune upward with each verse to match the ever-rising flood waters in the song’s lyrics. “Two feet high and rising ... Three feet high and rising ... Four feet high and rising ... ”
- “***I Walk The Line***” ... In the original recording of this song, here’s what Cash does:
 - Starts in the key of F, then
 - Shifts down a fifth to B \flat , then
 - Shifts down a fifth to E \flat , then
 - Shifts back up a fifth, returning to B \flat , then
 - Shifts back up a fifth again, returning to F, ending the song in the original key.

(No doubt, the guitar players at the recording session had capos on the first fret and were playing the chords, E, A, and D, instead of F, B \flat , and E \flat , respectively.)

But here’s the kicker: The second time Cash sings the tune in F, he sings the melody a *full octave lower* than the first time in F. The words are identical in the two F-key verses, creating a striking contrast. Overall, it’s a masterful piece of arranging. Within this song, Cash’s singing range is two octaves plus a major second.

TRUCK DRIVER'S GEAR CHANGE HALL OF SHAME

Shift modulation has become such a horrible cliché that there's a website dedicated to exposing recordings of shift modulation. The website is called **The Truck Driver's Gear Change Hall of Shame**, so named because shifting gears while driving a truck is an apt metaphor for this type of modulation.

Before you consider writing another Truck Driver's Gear Change song, you may want to check out the website:

www.GearChange.org

6.12.6 SEQUENTIAL MODULATION

In sequential modulation, a melodic phrase or a configuration of chords (or both) repeats at a different pitch to bring about a modulation, which eventually returns to the original key.

Several chords of the same type can be used palatably, such as C - D - E - F[#] (sequence of major seconds). Or chords of the same type can progress along a scale: Gm7 - Fm7 - E^bm7 - Dm7 - Cm7 (C minor scale).

Chase-charted examples coming up:

- “It Was a Very Good Year”
- “The Girl from Ipanema”

6.12.7 PIVOT CHORD MODULATION

A pivot chord is a chord that's common to both the prevailing key and the key to which tonality eventually moves. For example, the chord F major is common to both the key of F major (the tonic chord) and the key of C major (the IV chord). So F major can be used to “pivot” out of the key of C major and into the key of F major.

Figure 102 (below) shows an example of using a pivot chord to modulate to a remote key and back again (no particular song, just a generic example).

In this example, the original key is C major. The remote key is C[#] major / A[#] minor. The pivot chord is F in the original key and F7 in the remote key.

6.15

When Chord Progressions Go Bad ...

6.15.1

HOW TO USE CHASE CHARTS TO VISUALLY SPOT WEAK CHORD PROGRESSIONS

Now, for your entertainment and pleasure, here are a few examples of the kinds of chord progressions inexperienced songwriters string together, mainly because they don't know about the harmonic scale.

Having studied the above examples by songwriting masters, you will probably figure out pretty quickly why these progressions go off the rails (Figures 118 - 121). Using Chase Charts, you can spot the weakness by looking at the patterns of arrows that correspond to consecutive fifths up, multiple third progressions, sequences of chromatic progressions, non-involvement of dominant and tonic chords, and so on.

This is not to say that such progressions could never work under any circumstances. A songwriter might figure out a way to make them sound palatable in the context of a cleverly-worked-out tune. But why bother with a lot of pointless effort, trying to fix a lame progression? They shoot lame chord progressions, don't they?

Technically, there's no such thing as a “wrong” chord progression in the sense of “prohibited.” But there certainly are chord progressions that are easier for the brain to make sense of. That's what this chapter has been all about.

6.15.2

EXAMPLES OF CHORD PROGRESSIONS THAT DON'T QUITE MAKE IT

What's problematic about this one (Figure 118)?

- Two consecutive fifth-up progressions (E – B – F) without involving either tonic chord
- Lots of weak third progressions

FIGURE 128 Scales of Unity and Variety

		Accessible (Sufficient Unity)			
Boring (Lacking Variety)		Accessible but Boring (Irritating)	Accessible and Interesting (Compelling and Emotionally Powerful)	Interesting (Sufficient Variety)	
		Confusing and Boring (Complete Turn-off)	Somewhat Interesting but Confusing (Forgettable)		
		Confusing (Lacking Unity)			

Aim for the upper right.

Your song (or the song you've chosen to play, if you didn't write it) won't grab your audience emotionally if it confuses them musically or lyrically, or if it bores them, musically or lyrically.

A great song, performed competently, gets *everything* right. It strikes a unity-variety balance with respect to *each component*.

- Harmony and chord progressions
- Beat, pulse, meter, tempo, rhythm
- Phrasing and form
- Melody
- Lyrics
- Performance values (live or recorded)

When each of these elements strikes the listener as both accessible (not confusing) and compelling (not boring), the song is irresistible.

At the end of each of Chapters 6 through 10, you will find a table summarizing the key ways of achieving balance—avoiding confusion and boredom—with respect to the chapter's topic.

6.17.2

EMOTIONAL EFFECTS OF CHORDS

Table 52 below summarizes some emotional effects associated with various chord types. Emotional effects vary for a given chord, depending on musical context.

TABLE 52 Emotional Effects of Chords

Chord Type	Associated Emotions
Major (e.g., C)	Happiness, cheerfulness, confidence, brightness, satisfaction
Minor (e.g., Cm)	Sadness, darkness, sullenness, apprehension, melancholy, depression, mystery
Seventh (e.g., C7)	Funkiness, soulfulness, moderate edginess
Major Seventh (e.g., CM7)	Romance, softness, jazziness, serenity, tranquillity, exhilaration
Minor Seventh (e.g., Cm7)	Mellowness, moodiness, jazziness
Ninth (e.g., C9)	Openness, optimism
Diminished (e.g., C ^o)	Fear, shock, spookiness, suspense
Suspended Fourth (e.g., Csus4)	Delightful tension
Seventh, Minor Ninth (e.g., C7;9)	Creepiness, ominousness, fear, darkness
Added Ninth (e.g., Cadd9)	Steeliness, austerity

7.2.3

“CHUNKING” TO THE RESCUE (MORE OR LESS)

You can remember only about seven items at once. But if you *group* related items into larger units, your short-term memory treats those units as individual items, which frees up your working memory to admit more information—up to a point. Such grouping is called *chunking*. (It’s the reason phone numbers and credit card numbers are separated into groups of three and four.)

You could pretty easily remember a series of five random letters of the alphabet by repeating them in a phonological loop. You’d have a much harder time remembering 45 random letters because the phonological loop is limited to only a few seconds. But you could easily memorize 45 letters if they took the form of five random *words*, each consisting of nine letters.

In practically every aspect of music, including lyrics, chunking plays a central role.

As you’ll see shortly, your brain automatically chunks (groups) a steady sequence of discrete beats into larger units called pulses. Pulses chunk into still larger units called bars or measures, which chunk into still larger structural units (the subject of the next chapter).

But chunking has its limits. People find it much more difficult to remember a 15-minute symphonic movement or a 50-minute symphony, no matter how well-chunked it is, compared with a three-minute popular song.

7.2.4

LONG-TERM DECLARATIVE (EXPLICIT) MEMORY

Most of the stuff you’ve got stored in long-term memory is *unconscious*. In chapter 10, you’ll learn a procedure you can use to take advantage of your unconscious mind to create unique, emotionally powerful song lyrics (including rap lyrics) that will surprise and amaze you (and your listeners).

Two kinds of long-term memory are broadly recognized:

1. **Declarative memory.** Sometimes called *explicit* memory. This is your memory of events, facts, concepts.
2. **Procedural memory.** Sometimes referred to as *implicit* or *non-declarative* memory. This is your memory of how to do things—your skills and habits.

becomes second nature, like riding a horse or driving a car. Stored permanently in procedural memory.

Table 53 below summarizes the various kinds of memory.

TABLE 53 An Oversimplified Sketch of Human Memory

Short-term/Working Memory		
<ul style="list-style-type: none"> • Limited to a minute or two in duration, and to about 7 items; constantly gets overwritten • Phonological loop—a few seconds • Chunking • Attention • Information “brought to mind” (recollected) from long-term memory 		
Long-term Memory		
Declarative		Procedural
<i>Episodic</i>	<i>Semantic</i>	<ul style="list-style-type: none"> • “How-to,” such as your ability to drive a car, ride a horse, or play a musical instrument
<ul style="list-style-type: none"> • Events, experiences • Hippocampus • Amygdala—emotions linked to memories of experiences 	<ul style="list-style-type: none"> • Concepts • Facts such as the songs you know from memory 	

7.2.6

REPETITION AND MEMORY IN MUSIC

Recall that the visual metaphor of rhythm is length. As you walk along a street, you can see visual repetition all around you: the spacing between street lamps, the regular dashed white lines in the middle of a paved road, the equally-spaced floors of an apartment or office building. Humans divide space into regular lengths.

In music-making, your brain divides *time* into regular lengths. Since music takes place in the dimension of time instead of space, memory limitations require that the major musical elements be constantly renewed and reinforced at regular intervals. In other words, *repeated*.

7.3.3

HOW BEAT DIFFERS FROM PULSE

This chapter focuses on measured music, music with a beat. If you want to understand how to manipulate beat in your songwriting and performing to create emotionally powerful music, you need a good grasp of the nature of these fundamental elements and how they work:

- Beat
- Pulse
- Meter
- Tempo
- Rhythm

They're all different, but interrelated.

Beat

First: distinguishing beat from pulse.

For purposes of this discussion, beat refers to the basic, undifferentiated metronomic temporal setting of a piece of music.

Here are some ways to conceptualize “beat”:

- If you've done some recording, you're probably familiar with click tracks. Think of beat as the click track of a song, the simple, steady ticking of the metronome. Suppose you play a recording of a song through a sound system. As the recording plays, suppose you set a digital metronome so that it ticks in sync with the recorded song. That metronome's ticking is the beat.
- **Beat has no emphasis, no accent.** It's just *tick tick tick tick tick tick tick tick*. It's not *TICK tick TICK tick TICK tick TICK tick TICK tick*.
- Beat continues on in your brain even when the music temporarily ceases.
- Beat is the rhythmic unit that gets you tapping your foot or clapping your hands or nodding your head or pumping your fist.
- As you'll see later, beat is not necessarily the smallest unit of time in a piece of music. But it's the *basic* unit.

Embedded Skipple Pulses

Skipple pulses usually chunk into groups of four. Each skipple pulse is *embedded* in a single “big” beat, like this:

Accents	●	.	.	.	●	.	.	.
Counted Beats	1	2	3	4				

Skipple pulses also chunk into groups of three, each embedded in a single beat, like this (“jazz waltz”):

Accents	●	.	.	.	●	.
Counted Beats	1	2	3			

When skipple pulses are present in a song, they are *almost always embedded in duple or triple pulses*, as indicated in the above diagrams (there are some unusual exceptions). So whenever you hear the characteristic *thuuuummp-a thuuuummp-a* of skipple pulse in a song, you’re actually hearing *two types of pulses simultaneously*:

- On the “micro” level—the level of the individual beat—the pulse is skipple.
- On the “macro” level—the level of grouped beats—the pulse is duple, quadruple, or triple.

With embedded skipple pulses, the effect sounds far different from ordinary duple or triple pulse.

BEETHOVEN: BARRELHOUSE/BOOGIE COMPOSER

Beethoven’s last piano sonata, Opus 111 (1821-22), has a fantastic barrelhouse/boogie-woogie section, probably the first ever committed to paper. It’s an example of skipple-pulse piano style at its finest. To hear it, go to this link:

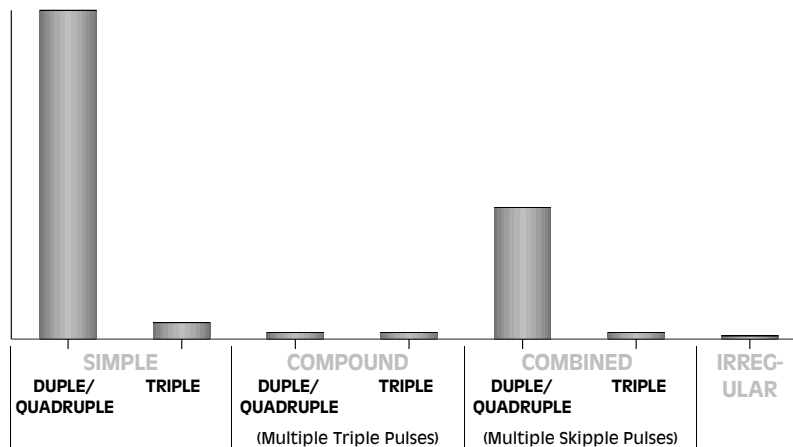
www.LVBeethoven.com/Oeuvres/Music_MidiSonatasPiano.html

Scroll to the bottom of the page, where you’ll find two midi files of the entire 21- to 24-minute sonata (depending on how fast it’s played), each sequenced by a different musician. Click on either one to hear the sonata. When it starts playing, grab the slider and whip it over to about 60% of the way through the piece. The

simple meter and compound meter, but rarely recognize combined meter in its own right.

If you were to randomly sample a large number of recordings of great songs in a variety of genres—hip-hop, pop, rock, folk, jazz, blues, country—from, say, 1900 to 1999, you would probably get a relative distribution of the popularity of meter types that would look something like Figure 130.

FIGURE 130 Relative Popularity of Meter Types (An Approximation)



A lot of songwriters gravitate to simple quadruple out of *ignorance* about the other metrical possibilities—especially combined meter.

So, if you want your songs to stand out ... make a deliberate effort to write more songs in meters *other than simple quadruple*.

The most naturally driving, forceful meter is not simple quadruple. It's *combined* quadruple.

Combined Quadruple: Not the Most Common, but the Coolest Meter

As previously mentioned, combined quadruple is the signature meter of African American genres: jazz, blues, R & B, soul, hip-hop. It's not nearly as pervasive in rock, country, and folk. It's rare in dance/electronica.

The defining characteristic of combined meter is the embedded skipple pulse on every macro beat, skipple being the only pulse-type with a *double accent*:

You can play or sing any ol' irregular rhythm patterns you want, without the slightest concern about whether or not they'll correspond to the meter. The Law of Simple Multiples or Fractions of the Underlying Beat ensures that *beat, pulse, and meter will automatically emerge from whatever rhythms you concoct*.

To paraphrase E. O. Wilson, *beat holds rhythm on a leash*. And, paradoxically, vice-versa.

You can play funk, polka, reggae, Bo Diddley, it doesn't matter. The individual notes that make up the rhythms you play or sing manifest as simple multiples or fractions of an underlying beat that emerges automatically, along with pulse and meter.

How does this happen?

7.8.3

HOW ACCENTS “AUTOMATICALLY” COMMUNICATE BEAT, PULSE, AND METER

Some of the notes that make up a rhythm pattern are accented in one or more ways that communicate the beat:

- **Metrical position accent:** Strong vs weak metrical position
- **Duration (agogic) accent:** Long vs short duration
- **Pitch accent:** High vs low pitch
- **Dynamic accent:** Loud vs soft volume level

Often, two or more accent types coincide on a single note. For example, the fifth note of the “Satisfaction” riff is both the highest note of the riff (pitch accent) and the longest note (duration accent). As well, the fifth note begins on a metrically weak beat but sustains to incorporate the first note of the second bar (metrical position accent).

You'll find it virtually impossible to deliberately counteract or hinder the steady procession of metrical pulses that emerges as you play rhythm patterns. You do not have to think about whether or not you've played enough beats with the correct accents to create uniform measures. Your brain automatically and correctly adds up the fractional and multiple beat durations and rest durations of the notes of your rhythm patterns and forges them into neat, uniform measures. Your playing and singing communicate those measures to your audience, *without any conscious effort on your part*.

That's why, when you play a song, you don't need to make an effort to play every beat of every measure. In fact, if you were to do that, your listeners would pelt you with cooked cabbages. Or, worse, Brussels sprouts. Because, if you were to merely

7.8.5

SUPERIMPOSED OSTINATOS IN HIP-HOP AND DANCE/ELECTRONICA

If you aspire to be a hip-hop or dance music producer, you need to become a master of ostinato, the rhythmic mainstay of beatmakers. Hip-hop and dance tracks usually contain multiple ostinatos, superimposed in accordance with the good ol’ Law of Simple Multiples or Fractions of the Underlying Beat. Some of the ostinatos change from section to section, some remain throughout the track.

In Figure 131 below, for example, A, B, C, and D represent completely different superimposed ostinatos (i.e., each is an *irregular* rhythm pattern, not just a pulse) in various percussion, synth, and bass parts.

FIGURE 131 Superimposed Ostinatos

A...	A...	A...	A...	A...	A...	A...	A...	A...	A...	A...	A...	A...	A...	A...	A...
B.....		B.....		B.....		B.....		B.....		B.....		B.....		B.....	
C.....				C.....				C.....				C.....			
D.....								D.....							

In dance music, the meter is simple quadruple. But in hip-hop, as discussed in Section 7.6.3, the meter is often combined. Each “underlying beat” is a skipple pulse, and therefore has built-in swing. That’s why hip-hop beatmakers have to be careful to keep superimposed ostinatos irregular but *simple*. Otherwise, the overall rhythm could become cluttered and confusing—not inviting of entrainment.

Table 62 below shows how the ostinato fits into the larger structural picture.

TABLE 62 Metrical and Rhythmic Elements and Their Properties

		Type of Pattern	Accented Beats?	Duration of Pattern	Type of Repetition
Metrical Elements	Beat	Regular	No	1 beat	Continuous
	Pulse	Regular	Yes	2 or 3 beats	Continuous
	Meter	Regular	Yes	1 bar	Continuous
Rhythmic Elements	Ostinato	Irregular	Yes	A few notes contained within 1 or 2 bars, sometimes 4	Continuous
	Vocal or Melodic Phrase	Irregular	Yes	From a few notes to a dozen or so	Usually returning; sometimes continuous

7.8.6

KEEP YOUR BASS PLAYER AND FIRE YOUR DRUMMER (IF YOU *HAVE* TO CHOOSE)

Drums and bass both communicate meter, while adding rhythmic interest (usually via ostinato).

Q: If you're lost in Jaurez in the rain and you have to fire either your drummer or your bassist to remain financially solvent, which player would it be wiser to axe?

A: The drummer. (Or, like Sarah McLachlan, just marry him.)

The White Stripes notwithstanding, bass is not only a mainstay of meter, it also contributes hugely to tonality and harmony by stepping through the important notes—chord roots, thirds, and fifths.

Although melody forms the skyline and gets the glory, bass provides the foundation of the overall sound.

DRUMMER DAISUKE INOUE, INVENTOR OF KARAOKE

Next time you're having a few at the Wrong Ranch Saloon on karaoke night and decide to stagger up to the stage to see if you can make the crowd forget Sadie and Ellie Sue's eccentric duet rendition of "Love will Tear Us Apart," spare a thought for the man who made it all possible. That good-natured Japanese sometime drummer, Daisuke Inoue.

Born in Osaka in 1940, Inoue played drums badly in cover bands in the 1960s for businessmen who liked to sing songs with live accompaniment. In 1970, at the request of a client, he made a tape of his band playing songs without vocals and packaged it with a microphone and amplifier: the first karaoke machine. (Karaoke literally means "empty orchestra.") The idea caught on, and he and his friends made a bunch of the machines and leased them to bars around town.

Alas, Inoue neglected to patent his invention, which soon became all the rage in Asia, and in time swept the world. Today, karaoke is a multi-billion-dollar industry.

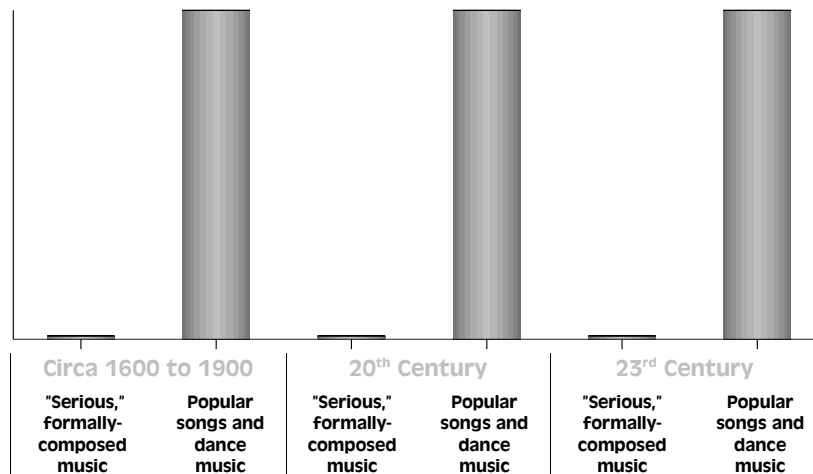
For his efforts, Inoue received the Ig Nobel peace prize in 2004, an incredible honour for a drummer.

7.8.7

EMOTIONAL EFFECTS OF VARIOUS KINDS OF RHYTHM AND ARTICULATION

Table 63 below lists some reported emotional effects of rhythm in the broad sense of the word: "the aspect of music that has to do with the distribution of beats and pulses through time," which includes meter.

FIGURE 132 Relative Popularity of “Serious” vs “Popular” Music (An Approximation)



THE REALLY TERRIBLE ORCHESTRA

If you cannot play a musical instrument well ... take heart! There's a special place for the likes of you.

Yes, it's The Really Terrible Orchestra, affectionately known as the RTO. They even have a CD on the market. Curiously, it's hard to find. RTO concerts always sell out for the same reason Florence Foster Jenkins' recitals always sold out.

For more information on the RTO, gallop on over to their modest website:

www.TheReallyTerribleOrchestra.com

7.9.2

OTHER BIG DIFFERENCES: IMPROVISATION,
SYNCOPIATION, AND POLYRHYTHM

In fifteen seconds, the difference between composition and improvisation is that in composition, you have all the time you want to decide what you want to say in fifteen seconds, while in improvisation, you have fifteen seconds.

—STEVE LACY defining improvisation in 15 seconds

As discussed in Chapter 2 in the section on jazz, improvisation all but disappeared from European and North American classical and popular music until, in the early 20th Century, jazz came along and resurrected it. Why did it nearly vanish in the first place?

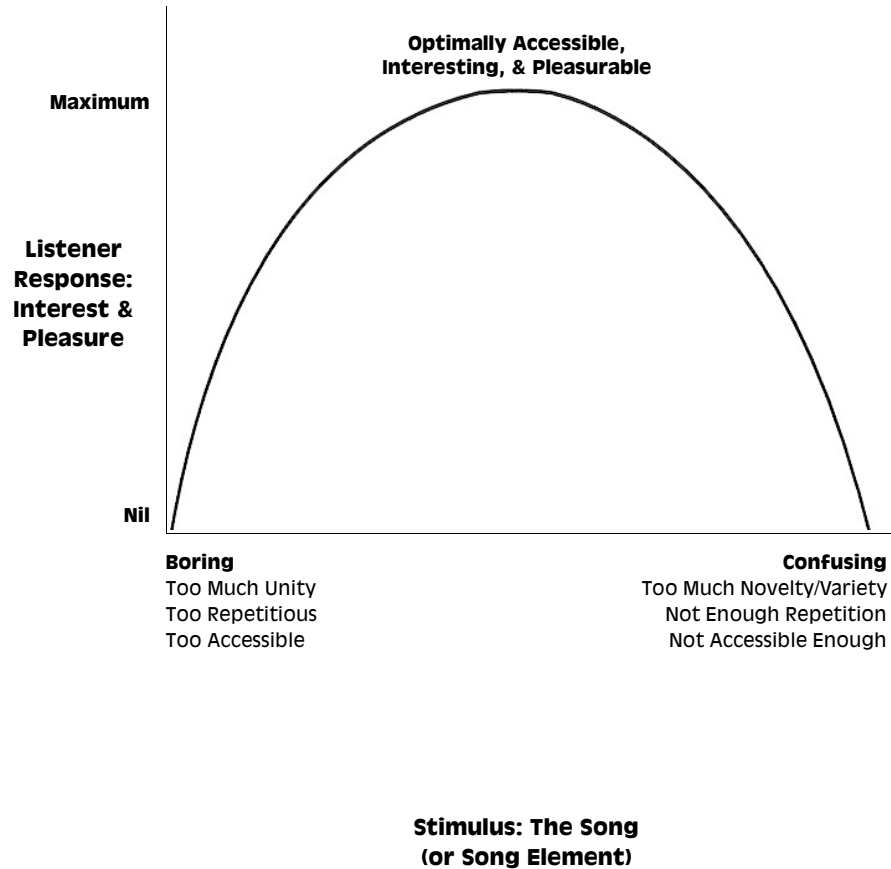
In his book on improvisation, Derek Bailey offers this explanation:

The petrifying effect of European classical music on those things it touches—jazz, many folk musics, and all popular musics have suffered grievously in their contact with it—made the prospect of finding improvisation there pretty remote. Formal, precious, self-absorbed, pompous, harbouring rigid conventions and carefully preserved hierarchical distinctions; obsessed with its geniuses and timeless masterpieces, shunning the accidental and the unexpected: the world of classical music provides an unlikely setting for improvisation.

He then goes on to note that in *early* European classical music, improvisation actually did play a major role. But over time, with the ascent of the conductor as the “chief of police” of the orchestra, improvisation in classical music declined rapidly until it disappeared altogether.

Improvisation almost always implies *syncopation* in melodic rhythm: accenting beats that normally don’t get accented, foiling the brain’s prediction machinery and heightening rhythmic interest. While syncopation is most radical in jazz, syncopated rhythms are also found in most good popular songs.

A simple example: the fifth note of the “Satisfaction” riff is rhythmically important because it’s the longest note (duration accent) and highest-pitched note of the riff (pitch accent). But it falls on the metrically weak position between the fourth beat of the first bar and first beat of the second bar. This results in *rhythmic dissonance*, or syncopation. The fifth note is more interesting and gets more attention than it would have gotten had it fallen predictably on the metrically-strong first beat of the second bar, a half-beat later.

FIGURE 133 Wundt Curve of Unity and Variety

(The citizens of the city of St. Louis, Missouri, were so impressed with the Wundt curve that, in 1964, they commissioned the construction of an enormous monument to the Wundt curve—630 feet high!—and called it the “Gateway Arch” because it sounds better than “Wundt Arch.” To see what it looks like, go to the official website, www.GatewayArch.com. Click on “Photographs” in the left-hand column.)

Most of the time, songs that fail (i.e., do not move audiences emotionally) have too many elements that cluster too far to the right on the Wundt curve. Too many extended chords (as opposed to simple triads and dominant sevenths). Too many melodic phrases that go on too long with too few breaks. Too many unrepeated words in the lyric. Too many instruments playing simultaneously in the performance of the song (live or recorded). Just too much going on in general. Repeat: human memory does not work like silicon chip memory.

phrases (and melodic phrases) from structural phrases—if you aspire to write great tunes consistently. Especially the fact that VM and melodic phrases are *rhythmic* and structural phrases are *metrical*.

Structural phrases chunk into *periods*. A period is a pair of structural phrases with superimposed VM phrases. The VM phrases form a complete musical statement, the musical equivalent of a sentence in language.

The *musical period* is the structural cornerstone of great popular songwriting.

Periods chunk into verses, choruses, and middle eights—the largest structural elements of songs.

Musical punctuation within phrases and periods takes the form of various types of cadences (discussed in Chapters 6 and 9).

The structural resemblances between music and language may explain why, in children, musical training has been shown to improve verbal memory.

8.1.3

MUSICAL STRUCTURE AND GESTALT PRINCIPLES

Your brain is always looking for patterns that make a seemingly chaotic world more comprehensible, more coherent. Experimentally-based Gestalt psychology describes how your brain seeks patterns, or “Gestalts”—structures that have greater meaning than the proverbial sums of their parts.

Several Gestalt principles apply to the understanding of song form and musical structure generally:

- ***Proximity***. Your brain looks for meaning in groups of things that are *close together*. Musically speaking, proximity means close together in pitch and *in time*—for example, a group of notes that coheres into a meaningful musical unit. A melodic or VM phrase is a Gestalt. Each note in isolation has no meaning, but the *group* has meaning.
- ***Similarity***. Your brain looks for meaning in groups of things that are similar. In music, *similarity means repetition*. Sometimes exact repetition, sometimes “similar” repetition—repetition with variation. Repetition of VM phrases, of structural phrases, of chord changes, of lyrics.
- ***Continuation***. Your brain looks for meaning in patterns that continue. In song structure, for example, if melodic lines are well-constructed, your brain will

perceive the phrases as flowing, one from another. And if a verse is followed by a chorus, then another verse, then a chorus, and so on, your brain expects the alternating pattern to continue.

- **Closure.** Your brain looks for a pattern to come to a meaningful state of completion. Musical closure usually takes the form of a *perfect cadence*, which you learned about in Chapter 6. A *coda*, a short passage at the end of a song, is another structural element that signals closure.

Keep Gestalt principles in mind as you create and perform music. Audiences find meaning and satisfaction in *sonic pattern recognition*. It's why structured, comprehensible, tonal music attracts appreciative audiences, and unstructured, incomprehensible, atonal music does not.

8.2

Why Binary Structure Is the Soul of Great Popular Song Form

8.2.1

BINARY STRUCTURE AT EVERY LEVEL

Four bars is the default structural phrase length. But a structural phrase can be as short as two bars or as long as six bars (at medium tempo).

Eight bars is the default length of a *period*, which consists of two consecutive structural phrases. The second structural phrase contains a VM phrase that “answers” or completes the VM phrase contained in the first structural phrase.

The VM phrases contained in the two structural phrases of a period usually musically balance each other in some way: same (irregular) rhythm pattern, parallel melodic contour, parallel lyrics, same sequence of chord changes, or some combination. This is referred to as *binary structure*, *binary form*, or *question-answer structure*.

You'll find binary form everywhere as structural scaffolding in popular music (and in classical music):

- **Pulse.** Two beats chunk into a duple pulse.

9

How Melody and Melody-harmony Integration REALLY Work

A melody is a series of tones that makes sense.
—VICTOR ZUCKERKANDL

9.1 Evolution, Music, and Emotional Arousal

9.1.1 WHY MUSIC IS ALL ABOUT EMOTION: EVOLUTION AND THE ADAPTIVE PURPOSES OF THE EMOTIONS

Only emotion endures.
—EZRA POUND

Evidence on the evolutionary origin of music lends support to the view that if music is “about” anything, it’s about the melody. That melody is the soul of music. (Everything is the soul of something, it seems. Ethanol is the soul of beer.)

Apart from lyrics, it is the melody, including melodic rhythm, that most people remember about a song. Harmony, while important, does not usually stick in long-term semantic memory the way melody does.

As discussed in Chapter 1, animal calls—the non-human equivalent of tunes—are emotional in nature. Emotions evolved as adaptations with enormous survival value.

We humans are animals that vocalize in part to communicate information (language) but also to communicate our emotional state. A human mother and her baby use melodious vocalizing, among other things, to attune to each other emotionally. Since music communicates emotion, it may well owe its evolutionary origin to the survival value of inherently musical mother-infant communication.

Music, the saying goes, is the language of emotion. Even pre-school children can accurately identify specific emotions that music elicits. If the adaptive purpose of music is to communicate emotion, and if music is “about” melody, then clearly *a melody that fails to communicate emotion fails as music*. This chapter explores some of the ways you can improve the odds that you will create melodies that succeed musically by communicating emotion.

ANIMAL LANGUAGE TRANSLATORS

Male mice sing when they encounter female mice. Isn’t that nice? Men mice sing love songs to attract women mice. Alas, male mice sing at frequencies of 30 to 110 kHz—far above the range of human hearing. So humans never hear their melodious serenading as they scurry through the house at night, avoiding traps.

Dogs and cats don’t sing, but they make emotional noises well within human hearing range. So, naturally, humans have found a way to cash in on the unworlcliness of pet owners who think dog barks and cat meows mean something specific, other than “hey!” A Japanese company successfully markets “dog translators” and “cat translators” to gullible pet owners, providing more evidence that pets are more intelligent than their owners. So far, hundreds of thousands of credulous humans have shelled out \$75 to \$100 for the devices, but no dogs or cats have paid for “human translators.”

when the original Moose Verdi galloped up to them, outside the Swedish Academy of Music back in 1901.

In Sweden, hunters are not allowed to shoot sacred moose, just as hunters are not allowed to shoot sacred cows in India. In fact, the Swedish home furnishings giant Ikea uses an image of a sacred moose as its sacred company mascot and sacred corporate logo. Ikea has worked out an arrangement with the Swedish government whereby, if a hunter in Sweden goes out into the bush and shoots a moose, Ikea will fly in a bounty hunter from Dodge City to track down and shoot the moose hunter. (Marshal McDillon loves this gig, as it gives him the opportunity, while in Sweden, to shop for Ikea home furnishings that you can't get in Dodge.) Fortunately, Ikea has only had to dispatch bounty hunters a dozen or so times, as the great majority of Swedes are law-abiding and respect the sacred place of the moose in the Swedish way of life. In fact, if you look hard enough on the Internet, you will even find Swedish moose fetish cults, usually affiliated with Swedish thrash and death metal bands such as the seminal band, Moose at the Gates.

Here's a brief account of how various hedonic drugs work in the brain, summarized by Steven Johnson in *Mind Wide Open*:

[The drug] ecstasy floods the brain with excess serotonin. Cocaine increases the availability of dopamine, noradrenaline, and serotonin. Hallucinogens like LSD achieve some of their effects by imitating the serotonin molecule. Amphetamines release dopamine and noradrenaline. Nicotine mimics dopamine molecules, as well as activating nicotine receptors. Alcohol and other tranquilizers have a more generalized effect, decreasing the activity of GABA [gamma-aminobutyric acid, an inhibitory neurotransmitter] in the brain. Opiates, as their name suggests, pass for the brain's naturally occurring opioids.

Research on motivation for choosing a career in music indicates many performers claim to choose music as a profession for hedonic reasons. They simply want to keep experiencing the pleasure, the emotional rush that music induces.

The brain's main pleasure-drugs are the opioids and oxytocin, the "love drug" associated with childbirth, romantic attachment, and social bonding. Animals fail to form pair bonds when researchers block their brains' oxytocin receptors. Evidence indicates music may trigger the release of oxytocin. David Huron, a specialist in music cognition, explains that:

Although in contemporary society music tends to be experienced in a personalized or individualized listening context, we already know

9.2

Melody, Memory, and Memes

9.2.1

HOW SONGS FUNCTION AS POWERFUL *MEMES*, REPLICATING AND MUTATING LIKE GENES

In his landmark book, *The Selfish Gene*, Richard Dawkins introduced the concept of the *meme* (rhymes with “team”), the unit of cultural transmission. Memes have gene-like properties. Anything humans create, hold in memory, and pass on to future generations and other members of the same generation is a meme.

A song that becomes a classic is a successful meme.

Memes have properties analogous to the those of the gene, the unit of biological transmission. Robust memes live on, get transmitted throughout the population and become part of the “meme pool.” Feeble memes are forgotten—they become extinct. Feeble memes include nearly all of the mediocre original songs written by nearly all (clueless) songwriters.

Memes propagate via a process analogous to, but not the same as, Darwinian natural selection. The mechanics of Darwinian natural selection apply:

1. **Selection.** Selective pressure must exist. Memes evolve to fit imposed environmental conditions (differential fitness, or survival of the fittest). For example, if a song causes enough people to experience enough pleasure, they will remember it and the song will become a classic, such as Dylan’s “All Along The Watchtower,” especially the Jimi Hendrix cover recording.
2. **Variation.** Variability must exist. Songs are created in many genres. Any given song can be performed and recorded in any number of styles by any number of artists. The searing Hendrix recording of “All Along the Watchtower,” much different from Dylan’s original acoustic rendition, has always been far more popular.
3. **Heredity.** Replication must occur in order to pass on memetic mutations to future generations. Many more people learned “All Along the Watchtower” and passed it on to others because of the Hendrix version (a mutation) than would have been the case had Hendrix not covered the song.

A large number of memes can exist as “meme complexes.” Religions and political parties, for instance. In music, a style or genre is a meme complex.

This does not mean that there’s such a thing as “cultural evolution.” There isn’t. Memetics merely explains how ideas—memes—spread through populations. Songs, for example, do not come about because of song mutations. Creative songwriters dream up songs. The natural selection analogy does not apply to the *origin* of memes such as songs—only to the way memes propagate.

A meme is a physical, biological entity. Every song you know, for instance, exists in your brain (your long-term semantic memory) in the form of a network or networks of neurons. When you teach somebody a song, that person forms the same or similar neuronal structure in his or her brain. You have propagated your song-meme.

Unlike genes, which can only propagate from generation to generation though time, memes can propagate “horizontally”—throughout a population of the *same generation*. Anything that humans create and can hold in memory and pass on to future generations is a meme. A song, for instance.

9.2.2

WHY MOST OF THE WORLD’S BRILLIANT TUNES HAVE NOT YET BEEN COMPOSED

The memes we call tunes can exist in practically infinite variety because music is *combinatorial*, like language and the genetic code. Some songwriters think that all the great melodies have already been composed ... there will never again be songwriters and composers as great as, say, Mozart or Lennon-McCartney or Chopin or Ellington or Schubert or Kern or any other great composer you care to name.

Rubbish.

How many possible tunes are there? To get an idea, consider the number of combinations you have to choose from. Suppose you start with some conservative restrictions, such as:

- A compass of 19 semitones, the pitch range of “The Star Spangled Banner”
- A note value no longer than one bar in duration (four beats in simple quadruple meter)
- A note value no shorter than one-eighth of a bar in duration

Almost anyone could sing any tune you might create within these parameters.

9.16

Putting It All Together: A Suggested Approach to Composing Tunes

9.16.1

IF THE NET'S DOWN, THERE'S NO STRUCTURE, NO COMPREHENSION ... AND NO EMOTIONAL CONNECTION

I'd just as soon play tennis with the net down.

—ROBERT FROST

That's how Frost dismissed free verse. His comment fits the art of songwriting perfectly. You cannot write great songs unless you have the net up—a willingness to learn, and play by, the “rules,” the *composition techniques* that make a tune intelligible and enable emotional communication.

A song exists in *time*, not in space, so it absolutely must reveal discernable structure and patterning as it unfolds, second by second, minute by minute. If it doesn't, listeners will not be able to make sense of it, remember it, and connect with it emotionally.

Lennon and McCartney, Irving Berlin, and other “musical illiterates” knew an awful lot of composition technique. By the time they hit their stride as songwriters, they knew most or all of the technical material discussed in this book (particularly in Chapters 6 through 10). When they came up with ideas or fragments that might work out as songs, they applied their technical know-how and turned those ideas and fragments into fully-realized brilliant songs.

The evidence of the technical expertise of great songwriters such as Irving Berlin and Lennon-McCartney is right there in the songs—in the recordings and in the sheet music transcriptions.

By contrast, 99.9% of aspiring songwriters are clueless about effective composition technique. Which is why nearly all songwriters turn out only generic, mediocre, forgettable songs. And that includes songwriters with *Billboard* hits.

It doesn't matter how intelligent you are.
 It doesn't matter how imaginative you are.
 It doesn't matter how many songs you've already written.
 It doesn't matter how hard you've worked on your music.
 It doesn't matter how well you can sing or play an instrument.
 It doesn't matter how good you are with computers and recording gear.
 It doesn't matter whether or not you come from a musical family.
 It doesn't matter whether or not you can read or write music.

If you don't become skilled in composition *technique*, you will rarely or never write a single brilliant song.

Each of the greats who wrote a body of classic songs had one thing in common: *technical mastery*—an understanding of intervals, chords, progressions, pulse types, meter, tempo, rhythm, vocal-melodic phrase, structural phrase, binary form, melodic coherence, melodic and harmonic cadence, and the various techniques for making tunes effective and compelling.

You or anybody else with an imagination who *takes the time* to master these technical elements and apply some imagination can become a great songwriter.

What follows is a suggested approach to composing original songs. It's based on everything covered so far in this book.

- In this approach, you start with the music and work your way into the lyrics.
- Section 10.14, towards the end of the next chapter, discusses the reverse approach—starting with lyrics meant for a melodic setting, or lyrics meant for rapping, then adding the beats, tunes, harmonies and other musical elements.

9.16.2

WHERE TO BEGIN? WITH PRE-SELECTIONS

A first step to learning how to compose original, coherent, emotionally compelling tunes is to spend some time becoming confident working with the four “pre-selection” song elements. This will get you out of the habit of slipping into your comfort zone—playing with the net down. It will require you (force you!) to gain an understanding of aspects of meter, tempo, rhythm, and mode that you've never tried in your songwriting.

Go back to Section 9.5.3. Each of the 16 examples lists the song's meter, tempo, and VM phrase start point. You probably know most of the melodies. You can learn the ones you don't know from the 30-second excerpts at download sites such as iTunes or PureTracks or any other such site.

10

How Lyrics REALLY Work

I love songs about horses, railroads, land, judgement day, family, hard times, whiskey, courtship, marriage, adultery, separation, murder, war, prison, rambling, damnation, home, salvation, death, pride, humor, piety, rebellion, patriotism, larceny, determination, tragedy, rowdiness, heartbreak, and love. And Mother. And God.

—JOHNNY CASH

10.1 Evolution and Language: The Biology of Lyrics

10.1.1

GREAT LYRICS: AN ORGANIZING PRINCIPLE

According to renowned literary theorist Northrop Frye, "Criticism is badly in need of an organizing principle, a central hypothesis which, like the theory of evolution, will see the phenomena it deals with as parts of a whole." Such an organizing principle already exists, however, needing only to be recognized and developed. Ironically, it is the same one Frye gestured toward so longingly: evolution.

—DAVID BARASH AND NANELLE BARASH

Evolution created humans. So, in storytelling that's humanly interesting and emotionally powerful, *genetic predispositions* motivate the characters. Great writers, from Sophocles to Shakespeare to Dylan, have always been great *intuitive biologists*.

In their Darwinian examination of literature, *Madame Bovary's Ovaries*, David Barash and Nanelle Barash show how classic literary works reveal human nature as shaped by natural selection:

Human beings, like all other living things, are biological critters, products of evolution by natural selection ... Great literature reflects certain human universals ... Men taking sexual advantage of women; women often doing the same thing, although typically in different ways. Competitiveness, whether violent or more subtle. The selfish underbelly of friendship. Nepotism (favoritism toward relatives) often combined with discrimination against strangers. ... The nature of human nature is becoming clear. One of its cardinal principles—reflected in literature—is the gravitational pull exerted by what Richard Dawkins first labeled “selfish genes,” a force that influences not only what people do but also the stories they tell about themselves, including what they find interesting, boring, perplexing, and frightening.

In most genres of popular music, lyrics play a leading role, not a supporting one. It's no accident that only about 10% of the 5,000 songs on the *Gold Standard Song List* have no lyrics—mainly jazz, where melodic improvisation is central, and dance/electronica where rhythm dominates.

“I'M A SCIENTIST-SONGWRITER, AND MY COLLEAGUES POINT AND LAUGH. HELP!”

Fear not, scientist-songwriter. You can remain a scientist *and* write songs about science for money. That'll show 'em. Just hop on your horse and ride on over to the **Science Songwriters' Association** at www.Science-Groove.org/SSA

If you write songs about, say, astrophysics or food toxicology, why, there's a market for your songs. For instance, Dr. Carl Winter, “the Elvis of *E. Coli*,” is a scientist whose songs about bacteria and related topics have sold tens of thousands of CDs. Visit his website at <http://Foodsafe.ucdavis.edu/music.html> and have a listen to hits such as

- “Don't Get Sick Wit It” (inspired by “Gettin' Jiggy Wit It”)
- “They Might Kill You” (“We Will Rock You”)

intensity to the same object or concept. That's why words have both denotative and *connotative* meanings.

Suppose for some reason you find *apple pie* revolting. It disgusts and irritates you. That does not change the way the great majority of people feel about apple pie. They feel pretty good about apple pie. It's *your* emotional reaction that's anomalous; it does not represent the reality of semantic space in your society.

As a lyricist, the degree to which you understand the emotional meanings of words in semantic space *with respect to your society* will determine how effectively you select words for your songs, be they rap lyrics or lyrics set to melodies. If you know what you're doing, you'll select *high-EPA words, words that have intensely-felt connotative meanings for most people, regardless of positive or negative valence.*

SPEAKING OF SPACE ... A LYRICAL SCANDAL OVER THE AGE OF THE UNIVERSE

In 2005, the pop star Kylie Melua had a hit single, "Nine Million Bicycles," written by the British songwriter and producer Mike Batt. One of the verses of "Nine Million Bicycles" contained a glaring factual error:

*We are twelve billion light years from the edge
That's a guess
No-one can ever say it's true
But I know that I will always be with you*

Twelve billion?

Everybody knows the universe is 13.7 billion years old.

The physicist Simon Singh, author of *Big Bang: The Origin of the Universe*, got on the case. He called upon the songwriter and the performer to get the facts straight and re-record the song.

Ms Melua went back into the studio and did just that. The new verse:

*We are 13.7 billion light years from the edge of the observable universe
That's a good estimate
With well-defined error bars
And with the available information, I predict that I will always be with you*

That satisfied the scientific community and rioting in the streets immediately ceased.

However, Ms Melua continues to perform the song with the original lyrics because, apparently, the rewritten words do not fit the musical setting very well.

10.3

Lyrical Emotion: Choice of Words

10.3.1

CONTENT-WORDS VS FUNCTION-WORDS

Although nearly all words communicate two kinds of meaning simultaneously—denotative (rational) and connotative (emotional)—a small number of words don't convey much if any meaningful content, either denotative or connotative. It's useful, therefore, to distinguish between *content-words* and *function-words*.

- **Content-words**, more than 99% of the words in a dictionary, carry significant *semantic* (i.e., meaningful) information.
- **Function-words** play a mainly *syntactic* role; that is, they're necessary for the text to make grammatical sense.

Function-words include:

- All eight forms of the verb “to be”: *am is are was were be being been* (although in creative writing you can usually avoid using these weak linking verbs)
- The articles: *a an the*
- Most conjunctions, such as: *and but or nor if*, etc.
- Pronouns that do not refer to people, such as: *that which it*, etc.
- Prepositions, such as *at by of for*, etc.

Without the syntactic contributions of articles, conjunctions, impersonal pronouns, and prepositions, lyrics would sound halting and only semi-intelligible, like a pidgin dialect.

ABSTRACT			CONCRETE	
food	produce	vegetable	mushroom	portobello
artist	musician	pop musician	songwriter	John Lennon
literature	publication	book	novel	<i>Ulysses</i>
organism	animal	mammal	horse	Seabiscuit
clothing	headgear	hat	cowboy hat	ten gallon Stetson

You could argue that *food* is concrete. You can see *food*. Same with *clothing* or *artist*. But, as the above list shows, it's easy to name examples of food that are *more* concrete than *food*.

If you keep asking of a noun, "What's an example?" you can get more and more specifically concrete.

"What's an example of *food*?"

"*Produce.*"

"What's an example of *produce*?"

"*Vegetables.*"

"What's an example of a *vegetable*?"

"*A mushroom.*"

"What's an example of a *mushroom*?"

"*A portobello mushroom.*"

"What's an example of a *portobello mushroom*?"

"Get stuffed."

As you get more and more concrete, your listeners find it easier and easier to grasp what the lyric's about:

person man my man Carlos

Concrete nouns paint vivid pictures, to be sure (*ten gallon hat*). But concrete nouns, together with related verbs and adjectives, can also serve as symbols to make available to the five senses ideas and emotions that could not otherwise be expressed:

*Oh you're in my blood like holy wine
You taste so bitter and so sweet
Oh I could drink a case of you
And I would still be on my feet
I'd still be on my feet
—JONI MITCHELL ("A Case Of You")*

Art has nothing to do with realism. It is not about creating a replica of what's out there in the world. I can take a realistic photograph of my cat and no one would give me a penny for it. In fact, art is not about realism at all—it's about the exact opposite. It involves deliberate hyperbole, exaggeration, even distortion, in order to create pleasing effects in the brain.

In metaphor, simile, allegory, personification and other figures of speech, two things are compared, explicitly or implicitly, implying a resemblance. At least one referent in the comparison is concrete and instantly recognizable. (Often both are concrete.) It occurs out of its “normal” context. So it surprises the reader or listener, triggering an emotional response and providing insight about something that could not otherwise be expressed. When you use high-EPA words, you create big surprises and intense emotional responses.

You cannot accurately translate metaphorical language into “plain English” any more easily than you could accurately translate a poem in another language into plain English. “Poetry,” as Robert Frost famously observed, “is what gets lost in translation.”

Language rich in high-EPA concrete symbols and metaphorical comparisons tends to stick around. The more visual and surprising the metaphor, the more compelling, and the more likely it is to stick in memory.

EASY MONEY! SHOW 'EM YOUR PARANORMAL POWER ... COLLECT \$1 MILLION!

The human brain has the uncanny ability to make linkages between unrelated things. That's why simile and metaphor work so well.

It's also why people believe the claims of astrologers, psychics, faith healers, etc. Alas, many such practitioners of the paranormal have tried, without success, to earn the \$1 million cash prize on permanent offer by the James Randi Educational Foundation, available to any human being who can “show, under proper observing conditions, evidence of any paranormal, supernatural, or occult power or event.” The foundation does not carry out the testing procedure. See www.Randi.org

If you don't have the courage to venture beyond the lowest level, the denotative or literal meanings of words and phrases, you won't write lyrics that anyone would consider art. And few will remember them unless they're associated with brilliant

music or a charismatic performer. Instead, you will write pedestrian, forgettable lyrics much like “I Still Have Strong Feelings for You,” from Section 10.7.

Or equally pedestrian lyrics such as these:

*I want to be your fantasy
And be your reality
And everything in between
I want you to need me
Like the air you breathe
I want you to feel me
In everything
I want you to see me
In your every dream*

—DIANE WARREN, recorded by CELINE DION (“I Want You To Need Me”)

*All is fair in love
Love’s a crazy game
Two people vow to stay
In love as one they say
But all is changed in time
The future none can see*

—STEVIE WONDER (“All In Love Is Fair”)

*You don’t have to be afraid of what you are
There’s an answer
If you reach into your soul
And the sorrow that you know
Will melt away*

—MARIAH CAREY & WALTER AFANASIEFF (“Hero”)

Lyrics don’t get much more generic, abstract, philosophical—and boring. Perfect for computer-programmed mainstream radio playlists and charismatic superstar performers—which is why such songs sell millions (see Chapter 12), even though the lyrics present nothing remotely interesting or intriguing to the listener. Boring and predictable. Extreme left side of the Wundt curve.

In 2003, researchers at the University of Colorado published a content analysis of “the 100 most popular songs (1958-1998) for artistic characteristics and expression of love.” They found that, over time, songwriters have replaced references to love with references to sex and selfishness. They concluded that, “the expression of love may have changed as the culture has become more individualistic.”

Whether writing about love in terms of romance or in terms of sexual gratification, many songwriters think you *have* to write Generic Artless Relationship Lyrics such as the above, because it’s the chart hit formula, and it’s the only way to succeed as a songwriter.

672 HOW MUSIC REALLY WORKS!

- They don't sound completely reasonable, but they make enough sense to be comprehensible.
- With figurative language and concrete imagery, they capture the listener's attention and engage the listener emotionally.

You can write lyrics of this quality if you learn effective lyrical technique and apply some imagination:

*Hark now, hear the sailor's cry
Smell the sea and feel the sky
Let your soul and spirit fly into the mystic
And when that foghorn blows
I will be coming home*
—VAN MORRISON ("Into The Mystic")

*I'm a fountain of blood
In the shape of a girl
You're the bird on the brim
Hypnotised by the whirl
Drink me, make me feel real
Wet your beak in the stream*
—BJORK ("Bachelorette")

*I take it higher like a bird on a wire, retire the fire
I never, 'cause I'm just movin' on up
Choosin' to touch the unseen, cravin' to clutch
The most inevitable, legible pyromania
Slaying the devil and sendin' him back to Transylvania*
—K-OS ("Crabbuckit")

*Words can be like weapons
No matter that they're small
And I used three tiny words on you
And then beat it down the hall
Does this road go on forever?
Does this terror know no end
For a girl on a road?*
—FERRON ("Girl On A Road")

Ransom notes keep falling from your mouth
—IMOGEN HEAP ("Hide And Seek")

- Same thing with Bob Dylan’s “Political World.” No chorus, no middle eight, but 11 verses (short ones!). Each verse *begins* with the same line,

We live in a political world

- You’ll find parallel construction everywhere in Lennon-McCartney lyrics. In double middle-eights. In verses of songs that have choruses. And in verses of songs without choruses, such as these:
 - “And I Love Her” has no chorus, three verses (one of which is repeated), and a middle eight. The title phrase repeats at the end of each verse.
 - “When I’m Sixty-four” has no chorus, three verses and two, count ’em, two middle eights—not uncommon in Lennon-McCartney songs. The line, *Will you still need me, will you still feed me, when I’m sixty-four* repeats at the end of each verse.

Massive parallel construction in Lennon-McCartney lyrics is one of the main reasons they’re so catchy and memorable.

10.10.4 PARALLEL CONSTRUCTION WITHIN A VERSE OR CHORUS

Parallel construction *within* a verse can be extraordinarily effective. It has a spell-binding quality:

*And who in her lonely slip?
Who by barbiturate?
Who in these realms of love?
Who by something blunt?
Who by avalanche?
Who by powder?
Who for his greed?
Who for his hunger?
And who shall I say is calling?
—LEONARD COHEN (“Who By Fire”)*

Here’s a less profound but nonetheless effective example of parallel construction within a verse. This example uses “call-and-response” technique, common in gospel songs:

In song lyrics—especially rap lyrics—rhyme plays a far more important role than it does in poetry. Lyricists have to write specifically for a *listening* audience, not a reading audience. Reading doesn't enter the picture unless a listener decides to read the CD insert, or goes lyric-hunting on the Internet.

When writing lyrics, short-term/working memory limitations apply to the hilt. Rhyme serves a couple of important—and related—functions:

- It helps make lyric lines memorable
- Like repetition and parallelism, rhyme creates structure

10.11.2

“TRUTH” IN RHYME

People not only remember rhymed lines more easily than unrhymed lines, but also *believe* rhymed lines more than unrhymed lines.

In a study in which participants were asked to rate the truthfulness or accuracy of aphorisms previously unknown to the participants, the aphorisms that rhymed always received higher accuracy ratings than those that did not rhyme—even though *there was no difference in meaning between the rhymed and unrhymed versions*. For example, “What sobriety conceals, alcohol reveals” was rated significantly more accurate than, “What sobriety conceals, alcohol unmasks.”

The researchers explained that people base truthfulness or accuracy of information in part on “processing fluency”—the ease with which the brain can process the information. They concluded that “rhyme, like repetition, affords statements an enhancement in processing fluency that can be misattributed to heightened conviction about their truthfulness.”

“YOU MUST SET FREE A CELEBRITY”

Defence attorney Johnny Cochran, virtuoso that he was, played the O. J. Simpson jury with admirable mastery. Knowing he was dealing with a stable of nodding donkeys, Cochran fed the jury the line, “If it doesn't fit, you must acquit.” The members of the jury looked at each other and nodded. The line rhymed, so it had to be true, they reasoned.

When deliberation day arrived after an *eight month* trial, the jury grazed in the pasture for three whole hours, ignored overwhelming DNA evidence against Simpson, and returned a verdict of not guilty.

7. Multi-word Rhyme

In multi-word rhyme, a non-rhyming word or syllable separates two rhyming words or syllables. The rhymes can be masculine or feminine, true or near.

More examples from the same 2Pac song. The last one uses a wrenched rhyme, *carots*, so that the last syllable (*-rots*) vowel-rhymes with *on*.

quick to holler/little smaller
behind the stairs/the times we shared
ten carots to rock/man on the block

Multi-word rhyme, like multi-syllable rhyme, is ubiquitous in great rap lyrics.

8. Mosaic Rhyme

When you rhyme two or more words with one word that has two or more syllables, you have *mosaic rhyme*, also called *compound rhyme*. The best rap lyrics almost invariably have mosaic rhyme.

In this example, *shot ya* rhymes with the last two syllables of *Sinatra*, and *Peruvians* rhymes with *do me in*.

Who shot ya? Mob ties like Sinatra
Peruvians tried to do me in
 —JAY-Z, THE NOTORIOUS B. I. G., L. BONNER, R. FRANKLIN, M. JONES, R.
 MIDDLEBROOKS, W. MORRISON, A. NOLAND, M. PIERCE, & G. WEBSTER,
 recorded by JAY-Z & THE NOTORIOUS B. I. G. ("Brooklyn's Finest")

10.11.7

RHYME BY LOCATION IN A PHRASE OR LINE

9. End Rhyme

Rhymes that end lines, whether true, near, masculine, or feminine, tend to stick in memory because:

- After initial exposure to the vocal phrase structure, the listener knows where lines end, anticipates rhymed words, but isn't sure what the rhyme is going to be (that's a surprise—or ought to be).

10.11.8

HOW TO USE AN ORDINARY RHYMING DICTIONARY TO FIND MILLIONS OF MULTI- SYLLABLE AND MULTI-WORD VOWEL RHYMES

Rhyming dictionaries list true rhymes only, usually by number of syllables and vowel category. No rhyming dictionary could come close to listing near rhymes, especially vowel rhymes. The reason is that, since you only need to rhyme vowels, not consonants, vowel rhymes are *combinatorial*.

So, how many combinations of vowel-rhyming words are there in the English language? Hmmm ...

First, consider the broad range of vowel *sounds* in the language:

- ***Monophthongs and monosyllables***—simple, single vowel sounds, such as these: *day, hat, arm, saw, see, bed, by, pipe, sit, no, too, got, put, cup, fur*. Depending on dialect, you could easily add more.
- ***Diphthongs and triphthongs***—single-syllable vowels that change as you move your tongue, as in words such as these: *toy, how, pew, mouse, coin, bone, fire, flour*, and so on. Again, the number of diphthongs and triphthongs varies with dialect.

Next, consider that you only need to vowel-rhyme *one* syllable of one word with *one* syllable of another word, even if both words have more than one syllable.

- The *er* sound in *urban* vowel-rhymes with the *er* sound in *anniversary*.
- The long *e* sound in *bebop* vowel-rhymes with *carefree, ecosystem*, and thousands of other words with a long *e* vowel.

Suppose you have a list of exactly 10,000 English-language words that have at least one long *e* vowel sound. Some of the words on your list are single-syllable, such as *see* and *tree*. Others have two or more syllables, such as *leader, jamboree*, and *congenial*.

- The first word on your list of 10,000 words, regardless of how many syllables it has, vowel-rhymes with each of the next 9,999 words. So now you have 9,999 two-word combinations that vowel-rhyme.

You can use the same procedure to find multi-syllable or multi-word vowel rhymes. Just look for two-or-more-syllable rhymes in which the vowel sounds in both syllables match, regardless of consonants. For example, long *a* followed by short *e*:

- **Multi-syllable words that vowel-rhyme:** *faceless, bracelet, blatant, greatest, outdated, tasteless, persuaded, mayhem*, etc.
- **Multi-word vowel rhymes:** *placed a bet, betrayed the chef, paid my respects, made my confession*, etc.

In rap, rhyme is the equivalent of melody, so the more, the better, especially multi-syllable and multi-word vowel rhymes—as long as the meaning of your lyric doesn't veer over the edge of comprehensibility into the abyss of gibberish (right side of the Wundt curve).

Listeners expect multi-syllable and multi-word rhymes in rap, and welcome new ones that surprise them, just as listeners to a melody welcome accented non-chord tones, sequences, modal melody, and other such characteristics of melody that create variety and evoke emotional responses.

Because you can use any ordinary rhyming dictionary to come up with millions of possible multi-word and multi-syllable vowel rhymes, you have no excuse not to have lots of them in your rap lyrics.

Moreover, because of the abundance of vowel rhymes, you don't need to settle for low-EPA words. You can use words with lots of emotional power without reducing the large number of rhymes that a great rap lyric requires.

More on this in Section 10.14.

HOOK SCHMOOK

You may or may not have noticed the absence of the word "hook" in the context of songwriting, here in this book largely about what goes into creating emotionally powerful music and lyrics.

As you know, the term "hook" refers to a catchy or memorable musical or lyrical bit of a song. If you don't know what you're doing as a songwriter, you'll be lucky if your song has a single hook.

But if you *do* know what you're doing, your song will unfold in time as a sequence of dozens of hooks occurring every few seconds from beginning to end. Lyrical hooks, rhythmic hooks, harmonic hooks, melodic hooks.

Beats & Pulses	● . . ● . . ● . . ● . . ● . . ● . . ● . . ● . .
Words	LOSE yourself in the MUS- ic; The MO- ment you OWN
	it you BET- ter NEV- er LET it GO You ON- ly get
	ONE SHOT, do NOT miss your CHANCE to BLOW, This OPpor-
	TUN- i- ty comes ONCE in a LIFE- time. YOU bet- ter

EMINEM AND THE RAPPIN' COURT RULING

Eminem's 1999 album, *The Slim Shady LP* has a song called "Brain Damage," which includes a verse that mentions an eighth grade classmate of Eminem's named DeAngelo Bailey. Here are some lines:

*I was harassed daily by this fat kid named DeAngelo Bailey
An eighth grader who acted obnoxious, cause his father
boxes
So every day he'd shove me into the lockers*

Bailey sued, claiming Eminem slandered him.

In 2003, judge Deborah Servitto dismissed DeAngelo's suit in a 14-page ruling. The document included the following footnote:

To convey the Court's opinion to fans of rap, the Court's research staff has helped the Court put the decision into a universally understandable format:

*Mr. Bailey complains that his rep is trash
So he's seeking compensation in the form of cash
Bailey thinks he's entitled to some monetary gain
Because Eminem used his name in vain*

*Eminem says Bailey used to throw him around
Beat him up in the john, shoved his face in the ground
Eminem contends that his rap is protected
By the rights guaranteed by the first amendment*

*Eminem maintains that the story is true
And that Bailey beat him black and blue
In the alternative he states that his story is phony
And a reasonable person would think it's baloney*

There's no substitute for putting in the time and effort it takes to learn technique. One way or another, all of the great songwriters *did* learn their technical stuff. Lennon-McCartney, Berlin, the Gershwins, Dylan, 2Pac, Mitchell, Eminem, Bowie, and the rest—all of them. The evidence, as discussed earlier, is in their songs.

Moreover, most great songwriters *do* revise their work.

You may have heard songwriters you know make statements along these lines:

- “I wrote three songs yesterday. They all just came to me as gifts.”
- “You can easily over-edit and destroy your raw first inspiration.”
- “Revising a song ruins it.”
- “There are no rules!”
- “Great songs come out of nowhere.”

Rubbish.

Those are the claims and rationalizations of the clueless.

Just because a song comes to you in a burst of “inspiration” in 10 minutes on hotel stationary, that doesn't make it a good song. It's probably drivel. Inspired drivel, but still drivel.

It bears repeating that *anybody with no technical knowledge or skills can write a song*. Writing “a song” requires **zero talent and zero know-how**, just as writing “a poem” requires zero talent and zero know-how. Any five-year-old can write a poem or a song.

When you write a song, if you don't know what you're doing from a technical standpoint, you simply default to ineffective technique, the technique of the clueless.

As you know by now (assuming you've read the previous chapters), when you write a song, there are *hundreds of ways you can screw up royally* without knowing that you've screwed up. If you don't know the difference between technique that works effectively in communicating your imaginative vision, and technique that does not work, you will always write mediocre music and lyrics.

If you want to create great art, you have to know the technical rules that actually work, apply those rules, and revise your songs where they require revision. Such revision will not spoil or destroy an inspired idea for a song. Instead, revising will help turn the words and music you imagine into works of art that will attract appreciative audiences.

If you want to write great lyrics, the next section describes a suggested approach you might find useful.

11

How Repertoire, Signature, and Performance REALLY Work

On stage, I make love to 25,000 different people. Then I go home alone.
—JANIS JOPLIN

11.1 Repertoire

11.1.1 WHAT IT TAKES TO BREAK AWAY FROM THE PACK

Most people get into bands for three very simple rock 'n' roll reasons:
to get laid, to get fame, and to get rich.

—BOB GELDOF, KBE

If you play in a band or as a solo artist (or would like to), you're one in a pack of millions. If you'd like to advance your music career, you need to break away from the pack.

What does it take to break away and get noticed for performing your original songs? Assuming you don't want to trust to blind luck (more on this in Chapter 12), you need:

1. Consistent first-rate songwriting; an adequate repertoire of brilliant songs
2. A signature sound and style
3. Raging ambition
4. Music business knowledge and skills (the subject of Chapter 12)

11.1.2

YOU HAVE NO SERIOUS COMPETITION

Skill without imagination is craftsmanship and gives us many useful objects such as wickerwork picnic baskets. Imagination without skill gives us modern art.

—SIR TOM STOPPARD

As for the pack of millions from whom you would like to break away—how are they faring?

1. Songwriting Skills

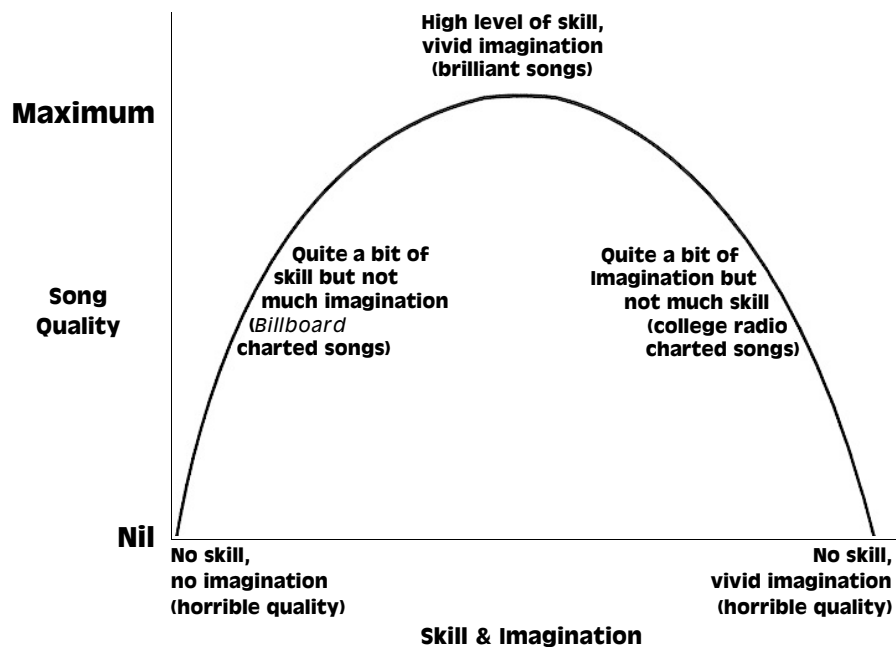
They're not faring well. *The song is the currency of the music business.* Nearly all songwriters deal in weak, devalued currency; hardly any songwriters are highly skilled *and* highly imaginative (see Figure 138 below).

So, if you can master the technical skills discussed in Chapters 6 through 10 *and* you have a vivid imagination, you won't have any serious competition as a songwriter. And if you have some ambition and business skills, you'll do well commercially.

- Those with limited imagination and minimal musical and lyrical composition skill write horribly boring, tedious songs (extreme left side of Wundt curve; the songwriting equivalent of the Barnett Newman painting, "Voice of Fire"—see Section 1.3.23)
- Those with limited imagination but quite a bit of skill write mediocre songs (left side of Wundt curve; the songwriting equivalent of "wickerwork picnic baskets")

- Those with quite a bit of imagination but minimal skill also write mediocre songs (right side of Wundt curve)
- Those with a vivid imagination but minimal skill write incoherent or meandering “modern art” songs (extreme right side of Wundt curve)

FIGURE 138 Wundt Curve of Song Quality (Music and Lyrics): The Application of Skill and Imagination



Blind luck, buzz, and performer brand loyalty determine how songs get on mainstream and college radio charts. Song quality doesn't have much to do with it (see Chapter 12).

However, if you write brilliant songs, you don't need the charts, and you don't need blind luck. A band or performer with outstanding musical and lyrical composition skills, a vivid imagination, and a signature *vocal* (not instrumental) sound and style—yet only average instrumental ability—has an excellent chance of achieving spectacular commercial success (e.g., Hank Williams, Sr., Lennon-McCartney, Bob Dylan, Paul Simon, Bjork, Eminem).

Alas, most bands and solo performers who aspire to bigger things have their priorities exactly backwards:

Fortunately for you, most of the millions of struggling songwriter-performers competing with you have no idea their songs are mediocre—and never will know. They also don't realize that their sound and style amounts to mimicry—and never will realize it.

So they soldier on, oblivious of their songwriting weaknesses and stylistic mimicry, and unaware of the necessity of doing something about both.

All in all, if you are willing to ...

- Take the time and effort to acquire serious musical and lyrical composition skills, and to spend most of your music-related time on perfecting those abilities, instead of obsessing about instrumental and studio skills;
- Do what it takes to create a *vocal* signature sound and style (more on this shortly);
- Focus your ambition;
- Learn about the music business and entrepreneurship (if you haven't already),

... then you should be able to carve out a most comfortable place for yourself as a performer-songwriter, with or without a band.

11.1.3

DO NOT CO-WRITE UNLESS YOU ABSOLUTELY HAVE TO

Collaborating with others to create your repertoire has several serious disadvantages:

- Your co-writer is probably clueless about effective musical and/or lyrical composition technique. If you collaborate with such a person—even if *he or she has previously written hundreds of songs*—you will probably crank out mediocre material. Obviously this does not apply if your co-writer is skilled—someone who knows pretty much everything in Chapters 6 through 10.
- If you co-write, you unnecessarily compromise your musical and lyrical composition style—your signature. The more co-writers, the tinier your signature. This defeats the purpose of having a signature.
- Co-writing unnecessarily erodes your confidence in your ability to compose effective music and effective lyrics by yourself.

If you haven't yet acquired the technical skills covered in Chapters 6 through 10, odds are high that your self-written songs are of merely average quality.

Stop performing them.

Instead, work on acquiring technical songwriting skills. It will take considerable work and time. After a minimum of a year or two of skill-acquisition and practice, you may be in a position to begin writing some new songs of significant quality.

In the meantime, stick with performing great classic songs. Your musical reputation will fare much better if you perform only the best songs. Don't water-down your repertoire with original songs of mediocre quality.

You'll probably find that www.GoldStandardSongList.com has the best and most comprehensive listings anywhere of quality material in all genres.

One other thing: do not perform unknown songs written by your friends. Odds are, they have minimal songwriting skills.

WANNA BE A DJ?

If you're thinking about becoming a DJ, start by reading a few good books that cover the range of DJ art, such as the one by Broughton and Brewster (see References).

"DJ" has several meanings:

1. A radio show presenter, who rarely has any control over the playlist on commercial radio, but does on non-commercial radio such as on community, public, or college radio
2. A club or party DJ who selects, plays, and mixes tracks for dancing
3. A DJ composer-producer who samples, scratches, plays, mixes, and remixes tracks to create new sounds.

To be a successful club or composer-producer DJ, you have to be highly skilled at certain things such as beat matching and recognizing song structure. So you need to have a good grasp of some of the elements of composition technique covered in this book, especially the material covered in Chapters 7 and 8.

11.2

Your Signature Sound and Style

11.2.1

HOW SIGNATURE SOUND DIFFERS FROM SIGNATURE STYLE

If you expect to be taken seriously as a performer of original material, you must develop a signature sound and style. In the context of developing your own musical signature, the terms “sound” and “style” refer to distinctly different things.

Signature Sound

Signature sound refers to the quality or character of sound, as discussed way back in Sections 3.2 and 3.3. For example, you can easily tell which instrument is which when you play exactly the same note on a piano and a guitar. When you play Middle C on a piano, the note has a distinctive “piano” signature sound to it. When you play Middle C on a guitar, the note has a characteristic “guitar” signature sound to it.

Same with two different voices. You can easily tell who’s who when you hear recordings of two performers singing the same song in the same key—Ray Charles and Elvis Presley, for example. Each singer has a completely unique vocal quality—a signature vocal sound.

Signature Style

This refers to the distinctive manner in which a performer sings, raps, or plays an instrument.

Suppose somebody were to play you two recordings of “Tea For Two,” each recorded in the *same key* and on the *same acoustic guitar* (so the signature sound does not change). Suppose Django Reinhardt recorded one version, and Chet Atkins the other. Without knowing the identity of either guitarist, you would know instantly that two different artists with radically different *signature styles* made the two recordings. If you had some familiarity with the music of Django and Chet, you’d know right away which artist made which recording.

Same with voices. If you were to hear Ray Charles and Elvis Presley sing the same song in the same key, you’d easily be able to recognize that, not only does each

artist have a signature *sound* to their voices, but each has a signature *style* of performing the song.

11.2.2

WHY YOU NEED TO CREATE A SIGNATURE SOUND AND STYLE

"In humans ... neophilia is so intense that it drives a substantial portion of the global economy, particularly the television, film, publishing, news, fashion, travel, pornography, scientific research, psychoactive drug, and music industries."

—GEOFFREY MILLER

Neophilia is the love of novelty, of new things. Humans are extreme neophiliacs. People crave the new and the different.

If you aspire to break away from the pack of millions of aspiring songwriters and eventually quit your job cleaning the stables at the Dodge City Horse Store, you need to appeal to natural human neophilia. You have to create two kinds of new-and-different things:

1. New songs of extraordinary quality
2. A new—i.e., unique—sound and style of performing your new songs

The perceived novelty of your signature sound and style will be directly proportional to the degree to which your sound and style mark a *departure* from the sound and style of established performers.

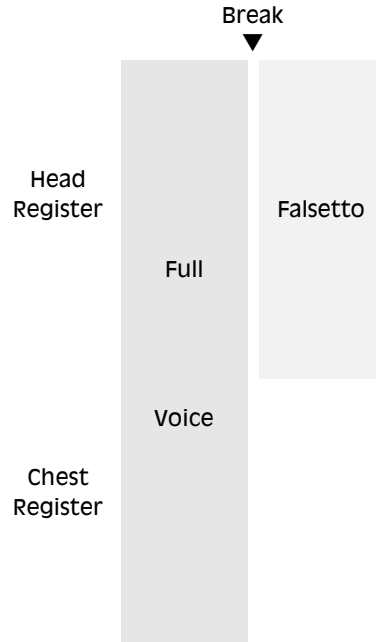
When you develop a signature sound and style, you are positioning yourself in a unique place in the minds of those who hear you. If your sound and style mimics some other artist's, then listeners will not perceive you as unique. So instead of carving out a new position, your sound and style will, in their brains, merely blend in with their memory of the artist or artists you're mimicking,

(Much advertising works on the principal of *positioning*. Corporations spend millions positioning themselves in the minds of consumers—the corporate equivalent of creating a unique style. It works. For example, Avis successfully positions itself as the car rental company that "tries harder." Whether it's true or not, people believe it. Chapter 12 discusses the findings of an interesting study of the decisions consumers make based on the brand positioning of Coke vs Pepsi.)

If you have:

- Brilliant new songs, but a style that mimics an established performer, or

FIGURE 139 Full Voice and Falsetto



A lot of mainstream singers play it safe and never use falsetto. But falsetto, especially in men, can sound remarkably emotional and expressive. Falsetto sounds edgy because singers who use it push the limits of vocal expressiveness, and audiences sense that. Soul, R & B, blues, rock, country, and gospel singers have always made use of falsetto (e.g., Aaron Neville, Marvin Gaye, Bobby McFerrin, the Bee Gees, Jimmie Rodgers, Wilf Carter). If it's not something you've tried, have a go at falsetto and incorporate it into your vocal style.

Usually, you cannot produce true falsetto tones at low chest voice frequencies. However, you can jump directly from chest register up to falsetto. When you quickly switch back and forth between full voice—especially chest voice—and falsetto, that's yodelling!

HELP FOR ASPIRING YODELLERS

If you just can't seem to get the hang of yodelling no matter how hard you try, help is at hand.

You can get yourself a yodelling T-shirt.

NODOJIMAN: THE ORIGINAL TV SINGING CONTEST

Long, long, long before *Pop Idol* or *American Idol*, there was *Nodojiman*. The Japanese word means “throat pride” or, loosely translated, “good singer.”

Nodojiman has been a popular Sunday institution in Japan since 1945, and is still going strong. The program’s format has some similarities to *Idol*. An MC introduces 20 contestants and each sings one song (actually only a short segment of one song). The winner goes on to the next level.

Nodojiman travels around Japan and around the world. So, if the *Idol* judges have shown you the door, keep an eye out for the venerable *Nodojiman* and try your luck there, the next time the show comes to your neighbourhood. It might be a good idea to brush up on your Japanese if you expect to have a shot at the finals and eventual superstardom.

11.3 Performing Live

11.3.1 MENTAL PRACTICE

Mental practice is the imagined rehearsal of a motor act with the specific intent of learning or improving it, without overt movement input.

—ALVARO PASCUAL-LEONE

As you know, stepping out on stage without being adequately prepared invites disaster. Only practice (and perhaps a beta blocker) ensures confident, un-self-conscious performance.

But it’s not necessary, or even desirable, to restrict practice to conventional practice sessions. You can also practice mentally. How? By performing the song over

Beta blockers do work. They reduce performance anxiety. Inderal, for example, quells physical tremor due to nervousness without affecting cognitive functioning. (Beta blockers are not sedatives.)

Beta blockers are potent drugs that were not developed to reduce performance anxiety in musicians. However, if used in low dosages, they do the job without harmful side effects.

One disadvantage is that, while your performance may be technically correct, it loses intensity when you're on a beta blocker.

11.3.6 YOUR AUDIENCE OF ONE

Your whole duty as a writer is to please and satisfy yourself, and the true writer always plays to an audience of one. Start sniffing the air or glancing at the Trend Machine, and you are as good as dead, although you may make a nice living.

—STRUNK AND WHITE

Though you may play for an audience of 5,000, those are 5,000 *individual, private minds*, not a single “audience mind” consisting of 5,000 minds. So you really are writing and performing for one single solitary individual. First yourself, then one listener. And that's all.

If you write or perform for a demographic, such as 18- to 25-year-old African American males, or 30 to 45-year-old white females, you will sound phony. Or boring. Or both.

VERDI'S MUSICAL MONEY-BACK GUARANTEE

'Twas the year of 1872 in the city of Parma, Italy, and Verdi's *Aida* was having a successful run.

One day, Verdi received a letter from a disgruntled customer, a young man who had travelled some distance to Parma to see the opera. He saw it twice, just to make sure he didn't like it. Now he was requesting a refund, not only for the opera tickets, but also for his train fare *and* his meals.

Maestro Verdi, class act that he was, agreed to the request. He refunded the customer, including his train fare, but not his meals. But the dissatisfied customer had to promise in writing never to attend another new Verdi opera.

12.1

Starters

12.1.1

SECTORS OF THE MUSIC BUSINESS

Before you read this chapter ...

- Do you aspire to earn a living as a performer and recording artist, but are currently working outside of the music industry (or are in school, college, or university)?
- Do you already earn a living in the music industry but would like to become a performer and recording artist instead of whatever it is you're doing, such as teaching music, working in a music store, working as a session player, etc.?

If you answered “no” to either of the above, this chapter probably won't interest you much. If “yes,” you may find this chapter helpful.

The music industry is comprised of at least five major sectors or areas of activity:

1. **Performing**—booking, promoting, and playing shows
2. **Recording**—producing, distributing, and selling singles, CDs, videos, etc.
3. **Copyright administration**—seeing that songwriters get financially compensated
4. **Instruments and gear**—making and selling guitars, keyboards, amps, recording hardware and software, etc.
5. **Education and training**—writing music education books, creating digital educational materials, teaching music-related courses, etc.

As well, the music industry has close ties with other sectors, especially:

1. **Media**—radio, Internet media, print media, TV, film, advertising
2. **Merchandising**—manufacture and sale of T-shirts, key chains, coasters, decals, hats, photographs, etc.

3. *Dance*—everything from ballet and modern dance to disco and rave culture
4. *Consumer audio equipment*—iPods, home stereos, etc.

Songwriting by itself is not a “music industry sector.” Until you’re in a position to *sell* your songs in some way—by performing them at the local pub for money, or by recording and selling a CD, or by having another artist perform or record your songs, generating income for you—until you’ve *monetized* your songs, your songwriting activity constitutes a hobby or pastime. It does not become “industry” until someone, in some way, pays you for your songs.

If you want to make a living as a songwriter-performer, you’ll need to learn quite a bit about most of the sectors listed above.

12.1.2

TO REITERATE: THE SONG IS THE CURRENCY OF THE MUSIC BUSINESS

As discussed briefly in Chapter 11, the song is the currency of the music business. The beauty is that you have the right to print as much of your own currency as you please, and *you have control over the value of your currency*. That is, if you care to devote the time and effort necessary to become skilled at composing music and lyrics, you can create and trade in valuable currency.

Audiences crave valuable currency—Lennon-McCartney currency, Eminem currency, Bjork currency, Loreena McKennitt currency.

If you don’t care to put in the time and effort it takes to become a skilled songwriter, then you will write mediocre songs, and few people will want to trade in your currency, no matter how much of it you crank out.

Fortunately, there’s a market for every style and genre of popular music, providing the value of the currency is high. If you make the effort to create your own high-value currency, you can make a nice living trading in it.

If you decide that songwriting is not for you, but you’d like to earn a living as a singer, then the first thing you need to concern yourself with is the quality of the songs you select for your repertoire. One big mistake a lot of young singers make is selecting songs based on “hit” status. Whether or not a song becomes a *Billboard* hit has nothing to do with song quality.

For an interesting story of a major label's psychopathic behaviour, read Steve Albini's now classic article, "The Problem with Music," first published in 1993, but still relevant:

www.TheBaffler.com/AlbiniExcerpt.html

On a lighter psychopathic note, if you aren't familiar with it, the comic strip *Dilbert*, by Scott Adams, brilliantly satirizes corporate behaviour. At least three major characters, the Boss, Dogbert, and Catbert, are psychopaths. Get your daily Dilbert fix at:

www.Dilbert.com

12.1.5

THE MUSIC BUSINESS: A MALE BASTION

Once upon a time in the not-too-distant past, those responsible for hiring symphony orchestra players never hired women except as harpists. The men who did the hiring claimed men were better players. Eventually, in response to charges of discrimination, physical screens were introduced at auditions. The hiring committee could hear a candidate play, but could not see him or her.

Lo and behold, suddenly, women started passing auditions and getting hired for all positions in symphony orchestras.

This was a classic case of the naturalistic fallacy: hiring committees made the false assumption that, because many more men than women become career musicians, men are the natural musicians of the species, and the better players (see Section 1.5.14).

A symphony orchestra, like a rock band or a hip-hop crew or a folk duo, is a *business*. The music industry, especially at the "big business" level, is a male bastion: men structure it and run it to accommodate male competitiveness and male power-and status-seeking.

In a competitive business environment, according to research findings published in the *Harvard Business Review*, women are far less likely than men to simply ask for their due. For example, when offered a job at a particular salary, most men try to negotiate for more, while most women settle for the salary offered. The study found that women tend to regard such negotiations as counterproductive to good working relationships, whereas men thrive on the prospect of a good competitive game.

For the sake of having a business career at all, many women decide to delay the fulfilment of their natural desire to raise children. The time, money, and energy required for child-rearing is so burdensome for women (but not for men) that having a child can destroy the business career aspirations of any woman who does not have

lots of support and resources. This applies especially to women trying to get established in the child-unfriendly music industry, a playground for extended male adolescence.

In most industries, including the music industry, women have much more success at the small-business level. When you own your own business, you're in control. If you're a female songwriter-performer and you want to get into the music business on your own terms, your best option may well be to start your own small business: set up your own label. More on this in Section 12.3.

12.2 Your Public Image

My reputation is a media creation.
—JOHNNY ROTTEN

12.2.1 IMAGE, REPUTATION, AND ALL THAT

Mr. Rotten is dead on with respect to public image and reputation, whether you're a solo performer or in a band.

The first thing you need to keep in mind is that every single little thing the media learns and reports about your music and you personally, *whether true or false*, becomes part of your public image and reputation—the media creation of you. And every detail will be stored forever somewhere on the Internet, easily Googleable.

If you choose a career as an independent artist, you have much more control over your public image and reputation than you do if you sign with a label—unless your songwriting currency is extraordinarily valuable. If that's the case, you will have considerably more control over your public image and reputation, despite being on a label.

Your Musical Image and Reputation

- *Story content of your lyrics.* Audiences and critics associate the stories and scenes in lyrics with the lives of the singers of those lyrics, like it or not. Whatever your lyrics say—even if you did not write the lyrics—becomes part of your public image. More so if audiences and critics know you wrote the lyrics.

- **Artistry of your lyrics.** Apart from lyrical story lines, the artistry evident in lyrics becomes part of your public image. If you write and perform banal “wickerwork” lyrics (such as Generic Artless Relationship Lyrics), your public image and reputation will reflect that. You, personally, will be regarded as ordinary, lacking imagination—even if you happen to be a smart, fascinating, imaginative person. On the other hand, if you write imaginative lyrics, you yourself will be regarded as magical, as a person somehow capable of creating lyrical magic—unlike ordinary people.
- **Your performing sound and style.** If it’s plainly derivative or clearly mimics an established artist, your public reputation and image will be much diminished, compared to what it would be if you sounded like nobody else and performed like nobody else.
- **Video and film of your performing sound and style.** Video and film will not hurt your public image and reputation, and may enhance it. But a creative video (as opposed to simple concert footage) will always destroy the images your lyrics create in listeners’ minds. Unless your record company insists on having you do a creative video, stick with straightforward concert video and film, or television/Internet appearances in which you simply perform. If you write mediocre lyrics, creative music videos may enhance your image.

Your Persona

Most rock journalism is people who can’t write interviewing people who can’t talk for people who can’t read.

—FRANK ZAPPA

- **Your persona in a radio or television interview.** Oh dear. People who can’t talk. That’s the case with most musicians. A few have natural wit, and fare better. If you already have a public image and reputation as a mediocre lyricist, go ahead and do all the radio and television interviews you want. Nothing you could say could further diminish your public image and reputation. If you’re only getting started and have no public image at all, do as much radio and television as you can, just to get on the map. However, if you have a reputation as an outstanding lyricist but you’re not terribly witty or adept at extemporaneous wordplay, you will damage your public image by granting radio or television interviews. Nothing you could say in spontaneous answers to an interviewer’s questions could match the brilliance of your song lyrics, which took you a great amount of time and effort to create. So don’t do radio or television interviews.

- ***Your persona in a documentary.*** As long as they don't interview you, you should be alright. They'll have to focus on something else, or report about you as a story. If you're important enough to be the subject of a documentary, and the documentary makers don't even have direct access to you by interview, your public image and reputation will go up.
- ***Your back story.*** You can falsify a back story for the media if you want to. But it can backfire, as it did for the white rapper Vanilla Ice, who made up a back story in order to gain street credibility. It worked for a while until the media found out his story was a pack of lies. The image and reputation of the rapper Ol' Dirty Bastard might have suffered had the truth been widely reported, before he died, that he came from a comfortable, stable middle-class background, with loving parents—that he did not grow up dirt poor in horrible circumstances in the projects, as was the story he fed to the media. (On the other hand, ODB's lyrics and crazed rap style were so unique, and his personal life was so colourful, that it seems unlikely his made-up back story would have hurt his image much.) Keep your media bio short and focus on interesting stuff—facts, not opinions. Seems like common sense, but, in bios and interviews, so many musicians go on and on about the silly trivia of their personal lives.

As far as your public image is concerned, you are what the media reports you are. If you give the media silly trivia, your public persona will be that of a silly, trivial person.

FANHEADS

If your act has a strong public image and a loyal fan following, perhaps one day your fans will start calling themselves "heads":

"Deadheads"	Fans of the Grateful Dead
"Phishheads"	Fans of Phish
"Parrotheads"	Fans of Jimmy Buffett
"Gearheads"	Fans of Bachman-Turner Overdrive (BTO)
"Fredheads"	Fans of Fred Eaglesmith
"Zedheads"	Non-American fans of Jay-Z
	(The last letter of the English alphabet is pronounced "zee" only in America. Everywhere else in the world, it's pronounced "zed.")

In this age of Internet media, website-based music distribution, webcasting, satellite radio, podcasting, and other such technologies, becoming successful as a musician-entrepreneur isn't as hard as it used to be *if you have high-value song currency*. If you don't—that's another story.

Here are ten reasons to set up your own label instead of chasing a deal with a large indie or major label.

1. Control

When you own your own label, you control:

- What songs you record
- When you record
- What songs you perform live
- When you perform live
- Your public image and persona
- How and where you run your business
- How you use the revenue your business generates
- In short, *everything*.

When you run your own label, you have to be a control freak to a considerable degree. The more things you learn to do yourself, the less you'll have to spend on outside help. For example, you can learn basic web design skills and build your own website. Later, when you have more money, you can hire a pro to re-do it, or do a make-over. You need not, and should not, put off having a web presence.

A MODEST BUT IMPORTANT VISUAL DESIGN EDUCATION

Knowing something about visual design has lots of applications for an indie label owner:

- Designing your website
- Designing media materials such as media kits, posters, etc.
- Designing CD covers and packaging
- Designing and creating images for consumer merchandise such as T-shirts, decals, beverage coasters, etc.

Even if you have the money to outsource such tasks instead of doing them yourself, you'll need to be able to tell the difference between good, effective design, and poor, ineffective design that looks "professional." A basic understanding of visual design

comparatively small number of slots per week, so they probably won't book you until you get some experience, have a sizable fan base, and have a manager and an agent.

At first, you'll have to book your own shows. Start locally. There's nothing stopping you from renting rooms and halls and promoting your own shows.

The thing is, nobody's going to come to your shows unless they've heard your music. You probably won't get commercial radio airplay without being signed to a major label or large independent label.

But there are other ways to get your music to the ears of potential fans.

When a newspaper or magazine does a story on you, make sure they plug your website, where curious readers will be able to listen to some of your tracks.

Your songs have to be so insanely great that music writers will rave about your songs. A sizeable proportion of people who read about you and visit your website will make a purchase of either a track or a CD upon hearing one or two of your songs just once. They will go straight to the tour info on your website and find out where you're playing next.

If your songs are not on a par with the best songs ever written in popular music, you're going to have a hard time getting your career going. (There's a popular myth in the industry that, at any given time, there are thousands of bands and individual songwriter-performers all writing brilliant material, but not getting signed by major labels because the majors can only sign a few new acts a year. Not true. Practically nobody in those bands has any significant songwriting know-how. The lower the skill level, the more competition.)

Promote yourself to public radio, community radio, college radio, satellite radio, Internet radio, podcasts. Make your songs available in as many places on the Internet as possible—not just your own website.

Keep after the media all the time and keep records of every bit of coverage you get, be it print, broadcast, or online. Again, *if your songs really are astounding*, media people will rave about you. This will help you attract a reputable manager or management company and a booking agent. Once you have some delirious media coverage and some legitimate industry people working for you, it'll be easier for you to play more often, start making a bit of money, and move to the next level.

Once again, though, it all depends on how incredible your songs are.

12.3.4

FILE SHARING: YOUR BEST PROMOTIONAL TOOL

I don't mind what Congress does, as long as they don't do it in the streets and frighten the horses.

—VICTOR HUGO

“File sharing” means that some people illegally “share” (i.e., steal) other people’s property. Here are some popular euphemisms for music file theft:

- Music file sharing
- Music file swapping
- Music file trading
- Music file downloading
- Free music downloading
- P2P habit
- Sampling music

And some popular rationalizations for music file theft:

- Metallica is already soooo rich!
- Record company owners make millions; why should I pay for that?
- I paid for the computer and the CD, why should I pay for the music?

Of course file sharing infringes copyright. Of course it’s illegal. Outright dang theft, and all that. Fetch Marshal McDillon.

But, as an indie musician, consider what file sharing can do for your career. You, the indie musician, have no access to mainstream commercial radio. No flashy music videos. No major label hype machine behind you.

But you *do* have file sharing. “Free” *sells*.

File sharing *helps* independent acts, who make much of their money on touring and T-shirts. As an indie artist, embrace file sharing. It’s your best promotional tool.

You have nothing to gain by complaining you’re a victim of file-sharing piracy. That argument is long over, despite the major labels’ insistence (through the Record Industry Association of America, or RIAA) on suing music fans—*their own customers*.

Consumers now lead the industry, not record labels. Some day, the industry will figure out a way to monetize illegal music file sharing, perhaps by collecting money from Internet service providers (who facilitate illegal music file sharing) and distributing it to songwriters and performers, the way radio stations pay performance rights fees that are distributed to songwriters via ASCAP, BMI, PRS, etc.

A rigorous study by researchers at Harvard University’s business school found that file sharing has not been the cause of the decline in CD sales in America in recent years. CDs now have to compete with a much wider range of options for the consumer’s entertainment dollar, such as electronic games and other computer-based amusement.

The Harvard researchers directly observed illegal file sharing activity and found that when sales of a CD declined, file sharing of that CD did not increase, as would be expected if there were a link between declining CD sales and file sharing.

12.3.5

YOUR POWER OVER RECORD LABELS

The only power an artist has in deciding whether or not to sign a publishing or recording contract is the power to say *no*. And the power to say no comes from having a fan base and a good income. That's one of the best reasons for becoming self-sufficient as an independent artist before you consider signing with a label.

If you have your own record label and people are buying your CDs, record companies will take an interest in you. Saying no doesn't mean saying no to any possible deal. It means saying no to any deal that would not benefit you in the long run.

As well, if you decide to sign with a label and it doesn't work out in the long run, you can always revive your own label, write new songs, and continue with your career.

12.3.6

HOW TO HANDLE MUSIC INDUSTRY LAWYERS

Lawyers make money working on legal problems. Not necessarily *solving* legal problems. Just working on them. When you hire a lawyer, you pay through the nose, whether the lawyer solves your legal problem or not. *Especially if you go to court.*

Since a lawyer makes money working on problems whether he or she solves them or not, a lawyer has a vested interest in keeping the clock running as long as you have the money to retain him or her. (Again, especially if you go to court.)

As an independent artist setting up a business, you'll need legal help. You will need an experienced lawyer who *specializes in music industry legal matters*, not a lawyer in general practice. If you know of a respected bona-fide music industry lawyer whom you would like to hire, do not let the law firm steer you to some other junior lawyer or articling student.

As for the job you need done, focus on *results*. That's what you're hiring the lawyer for. To get a specific job done. Lawyer Nicholas Carroll, in his book, *Dancing with Lawyers*, advises that you adopt the following strictly-business attitude when dealing with a lawyer:

I'm buying a service which provides the following results ... I need to know what results can be expected, how much it will cost and when it can be done ... Without this information I can't make a decision. If I can't make a decision, I'll have to let this job drop. (And then you [the lawyer] will not be hired.) If the value (to me) of the results is greater than the cost, *and* the cost is within my budget, I'll buy. If the value (to

Ani DiFranco	www.RighteousBabe.com
Fred Eaglesmith	www.FredEaglesmith.com
Ferron	www.FerronOnline.com
Jandek	http://tissue.net/Jandek/
Andrea Florian	www.AndreaFlorian.com
They Might Be Giants	www.TheyMightBeGiants.com
Janis Ian	www.JanisIan.com
Jim Hall	www.JimHallMusic.com

12.4

Indie Labels and Major Labels

12.4.1

WHY MOST BANDS AND SONGWRITER-PERFORMERS DON'T GET LABEL DEALS

Bands and solo artists struggling to get signed to a name-brand indie label or a major label usually assume that artists on those labels who write their own material and sell millions of records are good songwriters who are writing the right kinds of songs to be commercially successful.

Not true (with a few exceptions). At least the part about being good songwriters.

Most label artists who write their own songs write mediocre stuff. Many sell millions of records, but for lots of other reasons that have nothing to do with great songwriting ability.

Year after year, zillions of bands and solo songwriter-performers inundate major labels and large indie labels with piles of demo CDs. What's on those demos? The same kinds of generic songs they hear on commercial radio and college radio. "Wickerwork" music, or "modern art" music. Generic hard rock, generic hip-hop, generic country, generic R & B.

The Labels Don't Have Tin Ears; Songwriters Have Tin Pens

It's not true that record company A & R personnel can't tell the difference between great songwriting and run-of-the-mill songwriting. There's practically no great songwriting on those demos (even though A & R reps insist the bands they sign write superlative material). The songs on the demos represent thousands of different flavours of mediocrity. The job of A & R is to select a few of those acts every year to

- Personal appearances at large retail outlets (record companies pay for rack space in stores such as Wal-Mart, Tower, Virgin, etc.)—to get friendly with retail personnel and to attract media attention
- Opening-act touring with star label-mates

If the label has selected their new act shrewdly and promoted the act heavily, the new performer becomes a personality who convincingly delivers genre-appropriate craft-songs. Large numbers of fans connect emotionally with his or her persona and buy concert tickets, CDs, T-shirts, hoodies, hats, posters, photos, key-chains, coasters, bottle openers, lighters, even books comprised of the performer's immortal blog musings (“if you blog it, you can flog it”)—anything connected with the charismatic performer, who becomes a bona-fide star.

Example of the Buzz (or Bandwagon) Effect

*... false media
 We don't need it, do we?
 It's fake that's what it be to ya, dig me? ...
 Don't, don't, don't, don't, don't believe the hype
 Don't, don't, don't, don't, don't believe the hype*
 —C. RIDENHOUR, H. SHOCKLEE, W. DRAYTON, & E. SADLER, recorded by PUBLIC ENEMY (“Don't Believe The Hype”)

In the music industry, managers, agents, labels, the music media, and others try to get a buzz going for a new act or a new song.

Does it work?

Researchers at Columbia University investigated some factors that influence how music fans select one song over another. More than 14,000 participants (visitors to a music-downloading website *who did not know they were participants in an experiment*) were invited to check out new songs from a list of 48 MP3s by downloading and rating the songs they selected on a scale of 1 to 5.

Some of the participants (called “social influence” groups) could see which songs others were selecting and rating. The members of these groups tended to choose the same songs they saw others in their group selecting, and tended to rate them the same way, *even though none of the participants had ever heard any of the songs before*.

Another group (the “independent” group) could not see which songs others were choosing and rating. They rated the songs much differently, compared with the social influence groups.

The researchers found that buzz (the bandwagon effect) significantly affected song choice—*irrespective of song quality*. Song quality (as indicated by the ratings of the independent group) played a role in the social influence groups, but buzz had a powerful effect.

For example, one particular song that ranked in the middle of the pack by the independent group (#26 out of 48) ranked #1 in one of the social influence groups, simply because, by chance, it started getting more downloads at the outset. Others in that social influence group perceived the early download pattern as a buzz, jumped on the bandwagon, and sent the song to the top of the charts. And yet, in another of the social influence groups, the very same song by chance did not get a lot of downloads at the outset. In other words, the song that climbed to #1 on a chart of 48 songs when it had the buzz/bandwagon effect going for it ended up ranking #40 out of 48 when participants, by chance, did not perceive the song had a buzz.

As you'll see in a minute, the buzz/bandwagon effect is why payola works.

Example of the Brand Loyalty Effect

In the 1980s and 1990s, Pepsi Cola ran a series of television commercials called the "Pepsi Challenge." These commercials presented fake scenarios in which passers-by in a shopping mall would taste both Pepsi and Coke without knowing which was which, and would always indicate a preference for Pepsi.

In a laboratory-controlled study of the "Pepsi Challenge" scenario, the results differed wildly from the phony results of the TV commercials. Instead of preferring Pepsi over Coke, groups of blindfolded tasters preferred the taste of each soft drink with equal frequency.

But when groups of tasters could see the *logos* identifying which soft drink was which, three-quarters of the tasters claimed they preferred Coke over Pepsi, *even though, under blind conditions, no such preference choice could be demonstrated.*

The neuroscientists who conducted the study measured brain activity while the tasters were exposed to the Coke and Pepsi logos. Mere exposure to the Coke logo stimulated much more mental activity in areas of the brain associated with memory and self-image, compared with exposure to the Pepsi logo.

To summarize, in "blindfolded" conditions, people do not prefer Pepsi to Coke, nor Coke to Pepsi. It's 50-50. But in logo-identified conditions, preference for Coke over Pepsi shoots up to 75-25. The Coca Cola corporation has done an effective job, through constant branding activity, of creating a powerful, positive meme. Coke is a high-EPA word. People buy into the *myth* that Coke tastes better than Pepsi for reasons that have nothing to do with the taste of either soft drink. It's all about the power of propaganda alone—advertising and promotion—to change and shape behaviour without changing objective reality (in this example, the objective reality that Coke-Pepsi preference is 50-50 in the absence of brand identification). Under sinister circumstances, this is called brainwashing.

NOTES

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Chapter 6

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Chapter 7

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844 HOW MUSIC REALLY WORKS!

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Chapter 11

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INDEX

#

- 2Pac, 7, 505, 690, 691, 705, 751, 755, 832
- 10 chord progression guidelines, 466-472
- 10 effective lyric-composition techniques, 658-705
- 10 effective melody-composition techniques, 598-627
- 10 effective vocal techniques/guidelines, 757-763
- 12-bar blues, 141, 386, 388, 389, 434, 549

A

- A & R, 128, 809
- "A Case Of You," 667, 668
- "A Day In The Life," 608
- "A Hard Rain's A-gonna Fall," 527, 680, 730
- A Tribe Called Quest, 755
- A-440, *see* concert A
- AABA song form, 559, 560, 562
- absolute pitch, 150
- abstract language, avoiding, 666-668, 670
- accelerando, 515
- accented neighboring tones, 619, 620
- accent-matching, 556, 558, 565, 634, 635, 696-701, 703, 704, 724
- accidentals, 269, 361
- acoustics, 153, 154
- "Across The Universe," 606, 615, 747
- Adam's apple, *see* larynx
- adaptations, 9, 12, 21, 23, 24, 29, 30, 32, 40, 42, 53-56, 61, 64, 65, 68, 69, 71-77, 80, 83-86, 88, 90, 91, 93, 97, 99, 111, 112, 114, 171, 204, 568, 572, 644
- adjectives, 29, 656, 667, 712-714, 716, 718, 729, 735
- adrenaline, 569-571, 673, 772
- adverbs, 29, 653, 655, 656, 663, 712-714, 716, 718, 719, 733, 735
 - time-orienting, 653, 656, 719
- advertising, 33, 116, 746, 780, 813, 819
- Aeolian mode, *see* mode, Aeolian
- aerophones, 165, 167, 168, 170, 265
- affective meaning, 645, 646
- African Americans, 56, 88, 101, 104, 105, 125, 128-130, 131, 135-141, 512, 773
- agogic accent, *see* duration accent
- air reed, 164
- airplay rotation, 818
- airplay, 789, 804, 812, 813, 819
 - purchasing, 819
- alcohol, 573, 684, 772, 796, 797, 814
- "All Along The Watchtower," 257, 258, 363, 384, 400, 442, 575
- "All In Love Is Fair," 670
- allegory, 669
- Allen, Woody, 71, 72, 117
- Allman, Greg, 797
- allusions, 683
- ambition, 98, 601, 602, 730, 738, 740, 741
- American Idol*, *see* *Idol* (TV show)
- amino acids, 35, 59
- amphetamines, 573
- amusia, 28, 32
- amygdala, 480
- anacrusis, 552-554, 565, 588-590, 592-595, 600, 625, 637
- anapest, 697
- ancestors, 38, 39, 50, 56, 60, 64-68, 71, 77, 82, 86, 88, 89, 303
- androgens, 93
- animal calls, 14, 67
- anticipation, 434, 621
- "Anything You Can Do (I Can Do Better)," 147-153
- apes, *see* great apes
- aphasia:
 - Broca's, 32, 33
 - Wernicke's, 32, 33
- appoggiaturas, 619
- appropriated lyrics, 731
- Arabic scale, *see* scale, Arabic
- archaeology, 20, 62
- Ardipithecus kadabba*, 60
- Aristotle, 668
- Arlen, Harold, 133, 556, 593, 835
- Armagan, Esref, 19
- arms race (evolutionary), 72, 74, 91, 92, 111
- Armstrong, Louis, 4, 101, 129, 473, 519, 589, 835
- arousal, 81, 98, 171, 567, 570, 571
- arpeggio, 610
- art songs, 102
- art vs technique, 597
- artist royalty, 812
- "As Time Goes By," 562, 604, 605
- ASCAP, 103, 122, 130, 805, 812, 829
- ASPM (gene), 68
- assonance, 688
- Atkins, Chet, 134, 745, 833
- atonal music, 46, 147, 279, 280, 545
- attitude, 608, 646-648, 680, 775, 782, 807
- audience of one, 773
- audience participation, 768
- augmentation, 605, 615, 616
- augmented fourth, 193, 195, 201, 203, 205

- augmented triad, 293
 Australopithecines, 61
 autotuner, 763
 auxiliary, 619
- B**
- Bach, J. S., 262, 278, 342, 532, 562, 563, 597
 “Bachelorette,” 672
 back beat, 488
 Bad Writing Contest, 734
 Bakan, Joel, 785
 band names, 793, 794, 795
 bandwagon effect, 142, 816-819
 Barash, David/Nanelle, 641, 642
 Barenaked Ladies, 519, 592, 680
 Baron-Cohen, Simon, 644
 baroque, 124
 “Be My Yoko Ono,” 519, 592
 Beach Boys, The 196, 519, 725
 beat (distinguished from pulse), 486
 beat one of bar one:
 after, 552, 554, 555, 565, 587, 589, 592,
 595, 596, 600, 633, 637
 before, 552, 554, 565, 588-590, 592-595,
 600, 701
 on, 552, 554, 555, 565, 587, 593, 594,
 600, 619, 625
 Beatles, The, 6, 7, 106, 127, 142, 235, 265,
 296, 299, 423, 518, 577, 602, 613, 742,
 743, 751, 752, 776
 beatmakers and beatmaking, 120, 528, 743
 beats per minute, *see* BPM
 Beck, 585, 594, 614, 674
 Bee Gees, The, 106, 616, 762
 Beethoven, Ludwig van, 6, 110, 124, 169,
 219, 278, 296, 492, 532, 597, 747
 behaviourism, 28, 39, 40
 behind the beat, 555
 Bennett, Tony, 811, 832
 Berlin Act, 103
 Berlin, Irving, 4, 5, 133, 148, 628, 688, 835
 Berlioz, Hector, 476
 Berne Convention, 103, 122
 Bernstein, Leonard, 147, 834
 Berra, Yogi, 748
 Berry, Chuck, 137, 519, 731, 732, 833
 beta blockers, 765, 767, 772, 773
 big bands, 135, 136, 490
 Big Punisher, 685
Billboard magazine and charts, 116, 117, 136,
 628, 739, 742, 768, 819
 binary form, *see* form, binary
 biological determinism, 42
 bipedalism, 12, 13, 60, 61, 72, 77, 474
 Bjork, 110, 739, 755, 781, 811
 “Black Crow,” 100
 Blake, William, 730
 Bland, James A., 125, 838
 blank slate, 18, 28, 39, 40, 45, 76
Blind Watchmaker, The, 70
 Bliss, Chris, 584
 Bliss, P. P., 135
 blood type, 89
 bloodline, 89
 “Blue Moon,” 132, 363, 384, 395, 527
 blue note, 228, 256
 bluegrass, 16, 109, 119, 121, 133, 488, 755,
 794, 833, 834
 blues, 6, 105, 119, 129, 130, 135-137, 141-143,
 225, 228, 238, 256, 363, 384, 386, 388,
 389, 415, 416, 423, 429, 434, 440, 441,
 490, 502, 505, 512-514, 549, 593, 600, 602,
 613, 622, 730, 731, 754, 762, 831, 833-838
 BMI, 122, 130, 805, 812, 829
 Bolden, Buddy, 128
 “Bolero”/bolero, 527, 561, 832
 bone flute, 20, 63
 bonobos, 38, 92
 boogie, 492, 493, 527
 booze, *see* alcohol
 bossa nova, 527, 832, 833
 Bouchillon, Christopher, 141, 836
 Bowie, David, 7, 106, 114, 585, 587, 597, 705,
 831
 Boyz II Men, 505
 BPM (beats per minute), 15, 511, 514, 515,
 518-520, 524, 537, 552, 587-590, 592-595,
 599, 601, 630, 701
 brain, 5, 9, 14, 17, 19-21, 23, 25, 30, 31, 34,
 36, 45, 46, 48, 62, 68, 71, 92, 100, 155,
 158, 159, 161, 162, 188, 200, 268, 280,
 407, 462, 473-475, 485, 487, 494, 509,
 524, 534, 545, 558, 560, 570, 573, 609,
 635, 648, 669, 709, 748
 expansion, *see* encephalization
 left hemisphere, 24, 26, 27, 33, 536, 643
 lesion, 20, 23
 right hemisphere, 24-27, 95, 643
 size, 25, 62, 68, 77, 97
 brain-averse, 177, 179, 186
 brain-friendly, 177, 179, 181, 185, 187, 188,
 266, 284, 285
 brainwashing, 817
 brand loyalty effect, 739, 817, 818
 break away, 5, 737, 738, 743, 746
 breakout, 107, 108, 121, 123, 125, 126, 128,
 130-133, 135-141
 breath control, 758-759
 breeding season, 90
 brewski, 508
 bridge, 154, 169, 201, 332, 363, 386, 399, 400,
 407, 408, 418-420, 441, 444, 448, 510, 511,

536, 559, 562, 673. *See also* middle eight
 “Bridge Over Troubled Water,” 363, 407,
 408, 418, 419, 673
 British National Corpus (BNC), 662
 Broadway/Broadway musicals, 6, 123, 127,
 129, 132, 133, 135, 606, 753
 “Brooklyn’s Finest,” 691
 “Brown Sugar,” 589
 Brown, Donald E., 44
 Brown, James, 7, 137, 832
 Brown, Jason, 266
 Brown, Steven, 65
 Brubeck, Dave, 4, 507, 508, 834
 Buddhism, 55
 Bush, Kate, 673
 Butler, Judith, 734
 buzz, 658, 739, 783, 803, 806, 813, 816-820
 by ear, 3, 64, 343, 494

C

cabaret, 102, 126
 cadence, 49, 344-347, 352, 387-389, 401,
 404, 412, 418, 422, 442, 443, 457,
 544, 545, 554, 570, 582-584, 629, 633,
 635, 637
 authentic 344
 deceptive 344, 388, 389, 570
 dominant, 344
 feminine, 583, 584, 637
 final, 344
 full (full close), 344, 346, 347, 387, 582
 half (half close), 346, 387, 582
 imperfect, 346, 347, 387, 582
 masculine, 583, 584
 partial, 346
 perfect, 344, 347, 412, 545, 582
 plagal, 345, 404
 call-and-response, 679
 calypso, 138, 833
 “Can U Control Yo Hoe?,” 716
 “Canadian Railroad Trilogy,” 515
 cantata, 563
 capuchin monkeys, 38, 39
 “Carefree Highway,” 363, 407, 408, 410, 411,
 416
 Carey, Mariah, 670
 Carmichael, Hoagy, 115, 383, 395, 448, 835
 Carpenter, Mary Chapin, 685
 Carter Family, The, 133, 134, 519, 834
 Caruso, Enrico, 758, 837
Casablanca, 604
 Cash, Johnny, 4, 9, 10, 92, 110, 114, 134,
 315, 424, 519, 593, 624, 641, 678, 763,
 832
 celebrity, 684, 685, 791
 chain form, 560, 644

change blindness, 476, 477
 charisma, 815
 Charles, Ray, 137, 448, 518, 745, 478, 755,
 832
 Chase charts, 362-367, 371-392, 394-400,
 402-407, 409-417, 419, 426-432, 435-446,
 448-456, 458, 460, 461, 466, 467
 Chesney, Kenny, 724
 chest register/voice, *see* voice, chest (register)
 child psychosexual development, 100
 childhood, 18, 23, 24, 36, 37, 77, 474, 480
 children, 23, 29, 38, 41, 42, 44, 49, 67, 69, 75,
 77-79, 83, 87, 93, 96, 179, 202, 258, 544,
 568, 643, 681, 682, 786, 808
 chimpanzees, 14, 20, 24, 31, 32, 36, 38, 39,
 47, 48, 56, 57, 60, 67, 71, 83, 92, 177, 215
 Chomsky, Noam, 19, 23, 28, 29, 31, 33, 34, 44
 Chopin, Frederic, 278, 576
 chord of nature, 159
Chord Progression Chart, 366, 367, 467, 634,
 825-827
 chord progressions, weak, 449-452
 chord tones, 580, 605, 610, 611, 617-621, 623,
 625, 633, 635, 695
 chord:
 chromatic, 245, 272, 325, 379, 380,
 382-384, 401, 407, 409-413, 415-418,
 429, 443, 444, 447, 448, 450, 452, 464,
 467, 470, 471
 default, 375, 376, 399, 430
 diminished, 293, 311, 313, 332, 358, 360,
 404, 419, 427, 448, 454-456, 460, 461
 dominant/seventh, 222, 295, 297, 298,
 300, 345, 349, 352, 353, 360, 368, 377,
 387, 388, 399, 416, 418, 422, 430, 431,
 434, 438-440, 443, 445, 450, 455, 457,
 459, 464, 468, 582, 610, 618
 extended, 297, 299, 418, 422, 469, 539
 modal, *see* modal chord
 power, *see* power chord
 slash, *see* slash chord
 subdominant, 210, 353, 357, 358, 368,
 417, 455, 456
 suspended, 298, 422, 465
 tonic, 289, 300, 330, 331, 337, 344, 345,
 348, 352, 353, 357, 359, 366, 368,
 373-375, 379, 381, 386, 388, 394, 400,
 401, 404, 407, 408, 422, 425, 433, 439-
 441, 443, 449, 455-459, 467, 570, 582,
 583, 619, 620, 623, 625
 variant, 362, 375, 376, 381, 390, 399, 401-
 404, 412, 417, 430, 432, 438, 447, 470,
 471
 chordophones, 165, 169, 170
 chords, principal, 368-370, 434, 457-459, 511,
 621, 622

- chorus, 9, 15, 67, 84, 153, 259, 344, 386, 387, 390, 391, 396, 397, 399, 400, 409-411, 416, 418-420, 423, 431, 433, 439-441, 475, 477, 527, 542, 544-546, 548-551, 558-561, 563, 564, 571, 572, 578-580, 584, 585, 589, 590, 592, 594, 605-607, 614-616, 619, 620, 624, 625, 675-681, 689, 701, 704, 706, 709, 720, 722, 727, 728, 767
- chorusing, 83, 90
- Christianity, 55, 56, 69, 836
- chromatic note, 190, 191, 204, 244, 245, 256, 269-272, 325, 355, 610, 621, 622
- chromatic scale, *see* scale, chromatic
- chromatic solmization, 191
- chromosomes, 35, 36
- chunks and chunking, 479, 482, 487, 489, 490, 492, 494-496, 500, 502, 506, 508, 509, 540, 542-547, 550, 585, 604, 613, 700, 767
- Church mode, *see* mode, Church
- Churchill, Sir Winston, 681
- Circle of Fifths, 275-277, 356-359, 421, 458, 464
- Civil War, 104, 125, 126, 129
- Clarke, Arthur C., 69
- Clash, The, 110, 257, 833
- classical music, 124, 167, 304, 363, 489, 506, 534, 545, 772
- classics, 6, 8, 113-116, 132, 139, 245, 383, 505, 508, 513, 554, 578, 742, 743, 810
- Clear Channel, 768
- cliche, 425, 654, 715, 718, 719
- climax, *see* melodic climax
- Clinton, Hillary, 87
- closure, 545, 564
- CMRRA, 812
- coalition signalling, 85, 86
- cocaine, 573, 796
- Cochran, Johnny, 684
- coda, 545, 562
- codons, 35, 56
- co-evolution, 14, 62, 64-67, 541
- cognitive meaning, 645
- cognitive revolution, 28
- cognitive science, 16, 29
- Cohen, Leonard, 219, 283, 613, 674, 679, 811, 832
- Cole, Nat King, 106, 754, 834
- Coltrane, John, 38, 129, 834
- combinatorics, 33-35, 59, 67, 120, 121, 236, 376, 576, 693, 721, 792
- "Come Fly With Me," 595
- comfort zone, 598, 633, 711, 715, 716, 729, 749, 751, 756, 764
- comma, 198, 200, 260, 542
- commands, 38, 380, 588, 664, 668, 720
- common ancestor, 38, 60, 61, 65, 71
- common descent, 56, 87
- common practice period, 124, 562
- compass, 576, 579, 580, 637
- competition, 94, 96, 642, 738, 786, 804, 813
- competitors, 76, 84, 96
- composer-producer, 744
- compression, 154
- computer, 18, 19, 63, 64, 170, 268, 300, 472, 475, 476, 497, 603, 629, 670, 706, 754, 800, 802, 805, 819, 820
- parallel processing, 19, 30, 34, 728
- serial, 19
- concert, 81, 82, 116, 124, 125, 169, 183, 184, 256, 263, 314, 532, 533, 574, 763, 788, 800, 814, 816, 818
- concert A, 13, 183, 184, 263, 314, 484
- concerto, 563
- concrete imagery, 653, 666-669, 671, 672, 683, 707, 716, 719, 725, 728, 733
- conductor, 534, 831-838
- Congo the chimpanzee, 47
- conjunct motion, 609, 610
- connotative meaning, 520, 645-647, 649-651, 654, 713, 715, 717, 720, 723, 728, 733
- conscious mind, 726, 727
- content-words, 650, 651, 674, 675, 708, 710, 720, 723, 728, 729
- contractions, 661, 665
- contrapuntal motion, 343
- contrary motion, 343
- control freak, 798
- convergence, 66, 92, 734
- Copernicus, 58
- copyright, 103, 122, 731, 780, 805, 829
- corpus callosum, 25
- cortex, 25, 36, 83, 84, 100, 155, 480
- Costello, Elvis, 756
- cottontop tamarins, 204
- Coulter, Ann, 33
- counterpoint, 342, 343, 562
- country music, 106, 109, 119, 121, 130, 133, 134, 152, 390, 441, 814, 815, 834, 836
- new, 109, 119
- couplets, 685, 686, 709, 721-729
- courtship displays, 90, 91, 99, 100
- Coward, Noel, 5, 126, 755, 835
- co-writing songs, 97, 701, 741, 742, 753, 812
- "Crabbuckit," 672
- "Crazy," 363, 407, 413-415, 505
- creation mythology, 53, 58, 69
- creative reinterpretation, 730
- Creole, 128
- crest, 107, 109, 124-126, 129-133, 136-138,

140, 141
 critical period, 37, 150
 Cropper, Steve, 444
 Crosby, Bing, 4, 106, 755, 835
 cross rhythm, 535, 538
 crows, 39, 100
 cultural environment, 43
 cultural evolution, 40, 576
 cultural imperialism, 101
 cultural infrastructures, 109, 117-119, 749
 cultural relativism, 41, 46, 47, 243
 cultural transmission, 38, 575
 culture, 12, 13, 16-19, 22-24, 29, 37, 38,
 40-45, 48, 49, 51, 63, 74, 78-81, 88, 91,
 94, 96-98, 101, 105, 108, 111, 112, 124,
 125, 127, 128, 133, 139, 140, 165, 201,
 223, 224, 303, 304, 490, 574, 643, 647,
 648, 670, 781, 796
 currency of the music business, 738, 781, 782,
 787, 798, 811, 812

D

da Vinci, Leonardo, 113
 dactyl, 697
 damping, 95, 160, 163, 179
 dance, 6, 15, 42, 49, 65, 78, 81, 85, 90, 98,
 104, 109, 116, 119, 124, 125, 128, 131,
 134-136, 138-140, 143, 230, 433, 473-475,
 485, 490, 494, 505, 512, 519, 520, 527,
 528, 533, 562, 642, 653, 744, 753,
 755-757, 781, 807, 814
 "Danny Boy," 363, 384, 397, 398
 Danziger, Pam, 654
 d'Arezzo, Guido, 60, 191
 Darin, Bobby, 589
Dark Side of the Moon, 508, 509, 511
 Darwin/Darwinian theory, 11, 15, 31, 32, 43,
 53, 58, 64, 68, 70-72, 74, 90, 99, 112, 143,
 494, 551, 575, 642, 648, 740
 Davis, Miles, 129, 833
 Dawkins, Richard, 53, 70, 75, 575, 642
 "Dear Landlord," 363, 423, 428, 429, 435,
 436, 513
 Debussy, Claude, 229, 838
 Dekker, Thomas, 731
 delayed phrasing, 555
 democratic band, 794, 795
 Denmark Street, 127
 denotative meaning, 645, 646, 648-650, 669
diabolus in musica, 205, 221, 418. *See also*
 tritone
 dialogue, 37, 563, 569, 663, 720
 diaphragm, 154, 759, 760
 diatonic order, 224, 230-233, 255, 276, 279,
 285, 287, 307
 diatonic scale, *see* scale, diatonic

Dickinson, Emily, 633
 dictionary, 30, 35, 36, 56, 147, 155, 481, 646,
 650, 658, 689, 693-695, 706
 Diddley, Bo, 137, 525, 527, 613
 Diddy, 674, 791
 DiFranco, Ani, 809
 diminished fifth, 195, 293
 diminished triad, 293, 311, 352, 453
 diminution, 520, 605, 615, 616
 Dion, Celine, 315, 670
 diphthongs, 693
 disco, 139, 616, 781
 discrete pitches, 14, 15, 65, 147, 166, 177, 178,
 556, 763
 disjunct motion, 609, 610
 Dissanayake, Ellen, 77, 98, 99
 diversification, 113
 DJs/DJing, 137, 139-141, 477, 744, 830-832
 DNA, 35, 36, 56, 57, 59, 62, 71, 88, 89, 643,
 684, 810
 DOA, 808
 Donegan, Lonnie, 142
 "Don't Believe The Hype," 816
 "Don't Take Your Guns To Town," 9
 Doors, The, 82, 235, 536, 834
 dopamine, 573
 Dorsey, Thomas Andrew, 135, 835
 double flat, 269
 double sharp, 269
 Dr. Dre, 505, 831
 dragging, 515
 drone, 303, 304
 drugs, psychoactive/hedonic, 20, 93, 572-574,
 725, 746, 772, 773, 795-797
 duetting, 14, 83, 84, 91, 92
 Dunbar, Robin, 84
 duration (agogic) accent, 513, 525, 534, 557,
 611
 Dylan, Bob, 7, 106, 108, 114, 115, 124, 142,
 143, 257, 258, 295, 333, 382, 383, 400,
 435, 436, 513, 514, 519, 527, 552, 561,
 575, 597, 613, 618, 625, 642, 679, 680,
 686, 692, 705, 730, 739, 742, 743, 748,
 763, 776, 811, 834
 dynamic accent, 525

E

"Early Morning Rain," 552-554, 608
 earworms, 483
 ecstasy, 573
 Einstein, Albert, 25, 57, 71, 72, 245, 653
 "El Paso," 500, 606
 "Eleanor Rigby," 607
 Electra complex, 100
 electronica, 105, 106, 119, 138-140, 512, 528,
 642, 753, 755, 756

- electrophones, 165, 170
Elements of Style, The, 120, 658, 752
 Ellington, Duke, 7, 129, 296, 576, 587, 835
 Elliott, Missy, 726, 755
 Elliott, Ramin' Jack, 748
 embedded pulse, *see* pulse, embedded
 emcee, *see* MC/MCing
 Eminem, 106, 110, 673, 701-703, 705, 739, 743, 781
 emotional synchrony, 81
 emotions, 5, 25, 44, 49, 56, 65-67, 79, 80, 85, 98, 99, 112-115, 152, 171-174, 221, 258, 259, 280, 465, 472, 480, 482, 521, 531, 565, 567-571, 574, 578, 597, 609, 611, 612, 627, 628, 645, 646, 648, 650, 651, 654, 667, 668, 715, 727, 748
 as adaptations, 112
 empathy, 73, 93
 emphatic positions, 678, 692
 encephalization, 32, 61, 77, 83, 85, 100
 enculturation, 18, 42, 46
 enharmonic equivalents, 249, 276
 ensoulment, 59
 entrainment, 15, 28, 49, 82, 85, 90, 215, 474, 484, 528, 532
 entrepreneurship, 78, 741, 779, 796, 798, 801, 808, 811, 813
 enunciation, 767, 768, 775
 EPA, *see* Evaluation-Potency-Activity
 equal temperament, 200, 220, 249, 260-263, 266, 278, 303, 420
 estrogens, 93
 eugenics, 42, 43
 euphemism, 478, 715, 718, 805
 Evaluation-Potency-Activity (EPA), 645, 647-649, 651, 653-655, 660, 669, 682, 689, 695, 696, 708-715, 717-720, 722, 723, 727, 729, 754, 769, 792, 793, 817
 Everett, Hugh, 267
 evolution, 8, 12, 15, 16, 21, 30, 32, 34, 38, 40, 42, 43, 48, 53, 54, 57-61, 68, 70-72, 74, 75, 77, 81, 83-86, 89, 91-93, 96, 97, 111, 143, 159, 168, 473, 474, 567, 568, 576, 641, 642, 648
 evolutionary arms race, 72, 74, 92, 111
 evolutionary biology, 8, 16, 42, 43, 48, 75, 77, 84
 evolutionary conservation, 38
 evolutionary lag, 68
 evolutionary psychology, 16, 21, 42, 91
 exclamations, 664, 720
 exiting progression, 325-327, 372, 379
 exposition, 562
 extremists, 45, 142
- F**
 false dichotomy, 70
 falsetto, *see* voice, falsetto
 fame, 187, 315, 732, 737, 791
 fanheads, 790
 fascism, 56
 fashion, musical/artistic, 114-117, 383
 fast mapping, 38
 Fat Joe, 685
 feedback loop, 79, 91, 97, 100
 female brain, 25
 female predispositions, 93
 fermata, 484
 Ferron, 7, 672, 809
 Fields, W. C., 478
 file sharing, 804-806
 film music, 22, 174, 569
 finger-picking, 527
 Fisher, R. A., 91, 99, 100
 fitness, differential evolutionary, 74, 76, 81, 91, 97, 575
 Fitzgerald, Ella, 4, 587, 834
 "Five Feet High And Rising," 424
 "Five Foot Two, Eyes Of Blue," 363, 384, 391, 392
 flat, 189, 247, 252, 256, 260, 262, 269, 343, 731, 753
 Fleisch, Rudolf, 659, 660, 663
 flow (rap), 687, 700, 743, 747, 759
 Fogerty, John, 749
 folk music, 50, 101, 102, 123, 124, 130, 133, 143, 234, 235, 381, 490, 532, 834, 835, 837
 "Folsom Prison Blues," 593
 "For The Good Times," 594
 force of habit, 766
 form:
 binary, 493, 545-548, 550, 551, 555, 560, 564, 585, 629
 circular, 560
 continuing vs returning, 560, 561
 default, 564
 fossils, 61, 63
 Foster, David, 753
 Foster, Stephen, 103, 122, 126
 Fox, Robin, 41
 FOXP2 (gene), 20, 31, 32
 Franklin, Aretha, 110, 137, 592, 832
 fraternal twins, 20
 "Free Man In Paris," 363, 429, 438, 443, 779
 free will, 43, 86
 frequency, 13, 14, 49, 150, 154-161, 163, 164, 179-185, 187, 188, 196-201, 203-205, 212-215, 217-220, 223, 224, 226, 229-231, 232, 239, 240, 250, 258, 260-263, 274, 279, 284, 287, 304, 329, 334, 336, 338, 341, 348, 349, 355, 484, 536, 568, 582, 615,

761, 762, 817, 818
 Frost, Robert, 628, 669, 766
 Frye, Northrop, 113, 114, 641
 FUBAR, 766
 fugue, 562
 "Fun Fun Fun," 519, 725
 functional magnetic resonance
 imaging/fMRI, 20
 function-words, 650, 656, 662, 674, 675, 696,
 719, 721
 fundamental tone, 156-161, 164, 179, 180,
 188, 240, 274, 275, 285-288, 291
 fundamentalism, 55, 57, 69

G

GABA, 573
 Gabriel, Peter, 143
 Galileo, 57
 Gamelan, 220
 Garland, Judy, 4, 60, 593, 755
 Gaye, Marvin, 7, 137, 519, 762, 833
 Gazzaniga, Michael S. 40, 475
 gelada baboons, 84
 Geldof, Bob, 737, 740, 791
 gender, 40, 44, 660, 662, 830
 Gender Genie, 662
 gene, selfish, *see* selfish gene
 Generic Artless Relationship Lyric, 670, 671,
 707, 788, 814
 genes/genetics 16, 18, 20, 22, 23, 29, 32, 35,
 36, 38, 42, 43, 45, 50, 51, 54, 56, 57, 59,
 68, 71, 72, 74-76, 85-89, 91, 94, 111, 113,
 134, 150, 480, 569, 575, 576, 642, 644,
 725, 835
 genocide, 43, 62
 genome, 20, 36, 59, 68, 88, 112
 genre independence, 383
 genre popularity profile, 107, 109
 "Georgia On My Mind," 47, 116, 363, 408,
 423, 443, 447, 448, 616
 Gershwin, George/Ira, 5, 7, 115, 133, 257,
 287, 383, 429, 430, 438, 554, 555, 560,
 597, 608, 618, 631, 688, 836
 Gestalt, 544, 545, 550, 564, 585, 609, 643,
 726
 "Get Back," 606, 613
 gibbons, 14, 20, 67, 83, 91, 92, 177
 "Gimme Shelter," 278, 363, 429, 441, 442,
 664
 "Girl From Ipanema, The," 363, 408, 425,
 443, 445, 446, 606
 "Girl On A Road," 672
 gist, 9, 37, 38, 346, 476, 477
 global consciousness, 51, 52
 God/gods, 53, 58, 69, 70, 139, 500, 505, 527,
 641, 653, 682, 685, 730, 815

"Going Back To Harlan," 590, 592
Gold Standard Song List/GSSL, 5, 8, 97, 107,
 109, 113, 115, 121, 132, 136, 235, 258,
 278, 295, 363, 384, 407, 429, 503, 548,
 551, 574, 607, 608, 619, 642, 675, 750-
 752, 756
 "Golden Slumbers," 584, 613, 615, 620, 731
 Goldwyn, Sam, 245, 253
 Goodman, Benny, 129, 135, 835
 gorillas, 20, 31, 32, 38, 39, 60, 83, 476, 477
 gospel music, 135, 137, 152, 225, 488, 502,
 505, 679, 755, 762, 832-835, 838
 gossip, 44, 644, 645, 782
 Gould, Stephen Jay, 62
 "Graceland"/*Graceland*, 143, 519
 grammar, 23, 28-32, 34, 44, 118-120, 650
 generative, 29
 Grand Ole Opry, 133, 142, 836
 Grateful Dead, The, 519, 552, 790, 832
 great apes, 12, 24, 31, 38, 39, 60, 61, 66, 71,
 92
Green Book of Songs by Subject Matter, The, 671
 griots, 140
 grooming, 51, 84
 groove, 490, 527, 642, 830
 group bonding, 15, 81, 99
 GSSL, *see* *Gold Standard Song List*
Guitar & Keyboard Scales Poster, 238
Guitar Chord Poster, 367-371, 472
 Guthrie, Woody, 142, 748, 755, 834

H

habituation, 22, 488, 571, 572
 hack/hackdom, 6, 117, 383
 half-step, 190
 Hall, Jim, 809
 "Hallelujah," 283, 664
 hallucinogens, 573
Hamlet, 54, 115
 hammer, anvil, and stirrup (ear bones), 154
 Hammerstein II, Oscar, 132, 688, 836
 handedness, 24, 25, 160, 536
 "Happy Birthday," 81, 284, 346, 347, 551, 552
 Harburg, E. Y., 556, 593, 835
 hardware, 5, 64, 780
 Hare, Robert, 783-785
 harmonic degree, 307-314, 316, 328, 329, 331,
 345, 375, 376, 386, 390, 402-404, 451
 harmonic force, 580
 harmonic series, 147, 154, 157, 159, 188, 201,
 258, 261, 285
 harmonics, 155, 156, 158, 159, 161, 200, 262
 harmony:
 consonant, 22, 201-205, 218, 221, 229,
 239, 285, 290-296, 349, 394, 464, 470,
 580, 617-620, 625, 687, 688, 694

- dissonant, 22, 201-204, 221, 239, 240,
 290-295, 303, 305, 349, 534, 617-
 621
 Harris, Emmylou, 590
 Harry Fox Agency, 812
 Hawkins, Screamin' Jay, 87
 Hay, George D., 133, 836
 Haydn, Franz Joseph, 124, 747, 838
 he said, she said, 662
 head register/voice, *see* voice, head (register)
 Heap, Imogen, 672
 "Heart And Soul," 363, 384, 395
 "Heart Of Gold," 555, 608
 heartbeat, 25, 491
 "Heartbreak Hotel," 363, 364, 384-386, 388
 Heinichen, Johann David, 275, 458
 Heise, David R., 647
 Hendrix, Jimi, 4, 13, 115, 207, 284, 393, 400,
 555, 575, 636, 686, 756, 834
 heredity, 56, 74, 75, 89, 575
 "Hero," 670
 Hertz, 155
 "Hey Joe," 363, 384, 393, 394, 468
 "Hey Jude," 363, 407-411, 742
 "Hey Ya," 571, 606
Highway 61 Revisited, 513, 514
 Hill, Lauryn/Fugees, 673, 755
 hillbilly, 133
 Hinduism, 55
 Hindustani music, 49
 hip-hop, 16, 105, 106, 109, 117, 119, 121,
 124, 137, 138, 140, 141, 256, 490, 502,
 505, 512, 528, 587, 683, 740, 743, 752,
 753, 755, 769, 771, 786, 809, 813, 815,
 818, 820, 831, 832
 hippocampus, 480, 482
 hit formula, 670
 hit potential, 819, 820
 Hit Song Science, 819, 820
 Holiday, Billie, 555, 755, 835
 hominids, 13, 21, 32, 60-62, 65-67, 77, 82, 83,
 86, 89, 91, 93, 97, 98, 484
Homo neanderthalensis, 21, 55, 62, 63, 201
Homo sapiens, 21, 54, 61-63, 68, 72, 74, 77, 91,
 96, 123, 201, 643, 644
 homophobia, 89, 139
 hook, 695, 696
 hormone, 95, 106
 Hornbostel, Erich von, 165, 837
 Horowitz, Vladimir, 766, 835
 Horrified Observers of Pedestrian
 Entertainment, 791, 792
How the Mind Works, 16
Huckleberry Finn, 9
 Hugo, Chad, 680, 686
 Hugo, Victor, 804
 human nature, 45-47, 105, 258, 642
 human universals, 8, 44, 45, 96, 115, 642, 647
 humpback whales, 90
 hunter-gatherers, 46, 49, 68, 81, 574
 hyoid bone, 61, 62, 760, 761
 hyothyroid gap/membrane, 760, 761
 hype, 116, 730, 772, 805, 816
- I**
 "I Feel Lucky," 685
 "I Got Plenty O' Nuttin'," 363, 428-430, 438,
 616
 "I Got Rhythm," 608, 631
I Have a Dream (speech) 681-683
 "I Heard It Through The Grapevine," 257,
 258, 363, 407, 417, 519, 644
 "I Walk The Line," 424, 624
 "I Want You To Need Me," 670
 iamb, 697
 Ian, Janis, 809
 identical twins, 20
 idiophones, 165, 170
Idol (TV show), 13, 764-766, 775, 814
 "If I Had \$1,000,000," 680
 "If You Could Read My Mind," 519, 584
 "I'm So Lonesome I Could Cry," 505, 588,
 592
 imagination without skill, 738
 imitation learning, 748
 imperialism, 43, 101
 improvisation, 105, 121, 128, 129, 485, 534,
 626, 642, 767
in situ hypothesis, 58
 incomplete sentences, 664
 independent artist, 787, 795, 799, 800, 805,
 807, 808, 811
 independent label, 798, 801, 804, 809-811
 independent promoters, 818, 819
 Industrial Revolution, 102, 126
 infants, 21, 22, 24, 25, 29, 39, 49, 66, 74,
 77-80, 98, 99, 179, 188, 204, 280, 474,
 568, 579, 604
 pre-lingual, 20, 22, 77, 79
 infrasound, 150, 151
 infrastructures, 109, 118, 718, 749
 inheritance, genetic 18, 43, 45, 50, 51, 68, 74,
 86, 215
 Inoue, Daisuke, 530
 inspiration, 16, 705, 734
 intelligence, 17, 29, 38, 74, 88, 644
 intelligences, multiple 17
 intelligent design, 7, 69, 70
 intelligibility, 27, 559, 579, 768, 769, 771
 intensity, 151, 152, 171, 172, 220, 531, 536,
 570, 571, 646, 648, 649, 651, 713, 723,
 726, 773

Internet, 94, 104, 106, 122, 573, 684, 751, 780, 785, 787-789, 793, 798, 804-806, 808, 811

interval:

- complementary, 205, 206, 320
- dynamics, 208, 209, 211, 212, 214, 216-219, 334, 338, 350
- harmonic, 186, 277, 303, 307, 316, 318-321, 323, 324, 326, 328, 329, 333, 339, 361
- internal, 290-293, 350
- melodic, 186, 307, 316, 318, 320, 321, 323, 327, 329, 335, 345, 361, 580, 584, 588, 609, 767
- of unison, 224
- order, 224, 225, 232, 241, 243, 247, 264, 267, 270, 276
- outer, 290, 291-293

interviews, 9, 166, 630, 788-790

"Into The Mystic," 595, 672

intuitive biologists, 642

inversion:

- first, 289, 291
- second, 289, 291, 317, 322

iPod, 110, 750, 806

irregular patterns, 522, 526

"Is That All There Is?," 608, 663

Islam, 55, 56

isometric beats, 15, 16, 49, 90, 485

"It Was A Very Good Year," 363, 408, 423, 425, 443-445

iTunes, 148, 436, 509, 554, 629, 806

"I've Got You Under My Skin," 363, 384, 401-404, 447, 690

J

Jackendoff, Ray, 23, 34

Jackson, Janet, 59, 60

Jackson, Mahalia, 135, 755, 835

Jagger, Mick, 383, 411, 442, 578, 589, 606, 740, 833

jam session, 546

"Jambalaya," 363, 384, 387, 388, 439, 664

James Randi Educational Foundation, 669

Jandek, 809

jargon, 48, 715, 718

Jay-Z, 691, 752

jazz, 6, 38, 56, 90, 97, 105, 106, 117, 119, 121, 128-132, 135, 136, 139, 167, 256, 296, 299, 363, 490, 492, 502, 505, 506, 508, 512, 520, 527, 534, 555, 556, 559, 626, 642, 752, 753, 755, 756, 768, 808, 831-838

jazz waltz, 492, 527

Jefferson, Thomas, 125

Jenkins, Florence Foster, 28, 533

"Jerusalem," 730

Jesuits, 40

"Jesus Take The Wheel," 673

"Jesus Walks," 692

Jews/Jewish/Judaism, 55, 56, 104, 105, 127, 129, 682

Jobim, Antonio Carlos, 383, 446, 606, 833

John, Elton, 519, 618, 791, 831

Johnson, Johnnie, 731, 732, 833

Johnson, Robert, 4, 130, 754, 836

Jones, George, 87, 92, 134, 315, 763, 832

Joplin, Janis, 519, 608, 737, 834

Jordanaires, The, 315

"Juicy," 674

jungle hippies, *see* bonobos

K

karaoke, 81, 530

"Kaw-liga," 363, 429, 439, 440

Kelis, 686

Kern, Jerome, 132, 133, 837

key note, 242, 264, 268, 278, 279

key signature, 276, 277, 357

key:

- major, 243, 244, 247, 257, 259, 266, 270, 274, 276, 280, 303, 353, 356, 358, 360, 368, 381, 417, 420, 422, 423, 600, 601, 622, 633
- minor, 194-196, 243, 244, 247, 251, 255, 257, 259, 263, 266, 274, 303, 311, 353, 356-358, 360, 368, 374, 381, 382, 417, 420, 422, 439, 441, 443, 444, 448, 467, 511, 600, 622, 633, 826
- relative major, 243, 249, 274, 312, 422, 435
- relative minor, 243, 244, 246, 249, 273, 274, 311, 312, 328, 353, 356-358, 360, 361, 367-370, 398, 411, 422, 429, 435, 441, 443, 448, 453

Keyboard Chord Poster, 370, 472

"Killing Me Softly With His Song," 673

King Lear, 113

King, Carole, 383, 537, 592

King, Jr., Martin Luther, 681-683

"Kiss From A Rose," 622, 623

"Kodachrome," 363, 428, 429, 432

Kool DJ Herc, 140, 832

K-OS, 672

Krall, Diana, 555, 754, 755

Kristofferson, Kris, 150, 519, 594, 763

KRS-One, 683

Ku Klux Klan, 129

Kung, Hans, 531

L

Lacy, Steve, 534
 language, 3, 12-15, 18, 20, 23, 24, 26,
 28-40, 42, 44, 45, 50, 51, 61-68, 72,
 74, 75, 77, 80-86, 91, 98, 99, 105,
 118-120, 143, 344, 345, 347, 474, 476,
 481, 487, 541, 542, 544, 546, 551,
 556, 560, 568, 576, 579, 623, 641,
 643, 645-648, 652, 654, 658, 659, 666,
 668, 669, 671, 672, 683, 693, 699,
 703, 707, 708, 716, 717, 720, 721,
 725, 728, 748, 749, 768, 792, 793
 figurative, 644, 669, 671, 672, 683, 706,
 707, 725, 728
 language, sign, *see* sign language
 language, written, 30, 63, 345, 347, 541,
 643
 Larkin, Patty, 615
 larynx, 70, 485, 759-761, 774
 laughter, 80, 200, 555
 Law of Simple Multiples or Fractions of the
 Underlying Beat, 524-526, 528, 535
 lawyers, 39, 73, 398, 782, 785, 807, 808
 Leacock, Stephen, 541
 lead sheet, 277, 312, 364, 497, 503, 766
 leading tone, 210, 219, 240, 250, 251, 254,
 256, 268, 285, 288, 341, 343, 352, 455,
 457, 460, 578
 leapwise motion, 609, 610, 627, 763
 left-handedness, *see* handedness
 legato, 531
 Leibniz, Gottfried, 473
 Lennon, John, 4-6, 24, 115, 265, 287, 300,
 383, 404, 409, 513, 527, 540, 560, 576,
 584, 597, 606-608, 613, 615, 618-620,
 628, 667, 679, 705, 730, 731, 739, 742,
 810, 814, 833
 Lerdahl, Fred, 23, 34
 "Let's Call The Whole Thing Off," 555
 "Light My Fire," 536
 Lightfoot, Gordon, 202, 235, 383, 410, 416,
 515, 519, 552, 554, 560, 584, 608, 678,
 755, 831
 lighting, 814
 "Like A Rolling Stone," 333, 625
 Likert scale, 646
 linguistics, 5, 22, 23, 28, 31, 34, 77, 79, 647
 linking verbs, *see* verbs, copula
 literal meanings, 669
 LL Cool J, 505
 "Lord Randall," 730
 "Lose Yourself," 701, 702
 "Loser," 594, 614, 674
 lost in translation, 669
 loudness, 23, 151-153, 161, 162, 172-174, 487,
 493

love and death/*Love and Death*, 71, 725
Love And Theft, 730-731
 "Love For Sale," 673
 Lovett, Lyle, 685, 755
 "Lovesick Blues," 363, 423, 429, 440, 441
 LSD, 573
 luck, 483, 608, 656, 685, 695, 714, 722, 738,
 739, 813-815
 luxuriant flowing hair, 29, 134
 lyrical structural units, 676, 677

M

"Mack The Knife," 589
 macro beat, 502, 504, 510, 512, 700
Madame Bovary's Ovaries, 642
 Madonna, 106, 740
 mainstream genre, 109, 124, 125, 127,
 129-131, 133, 134, 136-140
 major label, 704, 768, 785, 791, 798, 801, 802,
 804, 805, 809-811, 813, 814, 818, 819
 major ninth, 298
 major second, 193, 194, 201, 203, 205, 217,
 221, 229, 290, 424, 425, 580
 major seventh, 193, 195, 201, 203, 205, 222,
 290, 297, 298, 314, 343, 362, 465, 580
 major sixth, 193, 195, 201, 203, 205, 222, 265,
 266, 290, 291
 major third, 193, 194, 198, 201-203, 205, 207,
 217, 221, 229, 290-293, 296, 309, 311, 350,
 417, 441, 458, 588
 male brain, 25
 male predispositions, 93
 management, 646, 802, 804
 market/marketing, 55, 102, 105, 483, 533,
 568, 642, 654, 655, 659, 727, 742, 781,
 783, 785, 791, 799, 802, 808, 819
 Marley, Bob, 7, 138, 519, 756, 833
 Martin, George, 265, 299, 300, 776, 833
 Marxism, 55
 MC/MCing, 116, 140, 765, 769, 770
 McCartney, Paul, 4-6, 24, 115, 300, 383, 403,
 404, 409, 410, 513, 540, 560, 576, 584,
 597, 606-608, 615, 618, 619, 628, 679, 705,
 730, 731, 739, 742, 781, 810, 833
 McGarrigle, Kate/Anna, 7, 590, 755
 McKennitt, Loreena, 781, 808
 MCPH1 (gene), 68
 measured music, 484-486, 543, 556, 598, 599,
 700
 measureless music, 484
 mechanical right, 103, 104
 mechanical royalties, 812
 mechanical soundcarriers, 104
 media, 48, 52, 97, 127, 597, 716, 780, 782,
 787, 789, 790, 794, 798, 803, 804, 811, 816
 melisma, 152, 626

- melody/melodic:
 climax, 605, 623-626, 635
 coherence, 579, 582, 604, 609, 611, 618, 629
 contour, 22, 27, 65, 545, 623, 624, 627
 force, 580
 phrase, *see* phrase, melodic
 rhythm, 522, 523, 526, 534, 556, 568, 587, 590, 607, 634
 stress patterns, 556
- Melua, Kylie, 649
- membranophone, 165, 167, 170
- memes/memetics, 575, 576, 817
- memory, 9, 37, 106, 219, 475-482, 501, 509, 537-539, 544, 547, 549, 551, 558, 560, 568, 570, 571, 575, 576, 579, 598, 627, 630, 634, 635, 643, 669, 677, 684, 691, 701, 722, 727, 746, 766, 767, 772, 817
 declarative, 479, 480
 episodic, 480, 481, 571
 explicit, 479
 implicit, 479, 481
 long-term, 477-482, 568, 576, 598, 634, 635, 722, 727
 non-declarative, 479
 procedural 479, 481, 482, 598, 634, 766, 767
 semantic, 480, 481, 568, 576
 short-term, 219, 475-480, 482, 547, 549, 551, 626, 630, 635, 684
 silicon chip, 538, 539
 working, 476, 478, 479, 482, 547, 558, 560, 684
- Memphis beat, 527
- mental grammar, 29, 30
- mental organs, 20, 68
- mental practice, 765-767
- mentalese, 34, 37, 38, 44, 346
- mento, 138
- merchandising, 780, 795, 798, 800, 803, 813
- metaphor, 19, 152, 425, 482, 668, 669, 671, 707
- meter, 23, 26, 155, 371, 463, 473, 475, 485, 486, 490, 494, 495, 497-517, 519, 522-530, 532, 535-540, 550, 554, 556, 564, 576, 583, 585-590, 592-595, 598-600, 629-631, 633, 696, 698-701
 combined, 498, 502-506, 507, 509-517, 519, 537, 587-589, 595, 599, 601, 700, 701
 compound, 498, 500-503, 505, 507, 511, 512, 514, 516, 590, 599
 default, 500, 511
 irregular, 485, 498, 506-509, 537, 540
 simple, 498-500, 502, 503, 505, 509, 511-515, 517, 519, 522, 524, 528, 537, 564, 576, 587-590, 592-595, 599, 630
- metrical position accent, 513, 525, 553, 557, 611
- Michelangelo, 113
- middle eight, 527, 546, 548, 549, 559-561, 564, 572, 608, 616, 623, 624, 676-679. *See also* bridge
- "Midnight Train To Georgia," 363, 384, 396, 415
- Mieskuoro Huutajat, 636
- "Milkshake," 686
- Miller, Geoffrey, 91, 485, 746
- Miller, Glenn, 129, 836
- mimicry, 19, 25, 79, 170, 573, 740, 741, 746, 748, 752, 757, 788
- minor ninth, 298, 465
- minor second, 193, 194, 201, 203, 205, 217-219, 221, 290, 580, 609
- minor seventh, 193, 195, 196, 201, 203, 205, 229, 290, 298, 314, 352, 362, 399, 402, 404, 465, 468, 580
- minor sixth, 193, 195, 201, 203, 205, 222, 229, 291, 293, 313, 343, 362, 580, 584
- minor third, 193, 194, 201-205, 207, 218, 221, 255, 289-293, 296, 309, 311, 343, 350, 417, 418, 427, 441, 455, 456, 580
- minstrels/minstrelsy, 103, 122, 123, 125, 126, 838
- misogyny, 715
- Mitchell, Joni, 7, 38, 100, 114, 115, 383, 438, 439, 597, 618, 667, 668, 705, 730, 743, 751, 752, 779, 811, 832
- mix/mixing, 27, 397, 613, 771, 802
 house, 769-771
 monitor, 770
- mnemonic devices, 677
- modal chord, 279
- modal harmonic scale, 453
- modal melody, 621, 695
- modal music, 279
- modal scale, 232, 279, 621
- mode:
 Aeolian, 234, 251, 255, 622
 Church, 232-235, 239-241, 257, 303, 332, 453, 454, 461, 464, 600, 610, 621, 622, 633
 Dorian, 232, 233, 235, 251, 252, 441, 454-457, 600, 622
 Gregorian, 232
 Ionian, 232, 233
 Locrian, 234, 235, 460, 461
 Lydian, 233, 235, 458
 major, 241, 243, 246, 247, 249, 255, 259, 347, 411, 454, 458, 459, 511
 minor, 241, 243, 249, 250, 255, 258, 259,

- 276, 280, 294, 347, 399-401, 418,
454-456, 511, 621, 622
- Mixolydian, 234, 235, 459, 460
- Phrygian, 233, 235, 456, 457
- modularity of the brain, 5, 12, 16-31, 34, 36,
37, 53, 65, 68, 95, 161, 279, 287, 483, 487
- modulation, 238, 262, 266-268, 270-273,
277, 278, 295, 353, 357, 358, 380,
382-384, 401, 405, 407, 412, 419-425,
428, 429, 433, 436, 439, 440, 443,
445, 447, 464, 470, 471, 578-580, 604,
616, 633
- arranger's, 423
- near, 420
- parallel key, 353, 412, 423, 438-441, 444,
471, 622, 623
- pivot chord, 277, 278, 357, 358, 393,
425-429, 431, 432, 435, 436, 438, 440,
464, 471
- relative key, 422, 423, 440, 447, 471
- remote, 420
- sequential, 425, 436, 445, 471
- shift, *see* Truck Driver's Gear Change
- monad, 36
- mondegreens, 686
- "Money," 507-511, 515, 540, 550
- monogamy, 84, 91, 92, 99
- monophthongs, 693
- Moog, Robert, 122
- "Moondance," 363, 384, 399
- Moose Nobel Prize in Music, 572, 774, 831-
838
- moralistic fallacy, 95
- Morrison, Van, 124, 137, 383, 399, 595, 618,
763, 831
- Morton, Jelly Roll, 128, 836
- mother-infant communication, 77-79, 98, 99,
474, 568
- motherese, 77-79, 98, 99
- motive/motif, 542, 546, 605
- Mozart effect, 78
- Mozart, Wolfgang Amadeus, 78, 124, 278,
296, 532, 576, 597, 747, 763
- MTV, 116, 117, 122, 749
- multiple intelligences, 17
- music business/industry, 12, 101-104, 108,
126, 569, 738, 740, 741, 752, 779-787,
791, 796, 801, 803, 807, 811, 816, 818
- music charts, 82, 128, 670
- music halls, 102, 103, 126, 127, 132, 752,
835-837
- music industry lawyers, *see* lawyers
- "Music Lesson, The" 46, 47
- music notation, 3, 4, 63, 64, 150, 191, 265,
266, 467, 497, 498, 503, 514
- music video, *see* video
- musical instruments, 15, 28, 36, 49, 61, 63, 64,
120, 159-165, 170, 198, 265, 288, 314, 481,
482, 485, 533, 542, 632, 643, 747, 754,
759, 767, 774, 800
- Musical Instruments Poster*, 160, 198
- musical intelligence, 17
- musical narrative, 213, 266
- musical structural units, 676, 677
- musical universals, 23, 44, 49, 51, 105, 484
- musics, 24, 534
- musilanguage, 65, 67
- mutations, 32, 61, 68, 70, 74, 111, 575, 576,
756
- "My Pal Foot Foot," 578
- MYH16 (gene), 31, 32, 61
- myth/mythology, 21, 37, 39, 40, 53, 55, 58,
59, 69, 70, 78, 213, 653, 804, 817
- N**
- name brands, 809-811, 813, 814
- name generators, 793
- Nashville Numbers, 308, 312-315, 331, 333,
339, 349, 354, 360, 366-368, 371, 372, 385,
386, 390, 401, 454, 467, 472, 826
- natural selection, 11, 12, 31, 32, 40, 43, 44, 58,
59, 68-72, 74, 82, 84, 111, 112, 143, 158,
159, 188, 494, 551, 572, 575, 576, 642,
644, 648
- naturalistic fallacy, 73, 95, 97, 98, 786
- Nazis, 55, 56, 88, 128
- Neanderthals, 20, 62, 63, 196
- Nelson, Willie, 134, 315, 383, 414, 415, 448,
519, 755, 832
- neocortex, 38, 644
- neophilia, 91, 746, 752, 800
- neurons, 19, 21, 25, 155, 488, 576, 748, 766
mirror, 748
- New Orleans, 128, 131, 653
- newborns, 20, 22, 68, 77, 98, 680
- Newman, Barnett, 46, 47, 738
- Newton, Sir Isaac, 57, 71, 113, 143
- nicotine, 573
- Nikki M, 795
- Nilsson, Birgit, 572, 831
- "Nine Million Bicycles," 649
- Nirvana, 106, 756
- Nobel Prize, 57, 572, 726, 774, 831
- node, 160
- Nodojiman*, 765
- non-chord tones, 579, 580, 605, 610, 617-621,
623, 625, 633, 635, 695
- non-harmonic tones, 617
- non-verbal communication, 79, 93
- noradrenaline, 573
- notation, *see* music notation
- note-syllables, 542, 543, 587, 596

Notorious B. I. G., 674, 691
 nouns, 29, 644, 653, 655, 656, 660, 666,
 667, 682, 712-714, 716, 718-720, 733,
 735, 793
 animate, 653
 concrete, 653, 667, 719, 733
 proper, 644, 653, 682, 720, 793
 nucleotides, 35
 nurture/nurturing, 42, 75, 93

O

oblique motion, 343
 obsessive-compulsive disorder, 594
 octave, 49, 150, 151, 172, 173, 185-190,
 192-194, 197-201, 203, 205, 206, 213,
 219, 220, 222-224, 226, 229, 236, 238,
 239, 247, 260-263, 265, 266, 274, 286,
 289, 290, 293, 296, 297, 302, 304, 309,
 320, 329, 331, 334, 336, 343, 355, 360,
 424, 557, 579, 611, 637
 Oedipus complex, 100
Oedipus Rex, 113
 off beat, 488, 584
 Ol' Dirty Bastard, 755, 790
 Oliver, King, 128, 836
 Olmstead, Marla, 47, 48
 "On Broadway," 606
On Human Nature, 45
 "One Fine Day," 363, 428, 429, 436, 437
 opera, 102, 125, 532, 562, 563, 773, 774, 830
 operetta, 104, 126, 837
 opiates/opioids, 573, 796
 oral tradition, 102, 123, 140, 644
 "Orange Blossom Special," 433, 434, 616
 oratorio, 563
 orchestra, 129, 168, 169, 484, 530, 532-534,
 559, 561-563, 786
 organisms, 36, 59, 70, 71, 74, 75, 644, 667
 Original Dixieland Jazz Band, 128, 836
 original songs/material, 5, 86, 120, 123, 537,
 575, 600, 601, 629, 704, 720, 726, 738,
 743-745, 747, 756, 772, 775, 799, 803, 811
 Ory, Kid, 128, 837
 Oscar (Academy Award), 701
 Osgood, Charles E., 647, 648
 ostinato, 526-529, 535, 538, 546, 561, 594
 ostinato, superimposed, 528
 "Over The Rainbow," 199, 556, 557, 593,
 611, 616
 Outkast, 571, 606
 overdubs, 515, 776
 overtones, 147, 148, 154-162, 171, 174, 175,
 179-181, 196, 198, 203, 207, 239, 240,
 258, 274, 275, 285-288, 291, 292, 303, 325

P

P2P, *see* file sharing
 pairs of pairs, 550, 551
 Palaeolithic Age, 61, 68, 89, 96, 159, 643
 palaeontology, 13, 56, 61, 62
 panspermia hypothesis, 58
 pant-hoot (chimpanzee), 83
 parallel construction, 597, 671, 675-681, 683,
 685, 689, 704, 724, 727
 parallel fifths, 343
 parallel motion, 343
 parallel processing, 16
 parallel thirds, 343
 parallel universe, 153, 266-268, 420
 paranormal, 669
 parents, 18, 36, 50, 75, 89, 96, 643, 725, 749
 Parker, Charlie, 108, 128, 129, 755, 835
 part writing, 342
 passing tone, 221, 222, 619
 passive voice, 652, 653
 patterns, 9, 22-24, 27, 29, 30, 38, 79, 178, 241,
 268, 294, 365, 372, 373, 376, 378, 381,
 449, 462, 475, 506, 522-527, 544, 550, 556,
 565, 571, 602, 603, 607-609, 631, 632, 634,
 635, 710, 819
 Paul, Les, 122, 831
 Pavarotti, Luciano, 4, 832
 payola, 817-819
 peacock, 12, 91, 97, 100
 Peer, Ralph, 133
 peers/peer group, 18, 50, 51, 54, 106, 116,
 643, 710, 750, 818
 Pepsi Challenge, 817
 perfect fifth, 49, 193, 195, 197-199, 201, 203,
 205, 218, 219, 222, 236, 274, 290, 318,
 320, 457, 579
 perfect fourth, 193, 195, 198, 201, 203, 205,
 207, 218, 221, 290, 291, 318, 320, 584
 perfect pitch, *see* absolute pitch
 performance anxiety, 767, 771-773
 performing rights, 103, 104, 805, 812
 period, 544-553, 555, 560-562, 564, 582-587,
 590, 592, 594-596, 610, 625, 630-632, 634,
 637, 651, 676, 700, 701, 731, 756, 767,
 791, 810
 persona, 788-790, 798, 816
 personal appearance, 812, 816
 personal environment, 18, 50, 648
 personal sentences, 663, 665, 671, 683
 personal words, 659, 660, 664, 665, 671, 683,
 712, 719, 720
 personality, 18, 89, 709, 713, 720, 740, 768,
 782, 785, 795, 808, 815, 816
 personification, 669, 671
 phallic stage, 100
 pharynx/pharyngeal cavity, 168, 760

- philandering, 87
 philosophy, 9, 57, 58, 196, 253, 577, 651
 phonological loop, 477, 479, 482
 phrase, 34, 49, 59, 49, 65-67, 78, 83, 125,
 135, 259, 271, 344-346, 389, 398, 410,
 413, 420, 425, 436, 441, 442, 469,
 475, 487, 488, 508, 523, 526, 529,
 538, 539, 541-561, 564, 565, 571-572,
 579, 582-590, 592-596, 598, 600-608,
 610-615, 617-619, 623-626, 629-635,
 637, 643, 645-648, 651, 656, 659, 660,
 664, 665, 669, 676-679, 687, 691, 692,
 696-698, 700, 701, 703, 704, 706, 709,
 711, 715, 719-724, 726-729, 747, 757-
 759, 766, 767
 beginnings, 551, 565, 698
 list, 720-724, 726, 728, 729
 melodic, 425, 436, 475, 539, 542, 544,
 556, 558-560, 583, 595, 598, 602-604,
 608, 623, 626, 629, 632, 634, 747
 structural, 541-549, 551-555, 557, 559,
 560, 564, 565, 571, 579, 582, 585-590,
 592-596, 598, 600, 603, 606, 625,
 629-634, 637, 677, 700, 701, 703, 704,
 724
 VM (vocal-melodic), 541-549, 551-555,
 557-561, 564, 565, 571, 572, 582-596,
 600, 601, 603, 606, 608, 610, 612-614,
 618, 624-626, 629-631, 633, 635, 637,
 697
 piano rolls, 103, 131
 Pink Floyd, 507, 508, 540, 833
 Pinker, Steven, 16, 19, 31, 32, 34, 68
 piracy, 805
 pitch, 16, 22, 23, 26-28, 34, 36, 49, 65, 67,
 79, 95, 147-153, 155, 156, 158, 160,
 164, 172-174, 177, 178, 184-186, 189,
 190, 192, 203, 211, 219, 220, 255,
 262-265, 284, 289, 303, 304, 307, 316,
 318, 320, 321, 323, 324, 343, 423,
 425, 436, 445, 487, 495, 509, 525,
 534, 544, 556-558, 576, 579, 580, 584,
 586, 593, 604-606, 609-613, 619, 623,
 626, 757, 760, 763, 819
 accent, 525, 534, 557, 584
 compass/range, 265, 576, 579, 580, 610
 pitchiness, *see* singing, off-key
 plagiarism, 730
 plastic/plasticity, 36, 37
 Plato, 60
 play by ear, 3, 64
 play by example, 748
 playlists, 670, 744, 768, 813, 815, 818, 819
 pleasure, 56, 82, 449, 473, 538-540, 570,
 572-575, 609, 771
 Pleistocene, 61
 podcasting, 798, 804, 806
 poetic feet, 697
 political correctness, 93, 95
 "Political World," 613, 679, 692
 polka, 104, 525, 527
 polybeat, 535
 polyphony, 56
 polypulse, 535
 polyrhythm, 105, 128, 534-536, 538
Pop Idol, *see* *Idol* (TV show)
 Pope John Paul II, 57
 Pope Urban VIII, 57
 popularity, 107-109, 123, 124, 129, 131-133,
 137, 139, 511, 512, 532, 533, 806, 818
 Porter, Cole, 5, 115, 133, 383, 401, 402, 404,
 447, 597, 618, 673, 688, 690, 751, 836
 positioning, 148, 543, 554, 585, 586, 685, 746
 positive feedback loop, 91, 97
 positron emission tomography/PET, 20
 Post-It note, 476, 711
 post-literate musicianship, 64
 postmodernism, 46-48, 215, 224
 post-traumatic stress disorder, 480, 772
 potency, 647
 Pound, Ezra, 567
 power chord, 302, 303
 pre-chorus, 559
 predispositions, 23, 43, 46, 93, 642
 preemies, 77, 79
 prepositions, 650, 652, 656
 pre-selecting, 598-601, 629-634, 716
 Presley, Elvis, 4, 46, 60, 106, 117, 137, 142,
 214, 240, 241, 315, 483, 501, 519, 552,
 642, 653, 673, 678, 745, 748, 758, 833
 pressure wave, 154
 primary accent, 495, 517
 primates, 12-15, 20, 31, 32, 60, 62, 66, 67, 83,
 84, 86, 92, 93, 147, 177, 644, 666
 prime, 224, 236, 240
 priming, 720, 721
 Prine, John, 719, 755
 prison/prisoners, 94, 593, 641, 784
 processing fluency, 684
 producers/producing records, 27, 128, 133,
 141, 265, 515, 528, 649, 740, 743, 744,
 753, 780, 783, 799, 803, 831-835, 837
 product names, 654
 profit, 359, 799-801
 program directors, 819
 progress, scientific/technical vs artistic, 6, 48,
 111-114, 119, 123, 124
 progression:
 chromatic, 324, 325, 327, 372, 379, 380,
 407, 408, 416, 449, 464, 634
 fifth, 319, 321-326, 327, 331, 332, 338,
 342, 344, 348, 357, 361, 372-375, 378,

391, 393, 394, 396, 397, 399, 400, 402, 415, 442, 443, 449, 451-453, 464
 second, 324, 326, 357, 358, 372, 378, 397, 398, 380, 399, 400, 413, 429, 441, 442, 445, 448, 623
 progression, third, 323-326, 357, 372, 376, 377, 390, 395, 397, 398, 400, 407, 442, 449
 promotion, 783, 804, 805, 813, 818, 819
 pronouns, 650, 656, 660-662, 665, 716
 emphatic, 661
 indefinite personal, 661
 personal, 660, 661, 665, 716
 possessive, 656, 661
 reflexive, 661
 propaganda, 817
 prosody, 696
 protomusical vocalization, 61, 67
 proximity, 544, 564, 609, 692
 PRS, 103, 805, 812, 829
 psychopaths/psychopathy, 478, 783-786
 puberty, 18, 97, 99, 106, 760
 Public Enemy, 816, 831
 public image, 787, 788, 790, 792, 795, 798
 publishing, 127, 746, 807, 812, 815
 pulse, 49, 121, 155, 463, 473, 479, 484, 486-517, 522-526, 528-530, 532, 536, 537, 540, 545, 546, 550, 555, 558, 629, 700-702, 760
 duple, 488, 489, 491, 493-496, 498, 499, 502, 504, 508, 509, 514, 545, 546
 embedded, 492, 496, 502-505, 508, 509, 512, 514, 515, 686, 700, 766
 quadruple, 489
 skipple, 488, 490-494, 496, 502-510, 512-515, 517, 555, 700, 701
 triple, 488-492, 496, 499-504, 507, 509, 512, 514, 517, 536, 550
 pygmy chimps, *see* bonobos
 pyrrhic foot, 697
 Pythagor, Monty, 177, 196, 198, 200
 Pythagorean comma, 198, 200, 260
 Pythagorean scale, *see* scale, Pythagorean

Q

Quarry Men, The, 6
 Queen, 519, 616, 832
 Queen Latifah, 689
 question-answer, *see* form, binary

R

race, 39, 72, 74, 88, 91, 92, 94, 111, 113, 135, 725, 766
 racism, 41, 42, 43, 56, 88, 89, 104, 124-126, 136, 137, 139

rack space, 816
 radio:
 college, 739, 744, 804, 806, 809
 commercial, 122, 744, 768, 802, 804, 805, 809, 812, 813, 815
 community, 804, 806
 public, 804, 806
 satellite, 798, 802, 804, 806
 stations, 137, 802, 805, 813, 815, 818, 819
 tours, 813
 ragtime, 122, 131, 132, 836-838
 Ramachandran, V. S., 668, 669
 Randi, James, 669
 Randolph, David, 532
 random event generators, 52
 range of human hearing, 159, 568
 rap/rappers/rapping, 27, 65, 106, 120, 138, 140, 141, 143, 479, 536, 559, 560, 591, 612, 629, 634, 649, 654, 657, 658, 674-676, 683-685, 687-692, 694, 695, 700-702, 710, 715, 720, 721, 723, 724, 726, 732, 743, 747, 752, 756-761, 763, 767, 768, 790, 791, 793, 831, 832
 "Rapper's Delight," 138, 141
 rarefaction, 154
 Ravel, Maurice, 239, 561, 837
 ravens, 39
 real world, 668
 Really Terrible Orchestra (RTO), 533
 recapitulation, 562
 record companies/labels, 128, 142, 215, 749, 783, 788, 797, 799, 801, 805-807, 809, 810, 812-816, 818, 819, 832, *see also* independent label; major label
 Record Industry Association of America (RIAA), 805
 recording/recordings, 5, 23, 27, 64, 78, 82, 97, 99, 114-117, 119, 122, 127, 128, 130, 143, 153, 162, 235, 258, 315, 383, 400, 413, 423-425, 446, 448, 486, 505, 508, 511, 512, 514, 515, 518, 527, 536, 538, 554, 555, 557, 575, 577, 587, 592, 593, 616, 624, 628, 629, 631, 636, 731, 740, 745, 748, 749, 751, 753, 756, 771, 774-776, 780, 781, 789, 795, 800, 802, 803, 807, 812, 813, 818-820, 831, 838
 recoupable expenses, 794, 812, 815
 Redding, Otis, 137, 383, 444, 834
 reference frequency, 263
 referential meaning, 65, 67, 80, 85, 118, 119, 346
 REG, *see* random event generators
 reggae, 119, 138, 139, 525, 756, 793, 833
 Reinhardt, Django, 4, 745, 835
 relativism, 41, 46-48, 243
 moral, 41

- relativistic fallacy, 41
 relativity, theory of, 243, 245
 religion, 11, 18, 41, 42, 44, 45, 53-58, 69,
 70, 81, 90, 96, 720, 725, 820
 as an adaptation, 54
 repeated tones, 609, 610, 612-614, 635
 repeated words, 571, 674, 675, 689
 repetition, 232, 271, 360, 477, 481, 482, 488,
 529, 539, 544, 547-549, 551, 571, 586,
 596, 604-606, 608, 610, 612, 624, 626,
 665, 674, 677, 680, 684, 734
 replication, 16, 56, 58-60, 74, 75, 78, 575
 reproduction/reproductive benefits, 12, 47,
 68, 74, 75, 90, 91, 97, 114, 644, 648, 725,
 732
 reputation, 744, 756, 787-790, 792, 794, 795,
 797
 resonance/resonators, 20, 112, 162-164, 167-
 169, 201, 288, 325, 759, 760
 rest (melodic), 524, 525, 531, 538, 547-549,
 551, 552, 559, 577, 592
 "Return To Sender," 363, 384, 395, 505
 returning progression, 325-327
 revenue, 103, 104, 798, 813
 revising, 6, 219, 704, 705, 727
 revival, 109, 123, 124, 130, 488
 rhyme, 575, 597, 643, 657, 658, 665, 674,
 676-678, 681, 683-695, 700, 701, 704,
 706, 709, 711, 715, 721-724, 726, 743
 beginning, 687, 692
 compound, 691
 end, 687, 691, 692, 704
 feminine, 690
 identical, 681, 683, 685, 686, 688, 689,
 724
 imperfect, 688
 Leonine, 692
 masculine, 690
 mosaic, 691, 694
 near, 688, 689, 693
 off, 688
 perfect, 687
 true, 687-689, 693, 694, 723, 724
 vowel, 688, 689, 691, 693-695, 724
 wrenched, 689, 691
 rhyming dictionary, 658, 689, 693-695, 706
 rhythm patterns, 522-528, 535, 542, 545, 546,
 548, 549, 602-604, 607, 608, 631, 633, 634
 rhythm section, 524, 795
 rhythmic dissonance, 534
 RIAA, *see* Record Industry Association of
 America
 Richards, Keith, 383, 411, 442, 522, 527, 578,
 589, 606, 630, 833
 right-handedness, *see* handedness
 risk-taking, 94
 RIT, *see* Roger's International Thesaurus
 ritardando, 515
 ritual, 42, 49, 55, 81
 RNA, 59
 Robbins, Marty, 134, 315, 420, 606
 Robertson, Pat, 55
 rock, 6, 82, 97, 105, 106, 109, 117-119, 121,
 124, 132, 137-139, 142, 165, 256, 299, 302,
 363, 441, 483, 488, 490, 505, 508, 509,
 511-515, 519, 521, 522, 601, 602, 616, 642,
 686, 691, 732, 737, 740, 753, 756, 762,
 767-769, 771, 786, 788, 793, 794, 797, 808,
 809, 813-815, 818, 831-834
 Rock 'n' Roll Hall of Fame, 732
 rockabilly, 6, 137, 505
 rocksteady, 138
 Rodgers, Jimmie, 133, 134, 762, 837
 Rodgers, Richard, 132, 133, 383, 395, 836
 Roger's International Thesaurus (RIT), 647, 659,
 711, 712, 714, 716-718, 729, 735
 Rolling Stone magazine, 107, 630
 Rolling Stones, The, 106, 235, 519, 589, 602
 romantic love, 51, 91, 573, 574
 romantic period (common practice), 124, 299
 rondo, 563
 root note, 286, 289, 303, 306, 307, 310, 321,
 336-338, 340, 341, 351, 427, 439
 root position, 289-291, 293, 306, 317, 322, 345
 Rose, Fred, 439, 605, 673, 835
 Rotten, Johnny, 10, 787
 royalties, 103, 126, 730, 732, 812
 RTO, *see* Really Terrible Orchestra
 Rubinstein, Anton, 766
 Rubinstein, Artur, 836
 runaway sexual selection, 91, 97, 99, 100
 Rushdie, Salman, 60
 rushing, 13, 515
 Russell, Bertrand, 726
- S**
 Sachs, Curt 165, 837
 Saga, Junichi, 730, 731
 Sagan, Carl, 69
Sahelanthropus tchadensis, 60
 Salinger, J. D., 638
 samba, 527, 613
 samplers/sampling, 44, 120, 170, 743, 754,
 805
 Santana, Carlos, 235, 756, 832
 Sartre, Jean-Paul, 128
 Sartwell's Laws, 601, 602
 "Satisfaction," 235, 522-525, 527, 534, 543,
 606, 630
 saturation tone, 626
 savannah, 82, 98

- scale:
- Arabic, 228
 - blues, 228, 238, 256
 - Chinese Mongolian, 225, 229
 - Chinese pentatonic, 229
 - chromatic, 188, 190, 192, 194, 224, 225, 236-240, 247, 279, 301, 494
 - degrees, 209-211, 215, 217-219, 239-241, 243, 244, 246-252, 254-256, 259, 268-270, 271, 274, 275, 285-288, 291, 292, 294, 296, 305-309, 313, 316, 321, 325, 327-331, 334, 335, 345, 347, 349, 350, 360, 361, 441, 471, 483, 578, 579, 582, 583, 584, 619, 620, 625, 637
 - diatonic, 63, 192, 196, 198, 209, 218, 228, 230, 245, 259, 271, 279, 285, 306, 308, 309, 318, 324, 325, 341, 360, 379, 453, 581, 600
 - Grand Minor, 255, 256
 - harmonic, 245, 277, 307, 311, 327, 328, 330-333, 335, 338-342, 344, 347, 348, 353-371, 375, 379, 380, 385, 386, 392, 393, 396, 401, 402, 407, 409, 410, 412, 432, 436, 438, 444, 446-449, 453-456, 458-461, 464, 466, 467, 469, 471, 472, 564, 581, 598, 826
 - harmonic minor, 254
 - Hungarian minor/Gypsy/Roma, 230
 - Indian/whole tone, 229, 239
 - major, 192, 194, 195, 197, 204, 205, 209, 210, 212, 216, 217, 230, 231, 233, 238, 241-244, 246-248, 250, 252, 255, 256, 267, 269-271, 278, 285, 291, 295, 309, 310, 312, 353, 355, 361, 564, 611, 617
 - major pentatonic, 224-226, 229, 238
 - melodic minor, 249-252, 255, 292, 360
 - minor, 230, 234, 238, 241, 242, 244, 246, 247, 249-256, 287, 292, 304, 312, 360, 425, 441, 623
 - minor pentatonic, 225, 226, 228, 238, 600
 - modal, *see* modal scale
 - natural minor, 234, 241, 249-251, 254, 312, 360
 - of harmonic degrees, 311, 328
 - pentatonic, 49, 130, 201, 224-229, 238, 304, 360, 600
 - Pythagorean, 196, 198, 200, 201, 224, 260, 285, 287
 - scat singing, *see* singing, scat
 - Schenker, Heinrich, 23, 837
 - Schlitz, Don, 685
 - Schoenberg, Arnold, 279, 837
 - schottische, 104
 - Schwarzenegger, Arnold, 86
 - science, 6, 8, 16, 40, 41, 43, 47, 48, 53, 54, 57, 69-71, 111-113, 115, 244, 280, 642, 647, 651, 740, 819, 820, 830
 - Scopes Monkey Trial, 54
 - scratching, 140
 - Seal, 622
 - secondary accent, 495, 517
 - secondary dominant, 357, 375, 376, 391-393, 415, 416, 440
 - seed list, 709-721, 723, 726-729, 734, 792
 - Seeger, Pete, 833
 - segregation, 104, 128, 129, 681
 - selective pressure/selection, 15, 18, 21, 24, 30, 54, 61, 69, 74, 77, 78, 84, 85, 88, 90, 575
 - self-determined pricing, 806
 - selfish gene, 75, 76, 85, 575, 642
 - Selfish Gene, The*, 75, 575
 - semantic content, 558
 - semantic differential, 647, 648
 - semantic space, 645, 647-649, 651
 - semitone, 190, 192-195, 205, 206, 224, 228-231, 233, 237, 240-243, 246, 247, 250-252, 254, 255, 260-262, 267-271, 276, 288, 296, 318, 341, 351, 361, 453, 454, 456, 459, 577, 619, 622
 - "Send In The Clowns," 501, 674
 - sentence fragment, 664
 - "September Song," 116, 363, 407, 408, 412, 413, 415
 - sequence, 9, 27, 31, 35, 47, 50, 52, 80, 83, 95, 197, 206, 269, 273, 284, 305, 318, 320, 323, 324, 327, 367, 402, 425, 436, 445-447, 468, 469, 475, 479, 485, 487, 494, 506, 509, 524, 527, 543, 545, 556, 570, 579, 583, 586, 593, 595, 604-610, 613, 614, 623, 633, 646, 660, 677, 680, 695, 709, 766
 - sequencing, 15, 24, 536
 - serotonin, 573
 - "Seven Nation Army," 678
 - sex, 39, 44, 72, 86-88, 90, 92-97, 106, 107, 519, 644, 670, 725, 732, 815, 833
 - Sex Pistols, The, 106, 519, 833
 - sexes, 72, 88, 91, 100, 330
 - sexism, 88, 89, 96
 - sexual orientation, 40, 90
 - sexual selection, 11, 12, 64, 71, 72, 74, 75, 86-88, 90, 91, 93, 97, 99, 100, 107
 - Sgt. Pepper's Lonely Hearts Club Band*, 127, 752
 - Shaggs, The, 577
 - Shakespeare, William, 54, 113-115, 234, 398, 642, 651, 653, 768
 - Shankar, Ravi, 752, 832
 - sharp, 12, 59, 82, 111, 150, 164, 174, 189, 244, 247, 248, 258, 260, 262, 269, 431, 511, 531, 681
 - sheet music, 64, 102-104, 628, 766, 818
 - Sheridan, Richard Brinsley, 704

- Shocked, Michelle, 3
 shoot the messenger, 58, 96
Showboat, 132
 showcasing, 813, 815
 shuffle, 490, 493
 Siberry, Jane, 806, 808
 sibilings, 20, 749
 sign language, 30, 476
 signals/signalling, 14, 21, 25, 66, 76, 77, 80, 85, 86, 91, 268, 270-272, 302, 344, 509, 541, 545
 signature sound/style, 14, 120, 303, 738, 740, 741, 745-749, 751-754, 756, 763, 764, 769-771, 801, 803, 810, 811
 similar motion, 343
 similarity, 17, 45, 56, 57, 442, 544, 564, 592, 687
 simile, 669, 671
 Simon, Paul, 143, 219, 383, 418, 419, 432, 507, 519, 739, 820, 832
 Simons, Daniel, 476, 477
 Simpson, O. J., 684
 Sinatra, Frank, 4, 106, 110, 136, 413, 518, 555, 595, 691, 834
 Singh, Simon, 649
 singing, 23, 26, 28, 61, 65, 66, 79, 81, 84, 90, 108, 120, 124, 126, 130, 133, 137, 142, 153, 162, 168, 175, 177, 242, 264, 269, 278, 284, 304, 413, 424, 480, 483, 485, 494, 515, 519, 525, 542, 543, 555, 617, 643, 673, 745, 752, 754, 756-761, 763-768, 776, 815
 contest, 764-766
 off-key, 519, 763, 764, 815
 primate, 66
 scat, 65
 sitar, 24, 752, 832
 "Sittin' On The Dock Of The Bay," 363, 408, 443, 444
 ska, 138, 139
 Skaggs, Ricky, 808
 skiffle, 6, 142
 skill without imagination, 738
 skipwise motion, *see* leapwise motion
 slash chord, 300-302
 slaves/slavery 104, 105, 125, 126, 130, 135, 140, 715
 Sloan, 808
 Sloboda, John, 80
 slurring, 763
 Smith, John Stafford, 183, 269, 405, 406
 Smith, Kate, 4
 Snoop Dogg, 680, 685, 715, 716
 social bonding, 61, 80, 83-85, 98, 573
 social construction, 40, 48
 social Darwinism, 42, 43, 73
 social determinism, 42
Social Text, 48
 sociopath, 783
 software, 5, 19, 64, 662, 743, 780, 800, 802, 819, 820
 Sokal, Alan, 48
 solmization, 185, 191
 sonata/sonata form, 492, 562, 563
 Sondheim, Stephen, 133, 674, 832
 song publishers, *see* publishing
 song quality, 739, 740, 742, 781, 802, 816
 Song Tapper, 603
 songwriter-performer, 741, 781, 782, 787, 789, 791, 792, 801, 804, 808-811, 813, 833
 sonic pattern recognition, 545
 Sophocles, 113, 642
 soul music, 124, 137
Sound of Music, The, 38, 185
 sound system culture, 140
 soundtrack of your life, 106
 "Space Oddity," 587, 630
 Souza, Stephen ("Digger"), 256
 spam, 806
 spatial cognition, 25, 27, 93, 95
 spectacle, 768, 769, 811, 814
 Spiegelman, Sol, 59
 spondee, 697
 spyware, 806
 staccato, 531
 stage fright, *see* performance anxiety
 stage name, 655, 792-794
 stage patter, 768, 769
 staging, 814
 "Stan," 673
 Standard Social Science Model (SSSM), 40, 41
 "standard" vs "classic," 562
 stanza, 344, 436, 677, 696
 star/stars (performers) 97, 133, 137, 207, 245, 649, 743, 763, 768, 779, 791, 793, 813-816, 818
 star criteria, 814, 815
 "Star Spangled Banner, The" 207, 268, 269, 284, 363, 384, 405, 406, 497, 498, 576, 579, 610, 617, 625, 636
 start point, 598, 600, 601, 603, 629
 status, 12, 42, 85, 94, 96, 643-645, 781, 786
 Stefani, Gwen, 753
 step, 181, 190, 197, 227, 301, 331, 371, 474, 490, 491, 609, 611, 614, 629, 763, 803
 stepwise motion, 331, 609, 611, 613, 615, 618, 763
 stimulus, 40, 78, 478, 485, 488, 538, 539, 709
 Stone Age, 46, 61, 68, 112, 748
 Stoppard, Sir Tom, 738
 Storr, Anthony, 23, 213

- Stravinsky, Igor, 223, 599, 836
 "Strawberry Fields Forever," 608, 742
 Strayhorn, Billy, 587, 615, 692, 834
 "Street Fighting Man," 578, 610, 616
 string quartet, 562, 563
 Stroop effect, 30, 31
 structural phrase, *see* phrase, structural
 Strunk and White, 658, 659, 773
 studio, 130, 515, 649, 740, 741, 774, 799, 800,
 802, 803, 834
 suite, 562
 Sullivan, Ed, 142
 Summer, Donna, 139
 "Summertime," 115, 257, 560
 "Sundown," 363, 407, 408, 416
 superlative degree, 656
 supernatural, 44, 70, 669
 "Superstition," 554, 588, 589
 survival, 12, 54, 66, 68, 74, 75, 77, 79, 80,
 82, 89, 91, 97-99, 112, 114, 115, 186,
 568, 569, 572, 575, 644, 648, 724,
 725, 732
 of the fittest, 74, 575
 suspension (non-chord tone), 619-621
 Swaggart, Jimmy, 57
 swing era, 136
 swing, *see* pulse, skipple
 symbols/symbolism, 24, 31, 32, 34, 35, 39,
 63, 65, 84, 85, 150, 269, 313, 316, 346,
 360, 361, 643, 644, 646, 651, 666-669,
 671, 683, 725, 771
 symphony, 168, 213, 381, 479, 484, 532, 542,
 562, 786
 synchronous choring, 90
 synchrony, 15, 81, 83, 85, 485, 535, 536
 syncopation, 121, 128, 131, 485, 534, 555,
 556, 767
 syntax, 23, 29, 65
 systemizing, 93
- T**
 taboo, 42, 86, 87
 "Take Five," 507, 508
 "Take The 'A' Train", 587, 615, 692
 Taliban, 56, 87
 "Talkin' John Birch Paranoid Blues," 142
 talking blues, 141-143, 836
 tango, 527, 834
 Tchaikovsky, Pyotr Ilyich, 115, 150, 278
 technique vs art, 597
 techno, 140
 technology, 5, 6, 32, 52, 64, 69, 74, 99, 108,
 111, 112, 153, 280, 647, 651
 telegraphing, 552, 554
 tempo, 15, 121, 142, 150, 155, 172, 258,
 371, 413, 431, 463, 473, 486, 498,
 511, 514-522, 524, 535-537, 542, 543,
 545-547, 549, 552, 554, 560, 562, 581,
 585-590, 592-595, 598-601, 612, 614,
 629-631, 633, 700, 701, 819
 default, 515, 594
 jogging, 518, 519, 537
 running, 518, 519, 537
 strolling, 518, 537
 walking, 518, 519, 537
 tessitura, 579, 580, 624
 testosterone, 95, 770
 Texas swing, 133
 theremin, 166
 thesaurus, 647, 659, 706, 711, 716, 720
 They Might Be Giants, 809
 Thoreau, Henry David, 115
 "Three Bells, The (The Jimmy Brown Song),"
 363, 428-431
 thyroid cartilage, 760
 timbre, 23, 156, 162, 172, 569
 time independence, 383
 time signature, 371, 494, 496-499, 501-504,
 507, 523
 time-space continuum, 475
 Tin Pan Alley, 127, 128, 132, 562
 tonal centre, 205, 211, 215-219, 231, 232, 259,
 260, 268, 270-272, 277-280, 294, 337, 344,
 346, 400, 401, 420, 422, 434, 435, 457, 483
 tonal music, 48, 105, 192, 277-279, 304, 545
 tonal system, 24, 285, 296, 303, 360, 420
 tonality, 232, 266, 277-280, 294, 295, 302,
 305, 336, 337, 345, 346, 348, 349, 352,
 378, 380, 397, 402, 404, 409, 410, 412,
 420, 422, 423, 425, 429, 431-434, 444, 448,
 450-452, 455, 457, 458, 460, 461, 464, 466,
 467, 471, 475, 485, 529, 569, 570, 578-580,
 582, 610, 616, 617, 622, 637
 tone color, 153, 156, 162, 172, 174, 286
 tone deafness, 28
 tonic note, 192, 194, 212-217, 219, 226, 228,
 239, 242, 246, 255, 259, 262, 264, 274,
 278, 279, 285, 289, 292, 294, 296, 302,
 304, 306, 318, 325, 329, 330, 334, 345-347,
 349, 352, 421, 441, 455, 570, 583, 622
 tonicization, 270, 271, 295, 376, 405
 tools, 38, 39, 42, 82, 83, 643, 646, 658, 743
 touring, 103, 616, 783, 794, 797, 801, 802,
 804, 805, 812, 813, 815, 816
 trachea, 168, 759
 "Tracks Of My Tears," 363, 384, 386-388
 tranquilizers, 573
 translation, 37, 643, 669
 translators, animal language, 568
 transmutation, 113
 transposing instruments, 265
 transposition, 22, 259, 263, 264-266

Travis, Merle, 134, 527, 833
 trip-hop, 140
 triphthongs, 693
 tritone, 195, 204, 206, 215, 221, 236, 241,
 261, 337, 352, 377, 416, 418, 455, 457,
 459, 460, 468
 trochee, 697
 troops, 39, 84
 "Trouble In Mind," 363, 407, 408, 415, 416
 troupes, 103, 125, 126
 Truck Driver's Gear Change, 420, 423-425,
 429, 471, 580, 616, 654
 tuning, 163, 178, 200, 220, 249, 259, 260,
 262, 263, 314, 438
 turnaround, 388, 389, 413, 435
 turnback, 389
 "Twinz (Deep Cover)," 685

U

U2, 519, 602, 612, 614
 unconscious mind, 100, 479, 709, 710, 720,
 722, 726, 727, 729
 underground, 56, 107, 108, 139, 714, 726
 underlying beat, 483, 485, 524-526, 528, 535,
 571, 614, 631
 unique melody, 548
 unique rhythm pattern, 542, 603
 unity, 152, 259, 260, 266, 270, 271, 306, 355,
 357, 420, 462-464, 466, 488, 536-540,
 549-551, 553, 560, 561, 563, 564, 578,
 580, 585-590, 592-595, 602, 604-607, 615,
 636, 637, 732, 776
 Universal Grammar, 23, 29, 31, 44
 universal music, 101
 Universal Musical Grammar, 23
 universal people, 44, 101
 unmeasured music, *see* measureless music
 unrhymed lines/syllables, 657, 683, 684, 700,
 723
 upright piano, 102, 128

V

valence, emotional, 171-174, 221, 521, 571,
 646, 648, 649, 651
 negative, 646, 649
 positive, 521
 vamp/vamping, 433, 434
 variation (genetic), 74, 575
 variety, 20, 40, 61, 70, 104, 126, 127, 132,
 218, 219, 224, 260, 266, 270-272, 294,
 295, 306, 355, 362, 390, 391, 407, 420,
 462-464, 470, 488, 512, 513, 523, 526,
 536-540, 548-551, 553, 560, 561, 563,
 564, 571, 576, 580, 585-590, 592-595,
 600, 604-607, 614, 615, 630, 632,

635-637, 671, 677, 678, 695, 704, 732, 754,
 756, 776, 808
 vaudeville, 123, 126, 127, 132, 836, 837
 vehicle for genes, organism as, 75
 venues, 127, 794, 796, 800
 verbal communication, 79, 93, 94
 verbal song, 65
 verbs, 29, 650, 652, 653, 655, 656, 660,
 663, 664, 667, 712-714, 716, 718, 719,
 733, 735
 action, 652, 653, 656, 660, 664, 712, 716,
 719, 733
 copula (linking), 650, 652, 660, 663, 716,
 733
 Verdi, Giuseppe, 573, 773, 774, 838
 Vermeer, Jan, 46, 47
 vervet monkeys, 67, 85, 93
 vestibular system, 474
 vibrato, 759, 760
 video, 116, 477, 584, 636, 775, 780, 788, 789,
 805, 811, 815
 viruses, 59, 806
 visual imagery, 666, 671
 VM (vocal-melodic) phrase, *see* phrase, VM
 (vocal-melodic)
 vocal cords, *see* vocal folds
 vocal folds, 148, 157, 168, 485, 759-761, 763
 vocal grooming, 84
 vocal sound/style, 120, 121, 168, 745, 748,
 753, 756, 761-763, 774, 776
 vocalization, 14, 78, 79, 90, 177, 568
 voice:
 chest (register), 759, 761, 762, 774
 falsetto, 580, 761, 762
 full, 761, 762
 head (register), 760, 761
 leading, 342, 343
 range, 160, 579, 759
 recorded, 774
 "Voice of Fire," 46-48, 738
 vole (prairie and meadow), 87

W

Waits, Tom, 7, 674, 751, 811, 831
 "Walking After Midnight," 363, 384, 390,
 391, 414
 Wallace, Alfred Russell, 71
 waltz, 104, 492, 495, 500, 527
 Warren, Diane, 670
 Waters, Muddy, 4, 130, 754, 834
 Watson, James D., 57
 Watson, John, 39
 "Way You Look Tonight, The," 625
 webcasting, 798
 Weill, Kurt, 133, 383, 412, 585, 589, 836
Well-tempered Clavier, The, 263

- West, Kanye, 106, 692
 “When A Man Loves A Woman,” 363, 384, 389, 390, 501, 590
 “When I’m Sixty-four,” 513, 679
 white rap, 141, 143
 White Stripes, The, 106, 483, 529, 678
 White, E. B., 659
 Whitman, Walt, 113
 “Who By Fire,” 679
 “Who Do You Love?,” 613, 615
 “Who Holds Your Hand?,” 615
 whole tone, 190, 194, 217, 229, 239, 240, 250, 296, 341, 351, 436
 “Wild Horses,” 363, 407, 408, 411
 Williams, Pharrell, 680, 686
 Williams, Robin (the comedian), 796
 Williams, Robin (the designer/author), 799
 Williams, Sr., Hank, 7, 64, 115, 134, 383, 387, 388, 439, 440, 519, 588, 592, 618, 673, 739, 751, 814, 835
 Wilson, Brian, 4, 513, 832
 Wilson, E. O., 45, 75, 525
 Winter, Carl, 642
 Wolfe, Tom, 462
 WOMAD, 143
 women in music, 97, 98, 786, 787, 808, 809
 Wonder, Stevie, 4, 137, 424, 588, 670, 755, 831
 work ethic, 815
 “Work It,” 726
 working attention, 478
 world music, 105, 143
 Wray, Link, 302
 “Wreck Of The Edmund Fitzgerald, The,” 235, 560
 writer’s block, 710, 711
 Wundt curve, 538-540, 551, 553, 560, 561, 571, 579, 585-590, 592-595, 626, 627, 631, 668, 670, 671, 677, 695, 706-709, 727, 738, 739, 811
 Wu-Tang Clan, 7
- X**
 xenophobia, 89
- Y**
 Yeats, W. B., 272, 458, 730
 “Yesterday,” 363, 384, 403, 404, 619, 742
 Yoakam, Dwight, 685
 yodelling, 762, 763
 “You Make Me Feel Like A Natural Woman,” 505, 592
 Young, Neil, 117, 315, 518, 554, 560, 618, 753, 831
- Z**
 Zappa, Frank, 11, 577, 779, 788, 832
 zebra finches, 39
 Zuckerkandl, Victor, 567