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JUAN CARLOS VASQUEZ

ABSTRACT

This text presents a compact historical survey of musical borrowing and sound appropriation from medieval chant through the latest digital experiments outside popular music involving extensive use of sampling. It then describes two artistic research projects consisting of a series of pieces that digitally reimagine selected works from the classical music repertoire, including thoughts about the contemporary relevance of giving new life to classical music through the perspective of new media.

Throughout history, the concept of “appropriation” has had multiple meanings and applications. In creative fields, particularly in the visual arts, one key motivator for incorporating someone else’s work into a new piece was to pay tribute to an influential figure of the past [1]. In that sense, appropriation served as a connecting bridge between periods of creation by recontextualizing an existing piece, shedding new light on a work by an old master. In the sonic world, we have musical “borrowing,” or “the creation side of copyright” [2]: common practices of reusing existing musical materials as sources for new pieces. In electroacoustic music, this practice differs from more political postures against copyright (distant from my personal approach), such as *plunderphonics*, a term coined by John Oswald, and comparable to Duchamp’s readymades (an example of what Oswald called “total importation”) [3]. Historically speaking, however, musical borrowing has indeed been used more as a source of inspiration than as a tool for issuing statements regarding authorship. Joseph Straus [4] outlines three models to explain the motivation behind the practice of musical quotation. The first, “influence of immaturity,” refers to borrowing as a necessity, common in the youthful phase prior to developing a personal musical style. The second, “influence of generosity,” is a more mature and subtle exteriorization through art of enriching artistic influences and may be also found in the artist’s late works.

In the third theory, “influence of anxiety”—mostly applied to music in the twentieth century—the interrelation of original and borrowed ideas (the new and the old) are presented in conflict, crucially defining the work.

Regardless of the particular individual drive to practice it, appropriation in classical music has been present prominently since medieval chant, where composers often used existing melodies as the starting point for their new pieces [5]. Likewise, the contrapuntal development of polyphonic music during the Renaissance also originated in preexisting musical lines [6]. In a similar vein, during the Baroque period, J.S. Bach borrowed music from composers such as Vivaldi, Albinoni, Telemann and Frescobaldi [7].

Musical borrowing was however somewhat more infrequent in the nineteenth century [8]. The newly acquired status of the composer prioritized defending individuality by defying tradition [9], lessening the role of quotation. In spite of this, a significant number of examples can be found in Yu’s well-documented list showing how Beethoven also borrowed from Clementi and Cherubini; Schubert did the same from Mozart and Beethoven. Handel, Mendelssohn, Haydn, Mozart, Wagner, Debussy, Mahler and Rachmaninoff, to mention a few, actively used musical quotation in their own pieces [10].

MUSICAL QUOTATION IN THE 20TH CENTURY

Appropriation had a meaningful role in music composed in the twentieth century, from both practical and philosophical points of view. In particular, Beethoven was a recurrent source for quotation, chosen as the embodiment of the common practice period. Cage, for instance, mentioned how repeating Beethoven 50 times per second “will have not only a different pitch but a different sound quality” [11], being transformed into a sound source inside a timbre palette where noise and musical sounds represent the extremes. Extensive borrowings from Beethoven can be found in Mauricio Kagel’s piece *Ludwig van* (1969), one of the first attempts to create an entirely new work by modifying and layering existing music from a different single composer’s musical

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borrowings. Other composers also paid tribute to Beethoven by quoting his music to different extents, such as in *Metamorphosen* (1947) by Richard Strauss; Shostakovich's reinterpretation of Beethoven's *Moonlight Sonata* in his *Sonata for Viola and Piano* (1975); and Stockhausen in *Opus 1970*, also known as *Stockhoven-Beethausen*. One of the archetypal examples of "poly-stylistics," Alfred Schnittke, even composed cadenzas for Beethoven's violin concerto, in which he quotes Beethoven as well as concertos by Brahms, Shostakovich and Alban Berg [12]. Finally, Charles Ives extensively borrowed material from Beethoven in each of the movements of his second piano sonata [13].

One major milestone in the use of musical quotation in contemporary music is the third movement of *Sinfonia*, by Luciano Berio. Berio borrowed musical lines from 18 different composers (Beethoven among them), managing to craft a meaningful collage out of musical fragments overlapped mostly on top of the third movement of Mahler's second symphony. Berio himself described the piece as a "documentary on an *objet trouvé* recorded in the mind of the listener" [14]. Thanks to Berio's technical mastery, what we have in *Sinfonia* appropriately illustrates the cultural meaning of quotation summarized by Metzger:

Borrowing then creates an unceasing interaction between the two sides, between both the original and the altered musical material, and the original and the new cultural associations. That interaction creates the thrill of hearing what happens when music takes on new life within music [15].

SOUND BORROWING IN THE DIGITAL AGE

In current times, musical borrowing exists in many forms and applications, often defying categorization into a specific genre. In "Recomposed by Max Richter," Vivaldi's Four Seasons are composed again by using variations of cyclical acoustic fragments extracted from Vivaldi's score. This is one case where the nuances between a remix, a reworking and an entirely independent work are difficult to define, even for the composers themselves: When asked about the classification of his work, Richter remarked: "There is not a single answer" [16]. Arrangements for analog synthesizer of classical pieces such as the works by Isao Tomita and Wendy Carlos similarly cannot be categorically classified as remix, transcription or exercise of creative appropriation taking the original score as a "rough guide" [17].

While popular culture is not the main focus of this study (including the extensive use of sampling in mainstream electronic music), *Collage 1* (1961) by James Tenney is a noteworthy case given the specific application of appropriation of popular culture in the tape music genre. *Collage 1* uses fragments of Elvis Presley's cover of *Blue Suede Shoes* by Carl Perkins. It is composed by reshuffling and rearranging the original piece with playbacks at different speeds. Brian Eno remarked that Tenney provided us with the chance to hear everyday music differently while "all that was inherently Elvis radically influenced our perception of Jim's piece" [18]. This goes in line with existing research that indicates that the rec-

ognition of borrowed material in an appropriated work has a significant impact on the general perception of the work that served as a source [19].

Finally, within the electroacoustic music field, there is a noteworthy example by Francis Dhomont, *Frankenstein Symphony*, that was composed by reordering fragments of music from 22 other composers' works, mostly friends of Dhomont [20]. Recent examples also include Eduardo Miranda's *Mozart Reloaded*, an electroacoustic defragmentation of several Mozart sonatas, and *Recomposed by Matthew Herbert: Mahler Symphony X*, in which Herbert manipulates and rerecords Mahler's 10th Symphony using the acoustic spatial responses of a variety of death-related venues.

CASE STUDY 1: THE COLLAGES SERIES

In late 2014, a U.S.-based label released my first series of *Collages*, meant to be an experimental application of the previously discussed theories. *Collages* is a series of nine works conceived by first taking recordings of a number of compositions from the common practice period. Later, I reimagined the pieces by digitally transforming sections of them and superimposing the processed fragments as a collage. This procedure has been used previously [21], although using original compositions as a source instead of existing classical pieces. For *Collages*, the most important compositional constraint was to use in each piece only one classical work for solo instrument as the sole source. It was an attempt to challenge myself to obtain as much timbral variety as possible from a spectrally limited source.

The first nine pieces were created between 2012 and 2014. The procedure consisted mostly of dividing the sound source into layers, processing each layer individually in slow transformation, and ultimately assigning a different narrow range of frequencies—similar to a band-pass filter—for each layer before beginning a superimposition process with the rest of the processed sounds. One of the earliest pieces, *Collage 2*, applies this approach to Beethoven's *Piano Sonata No. 21 in C major, Op. 53*, known as the "Waldstein." The final result allows the listener to appreciate sonic remnants of a familiar piece, albeit heavily processed, layered and evenly distributed in the audible spectrum of frequencies. Choosing Beethoven as the subject for one of my earliest experiments signaled the desire to bring the conceptual aims of quotation during the twentieth century into newly composed electroacoustic music.

To date, the pieces composing *Collages* have been premiered, performed and discussed at a significant number of universities, academic events and festivals around the globe. The title itself, "Collages," is self-explanatory in suggesting a methodology of superimposition. Bailey associated this approach with the constant sensory overload imposed by post-modernity [22]. The collage, also known as audio-montage, had various purposes in the latter half of the twentieth century, from political goals including those of "insurrectionary elements in society" [23] to exploration of the boundaries of sonic digital manipulation, such as the previously mentioned *Collage 1* by Tenney. Bailey once interviewed sound activist

Fig. 1. Image illustrating the level of gestural and spectral expansion in the newly composed piece (Vasquez's *Collage 10*) when compared to the source material (Sibelius's *Romance, Op. 24, No. 9*). (© Juan Carlos Vasquez)

Bob Ostertag, who promotes the use of a single source for the creation of sonic worlds of layered expansions of the original sample [24]. One of Ostertag's iconic pieces, *Sooner or Later* (1991), is an almost hour-long composition having as its only material a brief recording of a boy burying his father during the Salvadoran Civil War. My *Collages* are by design untouched by any political influence; however, I find very appealing the challenge of completing an entire piece with a strict self-imposed limitation of this nature. In the electroacoustic world, this would be the equivalent of guaranteeing the cohesion of a piece by vastly expanding in time a small motif, a technique known as thematic development [25].

From 2014 to 2018, I composed a second series of nine collages, named *Collages Vol. 2*. The main purpose of *Collages Vol. 2* was to continue the aesthetic premise of the previous release, albeit with a major difference in compositional approach. While the first *Collages* bared an intuitive structure, *Collages Vol. 2* undertook planned development. The first *Collages* followed the structural principles outlined by Pierre Schaeffer: In opposition to the traditional method of follow-

ing a preplanned organization where sound eventually finds accommodation, in the first *Collages* "the material preceded the structure" [26]. Previous similar ideas to this paradigm can be found even earlier, in the equally pioneering work of Edgar Varèse. In relation to *Hyperprism* (1922): "Musical coherence is not derived primarily from such traditional procedures as thematic-motivic development and linear progression but from the development of . . . textural entities" [27]. In contrast, while *Collages Vol. 2* still considered textural organization paramount for defining musical hierarchies, it involved previously predefined content and, more importantly, a defined structure before initiating the proper compositional process. This plan was a conscious choice to expand the application of appropriation from the sound material, aka sound sources, to the appropriation of the formal/structural decisions seen in music from the common practice period.

For example, *Sibelius Collage* is an electroacoustic reinterpretation of Jean Sibelius's *Romance, Op. 24, No. 9*, commissioned for the official 150th anniversary of Sibelius's birth. The historical importance of the occasion imposed a special challenge of seeing treasured tradition through the eyes of new media. Thus, for the *Sibelius Collage*, I decided to keep the same duration (3:14 minutes), the same form (a

classic ternary form, A-B-A') and the same expressive curve (introduction-conflict-climactic resolution) as the original *Romance, Op. 24, No. 9*. However, the new piece was thoroughly transformed by overlapping a total of 15 layers processed predominantly with quasi-synchronous granular synthesis and the audio stretching algorithm proposed by Paul Nasca [28]. The most evident outcome of the layering process was a spectral expansion of the piece, but a closer look into the spectrogram also shows an intended development process of gestures and contours (see Fig. 1).

Other classical formal frameworks used in other pieces included the rondo form (*Collage 14*) and a 22-voice spectral fugue (*Collage 16*), the latter inspired by Michael Norris's idea of "stochastic massed textures from multiple independent, desynchronized versions of a single sound file" [29]. Finally, a planned mosaic or "moment form" was also used (*Collages 11* and *13*), a strategy composed of a collection of moments where each moment is defined as a "self-contained (quasi-) independent section, set off from other sections by discontinuities" [30].

CASE STUDY 2: THREADBARE

Threadbare is a collaborative piece for live cello and loudspeaker orchestra, premiered in late 2018, featuring also a choreography for dancers by Kim Brooks Mata. The source for this piece is Eugène Ysaÿe's *Sonata for Solo Cello*, Op. 28. In *Threadbare*, the form, sonic material, digital processing and original structure from the sonata all informed one another in a process that fits the definition of “multiscale composition” or “interplay between inductive and deductive thinking, from the specific to the general and from the general to the specific” [31]. The piece is approximately 11 minutes long, starting with a brief improvised section followed by three contrasting sections.

In the opening prologue, the cello is instructed to improvise based on variations of the opening bars of the original sonata. The key points (both for this section and the rest of the piece), are the melodic contours of two specific portions, marked “A” and “B” in Fig. 2. The cello returns to these ideas using different approaches throughout the piece (extended techniques, sustained sounds and polyphony) in order to guarantee aesthetic coherence when played along with the electronics.

In the second section of *Threadbare*, multiple layers of processed cello sound progressively expand the overall textural density by occupying a different range of frequencies every time a new element comes in. Ultimately, toward the end of the section, a spatial tutti is reached, reinforced by the live diffusion. The live cello performs slow melodic variations of the Ysaÿe sonata and becomes an extra layer in the composite electroacoustic texture. Eventually, the live cello is gradually overpowered by the accumulation of speakers broadcasting the piece.

The third section, inspired by the parametric system present in Stockhausen's *Carré*, uses a custom machine in the Max4Live environment that processes the Sonata in a frame for integral serialism (in nine steps) for a number of param-

Fig. 2. Opening bars of the original *Sonata for Solo Cello*, Op. 28 by Eugène Ysaÿe, showing in boxes the specific portions that served as a main motif for the entire piece. (© Juan Carlos Vasquez)

eters: pitch (microtonal changes), panning, amplitude, gate and orientation (in reference to reversed or normal playback). Each time one series is completed, a new one is generated and started. The overall dynamics of the piece diminish substantially, making the live cello regain a predominant role. The live cello performs long, sustained notes as a response to strings sounds in the electronics, which resemble a melodic theme.

The third and final section relies extensively on overlapping layers with band-pass filtering, giving the impression of hearing a memory in the distance. In this section, the layering occurs in a subtler way: Instead of an aggressive accumulation of layers, there is a gradual deployment of a 5-voice spectrally divided canon with an extract from the Ysaÿe sonata.

DISCUSSION AND CONCLUSIONS

For John Milton, plagiarism of a work could not be accepted “if it [were] not bettered by the borrower” [32]. I steer clear of presenting myself as “bettering” as the borrower in any way, as I profoundly respect and admire every composer I paid tribute to in my releases.

While the documentation of my applications of sound appropriation as a compositional tool aims to contribute to a better understanding of my work, I hope to have conceived a valuable artistic project, regardless of whether or not it is experienced with knowledge of the context in which it was created. Therefore, I strongly encourage the reader to listen to the pieces seeking a purely aesthetic experience.

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