

# **Broadside Tunes from Claude M. Simpson and the Butterworth MSS: A Comparative Analysis**

**A Paper Originally Presented at the Broadside Day Conference in February 2015 at Cecil Sharp House**

**by Lewis Jones**

## **1. A Brief Introduction to Musical Modes**

In an octave of music there are twelve notes, separated by semitones. These (marked off by commas) are:

A, A-sharp (or B-flat), B, C, C-sharp (or D-flat), D, D-sharp (or E-flat), E, F, F-sharp (or G-flat), G, G-sharp (or A-flat).

Most musical scales consist of seven of these twelve notes. For most folk song there are six possible scales:

**1. *Ionian*:** This scale is identical to the major scale; this is the scale most commonly used by classical composers and most often found in English folk song.

The notes of the Ionian scale are C, D, E, F, G, A, B, C' – and you can get it if you play upwards from C to C' on the white notes of a keyboard or, in tonic sol-fa, if you sing the familiar scale of 'do, ray me, fa, sol, la, ti, do'. Note the distribution of tones and semitones in this scale:

C-(tone)-D-(tone)-E-(semitone)-F-(tone)-G-(tone)-A-(tone)-B-(semitone)-C'

**2. *Dorian*:** The notes of the Dorian scale are D, E, F, G, A, B, C, D' – and you can get it if you play upwards from D to D' on the white notes of a keyboard or, in tonic sol-fa, if you sing a scale of 'ray, me, fa, sol, la, ti, do, ray'. Note the distribution of tones and semitones in this scale:

D-(tone)-E-(semitone)-F-(tone)-G-(tone)-A-(tone)-B-(semitone)-C-(tone)-D'

**3. *Aeolian*:** The Aeolian scale is similar to the modern minor scales in their melodic and harmonic forms, but without the accidentals that sharpen or flatten some of the notes of those scales. The notes of the Aeolian scale are A, B, C, D, E, F, G, A' – and you can get it if you play upwards from A to A' on the white notes of a keyboard, or, in tonic sol-fa, if you sing a scale of 'la, ti, do, ray, me, fa, sol, la'. Note the distribution of tones and semitones in this scale:

A-(tone)-B-(semitone)-C-(tone)-D-(tone)-E-(semitone)-F-(tone)-G-(tone)-A'

**4. Mixolydian:** The notes of the Mixolydian scale are G, A, B, C, D, E, F, G' – and you can get it if you play upwards from G to G' on the white notes of a keyboard or, in tonic sol-fa, if you sing a scale of 'sol, la, ti, do, ray, me, fa, sol'. Note the distribution of tones and semitones in this scale:

G–(tone)–A–(tone)–B–(semitone)–C–(tone)–D–(tone)–E–(semitone)–F–(tone)–G'

The Mixolydian modal scale differs in but one note from the Ionian: the seventh note of the scale is flattened to make the final interval of the scale a tone instead of a semitone, and the penultimate interval a semitone instead of a tone.

**5. Phrygian:** You can get this rare scale if you play upwards from E to E' on the white notes of a keyboard or, in tonic sol-fa, if you sing a scale of 'me, fa, sol, la, ti, do, ray, me':

E–(semitone)–F–(tone)–G–(tone)–A–(tone)–B–(semitone)–C–(tone)–D–(tone)–E'

**6. Lydian:** This is the rarest scale of all in English broadside and folk song. You can get it if you play upwards from F to F' on the white notes of a keyboard or, in tonic sol-fa, if you sing a scale of 'fa, sol, la, ti, do, ray, me, fa:

F–(tone)–G–(tone)–A–(tone)–B–(semitone)–C–(tone)–D–(tone)–E–(semitone)–F'

Note that the modes are all about the distribution of the intervals between the notes of a scale, and whether these intervals are tones or semitones. The modes are not about pitch – that is determined by the key. For example, a tune in the key of F major has the same Ionian mode or scale as a tune in the key of C major, but the pitch of the notes is two and a half tones higher.

## **2. Modal Scales of the Folk Song Melodies Collected by George Butterworth**

For my presentation on modal scales at the October 2013 Folk Song Conference held here at Cecil Sharp House I investigated a 25% sample (103 tunes) from the Butterworth MSS which now form part of the EFDSS's online Full English project. Of these 44 tunes were Ionian, 26 were Dorian, 9 were Mixolydian and 7 were Aeolian. The rest of the tunes were hybrids. Ten were Ionian with Mixolydian influence, 3 were Mixolydian with Ionian influence, 2 were Aeolian with Dorian influence and 1 (for a single note) was Dorian with Mixolydian influence. This was a total of 102 tunes (one melody, a pure Dorian mode

replicate that is identical in GB/6a/36 and GB/6b/5, was only counted once.) In the whole of the Butterworth MSS there is no instance of a Phrygian tune, and the single example of a Lydian melody, GB/7b/3A, was not included in the random 25% sample.

### 3. Modal Scales of the Broadside Melodies Researched and Collated by Claude M. Simpson

The standard, classic text on the tunes to which British broadsides were intended to be sung is:

Claude M. Simpson (1966) *The British Broadside Ballad and Its Music*.

This seminal work is now difficult to access, expensive, and long out of print.

However, Bruce Olsen, the US ballad and broadside scholar, has left us, along with other valuable scholarly resources, a legacy of musical files in abc notation that contain transcriptions of all of the broadside tunes in Simpson. These are freely available online from either of these websites:

<http://www.fresnostate.edu/folklore/Olson/>

and

<http://mudcat.org/olson/viewpage.cfm>

Olsen's musical transcriptions are contained in 6 separate files compiled in abc code, BM0.abc, BM1.abc, BM2.abc, BM3.abc, BM4.abc and BM5.abc. There are a few extra tunes unintentionally interpolated into an otherwise continuous numerical sequence, but otherwise the first 5 files each contain 100 tunes, up to a total of 500. The sixth file, BM5.abc contains a further 59 tunes which, with the extra 5 interpolated melodies, make a grand total of 564 tunes. I have gone through these tunes and noted, from the K: field of the abc code, Olsen's categorisation of the melodies into the various musical modes. For present purposes I am assuming that Olsen's categorisations are correct even where, to me, they may seem questionable. Note that Olsen does not separate out Aeolian melodies from those in the modern scales of Harmonic Minor and Melodic Minor.

Here are the detailed findings and the summary.

<b>BM0</b>	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-99 + 51B	TOT %
Maj	6	5	6	4	5	4	4	3	3	4	44
Min	4	5	1	4	4	5	4	3	3	3	36
Dor			2	2	1	1		1	3	3	13
Mix							2	3	1		6
Phr			1								1
Lyd											

<b>BM1</b>	100-109	110-119	120-129	130-139	140-149	150-159	160-169	170-179	180-189	190-199	TOT %
Maj	4	6	3	2	5	3	4	4	7	5	43
Min	4	4	4	6	2	4	5	6		2	37
Dor	1		1	2	1	2			1	1	9
Mix	1				2	1			1	2	7
Phr			2				1		1		4
Lyd											

<b>BM2</b>	200-209	210-219	220-229	230-239	240-249	250-259	260-269	270-279	280-289	290-299	TOT %
Maj	4	4	6	8	5	3	6	3	6	2	47
Min	5	4	1	2	3	4	2	4	3	3	31
Dor		1	2			1	1	2		4	11
Mix			1		1	2				1	5
Phr	1	1			1		1	1			5
Lyd									1		1

<b>BM3</b>	300-309	310-319	320-329	330-339	340-349	350-359	360-369	370-379	380-389	390-399	TOT %
Maj	7	6	2	5	5	2	4	5	8	4	48
Min	2	4	5	5	2	7	3	1		5	34
Dor	1		1				2	1	2		7
Mix			2		3	1	1			1	8
Phr								3			3
Lyd											

<b>BM4</b>	400-409	410-419	420-429	430-439	440-449	450-459	460-469	470-479	480-489	490-499	TOT %
Maj	6	5	8	4	6	3	6	4	4	3	49
Min	3	4	1	3	2	6	4	3		3	29
Dor	1		1	1				2	4	2	11
Mix		1		2	1	1		1	1	2	9
Phr									1		1
Lyd					1						1

<b>BM5</b>	500-509	510-519	520-529	530-539	540-549	550-558	Misc.	TOT	GRAND TOTAL	FINAL %
Maj	3	7	4	5	4	4	3	30	261	46.3
Min	4	2	2		2	4		14	181	32.1
Dor			2	4	3			9	60	10.6
Mix	3	1	2		1	1	2	10	45	8.0
Phr				1				1	15	2.7
Lyd									2	0.3

<b>MODE</b>	<b>Simpson Final %</b>	<b>Butterworth Final % (including hybrids)</b>	<b>Butterworth Final % (excluding hybrids)</b>
<b>Major</b>	46.3	52.9	51.2
<b>Minor</b>	32.1	8.8	8.1 (Aeo)
<b>Dorian</b>	10.6	26.5	30.2
<b>Mixolydian</b>	8.0	11.8	10.5
<b>Phrygian</b>	2.7	0	
<b>Lydian</b>	0.3	0*	

\*The Butterworth MSS contain 1 Lydian melody, GB/7b/3A, but this was not included in the sample.

#### **4. Comparisons and Contrasts between the Tunes of Butterworth and Simpson**

The Ionian Mode, also known as the Major Key, has been the dominant scale in most western music. It was the scale identified as the most common by the famous musical theorist Heinrich Glarean in the C16 and is the scale that has most commonly been employed by western classical composers since the age of the Baroque. Butterworth found it more common in the early C20 than did Simpson in the period around the C17, the era to which most broadsides tunes can be dated. Today the Major Scale remains dominant, for example in popular music. In contrast, on this evidence, the various minor scales, including the Aeolian but excluding the Dorian mode, declined sharply, to about a quarter of their previous popularity, between the C17 and the early C20, when Butterworth and the other great collectors of English folk song were gathering in their harvest. In contrast, Mixolydian melodies remained fairly constant at around 10 percent of the total and, somewhat surprisingly perhaps, the popularity of Dorian melodies more than doubled.

<b>BMO</b>	<b>BMO Pure Modal</b>	<b>BMO Accidental Notes</b>	<b>Butterworth Pure Modal</b>	<b>Butterworth Accidental Notes</b>
1-10	5	5	86	16
11-20	2	8		
21-30	5	5		
31-40	4	6		
41-50	3	7		
51-60	5	5		
61-70	6	4		
71-80	2	8		
81-90	4	6		
91-99 + 51B	4	6		
Total and %	<b>40 (also 40%)</b>	<b>60 (also 60%)</b>	<b>84.3%</b>	<b>15.7%</b>

But perhaps the most striking contrast between the tunes of Butterworth and those of Simpson is demonstrated in the table above. A mere 15.5 percent of the Butterworth tunes contained accidental notes whereas the vast majority, namely 86 out of 102 melodies or 84.3 percent, were purely modal, with no accidental sharps, flats or naturals. Even in the minor mode, the clear majority of the Butterworth tunes were pure Aeolian and uninfluenced by the modern melodic and harmonic minor scales with their accidentals and their sharpened and flattened notes towards the tops of their scales. Moreover, 13 of the 16 Butterworth tunes that contained accidentals modulated between Ionian and Mixolydian, two modes that, as explained above, differ in but a single note. In contrast, a breakdown of the first 100 tunes that Olsen transcribed from Simpson shows that a mere 40 percent of them were pure modal with the other 60 percent containing one or more accidentals. Some of these accidentals are explainable in terms of the common modulation between Ionian and Mixolydian, and the accidentals in some of the minor mode tunes show evidence of the influence of the modern Melodic and Harmonic Minor scales. But many of the other accidentals appear to be random and to defy theoretical explanation; and some of the tunes with accidental notes may sound discordant to a modern ear.

We can only speculate on why the tunes of Simpson are less consistently modal than those of Butterworth. It may be, for example, that some of the broadside tunes were notated by people who had an imperfect grasp of musical theory (which, in the C17 was still evolving) or who displayed a cavalier attitude towards it. If a note sounded better to them with an accidental sharp, flat or natural they may have had little compunction about inserting it. Then if, in addition, they had what to a modern ear might appear to be an imperfect sense of harmony the tendency would be compounded. On the other hand, classical composers frequently modulate to a different key without changing the key signature, or add accidental sharps, flats, and naturals to give a pleasing or interesting sound or dissonance; so perhaps those who notated the broadside tunes were merely engaged in the same practice.

As for Butterworth and other early C20 collectors, to some extent they may have found pure modal melodies because they were looking for them. If to them a tune sounded Dorian, or Aeolian, or Mixolydian they might have assumed that any notes that varied in pitch from the notes of the mode were out of tune and in need of correction. On the other hand, the Folk Song Society placed great emphasis on the need to notate exactly what source singers sang, even if it sounded wrong, and most early C20 collectors did their best to follow that advice. In an earlier paper I myself demonstrated that one of Butterworth's broadside tunes ('The New Garden Fields') was pure Dorian when he first notated it directly from the mouth of the source singer, but full of accidentals and note queries when he and Vaughan Williams later transcribed it from a phonograph recording. A more detailed musical analysis of these issues may be possible when the Carpenter collection of sound recordings is at last made readily available to the world.