

From the Studio to the Stage: Bruno Mars, Liveness, and the Out-of-Tune Voice in “Locked Out of Heaven” (2012)

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Résumé de l'article

Bruno Mars est réputé pour ses spectacles *live*. Cependant, la version studio de la chanson « Locked Out of Heaven » de son album *Unorthodox Jukebox* (2012) présente une différence marquée de ses spectacles *live* dans sa précision de tonalité. Comment peut-on aborder ce contraste, au-delà des possibilités de négligences, d'accidents, ou même de choix conscients ? La réponse pourrait résider dans une analogie entre la tonalité imprécise de la chanson du studio et le clip vidéo, où le réalisateur, Cameron Duddy, imite les défauts d'une cassette VHS, tout en utilisant la spontanéité du groupe *live* de Mars. Selon Sanden, la suppression des imperfections humaines peut souvent rendre une performance moins vivante. Après avoir analysé les performances vocales *live* et enregistrées (à l'aide de performances remédiatisées que nous avons trouvées sur l'internet), le clip vidéo de Duddy, ainsi que le discours critique sur la vivacité dans la musique populaire, nous soutenons qu'une telle chanson rétablit rapport de force entre la version « finale » de l'album et celle présentée par les artistes pop sur scène : Bruno Mars propose un nouveau regard sur les conséquences de la disco-morphose, grâce à une utilisation étonnamment parcimonieuse de la technologie de correction tonale au sein d'un chanson pop méticuleusement produite.

FROM THE STUDIO TO THE STAGE: BRUNO MARS, LIVENESS, AND THE OUT-OF- TUNE VOICE IN “LOCKED OUT OF HEAVEN” (2012)

Sophie Stévançe, Serge Lacasse, and Marion Brachet

INTRODUCTION

For a long time now, popular music has been the focus of much debate about authenticity, notably at the intersection of performance and the use of technology. The infamous Auto-Tune software, for example, is a common target for criticizing the inability of many popular music artists to sing in tune: this software allows for precise pitch correction, often causing an overly smooth vocal timbre, a robotic feel created by the inhuman perfect pitch and most of all by the artificial transitions between the notes. For these reasons, among others, Auto-Tune has been at the centre of discussions on the artificial and “phony” character of a wide range of “pre-fabricated” pop music. Many pop singers are thus accused of not being able to sing in tune during live performances. In the words of Melissa Ragona, “Pitch correction has come to mean pitch corruption” (2015, 154). Music critic David Hajdu summed up a great part of this sentiment about Auto-Tune: “What matters most in music—what music is—is sound, and I can think of no sound quite as oppressive as the systematic execution of technical perfection. Auto-Tune, by making every song perfectly correct, makes every song wrong” (Hajdu 2012).

As an illustration of the discrepancies that necessarily exist between a perfect, most likely auto-tuned studio performance, and a “live” performance, we ask the reader to listen to a short example of Adele performing live her hit song “Hello” in November 2015 at the NRJ Awards.

Example 1. Adele performing “Hello” (with album track, 0”–15”, with original track, from the video, starting at 16”)

In the first fifteen seconds of example 1, we have synchronized the *album* track with the video, while in the next fifteen seconds, the actual *live* sound-track remained unedited. This illustrates the model that we usually find in popular music: the album track is mostly perfect, thanks to producers and tools such as Auto-Tune, while many artists have some difficulty performing onstage as precisely as they appear to do on their recordings.

From this perspective, it might seem counterintuitive to imagine pop artists who sound better live than on records—or, more specifically, a singer who sings mostly in tune when performing live, but who might be out of tune on his or her studio recordings. This happens to be the case for Bruno Mars in one of his famous recorded songs, “Locked Out of Heaven,” featured on *Unorthodox Jukebox*, released in December 2012.

PITCH ANALYSIS

A focus on one short excerpt might help identify the nuances that caught our attention, at the beginning of the second verse after the first chorus. Very little accompaniment is heard during the four bars, foregrounding Mars’s vocal performance in the mix. Let’s first listen to it in its original context with example 2.

Example 2. Bruno Mars, “Locked Out of Heaven,” end of chorus and second verse

Mars did also sing “Locked Out of Heaven” live on many occasions, including in an “unplugged” version (example 3) performed for the Sirius satellite radio network in December 2012.

Example 3. Bruno Mars, “Locked Out of Heaven,” Sirius Satellite Radio Network

While Mars’s singing is very precise in this live version of our excerpt, it is not in his album version, where he is slightly out of tune. Even though Mars’s studio singing may not have appeared substantially out of tune at first listen, a more focused listening can help better assess his performance. In order to highlight those pitch imperfections, we have prepared a couple of short videos using music applications such as Xtrax Pro, Cubase, and Melodyne (an Auto-Tune rival software where pitch correction is done manually and offline, as opposed to Auto-Tune’s real-time automatic tuning).

Thanks to Audionamix’s Xtrax Pro software, we were able to extract the vocal performance from the album and live recordings in examples 2 and 3, respectively. In Cubase, we were then able to create three different versions of the song’s excerpt, each played against the musical accompaniment heard on the album. First, the original vocal performance as heard on the album. Second, Mars’s live vocal performance played against the album’s accompaniment. Finally, the album vocal performance again, but this time corrected using Melodyne. In order to better hear the differences, each version is played in a loop, sometimes twice in a row, so that each performance can clearly be told apart. In short, our examples first present a comparison between the original vocal track and the live performance, followed by a comparison between the original track and a “corrected” version obtained using Melodyne. All of this can be heard in example 4, in which the Cubase interface clearly shows what version is playing: the original studio version, the live version, and the edited version.

Example 4. Cubase video

Example 4 already shows us that the album vocal performance is not precise. But how much is it actually out of tune? In example 5, we use Melodyne to manipulate the first five syllables only of the excerpt (“You bring me to my knees”). The video shows how the software allowed us to edit the exact pitch of each syllable.

Example 5: Melodyne video

Some comments below the YouTube video of the Sirius Satellite Radio Network praise Bruno Mars because he “doesn’t need autotune,” sometimes even calling him “a living autotune.” The remaining question, then, is why an excerpt where he is singing out of tune with his voice singled out in the mix has not, precisely, been “autotuned.”¹

THE SUBJUNCTIVE APPROACH

At first glance it may appear to be a trifling question: even fans commenting on the live acoustic version write that “he sounds EXACTLY like in the original song”—“exactly,” not necessarily better, seeming to suggest they haven’t noticed the imperfections in the studio version, or at least they did not bother them. Another fan, however, does write that “he’s one of those singers that sound better than their album.” Whether this comment refers to its few pitch imprecisions on studio recordings or not, we still wish to act “as if” it weren’t a trivial matter—an approach Willemien Froneman (2014) would call “subjunctive.” Indeed, the fact that Bruno Mars doesn’t sing quite in tune is unexpected and makes us wonder, mainly because these tuning issues are absent from his live performances.

A first hypothesis could be the same as for many singer-songwriters, who often sing flat or sharp to better accommodate and highlight their intonation and accentuation, thus sounding *right* even if they are technically singing out of tune (Pistone 2020). Mars’s live performances, however, confirm that this is definitely not a convincing explanation in his case.

Donald Meyer (1995, 11) notes that “some rock artists ... have very little concern for phonography.” Would this be the case with Mars? When describing the studio work for his first album, Mars declares, “I’ve been working really hard. A lot of people think this was an overnight thing.” And more specifically about “Locked Out of Heaven,” critic Jody Rosen from *Rolling Stone* explains that “as usual with Mars, the aesthetic is tidy and impeccable, pop songcraft polished to a high-gloss gleam” (Stanisci 2012). Actual negligence seems unlikely then, particularly in vocal performance.

The song was composed and produced by high-quality artists: Mark Ronson, Jeff Bhasker, Emile Haynie, Philip Lawrence, and Ari Levine, as well as

¹ We are not implying that the vocal track *should* have been autotuned, merely that it very easily *could* have been, for it is a product of the pop recording industry, where it would have been standard to do so.

Bruno Mars, of course. With such a professional team, one could wonder what artist would accept not getting the best vocal performance possible on an album intended to sell millions of copies worldwide, especially when they are famously known for being able to record a perfect vocal track. Combined with the quasi-systematic use of Auto-Tune or similar software in recording studios, the mere existence of this imperfection, however insignificant, is intriguing. What makes it even more puzzling is that this excerpt, where the voice is heard almost by itself, is exploited by Mars during live performances, who has underlined it by using a recurring variation of its melody. Example 6 shows a montage of five such examples of Mars performing this excerpt live.

Example 6. Videos of the excerpt during live performances

These four bars are thus an important moment of the song. From a subjunctive perspective, how could we then approach this problem?

THE VIDEO

Let's first explore the song's video and consider what relationship could be drawn between the voice and the way the video was made. Video director Cameron Duddy seems to have exploited three major aspects: first, the degraded quality of the image that simulates an old VHS recording; second, the band's spontaneity, as if Bruno Mars and his musicians were filmed "in action" in a small venue; and third, a corresponding moving shooting technique, as if it was taken over the shoulder by some fan. "Director Cameron Duddy gives the footage a fuzzy, interlaced, old-school TV treatment that occasionally splits apart into RGB and V-Hold distortions. But, all those shots of an AKAI sampler remind you that there's lots of modern touches going on here, while the edit and the stage-crashing are more in-line with the energy of an All Ages punk show" (Gottlieb 2012).

Example 7 shows a short excerpt of Duddy's video.

Example 7. Excerpt of "Locked Out of Heaven" music video

In a nutshell, the video suggests a live filming, even though it is obviously a montage, as illustrated by the many alternate shots in slow motion and/or in high quality. The unedited voice on "You bring me to my knees" could then be part of this spontaneous atmosphere. Other examples of such multimodal aesthetics have already been commented upon: for example, Carol Vernallis (2017, 6) insists on the link between the saturated guitar sounds and the raw grain of Nirvana's "Smells Like Teen Spirit" video. What stands out in Mars's is the inversion of the standard relationship between sound and image in music videos. As Antoine Gaudin (2018, 98) points out, the music is usually thought to be the first and main element, the cause of the images we are seeing. Here, the simulated live performance of the video clip seems to be causing the vocal imperfections: Bruno Mars is shown performing, moving and jumping around, which would be a fair explanation for a slightly out of tune vocal delivery caused by weariness or even shortness of breath.

AUTHENTICITY AND LIVENESS: FROM THE STUDIO TO THE STAGE ...

The main clue we can gather from this video is this aesthetic of *liveness*. Philip Auslander repeatedly pointed out that liveness isn't an ontology separate from that of mediatized recordings, but a value (a belief, almost) opposed to the mediatized in a certain cultural economy (1999, 51). This opposition comes with a set of hierarchies that are subject to changes over time and between musical genres. For example, the distinction between rock and pop artists sometimes revolves around the need, for the former, to authenticate their music by being able to play it on stage, while the latter have the freedom to record music that is unreproducible outside of the studio (82). While it is certainly tempting to place Bruno Mars on the pop end of this spectrum, the fact that he is acclaimed for being able to sing his vocal parts live and Cameron Duddy's efforts to stage a vintage, live performance, at least prove that the set of values linking authenticity to liveness is very much at play in Mars's case. As Allan Moore (2002) reminds us, musical authenticity is not linked to sounds but to decisions to see a certain artist as authentic. This *authentication*, in rock discourse, is usually granted thanks to "attributes of intimacy" and "immediacy (in the sense of unmediated forms of sound production)." As shown in the comments below the YouTube video of the acoustic performance of "Locked Out of Heaven," Mars is seen as not needing the mediation provided by AutoTune, and therefore as authentic insofar as he remains independent from a technology that threatens said authenticity (Keil and Feld 1994, 296).

Arguments surrounding both values of liveness and authenticity are somewhat circular from a theoretical point of view: authenticity is judged by persons who determine their own authenticity criteria, and liveness exists only in relation to the mediated, an evolving relationship where each is influenced by the other and where, again, the musickers² (Small 1998) are the only deciders of the value remaining in each type of performance. In many cases, the same values and sonic elements are shared on stage and on recordings, and are praised in both contexts, and, according to Auslander, that is the reason they cannot be told apart from an ontological point of view: as he writes, "Whereas mediatized performance derives its authority from its reference to the live, the live now derives its authority from its reference to the mediatized, which derives its authority from its reference to the live, etc." (1999, 39). This never-ending circle of influence and imitation between the live and the recorded can make it difficult to distinguish clearly between recorded and "live" performances because of the flaws that artists decide to include in their recording. For instance, Paul Sanden relies on the case of Meg White's imprecise drum playing on many White Stripes studio tracks, and more specifically on "There's No Home for You Here" (2003) in identifying a certain liveness in the band's recordings (2013, 83–6). Her frequent "rushing" could easily have been edited, but has not, for it would have gone against the White Stripes' deliberately crafted lo-fi aesthetic. Even though his records cannot be called lo-fi, Mars's case might be similar:

² A "musician" is a person engaged in any way in a musical activity: a composer, a performer, a recordist, a concertgoer, a record buyer, etc.

his slightly out-of-tune singing produces several effects Sanden has identified as categories of liveness. He mentions seven (non-mutually exclusive) categories: temporal liveness, spatial liveness, liveness of fidelity, liveness of spontaneity, corporeal liveness, interactive liveness, and virtual liveness. It seems to us that three of them are mobilized here. The imperfect pitch evokes a liveness of fidelity because it can be perceived as faithful to an imagined unmediated ideal; a liveness of spontaneity because it includes the unpredictable mistakes inherent to human performance, as well as a corporeal liveness. As Sanden explains, “The idea that performance contains live, unmediated sound stems in part from a shared historical understanding that music performance emanates directly from exertions of human bodies ... [s]inging [being] the most obvious example of this type of performance” (23).

Free of any auto-tuning on this section, Mars’s voice lacks this smooth, robotic quality so common in pop music, and therefore displays what can be perceived as a “natural” bodily quality. For Sanden, detecting humanity allows the listener to better identify herself with the artist, a process that involves, among other things, imperfections. Sanden quotes Robert Philip: “The more thoroughly the moments of imperfection are removed [from a recorded performance], the less the listener is aware of this human process” (Philip 2004, 48). In other words, the more perfect a recorded performance, the less live it sounds. At the same time, live performances may raise other expectations. According to Sanden, “The realization that a performer’s skill does indeed measure up to the challenge posed by a particular composition, or to a level of improvisation expected by a demanding fan base is what elicits excitement from the audience. Conversely, the realization that a performer is not equal to the task is often a source of disappointment and points to one of the potentially unpleasant aspects of live performance” (Sanden 2013, 37).

We could thus consider that listeners appreciate, on the one hand, the “live” impression suggested by imperfections (such as what we heard in our Bruno Mars excerpt, or more obvious examples such as the White Stripes case), and on the other, the artist’s ability to sing well onstage.

... AND BACK

In short, we do not appreciate the same things when we listen to a studio recording as when we attend a concert. We can make the safe guess that producers know it: therefore, could out-of-tune singing be considered aesthetically irrelevant (that is to say, acceptable, rather than deliberate) by these producers who prefer instead a good feeling? When relating the recording process of “Nothin’ on You” from his first album, Bruno Mars recalls, “The journey wasn’t short at all—it was trial and error and trial and error.... It was just back and forth, man” (Rodriguez 2010). Given Mars’s ability to sing in tune, this might suggest that he and his team were looking for the right take, the one with the right feeling, rather than the right note. This would support a stylistic explanation of the pitch imperfection, which could further be reinforced by additional examples from Mars’s repertoire. First, the “You bring me to my

knees” line is not the only one with pitch imperfections in “Locked Out of Heaven”: the harmony on “cause your sex takes me to paradise” also sounds flat, which is probably not bothering to the average listener because it clearly emulates a reggae feel where such imprecision is common. This one example is manifestly intentional, because it can even be heard in the live acoustic version. Other tracks from the same period in Bruno Mars’s career sometimes feature flat and blurry pitches: see the last “cause Uptown Funk gon’ give it to you” before the chorus on “Uptown Funk” (2014), or several lines on “Gorilla” (2012) (for instance, “and you’re screaming: Give it to me baby” at 3’45” in the official music video). These last examples, again, could be explained by the spontaneity of the delivery, or by the musical style alluded to (something closer to soul, in “Gorilla”). This aesthetic, in part built around values of *liveness*, or around references to genres that value *liveness*, can be historicized in the career of Bruno Mars, because it seems to have vanished over the years. More recent singles such as “Finesse” (2018) do not display such examples of out-of-tune singing, notably because the use of Auto-Tune (or an equivalent pitch correction software) has become apparent.³

Even though Mars’s records have always been neatly produced, with or without pitch correction software, they are now fully characterized by this full-fledged pop studio aesthetic, at the expense of what remained of the “live” aesthetic. For Sanden, indeed, the absence of discernible sonic treatment contributes to the impression of a faithful or more authentic (live or recorded) performance: “In these cases, recordings and performances that display the least amount of technological ‘interferences’ are valued over—that is, considered more live than—those in which mediatization is audible or at least acknowledged (in the form of editing, artificial reverberation, or Auto-Tuning, for example). In other words, this type of liveness is one of fidelity: the further a recording or a performance deviates from ‘true’ (acoustic) performed sounds, the less live it is” (Sanden 2013, 35).

In “Locked Out of Heaven,” we hear a voice that does not sound as if it had been treated with Auto-Tune or Melodyne *because* it is slightly out of tune. We thus feel closer to a live performance.

GENRES AND CRITERIA OF LIVENESS

For both Auslander and Sanden, authenticity is defined through evolving relationships between the stage and the record. Some musical genres, such as rock, will favour a distance between the recorded version and the live one (Sanden 2013, 72). This has been the case for iconic bands such as Deep Purple, Led Zeppelin, or The Grateful Dead, whose live performances were generally celebrated to the detriment of their album versions. The Grateful Dead were valued as an authentic band whose talent was revealed onstage, contrary to most

3 For a comparison that might help distinguish an example with heavy autotuning from one with no or more discreet autotuning, listen closely to “Finesse,” particularly the transitions between the high notes, and then to “Grenade” (2010), where “corporeal” throat sounds can still be heard when Mars is pushing to reach the high notes.

“pre-fabricated” pop bands whose live versions were, and are generally, tentative reproductions of what is heard on recordings. It seems that the aesthetics of artists such as Bruno Mars, or even other artists like Sia (see Lacasse 2010, 2016a, 2016b), is partly founded on such spontaneity: their persona and reputation are built around their ability to be excellent live performers. For example, Sia was shown performing her famous hit “Chandelier” while lying on her belly in a bed on the *Late Night Show* (Sia 2014), taking huge risks and displaying a sort of “aesthetic virtuosity” (Stévançe 2005), where her performance goes, in a way, beyond the version found on the CD. Her criteria of liveness are different, still, from the ones associated to Bruno Mars, whose live performances include instrumental parts as well: in the case of Sia, the live aspect is attached to the voice only, because the rest of the music is the pre-recorded studio version. Her performances also revisit usual forms of interactive liveness, another category presented by Sanden. While music is considered *live* “when it emerges from various interactions between performing partners and/or between performers and listeners/viewers” (Sanden 2013, 11), the performance is shared in an unusual way in most performances of “Chandelier,” with Sia singing with her back to the public and a young dancer “representing” Sia’s almost absent body and taking some part of responsibility for the “liveness” of the performance. This absence of interaction between Sia and the public, which was established to diminish the “live” effect, evidently created an opposite effect: the public admires the vocal performance as well as the one given by the dancer, but spectators, when they could, were sometimes concentrated on all the small gestures Sia would make during important moments of the song.

Several other performance and genre contexts have important effects on the link between the voice and its type of *liveness*. Adele, for example, often lacks the precision found in the studio versions of her songs, as shown by our opening example; however, these imperfections are integrated in her own live aesthetic, and have sometimes been clear emulations of Black voices associated with jazz, blues, and soul (Edgar 2014). These references include pitch inflexions as well as “distinctive signs of wear,” making “vocal strain ... an integral element in Adele’s vocal timbre,” at least in her 2012 Grammy performance (Adele 2012), according to Amanda Nell Edgar (2014, 174). While such signs of (simulated) vocal fatigue make for a probable explanation for pitch imperfections in the studio version of “Locked Out of Heaven” but are mostly absent from Mars’s live performances, they are much more prominent in Adele’s live performances than in her studio recordings. This is but one additional example of the multifaceted ways in which liveness may be interpreted: impressions of liveness to varying degrees are shaped by an infinite number of aesthetics of relationships between the artist and the live performance. It was this shifting terrain of relationships and the expectations associated with them that initiated the controversies around the infamous performances by Beyoncé (CBS News 2013), Katy Perry (2013), Adele (2016; Tasby 2017), or even Celine Dion (2015), and before them by bands such as Milli Vanilli (Nonelle n.d.). In all these cases, the origin of the debate was not so much the fact that the artists were singing out of tune or that their performances were pre-recorded, but rather that they

had been “unmasked,” that their “imperfect” selves had been revealed. They broke the expectations of the “perfect show,” of the ideal spectacle valued by (at least some part of) their audience.

CONCLUSION

In 1981, Antoine Hennion observed that our way of listening has adapted to the fact that a record—that it to say, our main listening device—is not “a neutral format,” precisely because we don’t have the same expectations when listening to a record or a live concert. He explains, “The phonographic ear has become more and more sensitive to the components of sound, following a true *discomorphosis* of music: tones, treble and bass correction, bright timbres; separation of the instruments, intensity balance, sonic space . . . , etc.” (Hennion 1981, 156, our translation, Hennion’s emphasis).

This new way of listening accounts for our knowledge that what we hear on a record is not a pure reproduction of a recorded performance, but rather a unique product entirely crafted as such. Even if our analyst ears might be over-sensitive to details, attention to specific timbres and to sound details is now shared by the general public, who is simply more accustomed to produced music than to live music. Auslander (1999) surely meant to confirm this idea when he wrote that the live is less and less present in our culture, and almost impossible to find without any trace of mediation. For Hennion, not only has our way of listening changed, music itself and its whole relationship to the public has evolved, technical evolutions being at the centre of its new definition (Hennion 1986, 132).

This is why a small imprecision such as the one we discussed here cannot be ignored: current recording techniques make them so rare that they automatically become significant, even if they would be meaningless in a live performance. Therefore, do examples like “Locked Out of Heaven” negate *discomorphosis*, by trying to inject more liveness in a record industry where the producer’s role is increasingly important? Not necessarily. While *discomorphosis* represents a new listening phenomenon, paradoxically, the ideal of high fidelity has not completely disappeared. According to Hennion, *discomorphosis* did not call the classical recording principles into question, because the producers’ editing can still be considered secondary workings, while the recorded (vocal) performance, even modified, remains the primary element.

Whether more recent evolutions in the recording industry than those studied by Hennion have caused a more profound shift in our way of listening might be a legitimate question for future research. In Bruno Mars’s case, which is our focus for now, we can at least notice that some contexts seem to reintroduce the classic ideal where the recording “claims a negative artistic function” (Hennion 1981, 155; our translation) and is trying to be as discreet as possible. Even if Mars’s albums have always been neatly produced, a few hints towards a more discreet way of recording subsisted in his albums of the first half of the 2010s. In our case study the effects of *discomorphosis* are balanced by an original recording ideal, thus restoring the proximity between the “definitive” recorded

version and the one presented in concerts. While this type of evolution, fuelled by the values associated to the aesthetics of liveness, has already been noticed by Auslander and Sanden, this example might be surprising because it comes from the mainstream pop industry, and not from a closely defined genre context such as what usually characterizes a rock aesthetic, where liveness is often more prominently valued. In the end, whether this “flaw” in Bruno Mars’s singing was fortuitous or contributing to an aesthetic “plan” implemented by the artist and his team is not such a crucial issue: even in the former case, the fact that it did pass through the (usually very tight) mesh of the production net makes it relevant in discussions about the ever-changing relationship between studio and stage performances.

BIBLIOGRAPHY

- Adele. 2012. “Adele Performing Rolling in the Deep @ the 2012 Grammy Awards.” YouTube. <https://www.youtube.com/watch?v=x1mlyIUe6Q8>.
- . 2015. “Hello,” 25. Adele, with Paul Epworth, Greg Kurstin, and Ryan Tedder. XL, Columbia.
- . 2016. “When We Were Young: Live at the BRIT Awards 2016.” YouTube. <https://www.youtube.com/watch?v=HDpCv71r-oU>.
- Auslander, P. 1999. *Liveness: Performance in a Mediatized Culture*. London: Routledge.
- Bolter, J. David, and R. A. Grusin. 2000. *Remediation: Understanding New Media*. Cambridge, MA: MIT Press.
- CBS News. 2013. “Beyonce Admits Inauguration Day Lip Sync, Says She’ll ‘Absolutely Be Singing Live’ at Super Bowl,” 31 January. <https://www.cbsnews.com/news/beyonce-admits-inauguration-day-lip-sync-says-shell-absolutely-be-singing-live-at-super-bowl/>.
- Dion, C. 2015. “Hymne à L’Amour (Live at American Music Awards AMAs 2015).” YouTube. https://www.youtube.com/watch?v=ifyz98_eWd4.
- Edgar, A. N. 2014. “Blackvoice and Adele’s Racialized Musical Performance: Blackness, Whiteness, and Discursive Authenticity.” *Critical Studies in Media Communication* 31 (3): 167–81. <https://doi.org/10.1080/15295036.2013.863427>.
- Erll, A., and A. Rigney. 2009. *Mediation, Remediation, and the Dynamics of Cultural Memory*. Berlin: Walter de Gruyter.
- Froneman, W. 2014. “Subjunctive Pleasure: The Odd Hour in the Boeremusiek Museum.” *Popular Music* 33 (1): 1–17.
- Gaudin, A. 2018. “Le clip comme forme d’expression musico-visuelle: pour une esthétique de la relation musique-images.” *Volume!* 14 (2). <https://doi.org/10.4000/volume.5556>.
- Gottlieb, Steven. 2012. “Bruno Mars ‘Locked Out of Heaven’ (Cameron Duddy, dir.)” Videostatic, 15 October. <https://www.videostatic.com/content/watch-it-bruno-mars-locked-out-heaven-cameron-duddy-dir>.
- Hajdu, D. 2012. “Imperfect Pitch.” *New Republic*, 22 June. <https://newrepublic.com/article/104194/david-hajdu-music-imperfect-pitch>.

- Hennion, A. 1981. *Les Professionnels du disque*. Paris: Métailié.
- . 1986. “La prise de son: une redéfinition de l’unité musicale.” *Vibrations: Musiques, médias, société* 2:124–32.
- . 1993. *La Passion musicale*. Paris. Métailié.
- . 2000. *Figures de l’amateur: Formes, objets, pratiques de l’amour de la musique*. Paris: La Documentation française.
- Keil, C., and S. Feld. 1994. *Music Grooves: Essays and Dialogues*. Chicago: University of Chicago Press.
- Lacasse, S. 2010. “Slave to the Supradiegetic Rhythm: A Micro-Rhythmic Analysis of Creaky Voice in Sia’s ‘Breathe Me.’” In *Musical Rhythm in the Age of Digital Reproduction*, edited by Anne Danielsen, 141–55. Aldershot: Ashgate.
- . 2016a. “From Geno-Song to Pheno-Song: From Adele to Sia.” Presented at the annual congress, MusCan, Calgary, 1–3 June.
- . 2016b. “Singing Dis/ability: A Phonostylistic Analysis of Sia’s (Troubled) Persona in ‘Breathe Me’ (2004), ‘Chandelier’ (2014) and ‘Alive’ (2015).” Presented at the annual conference, IASPM-Canada, Calgary, 28–30 May.
- Mars, Bruno. 2012a. “Locked Out of Heaven,” from La Maroquinerie in Paris, official live performance, November. <https://www.youtube.com/watch?v=130Xf68zRcM> (1’50).
- . 2012b. “Locked Out of Heaven,” live at SiriusXM, December. <https://www.youtube.com/watch?v=44RB94H8HrE>.
- . 2012c. “Locked Out of Heaven,” live Graham Norton Show, 7 December. <https://www.youtube.com/watch?v=TwNOiXCGPpU>.
- . 2012d. “Locked Out of Heaven,” live on NBC. <https://www.youtube.com/watch?v=TonQ3CX8fak> (1’54) (link discontinued).
- . 2012e. “Locked Out of Heaven,” official music video. Directed by Cameron Duddy and Bruno Mars, WMG. <https://www.youtube.com/watch?v=e-fA-gBckjo>.
- . 2012f. “Locked Out of Heaven,” *Unorthodox Jukebox*. Mark Ronson, Jeff Bhasker, Emile Haynie, Bruno Mars, Philip Lawrence, and Ari Levine. Atlantic, Elektra.
- . 2013. “Locked Out of Heaven,” live in Madrid, November <https://www.youtube.com/watch?v=Jn6U-L2vwwM> (3’7).
- . 2014. “Locked Out of Heaven,” live in Jakarta. <https://www.youtube.com/watch?v=8oYAUWHT7Y4> (3’25).
- Meyer, D. 1995. “The Real Cooking Is Done in the Studio: Toward a Context for Rock Criticism.” *Popular Music and Society* 19 (1): 1–15.
- Nonelle. n.d. “The Milli Vanilli Tragedy.” YouTube. <https://www.youtube.com/watch?v=EdRrCZ9DDcw>.
- Moore, A. 2002. “Authenticity as Authentication.” *Popular Music* 21 (2): 209–23.
- Perry, Katy. 2013. “‘Roar’ Live 15th Edition,” NRJ Music Awards. <https://www.nrj.fr/music-awards/videos/katy-perry-roar-live-15th-edition-10765451>.
- Philip, R. 2004. *Performing Music in the Age of Recording*. New Haven, CT: Yale University Press.
- Pistone, P. 2020. “Chanter faux pour dire juste.” *Volume!* 16 (2) / 17 (1): 199–207.

- Ragona, M. 2015. "Doping the Voice." *The Oxford Handbook of Sound and Image in Digital Media*, edited by Carol Vernallis, Amy Herzog, and John Richardson, 154–69. Oxford: Oxford University Press.
- Rodriguez, J. 2010. "B.o.B. Collaborator Bruno Mars Talks Long Road to Success." MTV, 12 May. https://archive.wikiwix.com/cache/index2.php?url=http://www.mtv.com/news/articles/1639050/20100512/bruno_mars.jhtml&title=lire%20en%20ligne#federation=archive.wikiwix.com&tab=url.
- Rosen, J. 2012. *RollingStones*, <http://www.rollingstone.com/music/songreviews/locked-out-of-heaven-20121010> (link discontinued).
- Sanden, P. 2013. *Liveness in Modern Music: Musicians, Technology, and the Perception of Performance*. New York: Routledge.
- Sia. 2014. "Sia Performance 'Chandelier.'" YouTube. <https://www.youtube.com/watch?v=UOX8f-cw10>.
- Small, C. 1998. *Musicking: The Meanings of Performing and Listening*, Hanover: Wesleyan University Press.
- Stanisci, Grace. 2012. "Bruno Mars Admits to Channelling the Police in His New Song 'Locked Out of Heaven.'" Yahoo!entertainment, 18 October. <https://www.yahoo.com/entertainment/blogs/sound-check/bruno-mars-admits-channelling-police-song-locked-heaven-184550045.html>.
- Stévance, S. 2005. "La virtuosité au service de la transversalité musicale." *L'Éducation musicale* 527/528 (November/December): 32–9.
- Tasby, T. 2017. "Adele Destroys George Michael Tribute." YouTube. <https://www.youtube.com/watch?v=RU3w7dHcK3U>.
- Turino, T. 2009. *Music as Social Life: The Politics of Participation*. Chicago: University of Chicago Press.
- Vernallis, C. 2017. "Beyoncé's Overwhelming Opus; or, the Past and Future of Music Video." *Film Criticism* 41 (1): 1–31. <https://doi.org/10.3998/1.3761232.0041.105>.

ABSTRACT

Bruno Mars excels in his live performances. However, the studio version of the song "Locked Out of Heaven," from his *Unorthodox Jukebox* album (2012), is distinctly different from his live performances of the piece in its pitch accuracy. How can we address this contrast, beyond the possibilities of negligence, accidents, or even conscious choices? The answer might reside in an analogy between the inaccurate pitch of the studio song and the video clip, where the director, Cameron Duddy, imitates the deficiencies of a VHS cassette, at the same time utilizing the spontaneity of Mars's live band. According to Sanden, the removal of human imperfections can often make a performance seem less live. After analyzing the live and recorded vocal performances (with the help of re-mediatized performances we found on the internet), Duddy's video clip, as well as the critical discourse on liveness in popular music, we argue that such a song re-establishes the power balance between the "final" version of the album and the one presented by pop artists on stage: Bruno Mars offers a new take

on the consequences of discomorphosis, thanks to a surprisingly parsimonious use of pitch-correction technology within a meticulously produced pop song.

Keywords: Bruno Mars, pitch correction technology, liveness, Adele, human imperfection

RÉSUMÉ

Bruno Mars est réputé pour ses spectacles *live*. Cependant, la version studio de la chanson « Locked Out of Heaven » de son album *Unorthodox Jukebox* (2012) présente une différence marquée de ses spectacles *live* dans sa précision de tonalité. Comment peut-on aborder ce contraste, au-delà des possibilités de négligences, d'accidents, ou même de choix conscients ? La réponse pourrait résider dans une analogie entre la tonalité imprécise de la chanson du studio et le clip vidéo, où le réalisateur, Cameron Duddy, imite les défauts d'une cassette VHS, tout en utilisant la spontanéité du groupe *live* de Mars. Selon Sanden, la suppression des imperfections humaines peut souvent rendre une performance moins vivante. Après avoir analysé les performances vocales *live* et enregistrées (à l'aide de performances remédiatisées que nous avons trouvées sur l'internet), le clip vidéo de Duddy, ainsi que le discours critique sur la vivacité dans la musique populaire, nous soutenons qu'une telle chanson rétablit rapport de force entre la version « finale » de l'album et celle présentée par les artistes pop sur scène : Bruno Mars propose un nouveau regard sur les conséquences de la disco-morphose, grâce à une utilisation étonnamment parcimonieuse de la technologie de correction tonale au sein d'un chanson pop méticuleusement produite.

Mots-clés : Bruno Mars, technologie de correction de tonalité, vivacité, Adele, imperfections humaines

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