

Drugs, Machines & Friendships: Cybertext, Collaboration, and the Beatles

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ABSTRACT

That spark of interaction that happens during a successful and inspired collaboration is as important as it is elusive. Said spark involves friends having fun together, and may be beyond the grasp of traditional academic language. Chemistry is an apt metaphor, and while it is unreasonable to expect a theoretical chemical formula to reproduce the web of motivations, sensibilities, and techniques that underlie a collaborative work of art, some strands can be identified. I am particularly concerned with the role of Producer, as well as certain types of feedback between machines and artists that shape the artists' intentions.

KEYWORDS

art, collaboration, cybertext, Beatles, the Unknown, Cybertext Producer, drugs, machines, friendships, fun

CYBERTEXT, COLLABORATION, AND THE BEATLES

I'll start with the Unknown.

We had written plays, poems, stories, three-by-five cards, radio theater, criticism, book reviews, and the odd paragraph. We had been playing writing games together for years. We used computers. And so the collaboration of the Unknown, the game, came as naturally to us as to some Little Leaguers slipping on their mitts and heading out to the park to play baseball. There was no need to question whether we should be playing writing games: the point was to plunge in and have fun writing. HTML was mostly new to us: a little harder than a typewriter, and a little easier than Microsoft Word. What was unnatural? Why did the writing game last for far more than an afternoon?

Hypertext.

In June 1962, when producer George Martin first signed the Beatles, he was ambivalent about them. "I've got nothing to lose," he reasoned [5]. In their live audition there was little hint of the inventive chemistry they would later achieve in the recording studio. The Beatles started with a plagiarized sound. They were essentially a live R&B quartet, performing mostly unoriginal three-minute songs with verses, a chorus, and a middle eight, for drums, bass, two guitars, and two-to-four-part harmonies.

They were cute and competent and sounded American and wore suits. They were commercially perfect, as if they had come in a can.

In the early 1960s Abbey Road was a two-track studio used essentially to capture live recordings without the noise of an audience. There were few ways to revise the live recording without literally cutting up the tape. In February 1963 ten of the songs on the Beatles' first album (*Please Please Me*) were recorded in the course of ten amazing hours. Later the Beatles could easily spend as much time working on a single unreleased song ('Not Guilty') as they did recording their first album. In October 1963 the Beatles first began to use four-track ('I Want to Hold Your Hand'). Four-track stimulated their imagination such that its freedom would soon become a limitation. They found new ways of using the machines to record more than four tracks. They rigged an eight track machine by synchronizing two 4 track machines ('A Day in the Life'). They removed erase heads from a tape deck allowing them to layer sounds indefinitely on a single piece of tape ('Tomorrow Never Knows'). In October 1964 the Beatles first used the recording studio to record an unfinished song ('Eight Days a Week'), listen to the recording, and finish the song based on what it sounded like on tape, and thus feedback between the collaborators and machines began to shape the composition process. In 1965 the Beatles, George Martin, and attendant engineers, began to tape their rehearsals, perhaps understanding that how they sounded on tape was more important than how they sounded in a room ('Ticket to Ride'). And they began to make habitual use of the four-track. By August 1966 the Beatles had stopped performing for audiences and were learning that while the recording studio could capture their live sound without all the damn screaming, it could also capture the sounds and music nobody had thought of yet. A song could be more than a chord structure, it could be a soundscape of imagined timbres. There was so much that the technology was not designed to do, but nevertheless could. The Beatles, George Martin, a few dedicated engineers (notably Geoff Emerick, Ken Townsend, Chris Thomas), and countless largely uncredited session musicians (including Martin and Thomas) literally broke the rules of the staid Abbey Road studios, explored the potential and limitations of the machines, and made art.

An ordinary cassette has four tracks: left and right stereo channels for sides one and two. Multitracking is a process by which simultaneous, independent sounds can be recorded on to different tracks on one piece of tape. For example, with a four-track tape, you could record the drums and bass of a song on track one, while recording two guitars on track two. Then you could play back tracks one and two while adding lead and backing vocals to tracks three and four. You could then mix those four tracks onto two tracks of another four-track tape, losing some fidelity and rendering those four tracks no longer independently editable, but giving you two new tracks

onto which you could add, for example, four French horns and the sound of an orchestra tuning up. This is how *Sgt. Pepper's Lonely Hearts Club Band* was recorded.

The Beatles discovered they could use multitracking to record forward, but also to record down. George Martin describes this process as painting a picture in sound with an infinite palette, and as adding layers to a cake [7]. Instead of simply recording a song straight through from beginning to end, the Beatles could work on the whole thing at once, by layering bits and pieces here and there. They got over the conservative idea that sounds had to be recorded at the speed at which they would be played back. They learned to speed up vocal tracks ('When I'm 64') or slow down instrumental tracks ('Rain') to create effects. They pushed it. Why not a guitar amplifier feeding back? (the Beatles introduced this rock cliché in October 1964 recording 'I Feel Fine') a sped-up electric piano solo? ('In My Life') or tape loops? ('Tomorrow Never Knows') Why not an orchestra wearing silly hats? a dog whistle? or twelve pianos (and a harmonium) all playing one majestic chord? ('A Day in the Life') What happens when one uses headphones as microphones? ('A Day in the Life') loudspeakers as microphones? ('Paperback Writer') rotating speakers from Leslie organs as vocal amps? ('Tomorrow Never Knows') Can a guitar sound like a piano? What would singing sound like if sung while the singer were lying on his back ('Revolution I')? swinging around the microphone on a rope ('Tomorrow Never Knows') or if recorded through a condenser microphone immersed in a jar of water? (one of the songs on *Sgt. Pepper's Lonely Hearts Club Band* was recorded this way, its title either forgotten or purposefully omitted from the record to conceal a flagrant and dangerous abuse of Abbey Road equipment) What kinds of distortion could be created by plugging an electric guitar directly into a recording console instead of recording its amplifier with a microphone? ('Revolution') overloading a microphone amp? ('I am the Walrus') or singing directly into the mixing board without using a microphone? (Martin and Emerick were unable to fulfill this impossible request) The Beatles were trying to think directly onto tape and their production team made it possible. Why not the smell of sawdust? ('Being for the Benefit of Mr. Kite') monks singing underground? guitars like seagulls? flanging? ('Tomorrow Never Knows') Why not a song that isn't even a song? ('Revolution 9') When the machines did something unexpected, the Beatles welcomed these accidents as new ideas (the alarm clock in 'A Day in the Life,' the placement and missing final note of 'Her Majesty,' the chance occurrence of *King Lear* when mixing the radio into 'I am the Walrus,' the rattling wine bottle on the speaker cabinet in 'Long Long Long,' the edit one minute into 'Strawberry Fields Together,' the segue between 'Good Morning' and 'Sgt. Pepper's Lonely Hearts Club Band (Reprise)'). Sometimes they even left important decisions to be made by accident, employing aleatoric methods such as the cut-up technique ('Being For the Benefit of Mr. Kite,' run-off groove of

Sgt. Pepper's Lonely Hearts Club Band).

Beatles arrangements evolved from how their band sounded playing together in a room to how an imagined band (for example two bass guitars, lead guitar, electric piano, two drum kits, mellotron, eight violins, four cellos, a contra bass clarinet, three horns, a choir of 16 voices, a performance of *The Tragedy of King Lear*, and vocals ('I am the Walrus')) might sound playing together but all in different rooms, or even different universes. Sometimes one Beatle might record all the tracks himself ('Wild Honey Pie'), occasionally they might play together as a rock band ('Sgt. Pepper Lonely Hearts Club Band (Reprise)'), but most songs used unique and impractical ensembles (for example drums, bass, tambourine, organ, two guitars, honky-tonk piano, vocals, and about ten guys in white lab coats using pencils to feed tape loops through machines ('Tomorrow Never Knows')). If Sgt. Pepper's Lonely Hearts Club Band were a real band, it would need even more people than are pictured on the album cover. The Beatles recorded songs that couldn't be played live. You can't play a guitar backward on stage, it doesn't matter how good you are. They deviated from their instrumentation and genre as the machines imposed their potential and limitations on the music. They challenged the recording studio and challenged the record. Songs didn't have to be three minutes, they could be long ('A Day in the Life') or short ('Her Majesty'). *Sgt. Pepper's Lonely Hearts Club Band*, an album recorded without silences between the tracks, signaled a decisive shift in focus from the single to the "Long Playing" record album as their medium. Now they were composing song cycles. A song might now be written to complement its context ('Sgt. Pepper Reprise') or refer to other songs ('Glass Onion'). Like jigsaw puzzle pieces, a song could lack closure but add closure to the whole.

As the Beatles started out wanting to record traditional three-minute monaural pop songs for radio ('Love me Do') and ended up composing monstrous two-sided layer cakes (*Abbey Road*), *The Unknown* was a conventional idea subverted by an unexpected interaction with technology. In the beginning we wanted to write a book of criticism of our own writing. While it might be unusual for a trio of unknown writers to create a book of scholarly criticism about their own work, the idea of a book of literary criticism was neither original nor did it spring innocently from our artistic vision. Books of criticism are what professional scholars write: a default genre. As an accessory for the book of criticism we would first publish a book of our poetry and fiction: *The Unknown: An Anthology*. As a promotional gesture for the *Anthology*, we would write a hypertext. The hypertext, originally meant to be a bit of ad copy—at most a publicity stunt for the real "serious" print work—devoured the project. In a late revision of the *Anthology*, I added scenes from the hypertext to the collection of poems and stories. When the book of criticism appears, it will be as much about the hypertext as it is about the poetry and fiction in the

Anthology. In this manner our interactions with machines—computers—and the art those interactions created—hypertext—changed the project we had set out to do into something unknown.

While our intentions at the outset may have been to write a single seamless collaboratively-authored narrative, the nature of the machines created seams. Authoring was channeled into writing individual scenes (HTML pages / nodes). We would sculpt these building blocks, sometimes one at a time, sometimes a sequence of blocks designed to be put together, and add links to and from them, and thus did the impossible architecture of the fiction evolve. The idea of sequence became exponentially more confused with each new scene. *The Unknown* stopped being a narrative sequence, and became instead a narrative sculpture. We were lifted from our familiar world of causality and working in dimensions we had never before perceived. We were composing fiction differently. Dirk describes the writing process as “like a jazz band with each member taking solos that referred to the previous riffs already laid down by whoever went before us.” We started out faking a standard—a sort of chromatic ‘Take Me out to the Ball Game’—but after a few rounds of solos we were no longer in a recognizable key and there was no way to end. We kept playing. The narrative grew branches. We clung to the idea of sequence, and scenes became very short, links on multiple interlocking chains (‘milwaukee.htm’). We thought the branches of story might exist in the same narrative plane, describing a single coherent story universe, as with much of the sort of fiction we like in books. When this aspiration collapsed (were we approaching San Diego from the east? (‘kansas.htm’) or the north? (‘sandiego.htm’)) there was a sense of release. The last bridge to our understanding of sequential fiction was swept away in the tidalwave. Our compulsion toward closure dissipated, and that tree of branching narratives became an explosion of multiple trajectories, a haze of shrapnel. Each new scene would now take place not after or before but within. We were adding daubs of paint to a canvas, tiles to a mosaic, cutouts to a collage, layers to a cake, writing down. New scenes accumulated autonomy and began to function less as lead-ins to what they linked to (‘tomorrow.htm’) or commentary on what they linked from (‘creativewriter.htm’) and more as works that could stand on their own (‘rhyme.htm’). Now, while thinking out from the center where the hypertext began, from the first scene we wrote, where the story actually begins (‘unknown.htm’) to its possible continuations; we were also thinking in from the world (literature) to the story. We began consciously to pay homage to our influences (‘cortazar.htm’), to incorporate existing genres (‘musical.htm’) and styles (‘spininterview.htm’). We brought the known into *The Unknown* as we decided that certain people, events, writing styles, and even texts—should become our own. Why not typing tests? (‘typetest.htm’) our students’ essays? (‘fivepara.htm’) program notes? (‘vienna.htm’) The Unknown now

became skilled in the art of saying much by saying little, attempting through concise scenes to evoke familiar worlds. Though discontinuous, *The Unknown* doesn't seek to disorient you, rather it seeks to orient you everywhere at once (‘inorbit.htm’). Few of the individual scenes are baffling (‘gospell.htm’); it might not be clear which diegetic level they take place on, or when they happened in the story, or who is narrating them, but it is clearly science fiction (‘inorbit.htm’) or ecstatic (‘dirkspirit.htm’) or about Beckett (‘unnamable.htm’) or the desert (‘texas.htm’). Like jigsaw puzzle pieces that don’t really fit together, Unknown scenes had closure but made problematic the closure of the whole.

The parallels between the Beatles and the Unknown are not obvious to those who are unfamiliar with the rapture of collaborative art. The differences between the Beatles and Unknown are easier to note. While both groups engaged machines with a playful spirit, attentive to unintended effects, the Beatles worked long hours in laboratory conditions (right down to the lab coats worn by Abbey Road engineers) while the Unknown wrote on the fly in hotel rooms (‘fbifiles.htm’), at work (‘kendralet.htm’), in the back seats of moving cars (‘dac1999c.htm’), and on cocktail napkins at bars (‘dec1994.htm’). The Beatles had professional recording equipment and access to any musical instrument of the time. The Unknown had an HP Jornada, an LG Phenom, a Kodak F300, an IAWA portable cassette recorder, and various ordinary computers. The Beatles were paid, as was a production team who could scarcely be improved upon. The Unknown were not paid for *The Unknown*, nor was our manager Marla (‘marla.htm’). The Beatles could call upon virtuosic instrumentalists at will and were seemingly under little pressure to deal with them in a professional manner. The Unknown didn’t even get an orchestra in funny hats. We mostly kept day jobs. The Beatles had everything they needed in order to create their best work, with the possible exception of privacy. The Unknown were unknown. We had privacy. We could go to restaurants or ride buses or write in public without being accosted by screaming fans. We still can. But the Beatles and the Unknown pushed the machines. Technical limitations, like all constraints, force ingenuity. State-of-the-art four-track equipment in 1966 wasn't quite enough to produce *Sgt. Pepper's Lonely Hearts Club Band*. In September 1968 the Beatles liberated an unused Abbey Road eight-track machine from storage where it was awaiting minor technical adjustments. Nowadays, recording studios can offer well over a hundred tracks, as many as can conceivably be used. *The Unknown* was meant to be a hypertext novel, and writing was almost all that our machines, programming skills, and bandwidth allowed in 1998. Would *Sgt. Pepper's Lonely Hearts Club Band* be a better album if it had been recorded with twenty-four-track technology? George Martin thinks it might have been, but Geoff Emerick unequivocally

disagrees: “We were put on the spot, and that was the sound you made at the moment; you had to put the right echo on, the right EQ, the vocal had to be right. It made things easier in a way, because otherwise there are too many variables, and what’s the point? Where do you go? To me, that’s why there’s no great product today.” [8]

Regardless, part of the beauty of *Sgt. Pepper’s Lonely Hearts Club Band* is how well it captures its moment in history: the summer of love, the drugs, the utopian yearning, and the machines.

George Martin's contribution to the music of the Beatles cannot be overestimated. He produced almost every song, played various instruments including piano (‘In My Life’) and harmonium (‘Being for the Benefit of Mr. Kite’), scored almost all the difficult instrumental arrangements (‘I am the Walrus’), worked late hours, and even made it possible for Lennon and McCartney to co-author albums when the songwriting duo weren't speaking (The Beatles). John Lennon would make surreal requests and George Martin would invent the technical means to fulfill them. Paul McCartney would sing the melodies he wanted the string and horn players to play, and George would transcribe them, “writing the dots” on to staff paper for the musicians. George Martin and Geoff Emerick showed a willingness to overlook the rules of the staid Abbey Road studios to devise unconventional production techniques that in many cases would constitute abuse of the equipment. During the recording of ‘A Day in the Life,’ 40 classically-trained musicians were brought in to record the orchestral buildup (overdubbed four times for a total of 160 on the finished recording). George Martin recalls the evening: “The Beatles asked me, and the musicians, to wear full evening dress, which we did. I left the studio at one point and came back to find one of the musicians, David McCallum, wearing a red clown’s nose and Erich Gruenberg, leader of the violins, wearing a gorilla’s paw on his bow hand. Everyone was wearing funny hats and carnival novelties. I just fell around laughing!When we’d finished doing the orchestral bit one part of me said ‘We’re being a bit self-indulgent here’. The other part of me said ‘It’s bloody marvellous!’” [5] The incident is a wonderful illustration of what might happen in a collaborative cybertext studio. I dream of such a studio and its engineers. What kinds of skills or disposition might a cybertext engineer need in order to facilitate feedback between collaborators and machines? How might a cybertext producer coax the best possible performances from the writers? What sort of equipment might a cybertext studio have? What tools might enable collaborative writing? Are there no computers built for two?

REFERENCES

1. Cunningham, Mark. *Good Vibrations: A History of Record Production*. 1998.

2. Gillespie, William, Frank Marquardt, Scott Rettberg, Dirk Stratton. *The Unknown*. 1998-2001.

<http://www.unknownhypertext.com>

3. Gillespie, William, Frank Marquardt, Scott Rettberg, Dirk Stratton. *The Unknown: An Anthology*. 2002.

4. Gillespie, William, Frank Marquardt, Scott Rettberg, Dirk Stratton. *Criticism of the Unknown*. (forthcoming)

5. Lewisohn, Mark. *The Beatles Recording Sessions: The Official Abbey Road Studio Session Notes 1962-1970*. 1988.

6. MacDonald, Ian. *Revolution in the Head: The Beatles Records and the Sixties*. 1994.

7. Martin, George, with Jeremy Hornsby. *All you Need is Ears*. 1979.

8. Massey Howard. “Revolutionary Recording.” An interview with Geoff Emerick. Published in *EQ* (January 2000). Excerpted from Howard Massey’s then-forthcoming book *Conversations with Record Producers*.

9. Unknown, the. Personal Interview. August 2002.