

## *The Yes We Can Chords*

Musematic observations by Philip Tagg, January-March 2009  
For typographical conventions used in this article, see p. 23

### *Introduction*

This article started as a simple reply to a simple question sent by Carol Vernallis to the IASPM<sup>1</sup> online list in January 2009. She asked: ‘does anyone have thoughts on the chord progression of *Yes We Can* or on the music as well as the pop songs it might be echoing?’ By ‘*Yes We Can*’ Carol was referring to the Obama presidential campaign video of the same name (Adams 2008).<sup>2</sup> IASPM member responses to Carol’s question can be summarised in the following six points.

[1] Mike Daley and Allan Moore reflected on the GOING SOMEWHERE ELSE potential of the B major chord and on the relative COMFORT AND SECURITY aspect of the plagal turnaround change. [2] Allan Moore suggested similar progressions in recordings like ELO’s *Jungle* (1973), Jimmy Ruffin’s *What Becomes Of The Brokenhearted* (1966) and Neil Young’s *Southern Man* (1970).<sup>3</sup> [3] Barbara Bradby referred to Otis Redding’s *Dock Of The Bay* (1968), an intertextual similarity also noted by several of my Montréal students. She also noted melodic similarity between the *Yes We Can* phrase sung at 0:31 in the Obama video and the initial ‘When the night’ phrase of Ben E King’s *Stand By Me* (1961). [4] Matthew Bannister pointed to similarities with Bob Marley and The Wailers’ *No Woman No Cry* (1974), and to possible anthemic connotations in *Another Girl Another Planet* by The Only Ones (1978). [5] Danilo Orozco suggested similarities to harmonic matrices of Spanish origin in Latin America. [6] David Uskovich referred to Journey’s *Don’t Stop Believing* (1981).<sup>4</sup>

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1. International Association for the Study of Popular Music, see [iaspm.net](http://iaspm.net).

2. The video, which was never officially sanctioned by the Obama campaign, went online in February 2008 and had by the following July been watched over 21 million times. The video, by ‘will.i.am’ (stage name for William Adams), was directed by Jesse (son of Bob) Dylan. Source: [en.wikipedia.org/wiki/Will.i.am](http://en.wikipedia.org/wiki/Will.i.am) [090315].

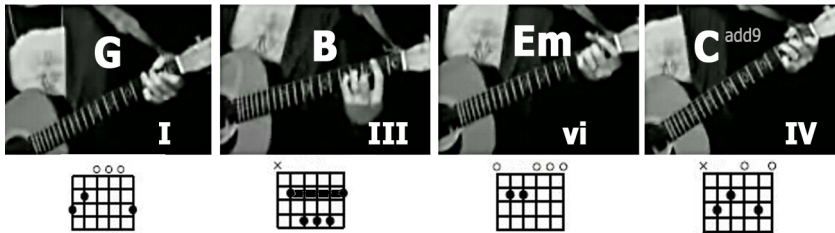
3. *Southern Man*’s chord loop ♯ Em | C Am ♯ / ♯ Em Em7 C Am ♯ will not be discussed in this article. It is really a variant of the aeolian shuttle (Björnberg, 1989).

This list of intertextual associations adds up to a fair set of IOCM,<sup>5</sup> such as might occur in a good popular music seminar where musematic analysis is the order of the day and where all references are relevant, but some more so than others.

### *The four chords*

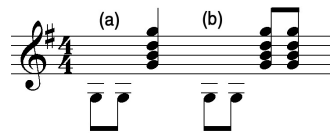
Before starting on any musematic analysis, I need to be as clear as possible in conventional structural terms about the harmonic progression we're dealing with. Like my IASPM colleagues, I heard a four-chord loop covering four bars of 4/4 running  $\sharp: G | B | Em | C \sharp$  or, in relative terms,  $\sharp: I | III | vi | IV \sharp$  (Fig.1).<sup>6</sup>

Fig. 1. The four *Yes We Can* chords as captured from YouTube (Adams 2008)



The sequence runs at  $\downarrow = 100$  and is heard repeatedly for the first 2:28 of the song's total duration of 4:26. It is played on an acoustic guitar with six metal (not nylon) strings. Apart from the B (III) in bar 2, taken as an A barré on the second fret, all chords are played in first position. With the exception of the C chord, whose higher c (first fret on the B string) is replaced by a d (third fret) to create a 'droned'  $C^{add9}$  effect, no chord contains notes extraneous to the common (tertial) triad in question.<sup>7</sup> All four chords in the *Yes We*

Fig. 2. *Yes We Can* guitar pattern



4. My own comments were sent to the IASPM list on 19 January 2009.
5. IOCM = interobjective comparison material, see [tagg.org/articles/ptgloss.html#IOCM](http://tagg.org/articles/ptgloss.html#IOCM).
6. I'm assuming the keynote of the piece to be G (I) even though the matrix and the entire recording actually end on C (IV).
7. The C chord at the start of the Dixie Chicks' *Not Ready To Make Nice* (2006) uses the same add9 effect. See [youtube.com/watch?v=IHH8bfPhusM](http://youtube.com/watch?v=IHH8bfPhusM) [090206].

*Can* sequence are rhythmically articulated in similar (or identical) ways to that shown in Figure 2 for the tonic (G). The root of each chord is usually sounded as two quavers, the second slightly muffled, followed by the chord's remaining notes as either one (♩) or two strummed downstrokes (♩♩) covering three or four of the guitar's upper strings: for example, the top g in the chords just shown is not always audible.

I can't think of another piece of music answering exactly to *all* the traits just described. Intertextual references provided by my students and myself, as well as those from IASPM colleagues in the online exchange, all exhibit some common structural traits but, as we shall see, some comparison pieces may be more relevant than others. Intertextual references need in other words to be more focused.

#### *Late renaissance and Andean bimodality*

Danilo Orozco's reference to harmonic matrices that Carlos Vega would have probably called bimodal is interesting because there is one common denominator between the *Yes We Can* chords and, for example, the recording of *Guardame las vacas* he refers to.<sup>8</sup>

The *Guardame las vacas* chords Orozco mentions are similar to those of *La folia* whose ubiquity throughout Europe in the late renaissance is comparable to that of the twelve-bar blues in twentieth-century USA. One common variant of the *La folia* matrix runs as follows:

|   |          |          |           |            |          |          |               |           |          |   |      |  |   |     |  |   |   |
|---|----------|----------|-----------|------------|----------|----------|---------------|-----------|----------|---|------|--|---|-----|--|---|---|
| ♩ | G        | D        | Em        | B          | G        | D        | Em            | B         | Em       | ‖ |      |  |   |     |  |   |   |
| ♩ | ♭III     |          | ♭VII      |            | i        |          | V             |           | ♭III     |   | ♭VII |  | i | - V |  | i | ‖ |
| ♩ | <i>I</i> | <i>V</i> | <i>vi</i> | <i>III</i> | <i>I</i> | <i>V</i> | <i>vi-III</i> | <i>vi</i> | <i>‖</i> |   |      |  |   |     |  |   |   |

If the finalis, E minor, in this eight-bar matrix is regarded as the main tonic, its relative chord functions will be those of the middle line just shown. If, on the other hand, you hear the matrix in G major (the key of the initialis), perhaps the italicised line will be more correct? Well, not really, because the matrix so clearly ends with an unequivocal V-i (B-Em) perfect cadence. Besides, with *La folia* as shown above, E minor is preceded or followed only by major triads of either D (♭VII) or B (V),

8. As Carlos Vega (1944:160) put it, referring to music in such traditions, '[n]o hay melodias en mayor y melodias en menor: hay simplemente melodias bimodales'.

both of which are, in terms of European tertial harmony, dominantal to E, especially the chord on degree V (B, altered to include the key's sharp seventh,  $d\sharp$ , instead of the key-specific triads Bm and D with their  $d\flat$ ). Moreover, there is at the turnaround point no cadential relationship, neither plagal nor dominantal, between the finalis and the following initialis. The same goes for many Huayno-style harmonic progressions, for example the four-chord matrix C - G - B - Em in Los Calchakis' version of *Quiaquenita* (from *La flûte indienne*, 1966). I am unable to hear the totality of that progression in G (IV-I-III-vi): it always sounds to me like  $\flat$ VI- $\flat$ III-V-i, i.e. as principally in E minor.<sup>9</sup>

The long and short of this brief excursion into late renaissance and Andean harmonic matrices is that, unlike the *Yes We Can* chords, they: [1] end with clear dominantal (V-i) cadences in the minor key; [2] start on a triad of the relative major or relative subdominant major; [3] are often twice as long. Considering other parameters of musical expression associated with the *Yes We Can* chords, it is worth remembering that: [4] the Andean/late renaissance IOCM's tempo is more often than not noticeably faster than  $\text{♩}=100$ ; [5] that their metre is not usually 4/4 but either 3/4 or 6/8 or a hemiola mixture of the two; [6] that any strumming of stringed chordal instruments is much quicker; [7] that the timbre of a steel-stringed acoustic guitar is unusual, while that of a gut or nylon-stringed guitar is less unusual (a 'Spanish' guitar sound), and that of a more trebly, jangly sound of a bandola, tiple or charango much more common. It's for these reasons that while it may be interesting to speculate in a possible general commonality of divergence from the tertial sonic image of 'classical' harmony and the sort of NINETEENTH CENTURY URBAN EUROPEANNESS that goes with it, I don't think those structural

9. In fact, when producing a Chile solidarity song for our band (*Solidaritetsång för Chiles folk*, Röda Kapellet, 1974), I opted, without at the time reflecting why, for the matrix  $\flat$ VI- $\flat$ III-V-i (F-C-E-Am). All musicians involved in its performance, plus Pedro van der Lee (Argentinian/Swedish musicologist and huayno performer), assumed the piece to be in A minor, not C major. The other tunes mentioned by Orozco exhibit similar traits. *Polo Margariteño* is also bimodal —G D (B) Em Am B Em— and *Rio Manzanares* runs, a bit like *Quiaquenita* —G C E Am ( $\flat$ VII- $\flat$ III-V-i). The Elida Nuñez version of *Uruchaqina* referred to by Orozco is melodically bimodal but the performance contains no real harmonic change. There is a kind of permanent flux between Am and C. See footnote 8, p. 3 for Vega's comment on bimodality.

similarities are striking enough to make a case for further interobjective comparison in this direction. In what follows, I will therefore try to restrict comparisons to material that more closely resembles the *Yes We Can* chords on as many counts as possible.

### *Four chords, four changes*

Investigating the meaning of a chord sequence means trying to find intertextual instances of all its chord changes. Tautologous though this may sound, it's worth remembering that, unless the matrix starts and ends on the same chord, a three-chord sequence contains three changes, a four-chord sequence four and so on. This truism *has* to be stated because it is easy to overlook one of the chord loop's most important tonal points: the *turnaround change* from the last chord back to the first one. In *Yes We Can* it's the plagal (IV→I) move from C to G. In fact, it's that change, rather than the V→vi (D to Em) in the middle of the loop, that owns any real finality potential.<sup>10</sup>

Plagal movement clockwise round the circle of fifths is almost as common in styles like gospel, modal country, folk rock and blues-based rock as it is uncommon in the anti-clockwise circle-of-fifths world of Corelli trio sonatas, Wagner operas, Victorian parlour song, jazz standards and so on.<sup>11</sup> *Yes We Can*'s plagal turnaround change may in fact be one reason why we are more likely to hear the tune as popular and North American rather than classical and European. We may even hear some AMEN, gospel or major pentatonic folk song references in that sort of change, but it is difficult to be more connotatively specific about IV-I as a chord change in those styles because it is such an idiomatically common harmonic step. It can also be the preferred harmonic finality marker for many songs in the broad range of English-language popular song traditions just mentioned.<sup>12</sup> So let's investigate the first change in the sequence instead. It is after all less usual than IV-I.

10. The B to E minor change may be more dominantly directional (as a sort of interrupted cadence) but it occurs so clearly midway through the sequence that it has more the character of temporary tonal progression than of finality.

11. For example, Hendrix's *Hey Joe*: C G D A E (plagal) compared to *Sweet Georgia Brown*: (B) E A D G (dominant). Modal and free jazz establish other tonal rules but almost all other jazz, not least bebop, is unswervingly based on V-I, not IV-I, directionality.

*First impressions: →I*

It is said that you never get a second chance to make a first impression. That adage certainly applies to harmonic departures because the second chord in any sequence is the one creating that first impression of harmonic change or direction. However, before discussing *Yes We Can's* I→III departure, it's worth considering the *very first* change, the change that takes the listener from musical nothing to something, i.e. from before and outside the music to the first sound of the song. The first-position acoustic guitar G chord in *Yes We Can* is important because its sound creates the song's *truly* first impression.

Initial first-position G chords, strummed or simply picked on a metal six-string acoustic guitar at an easy or moderate tempo, occur at the start of the following Bob Dylan recordings: *The Times They Are A-Changing* (1964a), *It Ain't Me Babe* (1964b), *John Wesley Harding* (1967), *George Jackson* (1971) and *Knockin' On Heaven's Door* (1973).<sup>13</sup> They also occur as first-chord tonics in a fair number of Woody Guthrie songs, for example in *Oklahoma Hills* (1937), *Grand Coulee Dam* (1946) and *Two Good Men* (1946?).<sup>14</sup> The first sound in *Yes We Can* is in other words virtually identical to the first sound in several popular songs by well-known US singer-songwriters associated with progressive politics and social change. Whether such allusions were intended or not in *Yes We Can*, the new US president's election promises of change and social justice could certainly have been linked to much less appropriate figures

12. The Dixie Chicks, for example, end both *Not Ready To Make Nice* and *Taking The Long Way Round* (2006) V-IV[-I], a more idiomatic sequence than V-I. The ionian mode and V-I are not uncommon in some forms of Country music but their absence is also far from unusual. This tonal trait may derive from the relative preponderance, in traditional Afro- and British-American musics, of modes with no #7.
13. G major is clearly one of Dylan's preferred keys. The following songs are also all in G, though articulated differently than in *The Times They Are A-Changing* or *Yes We Can*: *I Pity The Poor Immigrant* (in 3/4, 1968), *I Shall Be Released* (swung), *Lay, Lady, Lay* (with organ and steel guitar, 1969), *Don't Think Twice* (systematic picking, 1963) and *It's All Over Now Baby Blue* (G played using capo used, 1965).
14. A first-position tonic G also marks the start of other Guthrie songs like *All You Fascists Are Bound To Lose* and *Hey Lolly Lolly* (1944). Even Guthrie's ever popular *This Land Is Your Land* (1944), sung at Obama's inauguration festivities, starts on an open G even though the tune is in D with its chord loop ♯G|D|A|D♯.

of the nation's popular music traditions than Woody Guthrie or Bob Dylan. Just imagine the sights, sounds and words of artists like Alice Cooper, Charlie Daniels or Barry White as musical accompaniment for an election platform of responsible government!<sup>15</sup> Obviously, there's much more resonance, both lyrically and sonically, between Obama's 'It's time for a change' and *The Times They Are A-Changing*.

Another significant point about *Yes We Can's* G chord, with its four open strings and doubled third (b2 on the A and B strings), is that, like the other two first-position chords in the loop (Em and C), it is easy for any party or camp-fire amateur guitarist to produce. G, Em and C are all chords about which millions of North Americans could say 'Yes we can'. Nor does *Yes We Can's* second chord, B, taken as a standard A major shape with a barré on the second fret, present any major technical challenge to the semi-skilled amateur.<sup>16</sup> But it's not so much that poetic accessibility in itself that is semiotically important as its meaning to the non-guitar-playing majority. Thanks to the fact that those easy chords are within the capabilities of a significant guitar playing minority, the majority have through repeated exposure to such chords played in a simple way on guitar, learnt to associate them with the words, ideas and situations they accompany.

### *Harmonic departure: I→III*

I→III (G to B in *Yes We Can*) is neither the most usual nor unusual harmonic departure in English-language popular music: I→IV, I→V, I→vi, probably also I→ii and I→iii are probably all more common than I→III which, perhaps, may even be less usual than I→II, I→bIII or I→bVII, but probably more common than I→bVI (see Moore, 1992).

15. For example, *School's Out* (Cooper 1972), *A Few More Rednecks* (Daniels 1989), *I Can't Get Enough Of Your Love Babe* (White 1974).

16. The easiest guitar chords to produce, in first position, are E, Em, G, A, Am, C, D and Dm. I have no guitar training whatsoever but can manage to produce those eight chords without difficulty. I can even manage, usually several milliseconds late, to produce simple barré chords like *Yes We Can's* B. I cannot bring to mind a single popular 'protest' song in the English-language folk or folk rock traditions that isn't in one of those eight keys, the least common of which would be D minor. G and D major are certainly among the most common keys for such music.

Whatever the case, the number of pieces, or sections of pieces, that have come to my attention from an at least partially relevant repertoire and which start I→III is not very impressive. The eleven songs are, in alphabetical order: [1] *Abilene* (George Hamilton IV 1963); [2] *Bell-Bottom Blues* (Eric Clapton 1970); [3] *The Charleston* (Golden Gate Orchestra 1925); [4] *Crazy* (Patsy Cline 1961); [5] *Creep* (Radiohead 1992); [6] *Jungle* (Electric Light Orchestra 1979); [7] *Nobody Knows You When You're Down And Out* (Bessie Smith 1929);<sup>17</sup> [8] *Sitting On The Dock Of The Bay* (Otis Redding 1968); [9] *Who's Sorry Now* (Connie Francis, 1957); [10] *Woman Is The Nigger Of The World* (John Lennon 1975); [11] *A World Without Love* (Peter & Gordon 1964).<sup>18</sup> Without initially knowing why, I found that only three of those eleven pieces sounded enough like *Yes We Can* to be used as convincing IOCM for the chord sequence under analysis. Since that sort of 'intuition' is not much use in itself, I'll try to identify and explain *differences* in parameters of musical expression operative in connection with the I→III departure shared by both *Yes We Can* and the eleven comparison pieces. That process of elimination ought to sharpen focus on the most salient features of the *Yes We Can* chord loop.

First of all there are two strictly harmonic features that seem to make a semiotic difference to the character of the I→III departure: bass lines and continuations. Bass notes in the *Yes We Can* loop are all on the root of the triad whereas Clapton's *Bell-Bottom Blues* (1970) uses a conjunct descending bass line so that the chords actually run I→III<sub>5</sub>→vi→[I<sub>5</sub>→]IV (the bass notes in G would be g f# e [d] c, the chords G - D# - Em - G<sub>d</sub> - C), a progression containing two chords in inversion. Now, thanks to famous precedents like *Whiter Shade Of Pale*/Bach's *Air* (I-V<sub>3</sub>-vi-I<sub>5</sub>, etc., Bach, 1731; Procol Harum 1967), chord inversions in conjunct bass lines are quite a reliable pop sign of 'classicalness' or of 'classy' pop. It's a device which takes the tune in question out of the popular participation

17. See also versions by Clapton (1971, 1992) and Winwood (1967).

18. It would have been nice to include the I-III-IV in the IV-V-I-III-IV-V-I at the end of John Lennon's *Imagine* (1971): [IV] 'You may [V] say I'm a [I] dreamer [III] but I'm [IV] not the only [I] one; [IV] I hope some [V] day you'll [I] join us [III - IV] and the [V] world will [I] live as one'. Regrettably, I had to exclude that reference because its III is neither a first departure, nor followed by vi.

sphere of things like *Yes We Can's* strum-along guitar and root-position triads, and which, by using both conjunct bass lines and inverted triads, gentrifies the piece in question. That's just one reason for treating an obvious structural similarity like a shared I→III departure with caution. The second harmonic reason for doubting the relevance of some I→III comparison material is *continuation*. For example, only two of the ten IOCM pieces (*Dock Of The Bay* and *Creep*) feature I→III at the start of a four-chord loop. Many of the others go on to include chains of dominant (anti-clockwise) circle-of-fifths changes incompatible with the overall tonal idiom of *Yes We Can*. Moreover, parameters like tempo, accompaniment pattern and instrumentation can also make some I→III changes sound quite unlike *Yes We Can's*.

*The Charleston* (♩=96) and *Who's Sorry Now* (♩=88), for example, although performed at a tempo similar to *Yes We Can* (♩=100), are very different in terms of instrumentation, rhythmisation and harmonic continuation. The trad jazz band orchestration of *The Charleston*, not to mention its lo-fi 78 rpm recording sound, and, in *Who's Sorry Now*, the half-electrified 1950s pop combo, complete with constant piano triplets reminiscent of Stan Freberg's 'clink-clink-clink jazz',<sup>19</sup> are both a far cry from *Yes We Can's* simply played acoustic guitar notes and triads. The continuation of I-III in *The Charleston* and *Who's Sorry Now* into a string of dominant falling fifths (I-III-VI-II-V-I in the brass-and-sax-friendly keys of B♭ and E♭) are other obvious indications of musical styles and connotations on a distant planet from those of *Yes We Can*. The two Country numbers (*Abilene* and *Crazy*) can also be eliminated from the IOCM for similar reasons of incompatibility of instrumentation, accompanimental pattern and continuation.<sup>20</sup>

*When You're Down and Out* (♩=90, 12/8), *Sitting on the Dock of the Bay* (♩=103, 4/4) and *Creep* (♩=92, 4/4), on the other hand, all go at a similar pace to *Yes We Can* and are all part of the international, Anglo-Ameri-

19. See Freberg's parody (1956) of The Platters' *The Great Pretender* (1955).

20. The chords of *Abilene* (brisk swing 4/4) run G|B|C|G|A|D|G|C|G [D]|, those of *Crazy* G|B7|Em|Em|D|D7|G|G [D]| (medium slow ballad). *Who's Sorry Now* goes E♭|G7|C7|F7|B♭7|E♭ etc. in E♭ at ♩=88 and *The Charleston* B♭|D7|G7|C7|F7|B♭ at ♩=96 in B♭.

can, post-1955 pop repertoire. Although none of these three songs feature simply strummed acoustic guitar they do bear more resemblance to *Yes We Can* than do *The Charleston*, *Who's Sorry Now*, *Abilene* and *Crazy*. Nevertheless, there are several important points of structural difference between the three tunes under discussion (*Down And Out*; *Dock Of The Bay*; *Creep*) and, on the other hand, *Yes We Can*. For example, all recordings of *Down and Out*, whether at ♩=90, as by Bessie Smith (1929) or Eric Clapton (1992), or, much slower, as by Clapton (1970) or Stevie Winwood (1966), all feature a slow blues shuffle accompaniment (♩♩ even if notated ♩♩) using either cornet, piano and tuba accompaniment (Bessie Smith), or electric guitar, Hammond organ and drumkit (Clapton and Winwood), while the *Yes We Can* chords are stated in straight quavers (♩♩♩♩).<sup>21</sup> Moreover, the initial I-III of *Down and Out* continues into a falling fifths progression including VI (E or E<sup>7</sup>), not vi (Em), then ii (Am) and, after passing through chords like #IV<sup>dim</sup> (C<sup>#dim</sup>), to II<sup>7</sup> (A<sup>7</sup>), V<sup>7</sup> (D<sup>7</sup>) and I (G). No diminished chords and no extended dominant circle-of-fifths movement is to be heard anywhere in *Yes We Can*. It is conceived in a different timbral, metric, rhythmic and tonal idiom altogether.

*Sitting On The Dock Of The Bay* (Redding, 1968), on the other hand, runs in straight quavers (♩♩♩♩) and presents the four chords of its sequence at virtually the same rate (♩=104) as *Yes We Can*: I-III-IV-II (G B C A). This *Dock of the Bay* sequence is itself remarkable because it contains not a single plagal (IV→I) or dominantal (V→I) change. Only the 19-second bridge passage (1:24-1:43) of the song's total duration of 2:45 includes a very brief ♭VII→V→I progression (1:37-1:43) to lead back into the virtually directionless sequence of chords occupying all but a few seconds of the recording. The *Dock of the Bay* sequence is also interesting because it consists of two pairs of chords: [1] I and IV (G and C) are next to each other in the circle of fifths; [2] III and II (B and A) are both well on the sharp side of I and IV and they are only separated from each other by VI (E) in the circle of fifths. But the four chords aren't played in that sort of order — try G-C-A-B or G-B-A-C[-G] instead — because I

21. For example, the Clapton (1972) recording runs at ♩=56.

and III (G→B) belong together in one phrase to which Redding sings ‘Sitting on the dock of the bay’, after which he *breathes*. After that halfway cesura he sings ‘Watching the tide roll in’ to the second half of the chord loop (its IV→II part, C→A), a sort of I-VI in C echoing the same sort of change as the I-III in the first half, G→B). There would be nothing remarkable about that division of the sequence if the two tertial triads in each half were closer to each other on the key clock, but that is not so. The second triad of each pair is situated not just one or two quintal steps away from the first but at a distance of four (I-III/G-B) and three (IV-II/C-A) steps respectively. This is what makes the *Dock of the Bay* sequence sound more like two similar chord shuttles played one after the other – constant to-and-fro movement – rather than like a chord loop such as I-vi-IV-V or I-V-♭VII-IV. This to-and-fro movement in *Dock of the Bay*, enhanced by the addition of seaside sound effects like waves washing in and out, is of course absent in *Yes We Can* whose chord sequence contains two very clear neighbour-key chord changes: B→Em (III→vi, dominantal) and C→G (IV→I, plagal), giving it an definite *loop rather than double shuttle* character.<sup>22</sup>

None of this means *Sitting On The Dock Of The Bay* is inadmissible as IOCM evidence for the *Yes We Can* chords. Even though the Redding recording’s shuttle character, its harmonic continuation and its orchestration differ clearly from *Yes We Can*, its bridge repeats a short melodic phrase type (at ‘Nothing’s gonna change’, ‘I can’t do what ten people tell me to do’, etc., 1:24-1:37) that recurs in similar guise at 0:31 in *Yes We Can* (‘It was sung by immigrants’).<sup>23</sup> As Barbara Bradby pointed out in

22. Please note the distinction between chord *shuttle* (what Björnberg (1989) calls *pendulum*) and chord *loop*. Shuttles go *to and fro*; loops go *round*. You need at least three different points to create a two-dimensional *shape*. The more angles in a two-dimensional shape, the more it will resemble a circle. A baseball diamond has four angles (‘bases’) as, indeed, does a *rounders* pitch. You can even take a walk *round* a completely rectangular block. You just *can’t* go round in a straight line between two points, at least not in Newtonian physics. It’s the same with chord sequences. Incidentally, *Sitting On The Dock Of The Bay* also contains the obligatory seashore gull sounds in addition to the washing in and out of waves.

23. The context of that phrase in the lyrics of *Yes We Can* is as follows. “‘Yes we can”. **It was sung by immigrants** as they struck out from distant shores and pioneers who pushed westward against an unforgiving wilderness. “Yes we can””.

her IASPM-list posting, that phrase in *Yes We Can* is quite close to Ben E King's initial 'When the night' declamation in *Stand By Me* (1961). I would add that those melodic phrases in each of the three songs can be characterised as proclamatory, sincere and passionate. I would also characterise the phrase type as typical of male soul lead vocalists from the 1960s (e.g. Otis Redding, Wilson Pickett, Marvin Gaye) and associable with the Civil Rights struggle and with the sort of social processes that Haralambos documents in *Right On! From Blues to Soul in Black America* (1974). If there is any truth in this interpretation of the phrase at 0:31 in *Yes We Can*, the connection with the I-III in *Dock Of The Bay* becomes one of circular reinforcement by cross-association. That chain of connotations contains the following sort of indexical links: [1] a melodic phrase in *Yes We Can* resembles melodic archetypes sung by male vocalists in late 1960s soul music; [2] that music at that time was often associated with a more hopeful and assertive image among African Americans in the USA; [3] one of the most famous of those male vocalists was Otis Redding, one of whose biggest hits was *Sitting On The Dock Of The Bay*; [4] that song also contains the same I-III departure as *Yes We Can*, the Obama campaign song; [5] Obama's presidency marks another major positive change in US civil rights.

ELO's *Jungle* (1979), mentioned by Allan Moore, runs at the same tempo as *Yes We Can* ( $\text{♩}=100$ ). Its first three relative chord changes are identical to those of the Obama song: D F# Bm G (*Jungle*, in D) = I III vi IV = G B Em C (*Yes We Can*, in G). 'Bingo!', you might think and, indeed, you seem to have a 100% match. But there are problems because this perfect match doesn't sound much like the *Yes We Can* chords. There are at least four main reasons for the mismatch. [1] the ELO chords aren't used as a loop; [2] the ELO sequence continues into a repeated V→I cadence (A→D); [3] the four chords cover two, not four, bars and are spaced  $\text{♩} \text{♩} \text{♩} \text{♩}$  with only one note for each chord, not a full bar of  $\text{♩} \text{♩} \text{♩} \text{♩}$ , or  $\text{♩} \text{♩} \text{♩} \text{♩}$ , or any other similar pattern for every chord; [4] the instrumentation is totally different, filled with 'world-musicky' tropical instruments associable, at least in an urban, non-tropical, 'first world' music culture, with the song title (*Jungle*). I hear instruments resembling agogo, güiro, cowbell, wood block, maracas, plus — outside that

field (or jungle) of connotation— a very audible thick string pad. All these differences make me reluctant to use the ELO chords, despite their unmistakable similarity in terms of conventional harmonic theory, to those of the Obama song, as IOCM for *Yes We Can*. The two pieces just don't sound very similar.

Similar reasoning, but for different reasons of difference, can be applied to John Lennon's *Woman Is The Nigger Of The World* (1975). Apart from the fact that the Lennon sequence is not a loop but part of an eight-bar chorus sequence (| I III vi I IV iv I I | in E), the Lennon song's beat is swung (12/8 feel), the overall volume effect much louder, the vocal register higher and timbre harsher than *Yes We Can*'s. There are also radical instrumentation differences between the two, the Lennon piece including a percussive piano track, electric guitar and bass, up-front wailing sax and loud drumkit events. None of these features are anywhere to be heard in the Obama song.

Only two pieces of I→III IOCM are left to discuss, the Lennon/McCartney song *A World Without Love* (Peter and Gordon, 1964) and Radiohead's *Creep* (1992).

From 1964 until recently I laboured under the misapprehension that the first four bars of each verse in *A World Without Love* were set to the chords E | G# | C#m | A (I-III-vi-IV), i.e. to the same relative progression as the *Yes We Can* chord loop. The sequence in fact runs E | G# | C#m | C#m. I had even played it wrongly many times without any listener or fellow musician ever complaining, probably because the only melody note in the fourth bar, a c#, sounds just as good over A as C#m. The point of this anecdote is to suggest once again that an exact harmonic match is not necessarily the most important factor determining whether a chord sequence in one piece sounds like a chord sequence in another. In this context it means that the most important harmonic likeness between *A World Without Love* and *Yes We Can* is the fact that they both share the common departure changes I→III→vi. Now, the Lennon-McCartney sequence sounds different to *Yes We Can*'s mainly because: [1] the former runs at a faster pace (♩=134); [2] the accompaniment is dominated by McCartney's heavy ♩. ♩. ♩. ♩ 'one-five oompah' bass figures;<sup>24</sup> [3] its I-III-vi is not repeated as a loop. That

said, the I-III-vi-vi in *World Without Love* does occur regularly at the start of each verse in straight 4/4, with one chord per bar and with simply strummed acoustic guitar accompaniment, however low in the mix it may be. Moreover, *World Without Love's* harmonic continuation I - iv - I - I - ii - V - I (E | Am | E | E | F#m | B | E) stays within the *Yes We Can* idiom of common triads in root position, while the simple pop instrumentation has much more in common with *Yes We Can* than do ELO's *Jungle*, Lennon's *Woman Is The Nigger*, not to mention *The Charleston*, Bettie Smith's *When You're Down And Out*, etc.<sup>25</sup> Like *Dock Of The Bay*, the I→III in *World Without Love* does share some structural traits in common with *Yes We Can*. However, unlike *Dock Of The Bay*, the Peter & Gordon recording contains no elements of soul or gospel to point listeners toward any kind of civil rights connotations. If that is so, what sort of paramusical message does *World Without Love* contain?

[v.1, v.3] Please lock me away and don't allow the day here inside where I hide with my loneliness. I don't care what they say I won't stay in a world without love. [v.2] Birds sing out of tune and rain clouds hide the moon. I'm OK, here I'll stay with my loneliness. I don't care what they say I won't stay in a world without love. [bridge] Here I wait and in a while I will see my lover smile. She may come, I know not when. When she does I lose, so baby until then.

At first sight the musings of this lovesick young man have nothing in common with the struggle, hope and commonality found in the key phrases from Obama speeches that occur throughout *Yes We Can*. That said, you only need scratch a little below the surface of the Lennon/McCartney lyrics to find one parallel: an emotional process, expressed in simple terms, from relative despair and darkness to relative hope and

24. By 'one-five oompah' I mean that for each chord the bass part plays first the root of the overlying chord, then the fifth in relation to that note, e.g. e then b for E, g# then d# for G#, then c# and g# for C#m and so on. The order may sometimes be reversed on V, e.g. f# then b for a B chord (V) in the key of E (I).
25. The chord sequence for the twelve bars of the verse in *A World Without Love* runs F|E|G#|C#m|C#m|E|Am|E|E|F#m|B|E||<sup>1</sup> C B turnaround <sup>2</sup>E into middle 8 or at end|. The song's instrumentation consists of: [1] McCartney's heavy dotted one-five oompahs; [2] simple and discrete drumkit work; [3] simple guitar strumming; [4] a Vox organ playing virtually inaudible pads plus the tune of the verse by way of an instrumental break. The vocal line is sung simply and melodically by young males.

light, all with some sense of determination.

The sequence in Radiohead's *Creep* runs  $\text{I} \rightarrow \text{III} \rightarrow \text{IV} \rightarrow \text{iv} \parallel$  (G | B | C | Cm) as a loop at  $\text{♩} = 92$  throughout the entire four-minute song. Each loop covers four bars, with one chord per bar rhythmicised in straight crotchets or quavers in the drumkit and guitar parts ( $\text{♩} \text{♩} \text{♩} \text{♩}$  in hi-hat), and with simple  $\text{♩} \text{♩} \text{♩} \text{♩}$  patterns on bass. Taken as accompanimental motion *in toto*, these parts are even more similar than those of *Dock of the Bay* to the simple  $\text{♩} \text{♩} \text{♩} \text{♩}$  patterns of *Yes We Can's* acoustic guitar. They are certainly much closer to the Obama song than are ELO's  $\text{♩} \text{♩} \text{♩} \text{♩}$ , or *Down and Out's* or *Woman Is The Nigger's* swung  $\text{♩} \text{♩} \text{♩} \text{♩}$  or *Who's Sorry Now's*  $\text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \text{♩}$ ; and, as just stated, they are, like *Yes We Can*, looped over the same period of four 4/4 bars. Moreover, the Radiohead loop's turnaround change from C minor back to G (iv  $\rightarrow$  I) is plagal like *Yes We Can's* and the accompanimental patterns are all paragons of a no-frills pop/rock style (simple, standard drum and hi-hat patterns, simple guitar arpeggiations, virtually no reverb or other noticeable signal treatment etc.). *Creep's* BARE ESSENTIALS aesthetic tallies well with the NO-FRILLS character of the *Yes We Can* guitar sound.

Now, none of the similarities just mentioned can deny the fact that there are also clear differences between *Creep* and *Yes We Can*, the most obvious being Radiohead's use of alienated, angry rock yelling and powerfully overdriven guitar during 39% of the recording.<sup>26</sup> Another important difference is harmonic: while *Yes We Can* repeats I-III-vi-IV, the *Creep* loop runs I-III-IV-iv. This means that although the turnaround change in both songs is plagal, the IV chord (major) in *Creep* occurs one bar earlier in the place of *Yes We Can's* E minor (vi) and that the latter's C major triad (IV) is in the same loop position as Radiohead's C minor (iv). This C minor chord, with its  $\text{e}^\flat$  enharmonically contrasted in terms of voice-leading directionality against the B major chord's ascending  $\text{d}^\sharp$ , gives the *Creep* loop a unique character that may contribute to the song's sense of dramatic despondency:<sup>27</sup> the  $\text{d}^\sharp$  goes up and out to  $\text{e}^\natural$  but the  $\text{e}^\flat$  repeatedly reverses that movement back down and inwards to  $\text{d}^\natural$  and G. *Yes We Can* contains no descending chromaticism.


26. 39% of the song's 4:00 = 1:34. The yelling and overdrive occurs at two points in the recording: 1:02-1:24 (22") and 2:06-3:08 (1:02").

Nevertheless, despite these clear differences between *Yes We Can* and *Creep*, the two songs definitely share more in common than just the initial I-III change in a four-chord, four-bar harmonic loop in G. The question is how a song of angry self-deprecation about being a creep and a weirdo can share anything musically significant with one affirming the hopeful collective belief of *Yes We Can*. One reason may be contained in the sort of notion, hinted at by other IASPMites, that the I-III change has a strong GOING SOMEWHERE ELSE value, the kind of UP AND OUT found in the ascending I-III-vi (bass) and 5-#5-6 (inner part d-d#-e) movement already mentioned, and that this UP AND OUT GOING SOMEWHERE ELSE is just as essential to expressing confidence in overcoming difficulties — ‘yes we can’ — as it is to bawling out disgust at whatever it is that brings about self-disgust. The *Yes We Can* chord loop does not have the chromatic slide back down of *Creep*, nor is its I-III change followed by *Dock Of The Bay*'s second directionally equivocal IV-ii (C-A) change: it has none of the to-and-fro effect of that song's two chord shuttles. In fact, to gain more insight into the meaning of the *Yes We Can* chords we will need to examine comparison material featuring the other two chords in the Obama song's chord loop: vi and IV. To be more precise, we need to find IOCM featuring four-chord loops running I - x - vi - IV, where x is an alternative to III as a viable means of getting from I to vi. The most common x chord will of course be iii or V (in G major: Bm or D).

### *I-iii-vi-IV*

The first four chords of *What Becomes of the Brokenhearted?* (Ruffin 1966) run B $\flat$  Dm Gm E $\flat$  or, in relative terms, I→iii→vi→IV, i.e. exactly what we are looking for. Unfortunately, this is not the IOCM jackpot we wanted because the chord sequence actually goes B $\flat$ <sub>f</sub> Dm<sub>f</sub> Gm E $\flat$ <sub>g</sub>

27. *Creep* is certainly unique to the extent that I know of know other song based on the looped sequence I-III-IV-iv. I base the DRAMATIC DESPONDENCY interpretation not so much on the song's lyrics, though they contain plenty of drama and despondency, as on the sort of descriptions music analysis students provide, common responses being ALIENATED, ANGRY, HOPELESS, DESPAIR, CYNICAL, etc. Try replacing the Cm chord with D or Dm or F. If you register *more* or the same amount of DESPONDENCY with those alternatives to C minor, we may have different musical backgrounds and I apologise for generalising on the basis of my own and on my students' experience.

(I<sub>5</sub>→ iii<sub>3</sub>→ vi→ IV<sub>3</sub>): three out of the four triads are inverted. True, there is no conjunct bass line spanning a fourth or more in this sequence as in *A Whiter Shade Of Pale* (Procol Harum 1967) or Clapton's *Bell-Bottom Blues* (Derek and the Dominoes, 1970), but the triad inversions and the pedal-point character of the Ruffin song's bass part make for a partly static harmonic effect that is not released into substantial movement until later in the piece. Moreover, like Clapton's *Bell-Bottom Blues*, *Brokenhearted*'s initial sequence is not looped and its continuation contains harmonies incompatible with the consistent straight root-position chords of *Yes We Can*.<sup>28</sup> On top of all that, the Motown tune is orchestrated quite differently, with piano, strings, backing vocals and percussion all in clear evidence. Perhaps the  in 4/4 at ♩=100 and the male vocal timbre similar to that heard at 0:31 in the Obama piece can counteract some of the differences just mentioned. If so, eventual interobjective connections between are unlikely to be directly related to audible harmonic resemblance.

Harmonic incipits running I-iii in root position are not uncommon in other types of anglophone pop music. For example *Puff The Magic Dragon* (Peter, Paul & Mary, 1963), *The Weight* (The Band 1968) and *Daniel And The Sacred Harp* (1970) all start I-iii-IV, while *Sukiyaki* (Sakomoto 1963)<sup>29</sup> and *Hasta Mañana* (Abba, 1974) both feature a I-iii-vi progression. Later changes from I via iii to IV or vi also occur in *Hangman* (Peter, Paul and Mary, 1965) as well as at prominent places in Bob Dylan's *It's All Over Now Baby Blue* (1965: I-iii-IV) and *I Pity The Poor Immigrant* (1968: I-iii-vi).<sup>30</sup> Except for *Sukiyaki* and *Hasta Mañana*, these songs all belong to the US folk and folk rock repertoires. Moreover, *Hangman*, the two Band tracks and the two Dylan tunes feature lyrics diverging from the normal pop fare of love, fun and teenage angst or antics. Only one

28. Apart from other triad inversions, *Brokenhearted* contains an E<sup>dim</sup> and features bold switches to C major/A minor and back to B $\flat$  major/G minor.

29. In fact *Sukiyaki* starts with a plagal shuttle (I-IV-I in G) before harmonically departing into its I-iii-vi-V at bar 5 in the verse.

30. The iii-IV change in *Baby Blue* occurs towards the end of each verse (at 'Look out, the saints are coming through' in verse 1). The iii-vi recurs just before the final *lento* at the end of each verse of *I Pity The Poor Immigrant* (with Joan Baez from a *Hard Rain* concert, 1976).

of the songs, *The Weight*, uses a repeated chord loop, I-iii-IV-I at  $\text{♩}=124$  in regular 4/4 with one chord change per bar. Like *Hangman*, the lyrics of *The Weight* tell a story that contrasts negative and positive experiences, while the I-iii-vi of Dylan's *Immigrant* accompanies the twist towards justice at the end of each verse.<sup>31</sup> On the other hand, although all these songs feature simply strummed guitar over I-iii-IV or I-iii-vi progressions with all chords in root position, just one of them (*The Weight*) features a chord loop, and only then as a three- rather than four-chord unit. Moreover, none of the songs run I-iii-vi-IV which would have been the closest variant to *Yes We Can's* I-III-vi-IV. In short, even if there may be some similarities and some possible references to US-American folk and folk rock songs with serious lyrics, we really need to look elsewhere for more convincing harmonic resemblance.

### *I - V - vi - IV*

The second of our two alternatives to III in linking I to vi (between G and Em in *Yes We Can*) is V (D in G). The simple harmonic point here is that V is the relative major of iii, the key-specific triad on the root of the major scale's third degree, and that, like ii or III, V contains two notes adjacent to the target triad of vi.<sup>32</sup> This second-chord alternative changes the loop from I-III-vi-IV (*Yes We Can*) to I-V-vi-IV. Now, that sequence sounds quite similar to the start of Pachelbel's Canon — I V | vi iii | IV I | IV V —, a harmonic pattern that seems to have acquired widespread currency in English-language pop music.<sup>33</sup> That chord progression constitutes the entire harmonic basis of Liverpool band The Farm's *All Together Now* (1991) with its tempo of  $\text{♩}=108$  in 4/4 and its rate of harmonic change at one chord per bar.<sup>34</sup> More specifically, the I-

31. The storytelling lyrics of *Hangman*, *The Weight* and Dylan's *Immigrant* also occur in another well-known song using a I-iii[-vi] departure in andante tempo: The Beatles' *A Day In The Life* (1967: 'I read the news today', 'A crowd of people stood and stared', etc.). Without any conscious awareness of this connection, our band also used I-iii[-IV] for similar narrative purposes in *Revolutionens vagg*a (Röda Kapellet, 1974).
32. The d and f# of the D chord in G major are both adjacent to the root of E minor.
33. For a hilarious pot-pourri of Pachelbel's Canon tunes, see Paravonian (2006).
34. It is worth noting that the song appears on the 'album *Spartacus*, and is said to link ... the band's favourite themes [of] socialism, brotherhood and football' (Wikipedia article 'All Together Now' [090317]).

V-vi-IV sequence, also in 4/4 and with one chord per bar, can be heard at the start of each verse in The Beatles' *Let It Be* (1970: ♩=76 |C |G |Am |F) as well as, with two chords per bar, in the harmonic loop ♯I V<sub>3</sub>|vi IV ♯ under most of Bob Marley's *No Woman No Cry* (1974: ♩=78 ♯C G<sub>3</sub>|Am F). The same I-V-vi-IV also accompanies the chorus hook line of John Denver's *Country Roads* (1971: ♩=80 |D |A |Bm |G) and of The Dixie Chicks' *Not Ready To Make Nice* (2006: ♩=86 ♯G |D |Em |C ♯).<sup>35</sup> Of course, the same chord sequence can occur in boisterous rock tunes like *We're Not Going To Take It* (Twisted Sister, 1984: ♩=144) or *Another Girl Another Planet* (The Only Ones, 1978: ♩=156) but the tempo, rhythmisation, instrumentation and vocal delivery of these two tunes is a far cry from the relatively stately pace and relatively ordered, NO FRILLS aesthetic of the *Yes We Can* chords.<sup>36</sup> Indeed, the Obama song's chord sequence uses a tempo and a rate of delivery that has much more in common with the extremely popular songs mentioned earlier. But that is not the whole story. *All Together Now*, *Let It Be*, *No Woman No Cry*, *Country Roads* and *Not Ready To Make Nice* all have an anthemic character. They are eminently singable and all feature lyrics expressing hope or encouragement in the face of trouble and hardship. True, the lyrics of *Country Roads* mention only briefly a slight regret — 'I get a feeling I should have been home yesterday' — but all the others clearly present, as Table 1 shows, experiences of *both* hardship *and* hope (Table 1).

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35. Returning for the last time to the repertoire of the left-wing political rock band of which I was a member from 1972 to 1976, it may be worth adding that we used a I-V-vi-IV loop in G (G D Em C) to accompany the main storytelling sections of the ten-minute montage *Lärling* (Röda Kapellet, 1976). The lyrics are about rough deals for industrial apprentices and the determination to change things for the better.
36. Journey's *Don't Stop Believing* (1981) runs at a more moderate pace (♩=122) than the Twisted Sister and Only Ones tracks, and repeats the I-V-vi-IV loop during the verses. Still, with its four-square amplified piano crotchets and pseudo-classical semiquaver arpeggios on electric guitar, it is instrumentally very different to *Yes We Can*. Even so, the song has some anthemic value with lyrics telling someone not to give up ('Don't stop believing'). Another anthemic rock I-V-vi-IV example in G is Lynyrd Skynyrd's *Free Bird* (1973, ♩=120). However, that sequence is part of an 8-bar ♯I | V | vi | vi | ♯IV | IV | V | V ♯ period with IV in bar 5 as the start of a *second* phrase. More apposite, quite anthemic and politically progressive is iconic Swedish prog band Hoola Bandoola's *Man måste veta vad man önskar sig* (1972 ♯D | A | Bm | G ♯, ♩=120). Still, like the Röda Kapellet references (footnotes 9, 31, 35), even if stylistically rooted in the Anglo-American pop/rock tradition, Hoola's lyrics are in Swedish, not English.

Table 1. Key 'overcoming hardship' phrases in the lyrics of anthemic pop tunes featuring the I-V-vi-IV variant of the Yes We Can chords

| <i>Tune</i>  | <i>Troubles</i>  | <i>Hope, encouragement, determination</i>  |
|--|--|--|
| The Farm: <i>All Together Now</i> (1991)           | ... 'forefathers died, lost in millions for a country's pride'; 'All those tears shed in vain; Nothing learnt and nothing gained'. | ... 'they stopped fighting and they were one'; 'hope remains'; 'Stop the slaughter, let's go home'; ... 'joined together'; 'All together now'. |
| Beatles: <i>Let It Be</i> (1970)                   | 'times of trouble'; 'the broken hearted people'; 'the night is cloudy'.  | 'Mother Mary comes to me'; 'words of wisdom'; 'There will be an answer'; 'Still a chance'; 'A light that shines on me'.                        |
| Bob Marley: <i>No Woman No Cry</i> (1974/5)        | 'The government yard in Trenchtown'; 'observing the hypocrites'; 'good friends we've lost'.  | 'No woman no cry'; 'dry your tears'; 'I'll share with you'; 'got to push on through'.  |
| Dixie Chicks: <i>Not Ready To Make Nice</i> (2006) | 'I've paid a price and I'll keep paying'; 'too late to make it right'; 'sad, sad story'; 'my life will be over'.                   | 'I'm through with doubt'; 'I'm not ready to back down'; [I won't] 'do what... you think I should'.   |

The *Yes We Can* video's 'Yes we can' encapsulates the kind of sentiments listed in the HOPE, ENCOURAGEMENT, DETERMINATION column of Table 1. The Obama song's TROUBLES column would be filled with quotes like 'slaves and abolitionists', 'immigrants [braving the] 'unforgiving wilderness', 'workers [who had to] organise', 'women [who had to] reach for the ballots', 'obstacles [that] stand in our way', the 'chorus of cynics who grow louder and more dissonant', and 'the little girl who goes to a crumbling school in Dillon'. Apart from the all-encompassing slogan 'Yes we can', column three would also contain 'they blazed a trail', 'King who took us to the mountain-top and pointed the way to the Promised Land', 'opportunity and prosperity', 'heal this nation', 'repair this world', 'there has never been anything false about hope', etc.

Although none of the four songs mentioned in Table 1 feature simply strummed six-string guitar accompaniment, they all, like *Yes We Can*, move at a steady pace with one chord per 4/4 bar in four-bar periods.

Two of them (*No Woman No Cry* and *Not Ready To Make Nice*) repeat the I-V-vi-IV sequence at least twice in succession, while the lyrics of all songs, plus *Yes We Can*, juxtapose experiences of hardship and of hope.

### *IOCM in combination*

It would have been very surprising if there had been one single piece of other music containing exactly the same chord loop as *Yes We Can*'s played at a similar tempo in a similar way on the same sort of instrument in the same key and same metre. On the other hand, the IOCM presented above shows how a range of different elements found in relevant English-language pop music traditions are incorporated in the *Yes We Can* chord sequence. It should also be clear that those specific structural elements are often associated in those traditions with notions, attitudes, emotions, activities, events and processes that together build a reasonably coherent connotative semantic field. The most important structural traits and their main paramusical fields of connotation (abbr. PMFC) can be radically summarised as follows.

Table 2. General summary of *Yes We Can*'s harmonic IOCM and its PMFCs

| <i>General structural traits</i><br>(all 4/4 at moderate tempo) | <i>Genre[s]</i><br>(anglophone) | <i>Connotations</i><br>(PMFC)   |
|---|---------------------------------|---|
| G major and other easy chords on acoustic metal-6-string guitar | folk-related                    | easy to play, participatory, democratic, progressive politics, 'yes we can'                           |
| I - III   | pop                             | up and out, possible problems   |
| I - iii - vi  | folk, folk rock, country rock   | storytelling, of the people   |
| IV - I  | gospel, soul, rock              | anglophone pop, affirmative, determined, participatory ('Amen')                                       |
| I - V - vi - IV   | pop, rock                       | from hardship to encouragement, determination and hope; anthemic, participatory, progressive politics |

In short, there is good reason to believe that the *Yes We Can* chords, by drawing on specific English-language popular music traditions, contribute to the connotation of the sort of encouragement, participation, affirmation, empowerment and democratic participation that seem to

be part of the Obama ethos and agenda. Particularly striking is the juxtaposition of hardship and hope found in the I-V-vi-IV IOCM (Table 1, p. 20) corresponding to the Obama speech quotes about slaves, abolitionists, immigrants, workers, women and their determination to overcome various forms injustice. Zooming in on a much more recent and specific example, it is worth adding that The Dixie Chicks used the I-V-vi-IV variant of the *Yes We Can* chord loop to accompany their determination to defy personal threats resulting from the band's shame over the fact that the previous president hailed from their home state of Texas.<sup>37</sup> In Obama's words, it was time for a change and, indeed, in Dylan's words, the times they are, hopefully, a-changing for real.

Of course, although this article already contains well over 8,000 words, there is much more to be said about the music of the Obama election video and its connotations. It might for example be argued that the anthemic character of the I-V-vi-IV IOCM is of minor relevance to *Yes We Can* and its mainly spoken lyrics. But such an argument misses at least one important point: that recordings consisting of one-line phrases presented as a string of statements by one artist after another has existed as a recognised pop song form since at least Band Aid's *Do They Know It's Christmas?* (1985) and that songs in that form – the *charity stringalong*, as I call it – invariably involve a call to action for a just cause.<sup>38</sup> This singing or declaiming consecutively rather than simultaneously is simply another way of musically presenting a sense of community compared to a hymn or anthem. *Yes We Can* combines, so to speak, the harmonic universe of the progressive *Sing Out!* community<sup>39</sup> with the community of a charity stringalong for a humanitarian cause. The *Yes*

37. The complete story of the Shepherd's Bush (London) incident in 2003, when singer Natalie Maines expressed that shame, and its consequences for those three brave young female musicians from Texas is told in the moving documentary *Shut Up and Sing* (Cecilia Peck, Barbara Kopple; Cabin Creek Films/Weinstein, 2006).

38. For example, Artists United Against Apartheid (1985), Svensk rock mot apartheid (1985), Hear'n Aid (1986), Disco Aid (1986). To *string along* (verb), according to the *Oxford Concise English Dictionary* (1995), is a colloquial expression meaning to keep company with. *Singalong*, according to the same source, means 'a tune to which one can sing in accompaniment' or 'an occasion of community singing'. If several people sing or speak one at a time in succession during a song, i.e. as a string of individuals, they certainly keep each other (and the song) company, but they do so consecutively, not simultaneously: hence the label *stringalong*.

*We Can* chords also refer to other popular anglophone music traditions like four-man-band rock (e.g. Beatles, early Radiohead), country- and folk-rock (e.g. The Band), and soul (Otis Redding). Moreover, *Yes We Can* adds rap and African-American preaching to that mixture of styles, fusing them all into one single production. That fusion certainly seems to align with Obama's goals of unification and collaboration. However, all these issues – the musically inclusive expression of community, the role of rap and preaching in *Yes We Can*, and their relation to the political context in which the video was produced and used – are all topics regrettably beyond the scope of this article.

### *Abbreviations and typographical conventions*

- To save space, the web prefixes 'http://www.' and 'http://' are dropped. URLs are for the same reason given in Arial Narrow (this font) and are delimited by vertical bars. Dates of visits to web pages are given as six figures (yymmdd) in square brackets after the relevant URL; e.g. | tagg.org/texts.html |[090318] means that web page was viewed on 18 March 2009.
- Chord name abbreviations follow the conventions set out in *Tagg's Harmony Handout*, pp. 27-30 at | tagg.org/articles/xpdfs/harmonyhandout.pdf|. To avoid confusion, chord names are given in standard font (e.g. G, F#m) and note names in lower-case Arial (e.g. a a# b♭ bb).
- Abbreviations and terms peculiar to musematic analysis are explained in an online glossary at | tagg.org/articles/ptgloss.html|.

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39. Among *Sing Out!* magazine's founders were Pete Seeger, Woody Guthrie, Paul Robeson, Alan Lomax and Irwin Silber. For a description and history of the magazine, see |singout.org/sohistry.html|[090318].

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