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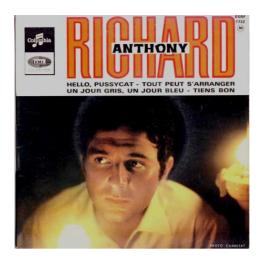
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Swan Songs & Extended Forms

IN THE TWO YEARS THAT PRECEDED the release of Abbey Road¹, The Beatles, had been going through hard times. The personal acrimony that had characterized the sessions for their double LP The Beatles (1968) had steadily increased during the recording of Get Back in early 1969. In the months that followed, a series of low intensity recording sessions took place as The Beatles carefully pondered their next move. Finally, Paul McCartney contacted producer George Martin about the possibility of working together again on one last album. Martin himself described the sequence of events:



I think we all knew that Abbey Road would be their swan song ...We had been very unhappy during Let It Be [...] So I was quite surprised when Paul rang me up and asked me to produce another record for them. He said, "Will you really produce it?" and I said, "If I'm really allowed to produce it I'll really produce it. If I have to go back and accept a lot of instructions which I don't like, then I won't do it." But Paul said they wanted me to produce it as I used to, and once we got back in the studio it was nice. (Buskin 1999: 64)

As compared with *Get Back*² sessions, the sessions for what was to become *Abbey Road* were relatively magnanimous. Individual egos were subsumed for the sake of the music, and for the first time since the glory days of 1966-67, all four Beatles are featured playing on nearly every track. Following a set of varied and impressive songs like "Come Together," "Something," and "Oh! Darling," *Abbey Road* concludes with a series of fragments that constitute the bulk of the LP's second side. Although listed as discrete tracks in the liner notes, one can readily detect musical elements that suggest the presence of organic unity. It is this perception of unity that has resulted in the sequence being unofficially dubbed the *Abbey Road Medley*.

Composing to Tape

The advent of recording technology has granted the listener unique access to the inner workings of compositional process. Alternate takes and mixes of recorded works allow one to hear how music can evolve over successive recording sessions. These alternate takes and mixes are similar to the preliminary sketches used by classical composers, and in many ways constitute the true "score" of a recorded work. In *The Beatles as Composers: The Genesis of Abbey Road, Side Two* (1995), Walter Everett points out that the recording method typically employed by the late-period Beatles (3-4 instruments plus guide vocal as basic track) resembles "...Mozart's habit of writing a particella draft for an opera or concerto—the structural solo and bass lines would be committed to paper first, after which the inner parts would be composed and assigned instrumentation..." (Marviin & Hermann 1995: 174) Recorded works can thus be seen to function simultaneously as art objects and important documents of a creative process.

How then should one structure an analysis of such a work? In the past, there's been an inclination to employ conventional methods of music analysis, but such approaches

inevitably circumvent the recorded work's essential aesthetic properties. In *The Beatles' Abbey Road Medley: Extended Forms In Popular Music* (MacFarlane 2007), I attempted to respond to this problem by adapting an "eclectic method" as formulated by Lawrence Ferrara in the book, *Philosophy and the Analysis of Music* (1991). Within the context of a multi-layered approach that explored elements of sound, form, and reference, I also chose to include relevant data on recording technique. The resulting study provided evidence that the *Abbey Road Medley* is not a medley at all; rather, it is an extended form in three movements:

Example 1: Model for Structural Analysis of the Abbey Road Medley

Prelude	Because
Movement I	You Never Give Me Your Money Out of College/That Magic Feeling One Sweet Dream
Movement II	Sun King-Mean Mr. Mustard Polythene Pam-She Came In Through The Bathroom Window
Movement III	Golden Slumbers-Carry That Weight The End
Postlude	Her Majesty

The creation of this model was predicated on the presence of directed, tonal motion towards structural goals, as well as various connective threads evident throughout the text. The use of the terms *Prelude* and *Postlude* in reference to the tracks "Because" and "Her Majesty" was intended to foreground the role that each of those songs played in bracketing the inner movements of the work. The term "movement" is used in reference to the three large sections that constitute the main body of the *Abbey Road Medley*, and is not intended to imply any overt connections with the traditions of Western musical practice.

My adaptation of Ferrara's method was promising. It had foregrounded elements of organic unity present in the *Abbey Road Medley*, and had also provided evidence that this unity was rooted in a compositional strategy made possible by the medium of multi-track recording. However, it should also be noted that the foundation for this study was a full score transcription of the *Abbey Road Medley*. Although such transcriptions are a necessary aspect of conventional music analysis, the underlying emphasis on a printed artifact ultimately privileged an approach that was poorly suited to an exploration of recorded sound.

Yesterday's Tools For Today's Problems

Conventional methods of music analysis focus exclusively on the printed score. As Ferrara points out in *Philosophy and the Analysis of Music* (1991), the strength of such methods lies in the fact that musical elements such as " [...] progressions,

retrogressions, structure and thematic development can be shown [...] by pointing to the score. Thus, the correctness of a formal analysis can be measured by its correspondence with the score." (Ferrara 1991: xiv) However, as with alphabetic writing and print, which abstract from human speech, a printed score abstracts from musical sound. Thus, a traditional analysis of a printed score is not an analysis of musical sound; rather, it is an analysis of the abstract symbols for musical sound. The inherent limitations of conventional analysis when applied to recorded works can be traced to the method's roots in alphabetic writing and print, each of which engenders a strong bias towards the visual.

Like the printed book, a musical score creates what media philosopher Marshall McLuhan described as "... a visual enclosure of non-visual spaces and senses [...] an abstraction of the visual from the ordinary sense interplay." (McLuhan 1962: 43) It plays to the sense of sight exclusively, and thereby compels sounds to conform to the logic of visual space. McLuhan describes visual space as "...the only form of space that is purely mental: it has no basis in experience because it is formed of abstract figures minus any ground, and because it is entirely the side-effect of a technology." (McLuhan & McLuhan 1988: 40) In a biography of Marshall McLuhan published in 2003, W. Terence Gordon addresses the importance of figure/ground:

The figure-ground distinction is highly important evidence for the dynamic character of perception. Figures tend to be complete, coherent and in front of ground, which is seen as less distinct, is attended to less readily, and is often seen as floating behind the figure. When figure and ground share a contour (as they commonly do), then the contour is usually seen as belonging to the figure. (Gordon 2003: 15)

Within visual space, resonant sound becomes redefined as static figure, isolated from its environmental context (ground). Thus, conventional methods of analysis focus exclusively on figure, and in that way position the recorded work as a figure minus a ground. Such methods are inherently incapable of exploring the dynamic interplay between figure (sound) and ground (space).

Multi-track recordings do not create visual enclosures for musical sound; rather, they facilitate the perception and manipulation of musical sound without the use of intermediary symbols. With their added emphasis on sound-space, they also possess unique qualities with regard to the perception of time. Through the stacking of parallel tracks in synchronization, time is not a solely linear phenomenon; it is also decidedly spatial. It can be argued that printed musical scores also allow for the perception of simultaneous time via multiple parts arranged on the vertical. However, as previously noted, the medium of print is purely visual, and thus necessitates the abstraction of simultaneity. Sound-space is abstracted to become tonal space. By way of contrast, multi-track recording, while partially visual in its means of representation also allows for the active exploration of simultaneous musical sounds in a manner that is decidedly tactile. It thereby encourages interplay between the senses as opposed to print-based scores, which reduce sound to a purely visual phenomenon.

According to McLuhan, electric technologies like multi-track recording have initiated a cultural return to the resonance of acoustic space. In *Laws of Media: The New Science* (1988), McLuhan and his son and collaborator Eric described the perceptual implications of visual and acoustic space:

Acoustic space [...] is spherical, discontinuous, non-homogeneous, resonant, and dynamic. Visual space is structured as static, abstract figure minus a ground;

acoustic space is a flux in which figure and ground rub against and transform each other." (McLuhan & McLuhan 1988: 33)

As a relatively new art form, multi-track recording facilitates the exploration of sound space, which William Moylan terms the Perceived Performance Environment:

"The perceived performance environment (or the environment of the sound stage) is the overall environment where the performance (recording) is heard as taking place. This environment binds all the individual spaces together into a single performance area." (Moylan 2007: 54)

The multi-track recording thus makes possible an engagement of figure (sound) and ground (space), as well as the dynamic interplay that exists between them.

A Mosaic Approach to the Recorded Work

Multi-track recordings bypass the visual enclosure of alphabetic writing and print, and allow for an engagement of figure (sound) and ground (space) as well as their dynamic interplay. If such interplay lies beyond the scope of conventional methods of musical analysis, we can once again ask how one should approach the recording medium in a manner that is appropriate and effective? In the book, *Experiments in Hearing* (1960), biophysicist Georg von Bekesy describes one such option:

It is possible to distinguish two forms of approach to a problem. One, which may be called the theoretical approach, is to formulate the problem in relation to what is already known, to make additions or extensions on the basis of accepted principles, and then to proceed to test these hypotheses experimentally. Another, which may be called the mosaic approach, takes each problem for itself with little reference to the field in which it lies, and seeks to discover relations and principles that hold within the circumscribed area. (Von Békésy 1960: 4)

In *The Gutenberg Galaxy*, Marshall McLuhan concurred with von Bekesy's assessment stressing that, "the mosaic approach is not only "much the easier" in the study of the simultaneous which is the auditory field; it is the only relevant approach." (McLuhan 1962: 42)

In keeping with these recommendations, the following analysis will be structured in terms of a mosaic intended to meet the recorded work on its own terms. In the process, it will attempt to make possible a consideration of the above-mentioned interplay between figure and ground: 1) Organization of the Multi-Track Recording (Figure); 2) Phenomenology of the Multi-Track Recording (Ground Through Figure); and 3) Interpretation of the Multi-Track Recording (Figure/Ground Interplay). I first explored this approach in the book, *The Beatles and McLuhan: Understanding the Electric Age* (MacFarlane 2012). Since my analysis of the Abbey Road Medley had preceded the creation of that study, this mosaic approach will now be applied to the song "Because."

Organization of the Multi-track Recording (Figure)

In the first level of the mosaic approach to the recorded work, narrative accounts of recording process will be explored in an effort to gain insight into the organization of sound (figure). The basic track of "Because," which consisted of Baldwin spinet electric harpsichord played by George Martin, electric guitar played by John Lennon, and bass guitar played by Paul McCartney, were all recorded on 1 August 1969. George Martin describes the arrangement and recording process:

Between us we created a backing with John playing a riff on guitar, me duplicating every note on an electronic harpsichord, and Paul playing bass. Each note between the guitar and harpsichord had to be exactly together, and as I'm not the world's greatest player in terms of timing I would make more mistakes than John did, so we had Ringo playing a regular beat on hi-hat to us through our headphones. (Buskin, 1999: 64-65)

Onto this basic track, John Lennon, Paul McCartney, and George Harrison added a lush three-part harmony vocal, which recalled earlier Beatle efforts such as "This Boy" (1963) and "Yes It Is' (1965). Martin guided the group through the intricacies of the vocal harmony and evidently suggested alterations and additions to the various parts. On the following Monday (4 August 1969), the singers recorded their three-part harmony twice more in order to create the electronic equivalent of a nine-part choir.³ In the book, *Here, There, and Everywhere: My Life Recording the Music of the Beatles* (2006), engineer Geoff Emerick described the care that went into the recording of the vocals:

John, Paul, and George Harrison each had his own mic, but they were all being recorded on a single track, so I was focused on doing the balance. To keep the purity of the sound, I had decided to use no signal processing whatsoever – no compressors or limiters. That meant that I had to manually "pot" the sound to smooth out the peaks and valleys—moving the faders up and down as it was being recorded – carefully following the dynamics of each word, each syllable. Fortunately, I'd had plenty of time to learn those moves during the long hours of vocal rehearsals. (Emerick & Massey 2006: 293)

As with many of the tracks on the *Abbey Road* album, "Because" is notable for its use of the Moog synthesizer. During the final overdubbing sessions for the song on 5 August 1969, George Harrison recorded the Moog on the two remaining tracks to parallel the keyboard/guitar ostinato in the B section ("Love is all, love is new.") and to create the distinctive waveform for the restatement of the main melodic line that is heard in the song's coda. (Lewisohn 1988: 185) The use of the Moog here is particularly noteworthy for its taste and restraint. Rather than exploiting the novelty of the instrument's exotic effects, The Beatles and their collaborators choose instead to view it as a full-fledged member of the ensemble.

"Because" was mixed on 12 August 1969 (*Ibid.*: 184-185) for inclusion on the *Abbey Road* LP. Producer George Martin supervised the creation of the mix in collaboration with engineers Geoff Emerick, Phil McDonald and John Kurlander. The session took place in the control room of EMI Studio Two. On the basis of the recording information provided by Mark Lewisohn in the book, *The Beatles Recording Sessions* (1988), it is possible to extrapolate a diagram of the 8-track master tape that was used for this mixing session:

Example 2: Because: Take 16, 5 August 1969

Track 1	Bass (McCartney)
Track 2	Baldwin Electric Harpsichord (Martin)
Track 3	Electric Guitar (Lennon)
Track 4	Vocal (Lennon); Vocal (McCartney); Vocal (Harrison)
Track 5	Vocal (Lennon); Vocal (McCartney); Vocal (Harrison)

Track 6	Vocal (Lennon); Vocal (McCartney); Vocal (Harrison)
Track 7	Moog Synthesizer (Harrison)
Track 8	Moog Synthesizer (Harrison)

Taken from Lewisohn 1988: 184-185

Phenomenology of the Multi-track Recording (Ground)

The goal of phenomenology is to engage an artifact/artwork in its immediacy without the use of intermediary symbols. Phenomenology seeks to provide an opportunity to engage a work in a manner that avoids the pre-suppositions and assumptions that are a necessary feature of formal methods. In his book, *Listening and Voice: Phenomenologies of Sound*, author Don Ihde points out that:

"The examination of sound begins with a phenomenology. It is this style of thinking which concentrates an intense examination on experience in its multifaceted, complex, and essential forms." (Ihde 2007: 17)

Phenomenology seeks to provide an opportunity to engage a work in a manner that avoids the pre-suppositions and assumptions that are a necessary feature of formal methods. In *The Idea of Phenomenology*, Edmund Husserl write that, "Phenomenology carries out its clarifications in acts of seeing, determining, and distinguishing sense [...] it does all this in the act of pure seeing [...] it ends where objectifying science begins." (Husserl 1999: 43) Husserl's approach constitutes an attempt to return to pre-Socratic (pre-literate) ways of knowing, i.e., ways of knowing guided by the pre-theoretical language of logos.

The organizational discussion of "Because" focused on the shaping of the sounds within the recording. In perceptual terms, this corresponded to an engagement of figure as bracketed away from its background, or ground. In acoustical terms, ground corresponds to the spatial environment in which sounds exist. Since ground is subliminal and always beyond perception, the following section will employ the descriptive phenomenology of Edmund Husserl in an attempt to ascertain what the various sounds (figure) can tell us about space on the recording (ground). It will thus constitute an attempt to access ground (space) through figure (sound)...

Silence that is dark, yet inviting, is suddenly revealed by a winding pattern of sound that enters left. This sound is quaint and earthy with a regularity that evokes the temporal. It is soon joined by a more sustained shadow sound that enters on the right. With this entrance, the original pattern develops and gradually reveals a new expansiveness in the spatial environment. After a brief pause (breath), a chorus of voices joins together with the previous sounds. As they do, a deep resonance emerges from below, assuring the listener that all is as it should be.

The voices seem to surround what came before, bathing the entire space with a luminous intensity that evokes the ocean, or life itself. The various elements now seem as one as the voices begin to intone a text that attempts to create metaphoric expression for the resonance of being. Causality now becomes clay as the various effects circle back to reveal the fundamental unity of existence. The vowels shaped by the voices frequently dissolve into wordless ululation, or sighs that offer an appropriate response to a totality that is more felt than seen.

Soon, a new sound enters that connects with the ensemble. This new sound is decidedly unusual in both shape and size. Following an initial awkwardness, it proceeds to engage in a delicate dance with the voices that now discard text in favor of the fundamental grammar of sound. Reason is revealed to be a part of the whole as the various sounds recede gracefully into the darkness. There is no longer a need for separation, resolution or conclusion. All is one.

What emerges from this particular phenomenological engagement of "Because" is a sense of fluidity. This track constitutes a spacious environment in which the various sounds ebb and flow. The motion of the sounds helps reveal a mythic space, one that is characterized by rebirth and renewal. Thus, the listener is able to experience the track "Because" as a dynamic, fertile environment – arguably, a metaphor for creation itself.

Interpretation of the Multi-track Recording (Figure/Ground Interplay)

The first level of this mosaic approach presented the organization of sound (figure) in the track, "Because". In the second level, descriptive phenomenology was employed in an effort to engage the unique spatial qualities of the work (ground through figure). In each case, an attempt was made to engage figure and ground in isolation. Having done this, we can now attempt to access the dynamic interplay between sound (figure) and ground (space) by using Marshall McLuhan's Laws of Media.

The Laws of Media (Tetrad) are a set of testable questions concerning four simultaneous processes: *enhancement*, *obsolescence*, *retrieval* and *reversal*. These questions may be applied to any technological artifact in order to ascertain its ultimate effects and to bring figure and ground back into balance. In the book, *Laws of Media: The New Science* (1988), each of these questions is clarified in relation to Marshall McLuhan's work on the perceptual distinctions between figure and ground:⁴

What does any artifact amplify or enhance?

Enhancement consists in intensifying some aspect of a situation, of extending a sense or configuration of senses, of turning an element of ground into figure or of further intensifying something already figure. (McLuhan & McLuhan 1988: 227)

What does it erode or obsolesce?

Obsolescence refers to rendering a former situation impotent by displacement: figure returns to ground. (*Ibid.*)

What does it retrieve that had been earlier obsolesced?

Retrieval is the process by which something long obsolete is pressed back into service, revivified, a dead disease now made safe; ground becomes figure through the new situation. (*Ibid.* 228)

What does it *reverse* or *flip* into when pushed to the full limit of its potential? (McLuhan & Powers, 1989: 9)

Reversal involves dual action simultaneously, as figure and ground reverse position and take on a complementary configuration. It is the peak of form, as it were, by overload. (McLuhan & McLuhan 1988: 228)

As will all multi-track sound recordings, "Because" *enhances* dynamic space via the vertical stacking of successive temporal ('now') moments. Successive slices of linear time are stacked vertically in the finished mix to create a virtual sound-space, or "super-space." (Space is made of time?)⁵ In this regard, the three-part vocal chorus is particularly significant in that three different vocal performances in three distinct temporal moments are heard simultaneously via the multi-track mix. In the process, human identity ceases to be figure on a timeline and becomes decidedly spatial,

thereby transcending the need for definition that is typically associated with temporal boundaries.

Example 3: Tetrad for "Because"

Successive cuts of linear time are stacked Exploration leads to the emergence of patterns that transform dynamic space into a mapped, fixed environment. vertically to create a virtual sound-space, or "super-space." Space is made of time? Reverses (flips) from the Enhances space via the vertical stacking of successive simultaneous into the now moments sequential Enhance Reverse Retrieve Obsolesce Retrieves an acoustical world Obsolesces the present moment as one of inter-structural resonance of a series of discrete events occurring dynamic space. on the temporal plane Sound is retrieved as sacred utterance -"Causality is released and there is no before and no after... Human voice becomes logos (Wilfrid Mellers, 1974, p. 118.)

At the same time, "Because" obsolesces the present moment as one in a series of discrete events occurring on the temporal plane. Linear timelines can now be seen as contours, total gestures created by human hands. Writing about "Because" in Twilight of the Gods: The Music of The Beatles (1974), musicologist Wilfred Mellers stressed that on this track, "Causality is released and there is no before and no after..." (Mellers 19784: 118) The world of "Because" can thus be seen as a place in which time itself has been displaced. Perhaps, as suggested in the previous paragraph it has been repurposed to become the stuff of a new dynamic space.

"Because" retrieves an acoustical world of inter-structural resonance. This is a dynamic environment in which figure (sound) and ground (space) inform and are informed by each other. In the process, sound takes on its original human function as environmental probe. Logos (word as sound) now returns as an active agent of human inquiry. However, exploration via logos also engenders the emergence of recurring patterns that transform dynamic space into a mapped, fixed environment. Thus, when pushed to the limits of its power, the simultaneous world of "Because" reverses into the sequential. The many become one via the overlay of bureaucracy and are enclosed in a collective space.

As a work of recorded sound, "Because" functions as a counter-environment that allows listeners to consider and reconsider the benefits and dangers associated with the rapid cultural changes engendered by electric technologies. In *Understanding Media: The Extensions of Man* (1964), Marshall McLuhan points out that in the twentieth century, "... the mechanical begins to yield to the organic under conditions of electric speeds [...] [by] electric tapes, synchronization of any number of different acts can be simultaneous." (McLuhan 1964: 141) In their multi-track recordings of which "Because" is a clear highpoint, The Beatles organically employ electric technology to report on an era being transformed by that self-same technology.

Poetics

In the preceding discussion, a mosaic approach was employed in an attempt to generate a deeper understanding of the track "Because" from the album, *Abbey Road*. This approach was designed to meet the recorded work on its own terms and thereby circumvent the biases inherent in conventional, paper-based methods of analysis. Many fascinating insights about the recording process emerged from this endeavor, but a thought that lingered throughout was whether or not this particular instance ("Because") was too specific. One begins to wonder about elements of the medium that may well transcend specific multi-track recordings and thus become defining characteristics of the entire process. With that in mind, we can now attempt to clarify the results of the preceding discussion by applying McLuhan's Tetrad to the process of multi-track recording itself.

Multi-track recording *enhances* music composition by allowing for the shaping of sounds in motion. In the process, the role of the composer begins to merge with that of the recording engineer and producer. Multi-track recording *obsolesces* music notation, i.e., the intermediary print-based symbols for musical sound. Figure now returns to the ground of possibilities. Additionally, the multi-track recording *retrieves* dynamic space thereby creating the possibility of deep participation and involvement. Logos (resonant sound) returns as an active agent of discovery as practitioners and listeners alike are invited to explore the dynamic space created by the multi-track mix. In the process, they become hunter-gatherers foraging for data in the auditory field. However, when pushed to the limits of its power, the process of multi-track recording *reverses* (flips) into the "fixed" work, i.e., the definitive interpretation

Example 4: Tetrad for Multi-track Recording

Enhances music composition as the shaping of simultaneous sounds in motion. In the process, musical sound becomes figure. Reverses into the "fixed" interpretation. The finished work now becomes figure.

Enhance Reverse

Retrieve Obsolesce

Retrieves dynamic space which invites participation. In the process, logos (resonant sound) returns as an active agent of discovery.

Obsolesces music notation, i.e., the intermediary symbols for sound. Figure returns to ground.

A Tetrad for The Beatles

For decades, the question asked by critics and listeners alike is, "Why did The Beatles break up?" Some have placed the blame on McCartney, who announced the breakup of the band in April 1970 in conjunction with the release of his first solo album, *McCartney*. (Sounes 2010: 265-266) This action infuriated Lennon who, as The Beatles' founding member, believed that only he could break up the band. Lennon's anger was evidently compounded by the fact that in September 1969, he himself had told McCartney, Harrison and Starr that he was leaving, but was asked to keep quiet about it until an ongoing contract negotiation with Capitol Records could be finalized. (Lewisohn 1992: 340) By this point, George Harrison and Ringo Starr had each already quit The Beatles, but were subsequently persuaded to return. (*Ibid.*: 303-7)

In spite of these tensions, it seems that The Beatles could easily have pursued individual solo projects, yet still come together periodically to record new material. Why didn't they? Witnesses to the group's activities in the 1960s describe a certain indefinable chemistry that seemed to emerge whenever all four Beatles were together. (Lewisoh, 1988: 174) In the book, *Revolution In The Head*, author Ian MacDonald described how "...The Beatles advanced through their twenties as a sort of sensory phalanx, picking up facts and impressions and pooling them between each other." (MacDonald 2008: 247)

In retrospect, The Beatles seemed to be able to function as total field. At their best, they achieved a balanced collective entity from which individual personalities could emerge as points of focus (figure), before receding back into the collective group identity (ground). This led to a remarkable richness of expression that initially seemed infinitely renewable. When this collective identity began to fragment in the late 1960s, the individual personalities of Lennon, McCartney, Harrison, and Starr each began to emerge as figures abstracted from the original ground. This assessment is supported by an application of McLuhan's Tetrad to The Beatles as a group.

The Beatles as a group *enhances* collective identity – the "electric" tribe. The group dynamic consistently asserts that ground is always the source of figure. In the process, The Beatles as a group *obsolesces* the individual viewpoint created by phonetic literacy and print. The private self recedes back into the collective that is its source. The Beatles as a group also *retrieves* the pre-literate, the corporate, the cooperative, and the collaborative. However, pushed to the limits of its power, The Beatles as a group *reverses* (flips) into the individual abstracted from the group. John Lennon, with Yoko, gradually begins to overshadow The Beatles. Paul McCartney then takes the spotlight by leaving the band. The original ground dissolves as each figure (Lennon, McCartney, Harrison, and Starr) generates, or becomes a part of, a new field of action (ground).

Example 5: Tetrad for The Beatles

Enhances collective identity - the 'electric' tribe

Reverses (flips) into the individual abstracted from the group – Lennon (with Yoko) begins to overshadow The Beatles (ground); McCartney takes the spotlight by leaving the group (becomes figure). The original ground (Beatles) dissolves as each new figure (Lennon, McCartney, Harrison, Starr) creates, or becomes part of, a new field of action (ground).

Enhance Reverse

Retrieve Obsolesce

Retrieves the pre-literate, the co-operative, the collaborative

Obsolesces the individual viewpoint created by phonetic literacy and print

When they were together, The Beatles, like all artists, were in the business of reporting on their cultural world. While we were busy contemplating and attempting to live in the print-based environments of the past, The Beatles were offering us an account of the emergence of a post-literate present, an acoustic age in which everything happens at once. Now, nearly fifty years after they filed their final report on that shift, we are just beginning to feel its cultural effects. How will we respond? In "The Invisible Environment: The Future of an Erosion," Marshall McLuhan writes...

The Beatles' stare at us with eloquent messages of changed sensory modes for our whole population, and yet people merely think how whimsical, how bizarre, how grotesque. The Beatles are trying to tell us by the anti-environment they present just how we have changed and in what ways. (McLuhan 1967: 163-7)

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NOTES

- **1.** Elements from this discussion originally appeared in my books (MacFarlane, 2007; 2012). They have been combined and adapted here as part of an application of the mosaic approach to "Because" from the album, *Abbey Road* (1969).
- 2. Ultimately released as Let It Be (1970).
- **3.** Geoff Emerick's account of the process differs from the one provided by Mark Lewisohn in that he remembers all recordings of the vocal tracks taking place on 4 August 1969.
- **4.** In this section, I have interpolated a quote from *Laws of Media: The New Science* (1988) so that it follows each individual question of the Tetrad. Although somewhat unorthodox in its presentation, the intention is to facilitate the reader's understanding of the process as applied to the analysis that follows.
- **5.** I would like to extend a special note of thanks to the students of Music Theory IV (MPATC-UE 38) and The Performing Arts in Western Civilization (MPATC-UE 1505) who explored the aesthetic effects of multi-track recording in class discussions during the spring 2015 semester at NYU Steinhardt. In connection, special commendations go to Nathaniel Picard-Busky, Rebecca Blackwell, and Al Altman.

ABSTRACTS

In September 1969, The Beatles released their final recorded work, *Abbey Road*, an album that perfects their unique and innovative approach to multi-track recording. Following an overview of the album that stresses the structural coherence of the *Abbey Road* Medley, the following discussion will consider the *Abbey Road* track "Because" using a mosaic approach designed to meet the recorded work on its own terms. Guided by Marshall McLuhan's probes into the cultural effects of electronic media, this discussion will pay particular attention to the ways in which "Because" creates a living narrative in acoustical space. The implications of that narrative will then be examined in light of the Beatles' engagement with electric technologies and the ways in which that engagement portends the media environments of the twenty-first century.

En septembre 1969, les Beatles publient leur dernier album, *Abbey Road*, qui vient parfaire leur approche unique et innovante de l'enregistrement multipiste. Après une présentation générale du disque visant à souligner la cohérence structurelle de son *medley*, cet article propose une approche mosaïque de « Because » qui permet de saisir l'œuvre enregistrée selon ses propres modalités. En s'inspirant des recherches de Marshall McLuhan sur les effets culturels des médias électroniques, l'auteur s'intéresse plus particulièrement à la façon dont « Because » crée un récit vivant au sein d'un espace acoustique. Les implications de ce récit sont examinées à la lumière du rapport étroit des Beatles à la technologie électrique et de la façon dont cette relation a modelé les environnements médiatiques du XXI° siècle.

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(George), McCartney (Paul), Starr (Ringo)

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