Blackout Representation, transformation and de-control in the sound work of Yasunao Tone

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blackout. n. Temporary loss of consciousness or memory.

The tradition of avant-garde experimental music that began with the futurists, the Dadaists and more specifically the musique concrète school in the late 1940s, is very closely related to the practice of using recording and playback media as a crucial part of the compositional process. Pierre Schaeffer, Jacques Pouillon, Pierre Henry and early advocates of acousmatic sound used the radio studio equipment of the time such as shellac players, shellac recorders, magnetic tape recorders and, later, custom-built multiple-head and variable-speed devices to create their sound collages, favouring many production techniques like tape editing and overdubbing that would eventually revolutionise the recording industry and the very nature of popular music. Almost any kind of music produced in recording studios today will have some kind of connection to at least one of several mid 20th century artistic and technical developments, such as the invention of multi-track recording by guitarist and sound maverick Les Paul, for example, also in the late forties. Paul’s machine and the new recording techniques that subsequently unfolded enabled studio engineers to conceive and treat sound substance in radical new ways in the decades that followed – Joe Meek, Phil Spector, Brian Wilson, George Martin and Lee Perry illustrate this perfectly. Just like any other area of the arts, music history is constantly shaped by the evolution of tools and media. Sometimes this requires artists to develop new tools in order to realise their visions. Other times, it requires artists to approach current tools in totally new ways in order to open up new aesthetic or philosophical paths, which is precisely the case with Yasunao Tone and his sound work using Compact Disc media from the mid 1980s onwards.

In his 1960 manifesto, Gustav Metzger defined auto-destructive art as “art which contains within itself an agent which automatically leads to its destruction within a period of time not to exceed twenty years. Other forms of auto-destructive art involve manual manipulation. There are forms of auto-destructive art where the artist has a tight control over the nature and timing of the disintegrative process, and there are other forms where the artist’s control is slight.”¹ Metzger, who would later join the Fluxus collective, then went on to list all the materials and techniques that one could use to produce an auto-destructive work of art. The list included adhesives, feed-back, and cybernetics, all of which were present to some extent in Yasunao Tone’s earliest experiments with modified Compact Discs and Compact Disc players in 1984, barely two years after the medium’s public release. However, these experiments, arguably the first attempts to take CD technology out of its context and force it into a creative space, were not so much about destruction but rather about manipulation. By placing tiny pieces of scotch tape on the disc’s data side, Tone was humanising an instrument that promised its users perfection, flawlessness and uncanny clarity.

Like other digital data storage systems, CDs hold information (sound, in audio discs) in binary code. Hence, a player needs a physical way to read those ones and zeros and convert them back to sound. For those who are unfamiliar with the basic principle behind CD technology, Boston-based tech journalist Eric B. Parizo summarised it in the preface to the 2001 compilation tribute to the inventor of the CD, Un Tributo to James T. Russell (which contained a piece by Tone, “Man’yōshū #37, wounded”): “A player uses a low-intensity laser scanner, reflecting light off of the surface of a disc. The code on the disc consists of flat areas and pits, or microscopic grooves. The intensity of the light reflected back from the surface of the CD differs depending upon whether the light strikes a flat spot or a pit. Electrical signals are then created based on the varied intensity of the reflected light. Those signals are then amplified and interpreted into audio, video, etc.”² This information decoding process is so delicate and precise that it requires a specific system to ensure that small irregularities in the laser reflection procedure will not affect the overall operation. This is where error-detection and correction programs, commonly known as CIRC or Cross-interleaved Reed-Solomon coding (after Irving Reed and Gus Solomon, who introduced the idea in 1960), come into play. The CIRC system guarantees that occasional scratches, dust or any minor imperfections on the data side of the disc do not corrupt information decoding, thus preventing them from altering the sound coming out of the speakers, which would potentially result in sporadic or even constant bursts of noise. With time, error-correction systems have evolved significantly. This silent evolution, probably unnoticed by most end-users, brought better, more reliable players that were able to offer smooth decoding of a new disc standards. But in the early days of CD, CIRC systems were soft enough to allow for possible external interventions. And this is exactly what Yasunao Tone was aiming for when

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he started looking at Compact Discs as a new medium – not storage, not playback – suitable for artistic and musical expression.

... REPRESENTATION

"I was not satisfied with recording because it presupposes to repeat the same sound over and over. I’ve been experimenting with pieces that are multiplicable and non-repetitive, such as Molecular Music (1982), which utilises film projection on the screen with light sensors. Then, after that, I was preparing my concert at Roulette in 1985 and I found a Japanese science book for lay people, called Science Seminar for the Familiar. The book has a chapter on digital recording, which gave me a regimental knowledge on digital recordings. But I was intrigued by the author’s remark in the chapter saying that digital recording is a wonderful audio device since it has almost no noise and produces sound very faithful to the original. However, when it misreads 1 with 0, of the binary code, the sound out becomes totally different and unexpected, due to the binary code becoming a totally different numerical value. I thought: ‘there must be a way to override that error-correcting system’. If I succeeded I could create a totally new piece out of ready-made music. I asked an engineer friend of mine and he suggested to make many pinholes on bits of scotch tape and to stick on the CD. After many trials and errors I succeed to create sound unheard of before."

The idea of unheard sound as a goal is crucial to Tone’s musical exploration, and can easily be linked to John Cage, a well-known pioneer in the creative use of records, who wrote: “My favourite music is the music I haven’t yet heard. I don’t hear the music I write: I write in order to hear the music I haven’t yet heard.” By the 1980s, John Cage’s legacy was already a significant force in both the experimental and the mainstream music scenes, influencing the ways in which many artists understood sound matter, structure, and the very act of listening. Cage’s somewhat ambiguous relationship with records, which he used as a sound source/instrument on various occasions, despite being critical of the medium, played an essential role in subsequent developments in the manipulation of recorded media manipulation by artists such as John Oswald, Hugh Davies, Christian Marclay, and to some degree, Grand Wizard Theodore, DJ Kool Herc and similar pioneers of scratch and hip-hop. But no matter how fundamental all these works might have been to the music of the late 20th century, their use of phonograph turntables or magnetic tapes is light years away from Tone’s own hacking of the Compact Disc. Despite some formal similarities, the vast majority of vinyl and tape manipulators of the time made calculated and skilful use of their non-instruments: the praxis of both experimental and mainstream scratchers involves a high degree of decision-making, craftsmanship and a musical consciousness that only differs from that of traditional performers in the choice of instrument. Furthermore, Tone’s approach is completely removed from any traditional formulation of music-making. It is probably much closer to certain practices of generative art, in which the artist creates a “system, such as a set of natural language rules, a computer program, a machine, or other procedural invention, which is set into motion with some degree of autonomy contributing to or resulting in a completed work of art.” Tone adds: “the sound I generate does not come from my conscious mind or a projection of my mind. I don’t know what will come out beforehand.”

Tone’s Compact Disc manipulation techniques should be regarded as a logical evolution of his earlier experiments, a totally coherent move in a career based on an approach to art as a way of pushing the limits of representation. Here, representation is seen as a multi-layered process that originates in text and written words in general (also understood as a representation of previous symbols, pictograms, etc.), transformed into sound by means of a given mechanical manipulation. A perfect example of this paradigm is Tone’s multiple re-presentations of the Man’yoshu (the oldest existing anthology of Japanese poetry, compiled between the Nara and the early Heian periods) which he has extensively used as a source throughout his career, both before and after the mid eighties. In the case of his prepared CDs, binary code (text in the form of zeros and ones representing recorded sound) is partially blocked to prevent the machine from reading it correctly, thus erasing the symbolic content of the code/text.

Far from being mere aesthetic artifacts, the raw data blasts in Tone’s CD-based works are pure, asynchronous audio turbulences, almost indistinguishable from the medium, the process, and the theoretical underpinnings of the composition. Tone’s creative use of audio storage technology originates, grows and develops within the medium itself, thus coming very near to what is commonly known as breaking the fourth wall in cinema and theatre; a situation in which fictional characters display an awareness that they are part of the work. From ancient times (in Greek comedy and tragedy) to the present day (in many of Abbas Kiarostami’s films, for instance), this narrative technique eliminates the fictional fourth wall between the audience and the actors. In one of his analyses of Kiarostami’s movies, French philosopher Jean-Luc Nancy described them as “evidence” – something that is neither fact nor fiction. “It is rather a document about ‘fiction’: not in the sense of imagining the unreal, but in the very specific and precise sense of the technique, of the art of constructing images.” Just as viewers can spot the camera in the middle of a supposed fictional scene in a Kiarostami film, Tone’s stuttering noise spirals are almost meta-referential. In the words of

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5. Yasunao Tone. Yasunao Tone interviewed by Jared Davies, un magazine, vol. 2 no. 2 (November 2008).

Nicolas Collins, another celebrated pioneer in the art of digital disc hacking, “music isn’t just conveyed through grooves, pits and waves. Music is grooves, pits and waves.”

Immediately after his discovery in 1984, Tone conceived the prepared Compact Disc as an ideal methodology capable of fulfilling both his conceptual and aesthetic goals. “My first use of prepared CDs was music for choreographer Kay Nishikawa’s dance suite Techno Eden. I gave her a recording of a collage of prepared CDs in October or November in 1985. She did Techno Eden in January 1986 at St. Marks Church in New York. Then a couple of months later I had a public performance of the prepared CDs at my own concert at the Experimental Intermedia Foundation in New York, in March 1986. The piece became immediately known because among the audience there was John Cage who not only applauded the piece but came to shake my hand no sooner than I finished the performance. [...] For the first ten years I had to play with other people’s CDs, because in the beginning, Compact Disc was not a format for composers like us, you know? It was only popular and classical music at that time, so for me it was kind of ready-made pop-art.” In 1998, John Zorn’s Tzadik record label released Solo for Wounded CD. The album, the second in Tone’s discography after Musica Iconologos (1993), was the studio version of the artist’s May 1995 performance at Roulette, a major New York City venue for contemporary music and intermedia art. Even though Tone’s idea had already been out there for over a decade, it wasn’t yet widely known. But when Solo for Wounded CD arrived in the glitch-crazed mid-nineties, it established Tone as a true trailblazer, rapidly connecting the composer (60 years old at the time) with a whole generation of younger sound artists, fascinated by his experiments with noise and data transformation.

TRANSFORMATION

One of Tone’s earliest pieces, Number, created in 1961, is probably the first recognisable example of data transformation in his career. In this early work, the artist read numbers in sequence, starting from 1, and captured the sound on a Sony open reel tape recorder set at a very low volume. He then re-recorded it several times, amplifying the volume each time, until there was only noise. “The final thing was so distorted that the recorder would shake, so I was very pleased (laughs).” This text-to-sound conversion precedes Alvin Lucier’s famous I Am Sitting in a Room (1970), somewhat similar in form, almost a decade earlier. “I started working on transformations and data conversions from an early stage, but it was never a conscious thing at the beginning. I realised much later. Transformation has always been involved in music: the traditional way of transforming text into sound was singing and reading from a score, but I was never interested in that kind of stuff.”

In the liner notes to Musica Iconologos, Robert Ashley points out that “Tone studied many methods of ‘translating’ images (specifically, things seen) into sounds, but for the most part the images in those compositions had been, first, translated into some form of machine-behavior.” Ashley refers to different means of information encoding – mostly digital processes – that Tone hacks into. The lengthy arrays of ones and zeros stored on a CD are there for the purpose of reconstructing and playing back a recording, but Tone’s mediation radically interferes in this process, so that the listener no longer hears the intended re-presentation of the original recording, but a new, almost generative composition without a pre-existing score. “It is no longer a question of imitation, nor duplication, nor even parody. It is a question of substituting the signs of the real for the real”, as Baudrillard would say.

By adding defects and bugs to the digital disc reading process or by embracing computer mishaps (as in his 2007 piece GGGong, the result of a faulty soundfile transfer), Tone’s transformation of the binary code produces unexpected results and reveals the unpredictable, uncertain force that Masamune Shirow called the Ghost in the Shell in his 1991 manga, cannibalising Arthur Koestler and Gilbert Ryle’s theories on structuralism. And even though there is no ghost involved, magic is one of the first parallels to emerge when one tries to simplify Tone’s work. In a hypothetical flowchart representing many of his data transformation pieces, whatever goes in comes out mysteriously transmuted. Text becomes sound, drawing becomes score, video becomes sound, text becomes video, and so forth. All these data transformations are driven by a process that is evidently a vital part of the work but that somehow remains intentionally buried by the author beneath several layers of technological and philosophical complexity.

“Processes are of course important but they are more than that. [...] As for the understanding of the work, my stance is closer to a pragmatics of art, I don’t deny necessity of something like wall texts and audio guides, because despite the fact that these reference tools exist outside of the works and are superfluous for the works, they are influential, if not indispensable for mediation between the works and the audience reception. It is like Gerard Genette’s [...] idea of paratext, defined as ‘that by which a text becomes book and offers itself as such to its reader, and more generally, to the public.’ Paratext is midway between the inside and the outside of the book, found in such places as the title, preface, note, blurb, and dedication. These are locations where the interaction between text and readership occurs. In other words, this is a study of literary institution. So paratext is namely mediation between reader and text; however, it lacks necessity where chance dominates, as it is like noise. Here emerge the modernistic notions of exclusion, such as the erasure of noise in music, and contempt


towards ornamentation in art, design and architecture. You see the connection between my idea of noise and necessity of mediation between audience and my work.”

Genette formulated the paratext/hypotext theory in his 1982 book Palimpsestes: La Littérature au second degré. As defined by the Merriam-Webster dictionary, a palimpsest is a “writing material (as a parchment or tablet) used one or more times after earlier writing has been erased.” Also, “something having usually diverse layers or aspects apparent beneath the surface.” The word actually comes from Greek παλίμπστης, which means scraped (clean and used) again, and serves as a particularly powerful metaphor for many of Tone’s data transformation pieces, where a given collection of symbols – be it the calligraphy of an ancient Japanese poem, or numbers as the semantic encoding of an audio recording on a Compact Disc – are de-signified, mutated, acted upon, and ultimately re-organised in a completely new form. Palimpsest also became the title of the CD Tone created in collaboration with German composer Florian Hecker, which was released in 2004, some time after they began exchanging material and ideas and working together. “The relation of process and end-result is a complexly intertwined subject and our collaboration Palimpsest is a very product of this, if one can even call so, duality. As you know working with Yasunao is a very rewarding and yet demanding experience. A theoretically lush tour de force, introducing me to the works of Lyotard and Husserl, sharing culinary particularities of finding just the right soba restaurant in Tokyo and a proper Sam Gye Tang in New York and making sure that I am fully aware that performing in darkness is sooo 19th century”, Hecker recalls.

British sound artist Mark Fell, who has also worked with Tone on several occasions since the early 00s, describes their first collaboration at Loughborough University (at the Creativity and Cognition Research Studios): “I was interested in exploring and developing Yasunao’s calligraphy to sound experiments and suggested that we worked on an interactive whiteboard (the kind used in classrooms) connected to some form of realtime sound synthesis. He was happy with this. I had some assumptions about Yasunao’s method, aesthetic preferences and so on. I had a hunch for example that he would not be interested in developing some form of complex, novel instrument – he was happy to work with someone who shared a dislike for traditional approaches to performance devices. […] It is this complex relationship between precision and pandemonium – at the centre of his method – that is impossible to unfold.”

DE-CONTROL

Going back to Metzger’s definition of auto-destructive art, the part that is actually of interest to an analysis of Tone’s oeuvre is the issue of control. While a substantial part of the development of music technology to date continues to feed on the Western obsession with control (real-time interaction, gesture mapping, motion tracking, haptic devices, and so on), Tone’s statement on performance and composition reveals a fascination towards what he calls “de-control”, which is plausibly one of the common attributes throughout his career, present in a number of pieces spanning various disciplines. In terms of his musical work, this means de-controlled compositions and de-controlled performances. “I never expect order in the first place, because order is the result of control. The word order sounds kind of militaristic to me, as in I order you to do something, and is also related to classical music. In that sense I am not a musician, I try to put myself outside of music. Usually, electronic music performers want as much control as possible over their instruments – I am more interested in de-control. When I was about six years old, in primary school, our teacher taught us music and wanted us to distinguish between triad chords, and if a boy couldn’t give the correct answer, he would get a whipping. So I hated this guy and I think that’s the origin for my hatred towards Western classical music and its implicit hierarchy: composer, conductor, performer, audience. Marching bands are also a very good example of hierarchy and control: rhythm, order and the military go always hand in hand, and you must remember I was also just a little kid when the Pacific War started, which was a result of a military government taking over the civilian government. We were expecting American air raids all the time… All that comes from the military, from control, from enforcement. So why should I want to use that kind of force when I make sound? Of course some people might say that my sound pieces are somehow aggressive, but that is a very different thing – it’s about structural intensity. There is a difference between intensity and power.”

More than two thousand years after the Pythagoreans, the generalised concept of aesthetic pleasure in the West is still based on a strict set of rules that places balance, sacred ratios and harmony at the forefront. What’s more, a whole century after the Futurists, the Western world (surely the noisiest civilisation on our planet to date) has yet
to accept noise as a thing of beauty, as a feasible source of creative power, or simply as a valid language for artistic realisation. On the other hand, the appreciation of most forms of popular music is predicated upon the principles of repetition and recognition. Among other reasons, we enjoy it because we take pleasure in recognition (of melodies, themes, patterns). And yet, it is a well established fact that the human brain requires a certain degree of stimuli and surprise if it is not to become idle. Tone’s work encompasses noise as asymmetric imperfection and, above all, as the antithesis of repetition.

Tone’s pieces for prepared/wounded CDs take one of the ideal commercial music media, for years the epitome of that repetition/recognition rationale that allows us to play a piece of music over and over again, and turns it into a highly entropic nondeterministic digital system. Entropy is a particularly appropriate and convenient term in the study of Yasunao’s de-controlled sound works, which originate in the composer’s own experiences in a number of improvisational performance groups during the 60s and 70s in Japan and the United States, after his focus shifted from writing (or écriture, as he prefers it, after Derrida) and literature (his area of expertise during his university years) to performing arts and music. There too, Tone managed to include his long-time interest in Dada, surrealism and automatic writing methods, which provide even greater clues about the composer’s complete disregard for formal musical structures/strategies. Spurred by Edmund Husserl’s theories on the perception of time and melody, his involvement in Group Ongaku (Japanese for Music Group) in the early sixties alongside Takehisa Kosugi and Mieko Shiomi, was already deeply concerned with (or more precisely, trying to circumvent) issues such as determinism, hierarchy, and the conventional notations associated with sound fabric (timbre, colour) and shape (duration, rhythm, time).10 I tried to avoid making melodies, and to do that I played my alto sax as fast as possible, one block of sound: too dense to even identify clear notes. I would then leave enough space before playing the next block. With that method you don’t get any perception of melody at all.

In her recollection of her first experience with Tone, Barcelona-based flutist Barbara Held (another of the composer’s long-time collaborators) further expands on Tone’s approach to de-control in composition: “I met Tone in the kitchen of the Experimental Intermedia Foundation at one of Phill Niblock’s famous Libra Parties. Phill introduced me to Tone, telling me that he had recently composed a piece for block of ice on top of small pump organ. We conversed a bit, and he said ‘I should write you a piece’, it sounded like a good idea to me. I thought that Tone would be interested in knowing more about the flute, but it turns out that as a student he had been a fan of my ‘master’ Jean-Pierre Rampal, so he knew everything he needed to know about what is considered good flute performance. He presented me with the score for Trio for Flute Player, a beautiful set (in his own calligraphy) of poems from the most ancient known collection of Japanese poetry, the Man’yōshū.

A clear sheet of acetate printed with the musical stave could be placed over the calligraphy, the English translation of each poem was to be read through the mouthpiece of the flute, and he had commissioned a special oscillator that was connected to the instrument by means of electrically conductive foam pads that translated finger movements into a line of electronic sound. It was up to me to think of a way to translate the shape of the Japanese characters on the flute. “Tone orally in clear manner instructed me that the curvy line of calligraphy of the poem, overlaid by a musical staff on acetates, does not correspond with pitch or any tonalities but with the player’s finger placements. Note that a flute player uses nine fingers, coinciding with numbers of lines and spaces of the staff — five lines and four spaces. I had been looking for a way of improvising without using a mode or scale or awkward random notes, so not only was it the first loud and obnoxious sounding flute piece that anyone had written for me (what a relief!), but it also changed the way I play, freeing, liberating. The score gave exact information to control the way my hands moved on the instrument, and opened up a way of accessing all possibilities of tunings and timbres of sound that wasn’t expressive or intentional.”

Tone was certainly not the first to propound a new approach to musical notation that is more in keeping with his own personal methods and views on composition. Experimental graphic notation had been a highly fertile field in the 20th century post-tonal avant-garde, particularly among members of the New York School (Feldman, Brown, Wolff et al.), and the Fluxus community that Tone himself joined during the 1960s. However, his literary grounding and modus operandi mean that his methodology (data-transformation, text-to-sound manipulation), is an especially appropriate framework for experimental forms of notation. “The problem with traditional notation – or even with tablature – is that what I get in the end is not my image of sound. When I write a sound piece I use some sort of transformation process, so if I write a score, it has to be based on the same principle. Take for instance the score that is now exhibited at the MACBA.11, a relatively recent piece that I wrote for Zeena Parkins. I used a text by Derrida and musical staff, but not to indicate pitch – it’s more like tablature, actually. There are three geometrical figures, a triangle, a circle and a square, each with smaller, concentric triangles, circles and squares inside. Sound is generated by the notation made of the combination of the different geometrical shapes with the piano stave and structural graph – a kind of Lacanian matheme – indicating to choose silence/sound and a shape. Every time you play, you have to choose one of these shapes, and it makes a big difference which one you choose: the whole thing is up to the performer, so I don’t have to think about it.”

As Held explains, even when he writes scores for others to perform, Tone bypasses


11 - The Origin of Geometry: An Introduction (2006), exhibited at The MACBA Study Center as part of the group show Possibility of Action. The Life of the Score (17/06/2008 - 05/10/2008) curated by Barbara Held and Pilar Subirà.
control without resorting to stochastic processes and the aleatoric strategies that have been common in Western music since Ives. “Unless you are an old fashioned computer musician using Markov chains or a DJ using DJ mixers, you don’t need randomness,” he concludes. In his abandonment of order, Tone devises systems, complex entropic contraptions, that use a wide range of tools – from linguistic characters (drastically stripped of their common symbolic meaning), to ready-made music media or custom – built electronic circuits – in order to produce a weird black hole, a momentary blackout that reaches directly into the composer’s inner self in a meticulous effort to stay clear of consciousness, repetition, decision-making and predictability. Confronted with this abysmal emptiness, the listener has no choice but to give in to the swirling vortex. And, once there, simply relish the blackout.
Yasunao Tone (Tokyo, 1935) is a Japanese interdisciplinary artist. He graduated from Chiba Japanese National University in 1957, majoring in Japanese literature. He became active in the Fluxus movement in the 1960s and moved to the United States in 1972. He organised and participated in many experimental music and performance groups such as Group On-gaku, Hi-Red Center and Team Random (the first computer art group in Japan). His unconventional musical work brings together certain forms of traditional Eastern culture and post-structuralist theories, and since the mid to late nineties has become a notable influence on new generations of sound artists worldwide. He lives and works in New York.

Roc Jiménez de Cisneros is a musician and composer. His work, mainly as part of computer music group EVOL, explores algorithmic composition, noise, psychedelia, system trajectories and the musical application of fractal geometry and other mathematical phenomena. He lives and works in Barcelona.

The conversations which form the basis for this interview took place in March 2002 (email interview by Anna Ramos) and July 2008, during Yasunao Tone’s visit to Barcelona, coinciding with his performance at MACBA, and were continued by email with Tone, Fell, Hecker and Held during February-March 2009. Tone’s work has also been featured on issues 1 and 7 of the Ràdio Web MACBA programme Lines of Sight, http://rwm.macba.cat
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