

# EXHIBIT 6

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**December 8, 2017**

**Re: “Let’s Get It On” and “Thinking Out Loud”**

I am Professor of Music, Director of Latin American and Caribbean Studies, and Jazz Studies Coordinator at the University of Vermont. I have contributed to numerous peer-reviewed journals and other publications and I am author of a book published by University of California Press. My work encompasses extensive music transcriptions, musicological analysis, historical research, and other scholarly activities, particularly in popular music. I earned a Ph.D. in Music (Ethnomusicology Concentration) from the Graduate Center of the City University of New York (CUNY) and a Master of Music in Jazz and Commercial Music from Manhattan School of Music. During 2006-7 I was a Fulbright scholar researching traditional and popular music in Mexico. As an active professional musician I have performed with leading musicians in jazz and popular music for more than thirty years. I have provided expert opinions and analysis on music copyright matters for over twelve years.

I have been asked to compare two songs: “Let’s Get It On” (LGIO) performed by Marvin Gaye and “Thinking Out Loud” (TOL) by Ed Sheeran. Recordings of these songs were provided to me by Mr. Patrick Frank of Frank and Rice PA. I also compared these songs with two live versions of TOL by Sheeran that I found on YouTube, one of which includes an interpolation from “Let’s Get It On.”<sup>1</sup> In addition, after my initial comparisons, I reviewed reports by Dr. Lawrence Ferrara (undated) and Mr. Anthony Ricigliano (dated April 7, 2015) that were also provided by Mr. Frank.

As I will discuss in further detail below, I have found significant similarities between the songs in question. In my opinion, these similarities can only be the result of copying from “Let’s Get It On.”

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<sup>1</sup> TOL/LGIO: <https://www.youtube.com/watch?v=RxZjVZKVN7k> (accessed 5/30/2015) and TOL: [https://www.youtube.com/watch?v=\\_9jTo\\_0Fqzg](https://www.youtube.com/watch?v=_9jTo_0Fqzg) (accessed 5/30/2015).

The following table outlines the general characteristics of “Let’s Get It On” and “Thinking Out Loud.”

**General characteristics**

Song	Key	Tempo (BPM) <sup>2</sup>	Length
LGIO (single version)	Eb major	~82	4:02
LGIO (full version)	Eb major	~82	4:51
TOL	D major	79	4:42
TOL (YouTube)	Db major	82	4:48
TOL/LGIO (YouTube)	C major	~86	5:52

As can be seen, LGIO and TOL are performed at nearly the same tempo, and can be considered exemplar of rock or soul ballads. The key centers are also similarly placed with the commercially-released version of TOL placed in the next lowest key from LGIO (a half step or semitone below LGIO’s key of E-flat major). Other live versions of TOL are placed lower, in D-flat major and C major.

**Form**

LGIO (single version)

0:00-1:34    verse  
 1:34-2:19    bridge  
 2:19-3:05    verse  
 3:05-3:17    short bridge  
 3:17-4:02    verse

LGIO (“deluxe” or full version)

0:00-1:34    verse  
 1:34-2:19    bridge  
 2:19-3:05    verse  
 3:05-3:50    bridge  
 3:17-4:51    verse

TOL (studio version)

0:00-0:24    verse A  
 0:24-0:48    verse B  
 0:48-1:13    bridge/pre-chorus  
 1:13-1:43    chorus  
 1:43-2:07    verse A2  
 2:07-2:32    verse B2  
 2:32-2:56    bridge/pre-chorus  
 2:56-3:26    chorus  
 3:26-3:50    interlude (guitar solo)  
 3:50-4:42    chorus

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<sup>2</sup> BPM = beats per minute

While the above structural analysis seems to suggest that the forms of the songs are different, it is important to note that the basic harmonic pattern and bass line underlying most of these sections remains the same. In both songs the bridge and pre-chorus are the only sections that depart significantly from this underlying four-chord structure. In TOL, the differences between the A and B verses and choruses are only in melodic pattern and lyrical content (and in the chorus, the use of a final cadence).

I have labeled the eight-measure section beginning at 0:24 “verse B” because it continues the same harmonic and underlying musical material as heard during the first eight measures (verse A) and because, each time this section appears, like a verse, it is set to different lyrics. The section beginning at 0:48 I have labeled a “bridge/pre-chorus” because it obviously precedes the chorus. But because the chorus in this song is set to the same harmonies as the verse (except for a final cadence), this section also functions much like a bridge in that it separates and provides harmonic contrast to two harmonically similar sections. While the structures of the songs are not identical, other than this contrasting transitional section (the “bridge” or “pre-chorus”), both songs are built almost entirely on a virtually identical harmonic and rhythmic foundation. This content, heard throughout the majority of both songs, forms a common musical bed on which other melodic similarities are found.

### **Specific Musical Expression or Content**

#### Methodology

To facilitate comparison, musicologists typically use transposition to place each song in the same key. I have transposed all the following examples from LGIO to D major (the key of the studio version of TOL). Further, in my analysis, following standard musicological procedure, I have used numbers to represent the pitches of the diatonic scale (1=D, 2=E, 3=F or F sharp, 4=G, etc.). In my analysis below, I will occasionally use the integer “8” to indicate the first scale degree at a pitch level an octave higher. Both songs occasionally deploy a “blue” third (a third degree of the scale that ranges from minor to major, or somewhere in-between). The “blue third” typically involves inflection that is difficult to represent in conventional Western notation. Sheeran’s melody includes a blue third in the very first measure and others are sprinkled throughout. By the same token, numerous instances of major thirds are heard in LGIO. Contemporary musicological research regards blue thirds ranging from minor to major (and sevenths) as a single tonal area (toneme) rather than as different scale degrees or than as a series of discrete pitches thereby justifying the use of a single integer (3) to represent the entire spectrum of thirds.<sup>3</sup>

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<sup>3</sup> See, for example, Evans, David (1982). *Big Road Blues*, p. 24; Kubik, Gerhard. *Africa and the Blues* (1999), p. 87, pp. 118-51 and Kubik, Gerhard. “Blue note,” *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed December 7, 2017.



### Foundation

LGIO and TOL rely on a strikingly similar foundation comprising melodic, harmonic, and rhythmic elements. As can be seen below, the opening bass line of TOL and LGIO are nearly identical. Melodically, the bass line leaps downward by a sixth before ascending stepwise to the fifth degree of the scale. Example 1 provides the opening bass lines of each song.

Example 1. Basic bass lines in LGIO and TOL (see also Ferrara Report)

In both songs, this melodic sequence can be characterized as 8-3-4-5-5. All of the melodic notes contained in TOL are found in LGIO. The only differences are some slight embellishments or “fills” heard at the end of each measure in LGIO. Indeed, as both songs progress, varying embellishments can be heard while the underlying pattern remains essentially the same.<sup>4</sup> Dr. Ferrara’s report states that “the *basic* bass line in both songs is on scale degrees 1-3-4-5” [italics added]. As is standard in musicological analysis, Dr. Ferrara’s analysis engages in a degree of reductionism (thereby confirming that all notes in a composition or in a melody are not equally important or relevant to the analysis). The basic rhythm of these bass lines is identical, with the pitches 3 and 5 anticipated or played before the third beat of the measure. Further, the 5 is sounded twice in a syncopated fashion, on the “and” of two and the “and” of three. Rhythmically this two-measure pattern could be counted as “**ONE**-and-two-**AND**-three-and-four-and-**ONE**-and-two-**AND**-three-**AND**-four-and.”

Graphically these bass lines can be represented as:

Beat	1	+	2	+	3	+	4	+	1	+	2	+	3	+	4	+
LGIO	D			F#					G			A		A		
TOL	D			F#					G			A		A		

During the opening of TOL this downward leap from the upper tonic is especially prominent and an important element of the melodic contour and contributes

<sup>4</sup> When extrapolating core musical expression, slight variations or embellishments among multiple variations are discounted. This is common practice in analyzing and comparing music from folk songs to jazz and popular music in order to arrive at a common or paradigmatic version and does not represent any attempt to distort the analysis.

significantly to the melodic flow of the bass line and the underlying cyclical groove (a large fall followed by a steady upward rise back to the first beat of the two-measure pattern). Even when the bass guitar enters in TOL and plays the inverted interval (an ascending third rather than a descending sixth), as depicted in the sheet music, the bass line with the descending sixth continues throughout much of the song.

Any assertion that a bass line can only be found in a bass instrument such as a bass guitar is nonsensical. Bass lines can, of course, be placed on the low strings of the guitar or in the left hand of a keyboard player. Polyphonic instruments such as these are capable of playing multiple parts simultaneously including bass lines. As in this report, Dr. Ferrara's preliminary report also refers to the bass line in the guitar part of TOL as a "bass line."

The bass line, i.e. the lowest melodic part, at the beginning of TOL, when it is most exposed, does have the descending sixth. This is the only bass part heard for the first 24 seconds. Because it is the beginning of the song it makes a lasting first impression on listener. If the guitarist's aesthetic choice was to have an ascending third instead of a descending sixth, he could have easily tuned the first string of his guitar down one whole step and played the ascending line with the same chords. The *scordatura* or alternate tuning for guitar known as "drop d" is extremely common as illustrated in the numerous published instruction books and videos available on-line explaining the simple procedure. Many well-known artists from blues and folk to heavy metal and other popular styles have used this tuning and it can be heard on some of the earliest commercial recordings from more than a hundred years ago all the way to the present day. Even using conventional tuning, the same chords can be played with the ascending third in the line from the open D string (though the F#, G, and A would be sounded an octave higher). In any event, the tuning of one of the guitar strings does not excuse copying the pitches, rhythms, and metric placement. Because of all the other similarities, most listeners familiar with "Let's Get It On" would undoubtedly recognize the similarity between the musical expression in these two songs even without the descending sixth. The composer of LGIO could have elected to use an ascending pattern as in most of the "prior art" cited by Ferrara. TOL copies this more unusual creative choice heard in LGIO.

The published sheet music for TOL shows the descending interval in the bass clef throughout much of the song. When Sheeran performs the song live as a solo act there is no bassist so this bass line is the only bass line heard throughout the entire song. Moreover, during a live performance, the bass guitarist can be heard and *seen* playing the descending sixth.<sup>5</sup>

The basic drum pattern in both songs is also virtually identical as can be seen in example 2.

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<sup>5</sup> [https://www.youtube.com/watch?v=\\_9jTo\\_0Fqzg](https://www.youtube.com/watch?v=_9jTo_0Fqzg) (accessed 5/30/2015).



## Example 2. Drums in LGIO and TOL

The important elements of the drum parts in LGIO and TOL are the same. The bass drum or “kick” is played on “one” with two syncopations or off-beat figures on the “and” of two and the “and” of three, with an accented snare (or backbeat) on two and four yielding the following rhythm: **ONE-and-TWO-AND-three-AND-FOUR-and-ONE-and-TWO-AND-three-AND-FOUR-and.** The following chart graphically represents the basic drum parts from both songs:<sup>6</sup>

		1	+	2	+	3	+	4	+	1	+	2	+	3	+	4	+
LGIO	hh	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	o
	sn			X				X				X				X	
	bd	X			X		X	X		X			X		X	X	
TOL	hh	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x?
	sn			X				X				X				X	
	bd	X			X		X			X			X		X		

hh=hi hat; sn=snare drum; bd= bass drum

One small difference is that the kick drum in LGIO doubles the snare on beat four. The syncopation in the bass line is accentuated and reinforced by the kick drum. The hi-hat (a double set of cymbals on a stand that can be opened and closed with the foot) is set to steady stream of eighth notes. It is unclear in the recording of TOL whether the hi hat occasionally is also sounded open on the last eighth of every second measure as it is throughout much of LGIO. As can be seen, these drum parts are for all practical purposes identical even though the drummers in both songs, as would be expected, occasionally introduce slight variations in the form of accents or omissions and add “fills” and embellishments. The combination of this drum part with the bass line and harmonies provides a signature foundation for LGIO that is immediately recognizable in TOL even with an ascending third in the bass line.

<sup>6</sup> After the first measure, the hi hat is generally sounded on every eighth-note in LGIO.

Neither of the preliminary reports submitted by Dr. Ferrara and Mr. Ricigliano make any mention of the drum parts in either song.

In my opinion, the distinctive combination of these bass lines and drum parts found in LGIO and TOL, which are similar in every important detail, could not be a result of independent creation and can only indicate copying. This musical expression forms the core of both songs – the verses of LGIO and the verses and chorus of TOL.

### Vocal Melody

The first melodic phrases heard in both songs are substantially similar. This phrase and a slightly different variant are heard eight times in TOL where they form the verse A making it one of the most frequently heard themes in TOL.

### Example 3. Opening themes of LGIO and TOL compared

0:01 D F#min G A  
 LGIO I've ben real - ly try - in' ba - by

0:00 D D/F# G A  
 TOL When your legs don't work like they used to be - fore,

Example 3 compares the opening phrase in both songs. As can be easily seen, the phrases are a similar length overlapping the bar line. They begin on exactly the same beat (halfway between beats two and three – the “and” of two). Following standard musicological procedure, the first phrase in each song can be converted to the following pitch sequence:

LGIO 345432212  
 TOL 35653212361

The first phrase from LGIO contains eight syllables. Comparing the pitches to which these syllables are set with those of the first eight of TOL yields a very similar sequence:

LGIO 34543212  
 TOL 35653212

The only difference is that the three notes following the first pitch are raised by one scale degree – 454 becomes 565. I will discuss this further below.



Another way to analyze this melodic sequence is to look at pitches that have important structural functions.

LGIO 345432212  
TOL 356532(1)23(6)1

I have placed two pitches in TOL in parentheses because melodically they function as neighbor tones and/or because of their extremely brief duration and weak rhythmic placement. Using this standard musicological technique, the melodic sequence of TOL can be reduced to 356532231.

The following compares the basic opening melodic gestures of both songs.

LGIO 345432212  
TOL 356532231

Once again, the main difference can be found in the second, third, and fourth pitches. Each of these pitches is simply raised one step: from 454 to 565. Even with this slight change the basic melodic contour remains unaltered.

As mentioned earlier, in terms of the rhythms, phrasing, and metric placement, the phrases in example 4 also share significant similarities. Both begin on the same beat (the “and” of two), straddle the bar line of the two-measure pattern repeated in the bass line, harmony, and drums, and end in the middle of the second measure.

It is important to note that at the opening of each song this similar melodic expression is set to similar harmonies and the same bass line and drum part. This phrase forms the basic melodic motif of the “A” verses of TOL where it is heard a total of eight times – at the very beginning of the song four times from 0:00-0:24 and four times from 1:43-2:07. In “Let’s Get It On,” as the opening phrase, it is undeniably one of the most memorable melodic figurations in the song.

Another important melodic figure heard in TOL is the motive repeated three times at the beginning of each chorus (1:13; 2:56; and 3:50). Example 4 provides examples of this theme from each song.



Example 5. Important phrase from LGIO compared with interlude of TOL and Sheeran performance of TOL that interpolates LGIO during interlude

The musical score is organized into four systems, each with three staves. The top staff is the vocal line, the middle staff is the guitar line, and the bottom staff is the vocal line again. The key signature is two sharps (D major) and the time signature is 4/4. Chords are indicated above the staves: D, F#7, G, and A. Time markers are placed at the beginning of each system: 0:48, 3:35, 4:51, and 4:51. The lyrics are: "We're all sen - si - tive peo -", "La, la, la, la, la, la, la, la, la, la, la, la, la.", "We're all sen - si - tive peo ple with so much to", "ple with so much to give. un - der -", "give un - der - stan - ding Su - gar", "stand - ing Sug - ar, since we got to be.", and "We're all sen - si - tive peo - ple sing - in'". The guitar part in the second system includes a "guitar" label and a "3" indicating a triplet.

This passage, like the passage in example 4, consists of repeated notes on a descending scale.

- LGIO 88778776535165
- TOL 8887776665553
- TOL (guitar) 88887776665555
- LGIO (Sheeran 1<sup>st</sup> x) 887876135376
- LGIO (Sheeran 2<sup>nd</sup> x) 8878776



One of the most telling aspects of this interpolation of “Let’s get It On” is the structural placement Mr. Sheeran has chosen. He extends the interlude where the guitar solo appears in the studio version, and, instead of singing the “la, la, la’s,” in example 5 he sings the “we’re all sensitive people” phrase notated above, not once, but twice, before returning to the chorus of TOL. He has, in effect, replaced his phrase with this phrase *exactly* where the vocables (“la, la, la,” etc.) appear in TOL, immediately before the return of the final chorus. He has substituted Marvin Gaye’s phrase for his own. Moreover, he has also *moved the phrase* to almost a measure earlier in order to closely match the placement of his “la la la” and guitar phrases over the underlying harmony, bass line, and drum pattern. I find not only the similarity but also the placement of these phrases in the overall structure (interlude) and similar shift over the harmonies in this performance to be compelling evidence of copying.

#### Harmonies

As conceded by Dr. Ferrara in his undated report, “Both songs use a similar (but not identical) chord progression in the same harmonic rhythm of two chords per bar in which the second and fourth chords are anticipated (i.e., they occur on the second half of beat 2).”

The basic harmony could be described as

LGIO I iii IV V  
TOL I I/3 IV V

Actually, in the beginning of TOL when only the guitar is sounded, because the harmony is thinner, the second chord could easily be heard as an F-sharp minor chord because the pitch D is absent in the vertical sonority.

LGIO I iii IV V  
TOL (opening) I iii IV V

The only difference in the basic harmony in much of the rest of the song is a detail of the closely related second chords, in TOL a D major chord with F# in the bass (D/F#) rather than F# minor. In fact, these chords are virtually interchangeable and both typically function as tonic chords.<sup>7</sup> The different note in this chord, a “D” instead of C#, does not significantly alter its sound and I doubt that many listeners would notice the difference. As Dr. Ferrara notes, there are multiple variations

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<sup>7</sup> Chords are said to be closely related when they share many of the same pitches. In diatonic harmony, the roots of such chords are usually a third apart, as they are here, F# minor and D. These chords also share the same tonic function. Indeed, the iii and I chords are frequently considered interchangeable.

found within the four-chord progression, and examples of 5-chords (chords without a third), 7th chords, and suspended 4th chords are also found.

Additionally, the many instances of D's in the melody of LGIO over the second chord could justify thinking of the second harmony of LGIO as a tonic chord or Dmaj7/F# or I<sup>maj7</sup>/iii.

#### Bridge/pre-chorus

The musical bed on which both songs lie is mostly built from the basic four-chord progression outlined in the above section. Indeed, the only significant departure from this pattern occurs during the bridge of each song when they both move to chords with a sub-dominant function. The opening chords of the bridges are closely related (E minor7 or ii7 in TOL and G major or G7 or IV in LGIO).<sup>8</sup>

These sections involve similar movement to harmony built on the supertonic or second degree of the scale (E minor in TOL and E7 in LGIO) and the dominant or A (ii-V and II7-V, respectively).<sup>9</sup>

Despite all these similarities, I should also note by way of difference that the two measures containing the words "we found love right where we are" in TOL are set to different harmony that is not found in LGIO.

I do not find significant differences in the modal qualities of these songs. While LGIO may have a somewhat more blues inflected vocal, both songs employ inflections on various pitches of the scale (especially the third degree) and as can be seen in example 2, Sheeran's melody contains "bent" notes that include F-natural as well as F-sharp. The sheet music to TOL contains blue thirds as can be seen in measures 36, 39, 40 (notated as e-sharps). By the same token, major thirds are abundant in Marvin Gaye's vocal melody – indeed his very first note is a major third (F-sharp). Both songs are built on major tonalities and, I have discussed above, contemporary scholarship regards blues tonality as involving a third degree that is variable in pitch.

#### Lyrics

While, like Dr. Ferrara, I have found few important lyrical similarities, I believe he somewhat exaggerates the differences when he states: "the lyrics in 'Let's' are about immediate sexual attraction, while the lyrics in 'Thinking' are about long-term romantic love" (undated Ferrara report). Despite LGIO's more overt sexuality, TOL also contains sexual and erotic overtones. (For example: "Will your mouth still remember the taste of my love?") Further, the lyrics to Gaye's song repeatedly emphasize romantic love "If you believe in love....", "We're all sensitive people with so much to give...", "I love you",

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<sup>8</sup> Once again, these chords are a third apart, E and G. They also share the same sub-dominant function and the ii and IV chords are considered practically interchangeable.

<sup>9</sup> In the sheet music of TOL these chords are given as E minor7 and A7.



"...if the love is true..." In the end, both ballads are celebrations of love to a particular woman. The main difference would be, then, that the attraction in TOL seems to have been consummated while the singer in LGIO is still yearning for fulfillment.

#### So-called "prior art"

Dr. Ferrara's undated report mentions ten songs that he claims pre-date LGIO that contain similar harmony. As outlined above, the similarities in LGIO and TOL are found in much more than just the harmony. In my preliminary investigation I have examined all of these works and found none that contain the bass line and drum part at issue in this matter (much less the other expression described in this report). Moreover, it will be obvious to any listener that none of these songs sound anything like LGIO and TOL.

It is important to note once again that, in his preliminary report, Dr. Ferrara himself referred to "the bass line" in the guitar heard at the beginning of TOL as containing the descending interval and noted its similarity to LGIO. He writes:

"the first iteration of the bass line in 'Thinking' has a leap down from 1 to 3 that is similar to "Let's." (Ferrara, Undated Report, p. 4).

Clearly, TOL contains both bass lines, the descending sixth *and* the ascending third. In my expert opinion, the descending pattern is prominent in TOL because of its exposure at the beginning of TOL.

#### Bass line characteristics in common between LGIO and TOL (in guitar)

1 3 4 5

two-measures

descending sixth

anticipation of 3 and 5

syncopation

In fact, the only example in which the second and fourth chords are anticipated (the Diaz version of "Georgy Girl") does not contain the descending sixth of the bass line heard in LGIO and TOL and the percussion part is nothing like the drum parts in LGIO and TOL. Moreover, it stretches credulity to the breaking point to suggest that this apparently obscure Mexican bandleader's cover version of a 1960s pop song (that, in any version, *sounds nothing like either song* in this case) could have had much influence beyond his own backyard.



## Example 6. "Georgy Girl" Diaz version

0:06

Bass

C Emin F G

Perc

The only examples among the works mentioned by Dr. Ferrara that feature a descending sixth in the bass line with any frequency are Donovan's "Hurdy Gurdy Man" and Holly's "True Love Ways." But in these songs, none of the chords are anticipated and, once again, the drum part is completely different. Moreover, in "Hurdy Gurdy" the bass part contains many extra notes, including the repeated tonic before the downward leap at the beginning. Neither of these examples have any syncopation whatsoever.

## Example 7. "Hurdy Gurdy Man" Donovan

1:05

Bass

G Bmin C D

Drum Set

## Example 8. "True Love Ways" Buddy Holly

0:03

The musical score for "True Love Ways" by Buddy Holly is presented in three staves. The top staff is the Bass line in 4/4 time, starting with a half note G2, followed by a half note F2, and then a half note E2. The middle staff shows the chord progression: Bb (B-flat major), Dmin (D minor), Eb (E-flat major), and F (F major). The bottom staff is the Drum Set part, featuring a simple pattern of eighth notes on the snare and bass drum, with a double bar line and repeat sign at the end of the first measure.

Of the two songs mentioned by Dr. Ferrara in his undated report that post-date LGIO but pre-date TOL, only Lionel Richie's "Do It To Me" contains anticipated second and fourth chords. While the bass line also contains a descending sixth, as can be seen below, there is little or no syncopation and the drum part is in a completely different style (sixteenth-note based subdivision) and bears no resemblance to the drum part in LGIO and TOL.

## Example 9. "Do It To Me" Lionel Richie

The musical score for "Do It To Me" by Lionel Richie is presented in three staves. The top staff is the Bass line in 4/4 time, starting with a half note G2, followed by a half note F2, and then a half note E2. The middle staff shows the chord progression: C (C major), Emin7 (E minor 7), FMaj7 (F major 7), and E/G (E major over G). The bottom staff is the Drum Set part, featuring a complex pattern of sixteenth notes on the snare and bass drum, with a double bar line and repeat sign at the end of the first measure.

In summary, none of the works cited by Dr. Ferrara contain substantial similarities to the songs at issue in this matter. None of these songs sound anything like the songs at issue in this matter. LGIO and TOL are far more similar to each other than any of these songs are to either of them.

### Conclusions

The evidence in this report points conclusively toward the creator(s) of “Thinking Out Loud” having copied important musical expression from the song “Let’s Get It On.” This unauthorized taking accounts for the foundation, groove, and core musical expression of both songs and, by itself, constitutes a violation of the artistic integrity of the original song. Striking similarities include the bass melody, drum parts, and harmonies in aggregate. Ontologically, the bass part heard prominently in the guitar at the beginning of TOL must be considered a bass line, as acknowledged by defendants’ own expert in his initial report. At the risk of restating the obvious, a bass line can be played on any instrument capable of playing low notes and can be played simultaneously with other parts on instruments capable of polyphony (multiple parts) such as guitars or keyboards. Bass lines are frequently assigned to the lower strings of the guitar or the lower range of a keyboard. Moreover, important melodic vocal expression in TOL is also similar that in LGIO. The opening melodic phrase in both songs is important to both songs and is substantially similar (example 3) in pitch sequence, phrasing, contour, and placement. The repeated phrase in the chorus of TOL is substantially similar to an important phrase in LGIO (example 4). A melody set to vocables and in the guitar during the interlude of TOL is substantially similar to one of the most memorable phrases of LGIO (“We’re all sensitive people...” (example 5). Sheeran himself quotes this passage from LGIO twice in a live performance and places the phrases in almost exactly in the same place as his similar phrase. The structural placement in the overall form and slight shift in setting over the four-chord groove further confirms his awareness of the similarity of this expression in LGIO and TOL. In a nearly five-minute song, this cannot be the result of coincidence. All these melodies share phrasing, contours, rhythms, and basic pitch sequences. In combination with the harmonies, bass line, and drum parts, this expression reveals that much of TOL has been derived from LGIO.



Other matters

My C.V. contains all pertinent information about my publications and an attached document to this report lists my testimony in other cases over the last four years. I reserve the right to supplement or amend this report in light of any additional material with which I am provided. I am being compensated at the rate of \$275 per hour for the study of this matter and \$575 per hour (four-hour minimum), plus any related travel time and expense, for trial testimony and deposition.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Alexander Stewart", with a long horizontal flourish extending to the right.

Alexander Stewart, Ph.D.  
Professor of Music  
University of Vermont