AN INTRODUCTION TO ENGLISH-LANGUAGE FOLKSONG
STYLE (II): Tonality, Modality, Harmony, and Intonation in Larena Clark’s
Traditional Songs

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In the last issue of the Journal, I showed how various temporal aspects of Larena Clark’s traditional repertoire, which consists of more than one hundred songs, jibe with both the overall style and various substyles of English-language folk song. In the present study, I turn from considerations of time to matters of pitch: specifically, tonality, modality, harmony, and intonation, the latter with regard to singing style. Again, one finds that LaRena’s traditional tunes constitute a specific mix of fully traditional elements and that a close examination of her melodies serves to clarify certain issues that arise in the analysis and “appreciation” of folksongs.

Tonality, Modality and Harmony

Scholars who first analyzed the tonal structures of English-language traditional songs at the beginning of the twentieth century were struck by their resemblance to the so-called “church modes” which had been used in the Middle Ages and Renaissance. Since then, some writers have disputed the application of a framework originally developed to deal with early ecclesiastical music to relatively recent songs which, for the most part, are secular, and never liturgical (unlike the Gregorian chants for which the modal system was developed). Nevertheless, and although one has to recognize the importance of major and pentatonic scales for English-language folksong, a modal system of analysis like that developed by Bertrand Bronson for the melodies of the Child ballads provides a remarkably close fit to the facts of traditional English-language song. Accordingly, in what follows, I employ a framework that embraces both major and pentatonic scales and a certain understanding of modality.

Melodies in Major

As reported for various samples of English-language folk song, in LaRena’s traditional pieces the largest single group of items can be readily classified as major. Indeed, more than one third of her traditional tunes are easily notated in a major key. In the transcriptions below, tunes are generally transposed, if necessary, to conclude on the second-line g of the treble clef, and the unambiguously major melodies are notated with a signature of one sharp. Melodies notated in this way show that the largest group of unambiguously major tunes represent all and only the seven pitch classes of the G-major collection (see, for instance, “Adieu Unto Cold Weather,” Example 1 of the earlier study). I prefer to describe these pieces as “major” rather than, for example, as “Ionian”, because the melodies clearly imply triadic progressions, particularly involving the I, IV, and V chords. Such progressions are more typical of functional tonality since the late seventeenth century than they are of more archaic, modal structures.

The second largest group of melodies in LaRena’s traditional repertoire consists of tunes that are clearly major in the sense just described, but that “lack” a single scale degree. Relative to the G-major framework adopted for the transcriptions, many lack an f-sharp and several lack a c (see “I’ll Remember You, Love, In My Prayers” and “Barbara Allen,” respectively, [Examples 2 and 3 of my previous article]). Such tunes yield so-called “gapped,” “hexatonic,” or “hexatypic” structures. In these, the analytic frameworks of Bronson and Mieczyslaw Kolinski capture what I feel is the salient aspect of the “missing” pitches, namely,
that the absence of either c or f-sharp removes the ambiguous tritone/diminished-fifth interval class from the collection of intervals used in the song. If any note were to be simply "left out" of a major scale, it would be one of these, for what results from such an "omission" is the simplest subset of the diatonic collection. In other words, leaving out a pitch class that would result in a tritone represents following the "line of least tonal resistance." By contrast, I found only a single unambiguously major melody in LaRena's traditional repertoire that "leaves out" another pitch class, namely, e (relative to G major).4

Similarly, I found only three instances of so-called "anhemitonic pentatonic" (which might be better characterized as "atritonic pentatonic"). This situation contrasts vividly with what one finds in the tunes of traditional English-language songs that have been recorded, for example, in Tennessee, where such pentatonic structures predominate. One of LaRena's songs, "The Banks of the Pembina" (Example 1, below), is clearly cast in what must be construed as "major-pentatonic", outlining as it does chords I, II, IV and V. Another of her melodies, for "The Gypsy Davy" (Example 2), is likewise clearly "major-pentatonic" in tonality, with the wrinkle that it concludes on scale degree V, that is, the lower dominant, thereby having a so-called "circular ending." The only other pentatonic song, "The King's Daughter" (Example 3), could be understood as an instance of Mixolydian-Dorian-Aeolian pentatonic (with an ending on g and pitch classes b-flat and e-natural "missing," relative to F major). However, one could also argue that its tonality is clearly major until the last phrase, where it veers towards an inconclusive, circular ending.5

The major orbit has two melodies that, pedantically, might be considered to mix Ionian and Lydian modes insofar as, relative to the G-major notations, every pitch class of the G-major diatonic collection is represented, and also c-sharp. However, in both songs, "The Golden Vanity" (Example 11 of the previous article) and "The Ploughboy" (Example 4, below), the implications of chords I, IV and V are quite clear, and the "extra" pitch class, c-sharp, can be regarded, when it appears, merely as a chromatic lower neighbor tone (to d, in "The Golden Vanity" and "The Ploughboy") or as a chromatic passing tone (between c-natural and d, in "The Ploughboy"). In other words, these "Ionian-Lydian" tunes really involve slight extensions of the somewhat simple, non-chromatic version of the functional, tonic-dominant tonality which one finds in so many of the songs; they need not be considered instances of an archaic modality. Indeed, "The Ploughboy" seems to demand, relative to the conventions for harmonizing late nineteenth-century popular songs, a harmonization involving the V7 of V chord (i.e., II7 or A7, relative to G major).6

Modal Melodies
In the remaining songs of LaRena's traditional repertoire, one finds considerable reason to adopt a modal framework for analysis. Consistent with the findings for other samples of English-language folksong, whereas Mixolydian, Dorian and Aeolian melodies appear throughout, there are no instances of Phrygian or Lydian. Interestingly, major (or Ionian), Mixolydian, Dorian, and Aeolian are the only modes where the fifths on degrees 1, 4 and 5 are perfect (rather than diminished) and the restriction of the tradition to these modes (as well as the use of various "gapped" and "mixed" forms) would seem to betoken a concern with ensuring a symmetrical pattern of melodic consonance around whatever pitch might be the tonic or "final" (or, in modal terms, the "finalis"). This concern can be described conversely as a preoccupation with avoiding dissonance at the centre
of a melody's tonal or modal structure?

The largest category in LaRena's modal songs can be termed "major-Mixolydian". Relative to the final (second-line g) of the transcriptions, several melodies have all the pitch classes of G major as well as an f-natural. In his study of lumbering songs, Norman Cazden found two tendencies in these major-Mixolydian tunes: 1) for f-sharp (or the "leading tone") to appear in the lower part of the range, a semitone below the lowest, most stable position of the "finalis" or "tonic," at the cadences of the first and last phrases (e.g., the A-phrases of an ABBA, come-all-ye form), and 2) for f-natural (or the "subtonic") to appear in the upper part of the range during the middle phrases (e.g., the B-phrases of a come-all-ye form). An instance of this is LaRena's melody for "The Faggot Cutter" (Example 12 of the earlier article) and an intonational variant is in her version of "The Banks of the Nile" (Example 5, below). In the latter, "sharp f's" appear in the first and last phrases. Although Cazden's generalization is serviceable, there are a number of exceptions among LaRena's songs. Nevertheless, I feel that his observation captures an important aspect of the tunes' style.

By and large, the use of f-natural relative to a final on g can be considered to complicate a melody relative to major tonality, for thereby each of the triads on degrees 1, 4 and 5 is not uniformly major, and hence triadic symmetry around the finalis or tonic is sacrificed. Also, f-natural in the middle of a melody, particularly in the upper part of the range, can be considered to compound the complexity that this pitch class contributes to the tune. Such complication is particularly significant in the middle of the piece where the highest degree of complication tends to take place in the style as a whole. In this way, the overall tendency of the songs to have an arch shape, whether with regard to contour (see below) or with regard to form (see above), is extended into the tonal realm where simple events tend to take place at the beginning and end, and more complicated events in the middle. Indeed, instances of circularity, which are relatively rare, can be regarded as traditional ways of countering the tendency to open and close a tune in a simple manner, for a circular song has a relatively complex ending.

Another recurrent feature of tunes that have Mixolydian elements is the appearance of a strongly implied IV-chord at various important points. For example, in LaRena's version of "I Once Loved a Lass" (Example 6, below), the first clearly implied chord is IV (relative to D major). Beginning with a IV-chord is quite uncharacteristic of functional, tonic-dominant harmony. In songs of this sort, it is unclear whether from a point of view based on functional harmony, a given tune is circular (by virtue of ending on the lower dominant, degree V, of a major key, i.e., G major in the instance just cited) or from a modal perspective, the melody is conclusive (by virtue of ending on the finalis, degree 1, of a Mixolydian mode). Insofar as the tradition comprises songs that are both clearly major, in a tonal sense, and clearly Mixolydian, in a modal sense, it would seem pedantic to insist on one interpretation rather than the other. Instead, it appears preferable to appreciate the ambiguity of such melodies as they arise. And it would seem that this very ambiguity is to be valued aesthetically in individual songs, and makes the best sense of the repertoire as a whole.

Other, "purely Mixolydian" melodies in LaRena's repertoire include her tunes for "George Riley" (Example 7, below) and "Rattle on the Stovepipe" (Example 7 of the earlier study), where, again, one can discern emphatic uses of the IV-chord. Only one "gapped-Mixolydian" melody occurs in this sample, namely, "The Bonny Young Irish Boy." Here, relative to a finalis on g, pitch class
a appears to be missing. Significantly, this tune is a close variant of the major-Mixolydian melody LaRena employs for “Bridget from Washago” (Example 8). The latter not only includes pitch class a but also f-sharp (in addition to f-natural).


Collections having precisely seven-pitch classes form the largest segment of the songs considered here. Of these, most are major, and much smaller groups are Mixolydian, Dorian, and Aeolian. Lydian and Phrygian are never encountered, or stated positively, all seven-tone collections are oriented so that the fifths around the final tone, on degrees 1, 4, and 5, are consistently perfect or “consonant.” Of the modes that have perfect fifths around their final degrees, the single mode for which all triads around the orienting note are major, namely, “Ionian” or the major scale, is by far the most frequent. And lest this be taken to indicate some sort of superiority of major over minor, one can note that an Ionian orientation differs from an Aeolian orientation (where the triads on degrees 1, 4, and 5 are all minor) not so much in the contrast between major and minor, but rather because the seventh degree in “Ionian” (or major) is relatively close to the orienting tone (or “tonic,” its resolution). Thus, the favoring of major scales can be regarded as a preference for relatively simpler structures insofar as the “leading tone” in major is bound more closely to its resolution, the tonic, than in natural minor.12

For the rest, smaller numbers of tunes comprise six or eight pitch classes, and very few comprise five. In most six-pitch-class melodies, the “missing” note removes by its absence the only ambiguous interval class in the diatonic collection (i.e., the six-semitone, tritone/diminished-fifth interval). Further, all the seven-pitch-class melodies correspond precisely to the diatonic collection (i.e., 7-35 in Allen Forte’s standard numbering of pitch-class sets). All the eight-pitch-class tunes involve the simplest sort of chromaticism whereby only a single added interval class is ambiguous. And all of the five-pitch-class pieces comprise the only five-tone collection where there are no ambiguities at all, namely, atritonic pentatonic.13

Not only in the seven-pitch-class melodies, but also in those comprising six, eight, and five pitch classes, the most frequent orientation is major: the great majority of six- and eight-tone melodies are major in orientation, and two, if not all three, of the five-tone pieces are readily understood as major in tonality (see Examples 1 to 3). In this sense, major orientations dominate LaRena’s repertoire as a whole.

Whereas major tonalities predominate, there is no radical discontinuity between these and seemingly more “archaic” structures. Instead, it would appear that, since at least the seventeenth century, more complex, modal structures have remained a constant, one might say somewhat “esoteric,” aesthetic alternative within the tradition as a whole. However, the modality of English-language folksong, though it overlaps the ecclesiastical system to some extent, seems to differ from the latter by being more generally organized along triadic lines. I return to this point below, for it opens up a possibility for appreciating the repertoire that, though perhaps heterodox, is, I believe, justified by the melodies themselves.14

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Pentatonisms
Before turning to harmonic aspects of the tradition, the point should be make that
though only three of LaRena's songs here are "pentatonic" in the narrow sense,
so-called "pentatonisms" abound among her songs. In many, frequently quite
extended, passages of her melodies, no tritone or semitone appears among the
notes, even though portions of the overall range where such intervals might
appear have been traversed in the meantime. For example, in her tune for the
ballad of "Barbara Allen" (Example 3 of the earlier study) this is true up to the
second last measure (of eight), even though the region, b-d, where one might have
found a c, and thus a semitone, had been reached as early as the beginning of the
third measure.15

Examples of this sort could be multiplied considerably. The important
point here is that, just as pentatonic melodies, or at least, extensive pentatonic
passages of melodies, coexisted with triadic harmonizations in nineteenth-century
popular songs (e.g., of the Stephen Foster variety), within the largely British
tradition which seems to have been such an important stylistic source for the
precursors of Tin Pan Alley, there appears to have been a coexistence of penta­
tonic (i.e., five-tone) and diatonic (i.e., seven-tone) passages within the melodies
themselves. To a considerable extent, it would seem that this coexistence is a
result of the high degree of consistency between diatonic and pentatonic frame­
works with regard to their respective definitions of interval sizes. Also, the
semitone-producing f-sharp in the second last measure of LaRena's rendition of
"Barbara Allen" constitutes a small surge of complexity toward the end of the
melody, just as the c which is introduced at the beginning of measure three of her
tune for "Go and Bring Me Back the Boy I Love" (Example 6 of the previous
article) injects some added life into a previously simpler piece.16

Harmonic Implications
Although members of LaRena's family, from whom she learned virtually all these
songs, played such instruments as the fiddle, there is no indication that within their
singing tradition chordal accompaniment was provided. Nevertheless, her tunes
clearly outline certain chords, and an unambiguous harmonic background is
evident in many of them. In this regard, among the "modal" melodies of certain
early, seventeenth-century sources closely connected with British folk song,
harmonic, specifically triadic outlines are obvious.17

Principles for harmonizing these melodies have been published before. Different arrangers might disagree from time to time but one is generally safe, and
generally does less violence to what is a monophonic tradition by choosing the
simplest harmonization consistent with the emphasized notes of the melody, and
this I have sought to do in a number of the examples below.18

Harmonizing the tunes in this manner shows that there is a rather clear
chordal idiom underlying the melodies. Major tunes are often easily harmonized
with chords I and V (or V7), and frequently, as well, chords IV and II (or II7) are
called for. Mixolydian melodies most often outline I (of course), IV (see above)
and bVII (e.g., F ma, relative to a final note on g: cf., for example, "Bridget from
Washago", Example 8). In general, the most clearly outlined chords are so-called
"common chords" (i.e., consonant, major or minor triads) and dominant sevenths
(e.g., D7) which might, or might not, be located on the fifth degree (cf. the opening
of "George Riley," Example 7, where a dominant-seventh structure, G7, occurs
on the final or tonic g).
Range
Analysts have applied to traditional English-language song ideas concerning range developed in medieval and Renaissance modal theory. Theorists distinguished between so-called "authentic" and "plagal" ranges. Elementary modern accounts of early modal theory make the point that melodies that extend from the final (degree 1) to the pitch an octave higher (degree 8) were considered authentic, and tunes that range from the fourth degree below the final (namely, degree V) to the pitch an octave higher (degree 5) were viewed as plagal. However, neither in early chant nor in traditional English-language song is there a restriction to these ranges. Authentic melodies might extend below degree 1 and either rise a little above, or not even reach, degree 8, and plagal melodies might range below degree V or not even reach a note as low as this, and they might not rise as high as degree 5 or they might range higher. Notwithstanding the simplified accounts in elementary modern treatments of early modality, a great variety of schemes for distinguishing between authentic and plagal existed side by side in the Middle Ages and Renaissance. Accordingly, there is no historically "correct" categorization of melodies into authentic and plagal. Nevertheless, although one cannot decide unequivocally in every instance, viewed from the overall perspective of early modal theory, about half of LaRena’s traditional tunes can be considered plagal and the other half authentic.

Although one cannot be absolutely precise in applying the various analytic schemes of early modal theory to LaRena’s songs, I feel the fact that LaRena’s tunes and most other melodies in English-language tradition can be classified fairly determinately into authentic and plagal types indicates some general features of the repertoire. Early modal theory allows for the possibility that a melody might range as far below the final as degree III, and might extend above it anywhere from degree 3 to degree 10 just as one finds in LaRena’s songs. Without specifying a historical connection between English-language traditional song and Gregorian chant, one can also note that virtually all of the latter can be fitted within this framework as well. Accordingly, there would seem to be in Western vocal music some general tendencies with regard to the relations among the lowest, highest, and final notes of a vocal melody, and it would not be surprising to find that other vocal repertoires could be fitted into such a framework. By and large, the last notes of LaRena’s melodies lie relatively low in the ambitus insofar as the tunes tend to range above the final note rather than below. In other words, these tunes tend to be “low-ending,” whether or not individual items are classified as authentic or plagal.

LaRena’s melodies also tend to have ranges that might be as narrow as a sixth or as wide as a twelfth, and the most frequent range, a ninth, lies in the middle. It is noteworthy that, in some important early modal theories, the normative (or “perfect”) ranges for Gregorian chants are specified as comprising a ninth and Tin Pan Alley composers have often specified the ninth as an ideal range for popular, commercial songs.

Finally, one can note that LaRena’s vocal range would be classified as “soprano”, and the bulk of her melodies are sung within the twelfth between B (just below middle C) and F-sharp (on the top line of the treble clef). As noted above, the melodies in the transcriptions have generally been transposed to end on the second line g of the treble clef.
Singing Style
Relative to other traditional singers, LaRena's delivery is rather plain. Unlike, for example, Angelo Dornan of New Brunswick, LaRena uses neither many nor extensive ornaments in her singing. Here and there she adds a grace note or a slight portamento, and I have tried to capture these elusive details in the transcriptions. By and large, however, her rendering of the songs is almost entirely "syllabic" in the sense that she almost invariably employs one pitch per syllable. In this respect, her performance of "Though Rocks and Hills Do Us Divide" (Example 9) is quite exceptional in having two notes on about a quarter of the syllables. Nevertheless, one nowhere finds the extensive melismas consisting of several notes found in both French- and English-language folksong of central and eastern Canada.23

In tempo, LaRena is remarkably steady throughout the performance of a song, and she projects the largely regular metres of her melodies quite clearly. Unlike some other traditional singers, she "settles down" rather early in her rendition of a song.

To my ear, LaRena's intonation is generally very close to equal temperament, unlike, for example, certain singers of the American South whose tuning of, for instance, the third degree of a scale varies between major and minor forms throughout a rendition. From time to time, I have not been exactly sure how to transcribe the pitch of a given note, and in such cases I have indicated my indecision by means of an arrow pointing upwards or downwards to indicate that the pitch is about a quarter of a tone higher or lower than the note to which the arrow is applied. In virtually all instances of this sort, the note is rather brief or otherwise somewhat difficult to "catch" (for example, by being rendered with a slight wavering).24

Minor instances of intonational ambiguity tend to occur in parts of a scale or mode where neither of the two pitches between which one is undecided (and which are a semitone apart) would contradict the overall tonal structure. For example, in an otherwise clear rendering of major, one might be undecided at a certain point between the leading tone and the tonic or between the third and fourth degrees (see, for example "Barbara Allen," Example 3 of the previous study, "The Ploughboy," Example 4 below, "The Cottage On Yonders Moor," and "The Jealous Lover"); and in Mixolydian-major, between the leading tone and the subtonic (see "The Banks of the Nile," Example 5). Despite these rather rare ambiguities, the tonal structures of LaRena's melodies are very clearly projected, except, of course, where the tune itself is tonally ambiguous, as in a circular melody. And though one sometimes hears a slight wavering in LaRena's voice, it is very infrequent, and her singing is altogether free of heavy vibrato.

Very rarely does LaRena's tune for a song seem to be a fragmentary or degraded version. By contrast, quite often in the tradition, the last two phrases of a four-phrase melody are taken as the stanza for an entire song (e.g., the BA of an ABBA or AABA form, or the AB' of an ABAB' form). Nevertheless, within a rendering of several stanzas, LaRena quite frequently adapts the tune to the words she knows by repeating or deleting a section (typically one half or the other of a four-phrase stanza).

To my ear, LaRena's vocal quality or "timbre" leans a little to the nasal side. Her pronunciation is generally quite close to "official" Canadian speech of the sort one hears from national news broadcasters. However, there are a few exceptions. Before a word beginning with a vowel, LaRena generally pronounces "the" as "thuh" rather than as "thee," as is quite common in Ontario vernacular.
Other instances of "non-official" pronunciations can be traced to regional (e.g., Irish) pronunciations that seem to have travelled with the songs by way of her elders. Finally, with regard to the "surface" of LaRena's singing style, I detect a "lilt" which is far from the emphatic accentuation or intensity of some other traditional singers. In short, her singing style can be considered both modest and engaging, but certainly neither pretentious nor mannered.

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Example 1. The Banks of the Pembina.

Oh, I took a stroll one evening in the early part of June; The
stars shone brightly in the sky, and brightly shone the moon. Oh, I took a stroll from
Cambridge, boys, to view the scenery round; 'Twas there I spied an Indian maid, sitting on the ground.

Example 2. The Gypsy Davy.

Oh, a Gypsy Davy came to town, riding on a pony. He whistled while he sang, and the green woods rang, And he won the heart of a lady.

Example 3. The King's Daughter.

Oh, Susanna she was a king's daughter who had left her own countryside, and all for to wed a nobleman bold. And to bear him company.
Example 4. The Ploughboy.

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Example 5. The Banks of the Nile.
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G A D C G

I once loved a lass and I oft heard her tell There was not a young man she loved half so well. She solemnly promised to be my sweet wife, And to make me right happy all the days of my life.

Example 7. George Riley.

C G7 C G7

As I walked out one summer’s ev’ning, All for to take the sweet pleasant air, Twas there I spied a comely fair maid; She appeared to me like an angel fair.

Example 8. Bridget from Washago.

G C G C D

We bid fare-well to Barrie town on Allanvale’s sandy ridge. We left on board a Simcoe tug, all for to build a bridge. We landed in Musko-ko-ko; the winds did howl and blow. A pretty fair maid my heart en- snared; she’s Bridget from Washago.

Though rocks and hills do us divide, And we are far apart, Oh, others may have my company. But you have got my heart. Last Sunday when I went to church, I passed my true love by. I knew her mind was changing by the roving of her eye.
NOTES


3. For the distinction between triadic, tonal, and dyadic, modal music, see Jay Rahn, "Constructs for Modality, ca. 1300-1550", Canadian Association of University Schools of Music Journal, 8, 2 (1978): 5-39, esp. 10-14. During the late Middle Ages and Renaissance one can discern a shift from dyadic to triadic conceptions that corresponds in large measure to the increasing use of four-part writing in polyphony, particularly at final cadences. Which, see Rahn, "Constructs," 17-19. The term "Construct," term coined here with Cazden, "A Simplified Mode Classification," 45, in using the term "major" rather than "Ionian" for folk songs in the English-language tradition, my specific reason being that these tunes are tonal-triadic rather than modal-dyadic in structure.

4. The augmented fourth and diminished fifth constitute the only pair of (ordered) interval classes in the diatonic collection that are ambiguous. In contrast with intervals of, for example, 3 semitones, which are always thirds, and with intervals of 5 semitones, which are always sevenths, intervals of 6 semitones might be either fourths or fifths (cf. Rahn, "Constructs," 10). For the terms "pitch class", "interval class", "collection", etc., see John Rahn, Basic Atonal Theory (New York: Longman, 1980). Bronson’s scheme in The Traditional Tunes is easily accommodated to the present formulation. On so-called "gapped" scales, see Cecil Sharp, English Folk Songs from the Southern Appalachians (ed. Maud Karpeles, London: Oxford U.P., 1932), xxx-xxx. In Mieczyslaw Kolinski's scheme, outlined in "Recent Trends in Ethnomusicology", Ethnomusicology 11, 1 (1967): 1-24, and applied in Barbara Allen: Tonal versus Melodic Structure, Part 1", Ethnomusicology 12, 2 (1966): 206-18 G- major melodies that are missing c or f-sharp would be characterized as "hexatonic". In the framework of Bruno Nettl's Theory and Method in Ethnomusicology 145, such tunes would be viewed as "hexatonic". One can note that Kolinski's system becomes somewhat more complicated if, for example, a is missing from an otherwise G-major melody, and that acceptance of the overall approaches of Bronson, Kolinski, and Nettl to descriptive analysis and their findings need not imply allegiance to the theories that underlie them (e.g., Kolinski's notion of "tints").


7. For accounts that demonstrate the predominance of "Ionian" (i.e., major), Mixolydian, Dorian, and Aeolian modes in English-language traditional song and related repertoires, see Woolridge's edition of Chappell's Old English Popular Music, p. xi, and Maud Karpeles, Cecil Sharp's Collection of English Folk Songs, 2 vol., (London: Oxford U.P., 1974). Note also that the same modes dominate French monophonic song ca. 1500, which is closely connected with modern French and French Canadian folk song; concerning modal usage in such songs, see Jay Khan Melodic and Textual Types in French Monophonic Song, ca. 1500 (unpub. diss., Columbia University, 1978, 2 vol.), 1. 159-65, and the tabulations in Maud Karpeles and Raoul d'Harcourt, Chansons folkloriques francaises au Canada (Quebec: Presses universitaires Laval, 1956), 42; George Proctor, "Musical Styles of Gaspe Songs", National Museum of Canada Bulletin 190 (1960): 209-12; and Smith, "Ernest Gagnon", 255. The predominance of these four modes, and the eventual supremacy of major (or Ionian) would seem to be a general feature of Western European traditional song as whole.

8. See Cazden, "Notes on the Analysis": 20-21 on the uses of high and low versions of the seventh degree in (what is termed here) "major-Mixolydian".

9. On the arch contour in European folk songs in general, see Walter Wiora, European Folk Song (Koln: Arno Volk Verlag, 1966) 7. With regard to contour, high tones in the middle of a tune correspond to complexity in a melody's middle by virtue of fact that higher tones comprise more vibrations per second. A case could be made that circular melodies are, within the context of the tradition, somewhat esoteric, just as modal melodies might be regarded as somewhat more arcane than major tunes. On the symmetry of major triads in a major key, see Rahn, "Constructs" 12-13, and the seminal observations of Benjamin Boretz, "Musical Syntax (II)", Perspectives of New Music, 10 (1971): 252-70, esp. 259.
For the standard numbering of subsets (e.g., 7-35) of the twelve-semitone aggregate, see Allen Forte, *The Structure of Atonal Music* (New Haven: Yale UP, 1973). Using Forte's numbering system, almost all the six-pitch-class tunes considered here correspond to 6-25, all the eight-pitch-class tunes to 6-23. The ambiguity that arises in a G-major context, from the use of f-natural in addition to f-sharp or c-sharp in addition to c-natural is a result of the fact that a single interval in each case (f-sharp/f-natural or c-natural/c-sharp, respectively) comprises one semitone and zero scale degrees in contrast with such intervals as b-natural-c-natural and f-sharp-g-natural that comprise one semitone and one scale degree. In this way, the one-semitone interval is ambiguous because it comprises both zero scale degrees and one scale degree, just as the six-semitone interval in the diatonic collection (7-35) is ambiguous by virtue of comprising a fourth and fifth. Note as well that the trichordic collection (3-35 in Forte's numbering) is the only five-pitch-class subset of the twelve-semitone aggregate which has absolutely no ambiguities in the coordination of interval sizes expressed in terms of numbers of semitones and numbers of scale degrees. Cf., on this point, Rahn, "Constructs," p. 15. It would appear that these relatively simple structures have been "selected" (i.e., by virtue of their reinforcing effects) during the history of English-language traditional song culture (cf., Jay Rahn, "Music in Theory and Practice: A Behavioral View", *Integral: The Journal of Applied Musical Thought*, 1(1987): 105-26).


On pentatonisms, see Brailoiu, "Sur une melodie", 342.

See Charles Hamm, "Popular Music," *The New Grove Dictionary of Music and Musicians* (London: Macmillan, 1980), vol. 15 87-121, 100, on pentatonic melodies in minstrel show songs and note that there are a number of major-pentatonic passages in Steven Foster's songs. The consistency of interval sizes between pentatonic and diatonic scales can be illustrated by the interval of three semitones which always comprises one scale degree in pentatonic and two in diatonic (cf., the coordination of diatonic and pentatonic structures described for quite another context) in Jay Rahn, *A Theory for All Music* (Toronto: U of T P, 1983), 173-74.

On the principles of harmonization followed here, see the pair of articles cited in note 10.


That a (pleruplural) plagal melody might descend to degree III and a (pleruplural) authentic melody might rise to degree 10 is implicit in Marchetto of Padua's formulation of modal ranges which influenced modal theorists from the fourteenth to the sixteenth centuries (see Jan W. Herlinger, ed., *The Lucidarium of Marchetto of Padua* (Chicago: U. of Chicago P., 1985), II.27-30, 384-87). Very few Gregorian Chants seem to have exceeded this range; indeed, according to Willi Apel's account in *Gregorian Chant* (Bloomington: Indiana U.P., 1958), 148-52, very few exceptions appear in the modern *Liber Usualis*. The only melody among LaRena's songs in this sample that transgresses the I11-10 scheme is her own composition, "Woes of Two Fishermen," which has a third ambitus (that could be understood as an ending on degree 8), though it is a variant of the traditional passamezzo antico tune-type, which features a I-IV-I-3 (or V-IV-V-I chord progression that she sings in several other variants all of which end low (i.e., on degree 1, e.g., her rendering of "The Cowboy's Lament").

Note that in Marchetto's formulation the perfect authentic range extends from degree VII to degree 8 and the perfect plagal from V to 6 (The Lucidarium, 376-84). For a typical description of the range of approximately a ninth in Tin Pan Alley song, see Robert Bruce, *So You Want to Write a Song?* (New York: Mayfair, 1935) 16.

For the convention of indicating that the original piece was performed, for example, three semitones lower than notated by placing such a formula as "OR= + 3 s.t." above the transcription, see Kolinski, "Recent Trends" 22; and Rahn, "Guidelines... General Considerations" 38.

For transcriptions of the highly melismatic singing styles of Anglo Dorman and other, French-Canadian singers, see Helen Creighton, *Folksongs from Southern New Brunswick* (Ottawa: National Museum, 1971), and Marguerite and Raoul d'Harcourt, *Chansons folkloriques françaises au Canada.*

For instances of variable intonation of the third degree in Tennessee, see Burton and Ambrose 48, 56, 62, and 85.