

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

KATHRYN TOWNSEND GRIFFIN, HELEN
MCDONALD, and THE ESTATE OF CHERRIGALE
TOWNSEND,

Plaintiffs,

-against-

EDWARD CHRISTOPHER SHEERAN, p/k/a ED
SHEERAN, ATLANTIC RECORDING
CORPORATION, d/b/a ATLANTIC RECORDS,
SONY/ATV MUSIC PUBLISHING, LLC, and
WARNER MUSIC GROUP CORPORATION, d/b/a
ASYLUM RECORDS

Defendants.

ECF CASE

17-cv-5221 (RJS)

**REPLY DECLARATION OF
DR. LAWRENCE FERRARA**

I, Lawrence Ferrara, declare as follows:

1. I have personal knowledge of the facts set forth in this Reply Declaration.

Undefined capitalized terms have the meanings in my Declaration dated July 27, 2018 (“Moving Declaration” or “Mov. Decl.”) and my Report dated January 12, 2018.

**THERE ARE NO SIMILARITIES BETWEEN
TOL AND THE LGO DEPOSIT COPY INDICATIVE OF COPYING**

A. The I-iii-IV-V Chord Progression Was Commonplace Prior To LGO

2. Dr. Stewart’s Report does not address or analyze the LGO Deposit Copy.

3. It is undisputed that the I-iii-IV-V chord progression used in LGO was in common use prior to LGO. Dr. Stewart concedes at least twelve songs predate LGO that use the same chord progression, and two guitar method books feature the chord progression, one of which labels it a “common progression.”¹ Dr. Stewart’s new conclusion (Stewart Decl. ¶ 7) –

¹ There are greater similarities between the chord progression in a thirteenth song – “Get Off My Cloud” by the Rolling Stones – and the chord progression in TOL than there are similarities between the chord progressions in LGO and TOL.

which contradicts his deposition testimony that this chord progression is “a common progression” – that the I-iii-IV-V progression was “not commonplace” prior to LGO – is objectively untrue.

B. TOL Does Not Feature the Identical Chord Progression

4. TOL does not feature the identical chord progression used in LGO. Dr. Stewart’s assertion (Stewart Decl. ¶¶ 2, 5) to the contrary is demonstrably false. The second chord in TOL is a “I/3” and not a “iii.” These are two different chords. Dr. Stewart’s own transcriptions contradict his new assertion. In example 3 of the Stewart Report, Dr. Stewart depicts the second chord in TOL as a “D/F#” – which is a “I/3” chord, not a “iii” chord. *See* Demonstrative Ex. 1.² In his transcription of the “full score” to TOL (Frank Decl. Ex. 6), Dr. Stewart does the same. *See* Demonstrative Ex. 2.

5. Dr. Stewart does not dispute that (unlike in LGO), the chord progressions in TOL change, and entire segments of TOL feature chord progressions substantially different from LGO.

C. The Harmonic Rhythms Are Not the Same, and Anticipation Is Commonplace

6. The harmonic rhythm of the chord progressions in the LGO Deposit Copy and TOL are objectively different. As I have explained, the harmonic rhythm in the LGO Deposit Copy features a four-bar (not a two-bar) chord progression with two chords in bar 1, one chord in bar 2, two chords in bar 3 and one chord in bar 4. Dr. Stewart falsely claims that I describe six chords and not four chords in LGO. *See* Stewart Decl. ¶ 20. The LGO Deposit Copy shows that the chord in bar 2 carries over and is the same as the second chord in bar 1, and the chord in bar 4 carries over and is the same as the second chord in bar 3. Thus, I indicated four discrete chords,

² “Demonstratives” refer to the Demonstratives annexed to this Reply Declaration as Exhibit 23.

not six chords. The difference in harmonic rhythm between the LGO Deposit Copy and TOL is empirically verified by the LGO Deposit Copy. *See, e.g.*, bars 1-4 in the LGO Deposit Copy.³

7. Dr. Stewart attempts to avoid his admission that LGO features a “common” chord progression by placing significance on the fact that the harmonic rhythms in each song “anticipate” the second and fourth chords. But the anticipation of chord changes – *i.e.*, changing chords between beats – is a well-worn musical technique that is not remotely unique to LGO. For example, using the chord progressions at issue, the second and fourth chords are anticipated in two versions of “Georgy Girl” (1967) as well as “True Love Ways” by Peter & Gordon (1965), which predate LGO, and “Six Pack Summer” (2000), which predates TOL. *See* Ferrara Report pp. 53-59. Exhibit 22 (attached hereto) consists of pages from a guitar chord method book, which instructs on “anticipating” chords and provides examples of the anticipation of the second and fourth chords in the progressions in #5, #27, and #98.

D. The Vocal Melodies Are Objectively Dissimilar

8. I have demonstrated the objectively vast differences between the vocal melodies, which remain undisputed. *See* Moving Decl. ¶ 20 and Report ¶¶ 79-104. Even if this Court were to accept Dr. Stewart’s altered versions of the vocal melodies, it is undisputed that, even in their altered state, (1) only 4 of 9 pitches line up in the same order in Melody A of each work, only 5 of 11 pitches line up in the same order in Melody B of each work, and only 6 of 14 pitches line up in the same order in Melody C of each work, (2) that Dr. Stewart does not analyze the

³ By deleting the key word, “change” from my Moving Declaration, Dr. Stewart attempts to create another distraction. I stated at Paragraph 8 of my Moving Declaration that “harmonic rhythm is the pace at which the chords are played or change.” (Emphasis added). It does not matter if those changing chords are written in a score or played on instruments. That is entirely consistent with the definition in my Report (¶ 7(b)), the definition in *The Harvard Dictionary of Music* and the definition in *The New Grove Dictionary of Music and Musicians*.

melodic rhythms, and (3) that the rhythmic durations of the pitches in each work are objectively different.

9. At paragraphs 57-59 of his Declaration, Dr. Stewart now grossly misrepresents a melody in LGO as the melodic “hook” of LGO. First, the pitch sequence in the melody of Dr. Stewart’s music example at paragraph 58 occurs only one time in the entirety of LGO and thus, it is not remotely accurate to label it the melodic “hook” of LGO. Second, Dr. Stewart omitted two notes (set to the word “on”) in his music example at paragraph 58 as compared with his own full transcription. *See* Demonstrative Ex. 3 (highlighting the omitted notes).

10. Yet, even using the LGO melody in Dr. Stewart’s inaccurate transcription at paragraph 58 (referenced as Melody B in his Declaration), the order of the pitches is still markedly different from “Melody B” in TOL as charted immediately below.

LGO: 1 1 1 6 5 3 2 6 5 3 5 6 5 3

TOL: 3 5 6 5 3 2 1 2 3 6 1 3 5 6 5 3 3 2 1 1

As is obvious, these are drastically different melodies. Additionally, Dr. Stewart does not analyze the melodic rhythms of each melody, which are objectively different as transcribed by Dr. Stewart.

E. The LGO Deposit Copy Does Not Include the Bass Part In the LGO Recording

11. I have also explained that the LGO Deposit Copy does not include the bass part in the LGO Recording. Dr. Stewart concedes that the bass line is not notated in the LGO Deposit Copy (Reply Farkas Decl. Ex. 20, 148:9-13), yet at paragraph 3 of his Declaration he writes, “[t]he basic bass line [is] implied by the chords and their metric placement on the LGO deposit copy.” That is misleading and objectively untrue. There are dozens of possible bass-lines that could be devised from the chords and their metric placement indicated in the LGO Deposit Copy.

Thus, the suggestion that the specific bass line in the LGO Recording – which features the purportedly “unusual choice” (Dr. Stewart’s words) of the “descending sixth” on which Dr. Stewart relies so heavily – is the bass line implied in the LGO Deposit Copy is simply incorrect and misleading.

EVEN IF ADDITIONAL ELEMENTS FROM THE LGO RECORDING ARE CONSIDERED, THERE ARE NO SIMILARITIES INDICATIVE OF COPYING

F. More Than 91% of TOL Features a Bass-Line that is Markedly Different From The Bass-Guitar Part In The LGO Recording

12. As established in my Moving Declaration and Report, the bass-line in TOL, starting at 24 seconds and through and including TOL’s conclusion – *i.e.*, the TOL Bass Line, which is present for more than 91% of TOL – is played by the bass-guitar. Dr. Stewart does not dispute that the TOL Bass Line differs from the bass-line played on the electric-guitar during the opening seconds of TOL, *i.e.*, the TOL Opening Bass Line. Nor does Dr. Stewart dispute the fact that he failed to provide any transcription or analysis of the TOL Bass Line in his Report.

13. As demonstrated in my full transcription of the bass-guitar in TOL (a copy of which is annexed as Ex. 19 to the Reply Farkas Declaration), the “unusual choice” (again, Dr. Stewart’s words) of the “descending sixth” in the bass-guitar part in the LGO Recording is never present in the TOL Bass Line. Thus, they are different. At paragraph 37 of his Declaration, Dr. Stewart writes that the descending sixth interval is featured “31 times in the TOL sheet music.” That is misleading and irrelevant. The TOL published sheet music is a piano/vocal arrangement that recreates parts of the bass-line to correspond to the left hand of the pianist. The descending sixths in the published sheet music do not indicate the specific order of notes in the bass-guitar part in TOL as confirmed by Dr. Stewart’s own full transcription of TOL. *See* Frank Decl. Ex. 6.

14. Moreover, in my full transcription of the bass-line of TOL, a descending sixth (from the first note D to the second note F#) never occurs in the TOL Bass Line.⁴ Further, even as transcribed in bars 9-91 by Dr. Stewart (Frank Decl. Ex. 6), the descending sixth (from the first note D to the second note F#) only occurs two times (once each in bars 75 and 83).

15. Dr. Stewart's conclusion (Stewart Decl. ¶ 24) that the "bass lines [sic] LGO and TOL are virtually identical in the ... last chorus of TOL" is also demonstrably false. Dr. Stewart's full transcription of TOL (Frank Decl. Ex. 6) shows that the bass-guitar line during the last chorus of TOL (starting at 3:50 at bar 77) embodies distinct differences from the bass-guitar line in his full transcription of the LGO Recording (Frank Decl. Ex. 4). *See also* Demonstrative Ex. 4. Likewise baseless is Dr. Stewart's conclusion that "100%" of the bass-line notes in the LGO Recording "have been replicated in the last chorus of Thinking Out Loud." Not only has Dr. Stewart changed the notes from his previous transcription making them more similar,⁵ the interval and direction between the first and second notes is also different – whereas scale degree "1" in LGO descends the interval of a sixth, scale degree "1" in TOL ascends the interval of a third. Descending a sixth as compared with ascending in the opposite direction and in the smaller interval of a third is not a "replication," nor is it remotely indicative of copying. They produce different notes arrived at from different directions. Indeed, Dr. Stewart concedes "[t]he

⁴ Dr. Stewart incorrectly claims that I "never provided a transcription of the bass line in LGO." *See* Stewart Decl. ¶ 28. That is false. Counsel provided Plaintiffs with my transcription of the bass-line of the entirety of the LGO Recording (as well as the bass line for the entirety of TOL) during expert discovery. *See* Farkas Reply Decl. ¶ 8, Ex. 19. Further, musical example 2 in my Report presents a transcription of the bass-line at the opening of the LGO Recording.

⁵ Dr. Stewart's transcription of the TOL bass in the music example below paragraph 41 of his Declaration contradicts his transcription in the same bar in his full transcription of TOL. In the music example in his Declaration, he adds a rest and a note in bar 1 and omits a note in bar 2 as compared with his full transcription of TOL, making these parts appear more similar to the LGO bass than they actually are. *See* Frank Decl. Ex. 6, Bar 77-78; *see also* Demonstrative Ex. 4.

descending sixth gives the bass melody a different contour than if the melody ascended to F# from D.” *See* Stewart Decl. ¶ 36. In short, Dr. Stewart has not and cannot dispute that the TOL Bass Line is distinctly different from the bass-guitar part in the LGO Recording.⁶

G. TOL Features A Single Bass-Line at 0:24 and Thereafter

16. Dr. Stewart incorrectly labels the TOL Bass Line as an “additional” bass line which runs concurrent with the TOL Opening Bass Line. *See* Stewart Decl. ¶ 39. Dr. Stewart’s own words prove that to be objectively false. He concedes that “[t]he bass line of a musical work is set in a lower register and is typically the lowest melodic part.” *Id.* ¶ 24. When the bass-guitar part enters at 24 seconds in TOL, the low strings of the electric-guitar are an octave higher than the bass-guitar, as Dr. Stewart concedes. *Id.* In other words, as of 24 seconds into TOL, the lowest notes on the electric-guitar are not the “lowest melodic part” of the song. Thus, the TOL Bass Line is the bass-line of TOL as defined by Dr. Stewart and the TOL Bass Line is distinctly different from the bass-line in the LGO Recording.⁷

H. The Similarities Between the TOL Opening Bass Line and the Bass-Guitar Part in the LGO Recording Are Insignificant and Were Commonplace Prior to LGO

17. As I have explained, the “characteristics” in common (as identified by Dr. Stewart) between the bass-guitar part in the LGO Recording and the TOL Opening Bass Line are objectively insignificant and were in common use prior to LGO.

⁶ Dr. Stewart’s full transcription of the LGO Recording (Frank Decl. Ex. 4) demonstrates that the bass-guitar line changes throughout the song. Consequently, much of his analysis at paragraphs 30-32 of his Declaration (which focuses solely on two bars) contradicts his own full transcription.

⁷ Three reports, sworn deposition testimony and a declaration later, Dr. Stewart mentions for the very first time a melody in the baritone saxophone, suggesting it is a third bass-line in the LGO Recording. *See* Stewart Decl. ¶¶ 39-40. He failed to ever raise this supposed “bass line” in the three years he has been analyzing these songs, and calling the saxophone part a bass-line contradicts his own definition of what constitutes the bass-line in a song. The saxophone part is not in the deposit copy.

18. Dr. Stewart has not disputed that countless songs have bass-lines that consist of two measures. *See* Mov. Decl. ¶ 42. While he now claims I only identified one relevant example of prior art, I have demonstrated that the descending sixth at issue (present in the TOL Opening Bass Line but not in the TOL Bass Line) was in common use prior to LGO – for example, in “Georgy Girl,” “True Love Ways” (by Peter & Gordon), “Last One to Know,” “Once Upon a Dream,” “Fun, Fun, Fun,” “A Summer Song,” and “Hurdy Gurdy Man.” *See* Ferrara Report pp. 53-58.

I. Similarities In the Drum Parts Were In Common Use Before LGO and a Drum Part Is Not Included in the Deposit Copy

19. Dr. Stewart has conceded that the LGO Deposit Copy does not include a drum part. *See* Reply Farkas Decl. Ex. 20, 148:2-8. It is also undisputed that each element of the drum part in the LGO Recording was in common use prior to LGO and that the drum part, as a whole, existed prior to LGO. *See* Stewart Tr. 243:7-244:2, 245:9-22, 246:4-22; Mov. Decl. ¶ 47. Further, although Dr. Stewart takes issue with some differences that I have observed, he does not dispute that the drum parts are not the same.

20. Unable to confront these admissions directly, Dr. Stewart adopts a diversionary tactic by attacking the prior art examples I cited, which does nothing to moot his admission that each element of the simple, repetitive drum part in the LGO Recording was in common use. Regardless, my examples of prior art are proper. Dr. Stewart attacks the examples by focusing on the “sound” of the drum parts. Although the “sound” of a snare drum rim strike is not the same as the “sound” of a snare drum head strike, that difference is not consequential to rhythm. Indeed, Dr. Stewart’s opinion here regarding the significance of the duration between eighth-notes in the drum part contradicts his opinion regarding the insignificance of the duration of eighth-notes in the bass-line. When asked at his deposition about the difference in duration

between eighth-notes in the bass-lines in TOL and LGO, he was dismissive of the difference. He testified, “So how long is a half a beat in this particular tempo? Let’s see, if there are approximately 80 beats per minute then it would be well under a half a second for a half beat.” *See* Reply Farkas Decl. Ex. 20, 186:12-189:4. Thus, using Dr. Stewart’s analysis, the difference between an eighth-note on a ride cymbal and an eighth-note on a closed hi-hat cymbal would be well under $\frac{1}{4}$ of a second insofar as both are half a beat (*i.e.*, an eighth note), both have some duration, and the total duration is, according to Dr. Stewart, “well under a half a second.” Dr. Stewart also testified, “What is really critical here is the placement of the note.” *Id.* Importantly, Dr. Stewart does not dispute the fact that the placement of the notes in James Brown’s classic 1965 song “Papa’s Got a Brand New Bag” and his 1964 song “Out of Sight” is identical to the placement of the notes in the TOL drum pattern in the drum method book cited in my Report.

21. Finally, the student drum method books cited in my Report establish that the similarities in the drum patterns were widely available prior to TOL.

ADDITIONAL ELEMENTS

22. Dr. Stewart did not find any significant lyrical similarities in LGO and TOL and his Report establishes that their song structures are different. *See* Stewart Report, Pages 2 and 12-13, Ex. 14. It is likewise undisputed by Dr. Stewart that the key of each work is different,⁸ that 4/4 meter is a foundational musical building block and that countless musical compositions are written in 4/4 meter. It is undisputed that the LGO Deposit Copy does not specify the tempo with which to perform the composition, and Dr. Stewart has admitted that TOL and the LGO Recording have different tempos. *See* Stewart Report At Page 2, Ex. 14.

⁸ The key choice is often driven by the vocal range and comfort of the lead singer, the ease of playing the guitar in certain keys, and other similar considerations. Thus, whether LGO and TOL are in proximate keys is not significant, nor is it remotely indicative of copying.

THE TWO WORKS AS A WHOLE

23. Dr. Stewart testified that the two works as a whole are not identical or virtually identical to one another. *See* Stewart Tr. 275:17-25. I respectfully refer the Court to Paragraphs 13-14 and 48-50 of my Moving Declaration for a full recitation of the many reasons why the two works, as a whole, are quite different.

DR. STEWART'S MISREPRESENTATION AT PAGES 21-22 OF HIS DECLARATION

24. One final point merits brief attention as it undermines Dr. Stewart's opinions to a telling degree. At pages 21-22 of his Declaration, Dr. Stewart claims that "[o]f the 93 notes depicted in [his] transcription of Thinking Out Loud" on page 22 of his Declaration, "all but 12 notes, or 87%, are found in the chorus of LGO" – irrespective of the fact that these pitches appear in a different order, in different patterns and are set to different melodic rhythms. Dr. Stewart's assertion is, to say the least, nonsense.

25. It is not the mere use of a pool of pitches represented as numerical scale degrees that makes melodies similar. There are only 7 scale degrees in a major scale. Using Dr. Stewart's analytical method, he would find that the creator of the word "roasting" copied the word "organist" because they draw on the same 8 letters of the alphabet. The order or sequence of those 8 letters makes those two words different. Tellingly, the order of the notes in LGO and TOL in Dr. Stewart's "Full Score Comparison" under Paragraph 77 in his Declaration is markedly different. Moreover, the rhythmic durations to which those pitches are set are also markedly different as transcribed by Dr. Stewart. *Id.* Thus, like the difference in anagrams that merely share the same pool of letters, the musical expression in LGO and TOL in Dr. Stewart's "Full Score Comparison" is decidedly different. His misrepresentation finds no support in any musicological theory regarding tonal music and is highly misleading.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: September 27, 2018



By: LAWRENCE FERRARA, Ph.D.