

Rethinking Nature in Post-Fukushima Japan

Facing the Crisis

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and Silvia Vesco

Vibrations of 11 March 2011 in Japan's Performance Scene

Yamakawa Fuyuki and the Sound of Radioactivity

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Abstract This article discusses the strong resonance provoked by the 2011 triple disaster in the Japanese performance and visual arts by focusing on multimedia artist Yamakawa Fuyuki and the antinuclear activist network's intersection with the underground music scene. Directly plugging into the disaster, Yamakawa re-elaborated his artistic practice in relation to the nuclear crisis by addressing internal and external exposure to radiation. Illustrated are connections between polluted environment, corporeality, politics and performance art, and how his performative experimentations offer novel insights into the interaction between art and disaster enhancing alternative modes of interpretation in technoscience and aesthetic theory.

Summary 1 Forceful Reconfiguration of Visual and Performing Arts. – 2 Yamakawa Fuyuki's Radioactive Performativity. – 3 Cardiac Electrification. – 4 Energy Consumption as Protest and Resistance. – 5 Khoomei and Sustainability: Re-Sonorising the Environment. – 6 Art as *Pharmakon*. – 7 Atomic Performance at Dance Truck Project

Keywords Performance art and disaster. Acoustic corporeality. Seismic ambient noise. Japanese underground music. Antinuclear protest.

1 Forceful Reconfiguration of Visual and Performing Arts

Following 11 March 2011, the ineffable grief and mourning for the victims, accompanied by the paradox of a strange calm mixed with terror, shock and the uncertainty of what will come next invaded mute bodies. Speechlessness and impossibility to configure the state of things in combination with the self-imposed censorship regarding nuclear power issues diffused in Japanese society structurally affected the performance art scene. Theatre, the place where the complex rapport between fiction and reality is staged, has been seriously undermined by the multiple overwhelming disasters, and was forcefully compelled to re-configure itself and to manifest a structural change. Miyazawa Akio, for instance, declared his loss

of words immediately after the earthquake. At TPAMiY Summer Session 2011 (5-7 August) he stated that he is taking notes of his thoughts, and will reflect afterwards about the theatrical technique through which he may put his considerations on stage, underlining that the disaster offers to many theatre-makers a new chance.¹

Having manifested a marked involution regarding critical issues on society and establishment since the 1980s by reversing into escapism, the visual and performing arts could no longer ignore their responsibility to become the platform for immediate reaction against the status quo, while contributing to the construction of a new identity and to the reconstruction of the afflicted community.² Nevertheless, great part of the dormant performance scene inserted into the entertainment industry of Japan remained as such.

Important festivals started to question art itself addressing the ontological and etiological horizon, a quite rare agenda in the past decades, even for the most alternative scenes. *Dansu ga mitai! 13* ダンスがみたい! 13 (I Want to See Dance! 13, 19 July-30 August 2011), dance festival directed by Makabe Shigeo,³ focused on the provocative question “Ima, anata no dansu wa hitsuyō ka...” 今、あなたのダンスは必要か... (In this moment, is your dance necessary...?), and investigated the meaning of dance experienced by both, the performer and the audience.⁴ The performances were followed by discussions with the artists, who had to make sense of their work in connection to the actual situation. The aftertalk is a common practice in dance events, but what emerged was that performers, who usually do not explicitly formulate socio-political issues in relation to their dance, despite they deal with politics in their private discussions, were directly confronted with the specific contingency.⁵

In 2011 a group of dancers, performers and critics, who were already engaged in the defence of Article 9, formed the Maiboku no kai 舞木の会

1 The panel “‘Hyōgen’ toshite no demo” (表現)としてのデモ (Demonstration as Expression, 6 August) held by Miyazaki, Mita Itaru and Sakurai Keisuke discussed in a transnational perspective the performative nature of the new-born protests characterised by the importance of sound-making and their relation to social networks. According to Sakurai, the only way of artistic expression left after 11 March 2011 is to engage in the mobile street protests. For the strict link between demonstrations, performativity and aesthetics see Eckersall 2013.

2 In the wake of the 2011 Tōhoku earthquake many performances have been cancelled. A previous crucial moment in Japan’s past three decades was the crisis following the 1995 Hanshin-Awaji earthquake, which prompted the development and institutionalisation of civil society, and the Tokyo sarin gas attack.

3 Makabe founded in 1987 the theatre company OM-2 experimenting with dramaturgies and physical theatre oriented towards cross-cultural collaborations and critical socio-political issues.

4 The festival has been held at Kagurazaka die pratze and d-Sōko (Nippori).

5 It should be noted, that many artists regard their productions as intrinsically political.



Figure 1. “The future can be changed”. Waiting at Hibiya Park before marching towards the Diet Building. Metropolitan Coalition Against Nukes demonstration, 11 March 2012. © Katja Centonze

(Meeting of Maiboku) and took actions launching the project *Tatakau dansu* たたかうダンス (Dance Fighting) in 2012.⁶ Opposing the pro-nuclear policies and the Article 9 revision they held talk sessions, video screenings and performances, such as Ishii Kahoru’s “guerrilla dance”, and raised critical issues about dance, activism and politics underpinned by movement analysis, while privileging a woman-centred perspective.⁷

Festival/Tokyo’s symposium *Watashitachi wa nani o kataru koto ga dekiru no ka?* 私たちは何を語るすることができるのか? (What can We Tell?, 9-10 November 2011) principally faced the agency of communication and possibility of representation by means of theatrical illusion. Its panel “3.11 ikō no geijutsukatsudō to sono kōkyōsei o megutte” 3.11 以降の芸術活動とその公共性を巡って (Post-3.11 Performing Arts and Their Publicness), moderated by Ōtori Hidenaga, debated the responsibility of artistic expression, public arts policies and the grand narrative in disaster affected Japan. Focusing his discourse on theatre and politics, and on how theatre may help to find out new ways of communication, guest speaker Hans-Thies Lehmann envisaged ancient tragedy as a device to warn human beings not to fall too deep into hubris, while running after technology. He believes that art can save society. Nevertheless, as happens with Cassandra’s prophecies in Greek mythology, the admonishments given by artists often fall on deaf ears. In Lehmann’s vision, although art does not give answers, it poses radical questions, and the political in theatre nowadays should be read in its mode of representation.

Long term project *Fukushima Odyusseia* 福島オデュッセイ (Fukushima Odyssea) led by Akuta Masahiko and Ōtori Hidenaga has been conduct-

6 For details on the group composed by Nishida Rumiko, Kikuchi Biyo, Sakaguchi Katsuhiko, Nakanishi Remon and others see <http://dance9.seesaa.net/> (2015-02-15).

7 It should be underlined, that in Japan’s antinuclear movement previous to 2011 a fundamental role was played by women (see Yamaguchi, Mutō 2012).

ed throughout the three years following the 2011 disasters and is programmed to be continued.⁸ They widely faced the problem of freedom and speech thanks to the constant participation of ex NHK producer Sakurai Hitoshi, who interrogates the media censorship in relation to radioactive contamination.⁹ This compound counterculture enterprise articulated a variety of tasks proposing an active and itinerant mobilisation, a set sail named “Fukushima Odyssea”, where Fukushima functions as a symbol. Under question is put the possibility of a new economic system and value exchange (*kachi kōkan* 価値交換), investigating in detail political, cultural and scientific aspects of the nuclear issue from its discovery to its use in history, including Dwight Eisenhower’s speech “Atoms for Peace” (1953). Discussed were also Guy Debord’s concept of “Society of the Spectacle” in relation to the nuclear, and the destruction of the *kokutai* 国体 (emperor-centred state) in respect to three historical moments: the arrival of Commodore Perry, the atomic bombs of Hiroshima and Nagasaki, and the Fukushima Daiichi nuclear plant accident. Analysed were also the ongoing street protests and demonstrations envisaged as the collective voice *choros*, which characterises ancient Greek theatre tradition, and “Fukushima!” as scream (*himei* 悲鳴) taken in its acceptation as proclaimed by Antonin Artaud. Experimenting with a theatre articulated as trial, they advocate a navigating trial theatre (*saiban engeki* 裁判演劇).¹⁰

Kaleidoscopic dynamics and cross-practices between genres and disciplines underscore the rallies germinated in the aftermath of the 2011 disasters, organised by osmotic, non-politically aligned groups of voluntary activists mainly representing the precariat.¹¹ These mass demonstrations showed that citizens (re)discovered the right to protest, raising their voice and expressing publicly their dissent against state policies and the global “nuclear village”. This human tapestry and the antinuclear movements

8 Among the involved guest speakers were Tanikawa Michiko, Suzuki Sōshi, Hayashi Tatsuki and Takayama Akira. The sessions have been held at livehouse CoreDo (Nogizaka) and at Akane (Waseda).

9 Sakurai’s (2011) article questioning media has been first published on *Asahi Shinbun* webpage on 10 May 2011, but is not accessible any more.

10 Ōtori Hidenaga is probably the most transversal presence at activist debates. The theatre critic is a former student of control engineering at Tokyo Institute of Technology, and therefore able to investigate technical problems related to the nuclear plant disaster, the false information given by TEPCO, by official media and the governmental agencies. He appeared as Jacques Derrida in the complex human and marionette opera of denouncement directed by Akuta Masahiko and Yūki Isshi, *Arutō 24 ji* アルトー24時 (Artaud 24 Hours, 2011) and *Arutō 24 ji futatabi* アルトー24時++再び (Artaud 24 Hours, Once Again, 2013), where also Yamakawa Fuyuki and Itō Atsushi (Atomic Optron) were involved in.

11 As explained by Antonio Negri during the symposium *Multitude and Power: The World after 3.11* (2013), multitude is a concept concerning the precariatized, exploited social class in the post-industrial era.



Figure 2. Ika (Dameren) standing in front of the police barricade keeping the stream of protesters from surrounding the Diet Building, 11 March 2012. © Katja Centonze



Figure 3. Marching from Hibiya Park to Ginza. Metropolitan Coalition Against Nukes demonstration, 11 March 2012. © Francesca Usicco



Figure 4. Mass demonstration in front of the Diet Building, 29 July 2012. © Katja Centonze



Figure 5. Itō Atsuhiro playing his neon instrument, Optron, at the Shirōto no ran demonstration in front of Studio Alta (Shinjuku), 11 September 2011. © Katja Centonze

have been envisaged as “multitude” and new political agencies during the symposium *Maruchichūdo to kenryoku: 3.11 ikō no sekai* マルチチュウドと権力: 3.11 以降の世界 (Multitude and Power: The World after 3.11).¹²

2 Yamakawa Fuyuki's Radioactive Performativity

Directly plugging into the disaster, multimedia artist and sound creator Yamakawa Fuyuki, who obliterates the dialectic between nature and technology, is paradigmatic of the antinuclear activist network and its intersection with the underground music scene. In an integration of sustainable forms of art, music, and lecture performance he amplifies his peculiar corporeal techniques with the help of analog devices and digital technology, and deploys his body as a musical instrument. Blurred are not only boundaries between artistic disciplines, transmission of knowledge and performance, but above all, between the outside and the inside of the body.

As a matter of fact, since 2011 his artistic practice is re-elaborated in relation to the environmental change and catastrophe addressing internal and external exposure to radiation.

His performative experimentations illustrate connections between polluted/toxic ambient, corporeality, politics and performance art, and offer novel insights into the interaction between art and disaster enhancing alternative modes of interpretation in technoscience and aesthetic theory. The concern for contamination is not only manifested in the content of his creation, but radionuclides are the material and matter he works with and sculptures around. Yamakawa's art has been intrinsically affected and paradoxically supported by radiation.

The first attempt to respond to the nuclear crisis manifesting his rapport to electricity and atomic power is *Atomic Guitar Mark I & II (Left Handed)*, a radioactive sound installation of prepared instruments. This series stars two canary yellow Stratocasters stationed specularly onto stands, and features two analog Geiger counters and Geiger Müller tubes, crow black amplifiers, a mixer, wires and cables to connect the circuit, a sample of contaminated soil put on a standing tray positioned in front of the guitars. The sample of soil is usually taken from the Toride Campus of Tokyo University of the Arts (Ibaraki), where Yamakawa works as a part-

12 The symposium coordinated by Itō Mamoru has been held by Antonio Negri, Ichida Yoshihiko, Mōri Yoshitaka and Ueno Chizuko at Science Council of Japan (Tokyo, 6 April 2013). Negri's political thought has widely influenced groups of social mobilisation in Japan, such as Dameren, the anti-capitalistic movement addressing the precariat founded in 1992 by Kaminaga Kōichi and Pepe Hasegawa.

time lecturer.¹³ On the back of the electric guitars, plugged into amplifiers, are applied tactile transducers¹⁴ wired into the radiation monitors, which sense the decaying atoms emanated from the soil on the tray. As soon as the Geiger counters start to react and tick generating mechanical tremors, the movement is transmitted onto the guitar-bodies and their strings, which start to vibrate and swing producing aural signals. These irradiated soundwaves are picked up, maximised and then diffused by the loudspeaker system. What happens here is that the ionising radionuclides, instable and transforming particles, activate and play the Stratocasters. Yamakawa, who defines this electrophonic installation a *jidō ensō sōchi* 自動演奏装置 (equipment of automatic execution), does not touch the primary sound emission source (Yamakawa 2015).¹⁵ The Geiger counter's oscillation is amplified in the feedback process and transmuted into an autonomous artistic execution, as no human being commands the emission of sound. The stochastic process of radiation decay determines the random aural vibration and this mechanism reorients microsieverts into beats per minute (bpm). The diffused 'melodic noise' appears sometimes slightly irregular, but surprisingly cadenced, and progresses nearly in repetitive harmonic sets of pitches through modules of rhythmic recurrence. In brief, it articulates into phonic distortions without being disturbing. The acoustic signals, or drones, engendered by the resounding string vibrations drop and precipitate from the guitars and propagate through the air reaching and touching the visitors'/audience's bodies and ears affecting hearing and sight. These vibrating stimuli can be physically perceived, involving, therefore, also the somatosensation.

Yamakawa confers an acoustic dimension to the inaudible and soundless nuclear fallout and the re-suspension of radionuclides, and makes visible the sound of the imperceptible danger represented by radioactive pollutants.¹⁶

His concern for the impalpable, intangible nature of radioactivity, which our body does not sense - and therefore does not become aware of its threat, since it does not stimulate our nociceptors - informs his creations

13 Addressed here is the precarious working condition and the economic stagnation characterising post-industrial Japan.

14 Tactile transducers permit to transform low bass frequencies into perceivable vibrations conferring tactility to sound.

15 Confront the study on primary emission of radiation to the atmosphere, aerosol categories, and aerosol dynamic processes, including nucleation, condensation/volatilisation and coagulation in Igarashi et al. 2015.

16 A parallel attempt of visualising radioactivity is achieved in Yugi Misato's graphic series *Akai tsubutsu no e* 赤いつぶつぶの絵 (Red Dot Paintings) centred on warnings for protecting children, the most exposed to nuclear danger, from possible contamination. Her works have been chosen as frontpage for weekly magazine *Kin'yōbi* (Friday).

following 11 March 2011.

Broadly speaking, the term 'Mark' combined with a number indicates the version and level of development of a product or machine. It is also used in relation to musical instruments or in military jargon for designating atomic bombs. Mark I and II in the installation title also point at the containment designs of reactor one and two of Fukushima Daiichi Nuclear Plant signaling their outdated technology, as Mark I is the oldest model of boiling water reactor, which resembles a capsized lightbulb. They may also refer to the units in the popular series *Neon Genesis Evangelion* (Centonze 2015c).

In my opinion, this canary yellow installation of prepared instruments may be envisaged as an inorganic re-enactment in the contemporary nuclear age of Paul Klee's *Zwitschermaschine* (1922), which playfully fuses denouncement, cruelty and tender aesthetics. A further reading may be that the Stratocasters are staged as songbirds, recalling the use of canaries in coal mining as a warning system for toxic gases release.

Sure is, that the Stratocasters re-echo the black and yellow of the radiation hazard symbol.

For *Art Fair Tokyo 2012*, where Yamakawa, as a member of collective Snow Contemporary, staged his *Atomic Guitar No. 7 Warlock-type+No. 8 Warlock-type Left Handed*, the soil was taken from the area of the Imperial Palace in Tokyo (see Yamakoshi 2012). Here two couples of fixed Stratocasters have been exhibited, and the second pair's design reminds me of the colour and contours of electric Pikachū and his tail.¹⁷

Actually exhibited at the Museum of Contemporary Art Tokyo *Atomic Guitars Mark I & II (Left Handed)* has been first conceived in July 2011 for the performative exhibition *Atomic Site* (first edition 11-20 August 2011), curated by activist artist Illcommonz (Oda Masanori) at Contemporary Art Factory.¹⁸ Under the banner "DIY" (Detect it yourself) this provocative project, including video-making, installations, performance, research laboratory, lounge, advertisement design, and led by independent artists,¹⁹

17 Pikachū has been also reinterpreted by Chim↑Pom in their challenging critique and urban guerrilla-like intervention *Super Rat* (2006), when the collective haunted rats in the streets of Shibuya, stuffed and painted them yellow transforming them into mutant Pokemon figures, or in *Pika* (2009), their art-action enacted in reference to the *pika pika* flash of the Hiroshima hydrogen blast.

18 As outlined in Manabe's study (2015), Oda is a key person in artistic activism since the initial phase of sound demos in Japan participating in the protests in 2003 against the War in Iraq. Since then Yamakawa and Itō Atsuhiko started to collaborate in Oda's sound rallies "Korosuna" (Don't Kill). Since 2011 Yamakawa and Itō join as noisemakers and demonstrators Drums of Fury (Ikari no dramu 怒りのドラム), transdisciplinary activist collective coordinated by Oda, which carried out a series of rumbling rallies and marching to the beat of drums.

19 Involved are also Ishikawa Raita, Itō Atsuhiko, Shirōto no ran activist and documentarist Nakamura Yūki, Julia Leser, Clarissa Seidel, Yoshida Ami, MijA, =3=3=3 (Pupupu) and Chim↑Pom.

fleshes out the near future world of radiation level 8 with no place to hide.²⁰ Raising their voice against indifference the collective's response to the overwhelming disasters is their engagement in an art form, a new movement of thought called "*Genpatsu dada*" 原発ダダ (Nuclear Dadaism), as well as "*Fukushima dada*" フクシマ・ダダ (Fukushima Dadaism), or "*Atomikku dada*" アトミック・ダダ (Atomic Dadaism).²¹ They oppose to the pro-nuclear policy and propagandistic slogan "*anzen, eko, kurīn, kōritsuteki*" 安全・エコ・クリーン・効率的 (safe, ecologic, clean, efficient) the catchphrase "*fūan, ero, fukenkō, fukōritsu*" 不安・エロ・不健康・非効率 (unsafe, obscene, unhealthy, inefficient) expressing radical scepticism towards technology and the corporate media allied with the state.



Figure 6. Yamakawa Fuyuki, *Atomic Guitar Mark I & II (Left-Handed)*, 2011
(Courtesy Yamakawa Fuyuki) (<https://www.youtube.com/watch?v=Rwbnoongh84>)

20 The principles announced on their webpage are among others: free entrance, no fund raising, no use of air conditioner, no energy-saving because of the distrust towards the government's strategies, no press release because of the distrust in media, no sneak preview and no opening party for the media, free photographing, videorecording and USTREAM are allowed (<https://atomiksite.wordpress.com/about/>, 2015-02-02).

21 "Dada" refers also to the expression "*dada more*" ダダ漏れ (uncontained leak).



Figures 7-8. Yamakawa Fuyuki, *Atomic Guitar Mark I & II (Left Handed)*. EARTH Gallery (Tokyo), 27 June 2015. © Katja Centonze

3 Cardiac Electrification

In Yamakawa's performative cross-practices, underpinned by the *onkyōshintairon* 音響身体論 (Yamakawa 2015), his theory conceived on acoustic corporeality (or corporeal acoustics), the manipulation of media technologies and their processing starts from within his body. Therefore, in an open challenge to physical limits, his organic built articulates as a multimedia performance or sound system in itself.

Thanks to his breathing technique and pneumatic activity, Yamakawa is capable to create an interface between the automatic nervous system, which governs involuntary actions, such as internal organ activity, and the somatic nervous system, responsible for voluntary control of body movement. This biofeedback practice enables him to have a sharp control over the cardiac muscle, and thus, over the pulsations and sound it generates. His principal aim is to re-orient the rhythm of his heart, the power station of vitality, inducing it to squeeze, contract and react under his command, performing and transforming his heartbeat into a sonic action and the cardiac muscle into a musical instrument. Yamakawa provokes arrhythmias or tries to stop his heart for a while fluctuating between fibrillation and defibrillation. After hyperventilating, he holds his breath and the heart starts to beat quickly. Conversely, under anaerobic condition the heart starts to economise oxygen and to beat slowly (Yamakawa 2008a). In this cardiophonic execution the artist renders the heart an aerophone, without touching it with his mouth, and a percussion instrument without hitting it with his hands.

If observed in medical terms, the heart muscle is an electrical conduction system, which is endowed with an intrinsic electrical activity and displays auto-rhythmicity with its travelling impulses, its signals, intranodal tracks and firing rate (Pinnell et al. 2007, 86).

Nevertheless, as heartbeats are low in pitch, the electric system of his heart and the resonating respiration, in order to be properly perceived in a venue by the beholders, require a reinforcement system for maximisation, amplification and reverberation.

He, therefore, applies an electronic stethoscope for auscultation to his naked breast facilitating the spread of sound throughout the space and the involvement of the audience's senses and bodies. This music is further processed into an electric and digital symphony defined by the artist as *shinzō no pafōmansu* 心臓のパフォーマンス (cardioperformance). In this feedback circuit of organic/biological, analog and digital devices his heartbeat impulses are digitalised, converted into electric signals, which activate a swarm of bare lightbulbs hanging upside down and usually installed in proximity of the performer. These flicker in synchronisation with the audio impulses of his heart (see Centonze 2006; 2014, 355). In synthesis, the cardiac electric signals producing heartbeat sound pulsation trigger

the twinkling of the lightbulbs, and therefore are reconverted, while being translated into visual art and visible lightflux, which illuminates the darkness of the scene. Here, decibels are converted into lumens.²²

Yamakawa intends this interweaving of technology and corporeality as practices of bodily self-extension and amplification. For him it is as if the audience entered his body. He broadens and expands the activity of his cardiac organ, its signals and intranodal tracks, while distributing and spatialising the functions of the biological operating system from the inside to the outside space generating an immersive and galvanising experience lived by the audience.

In light of the nuclear crisis, we may say that, the heart stands out as a primary sound emission source and the circuit provokes a multilayered and multisensorial re-suspension of acoustics. There may be traced a posteriori also a parallelism between the lightbulbs and the shape of outdated boiling water container Mark I of the burnt-out nuclear power plant.

As Yamakawa, who traces connections between his heart and the exploded nuclear plant, states: “My life is nuclear-powered” (Richardson 2012).

In combination, this sonic loop is integrated with the overtone chant, *khoomei* (*khöömei* or *khomii*), traditionally practiced in Tuva. In this technique, based on the use of double vocalisation, a single performer emits two tones simultaneously. *Khoomei* is already a practice of corporeal extension by distributing anthropogenic sound into space.²³ As this discipline influences the heartbeat’s pace, Yamakawa intends it as a conjunct artistic mechanism for cadencing and orienting his cardiac activity, which through this vocalisation is controlled in speed and velocity.

In addition, he makes his skull resonate even more by hitting it with his hands provoking intracranial sounds and teeth clapping. These effects are amplified by the skull microphone (or bone-conduction) which captures bone vibrations.²⁴

While displaying and playing his heart, Yamakawa creates noisy chords and drones with his guitar by shaking and rocking it firmly, or by rubbing its body staging at the same time his own seismic corporeality and letting act his vibrating voice on its strings. He occasionally also jumps and kicks from behind with his *dorsum pedis* the cymbal positioned behind him.

It appears evident, that the effort ensued during these integrated bodily works further affect the rhythmical outcome of the cardiac muscle, since

22 More details concerning the circuit are described in earlier studies focusing on the collaboration between Yamakawa and Kawaguchi Takao, *D.D.D.* (2004) (see Centonze 2006, 2014).

23 *Khoomei* is also a technique inherent to Tuvan shamanic practices (Yamakawa 2015).

24 A variety of microphones are employed in his cardiac performances. Whereas the air microphone picks up air vibration, a contact microphone, often employed in noise music experimentations, is directly attached to the body of a solid object sensing and transducing its physical vibration.

oxygen consumption of the beating heart increases during exercise (Pinnell et al. 2007, 87). His performances imply risks, as for instance, when he fainted during *D.D.D.* performed with Kawaguchi Takao at Biennale Danza Venezia 2006. The lightbulbs exploded and caught fire.

4 Energy Consumption as Protest and Resistance

As often explained by the artist (Yamakawa 2008a, 2015), during his cardioperformance he undergoes an “electrification of the body” (*shintai o denkikasaseru* 身体を電気化させる).

It appears evident, that Yamakawa’s biological/artificial concert, or, as I would call it, abiogenetic circuit, implies a high expenditure of power supply, considering that for transforming heartbeats into the visual phenomenon that illuminates the darkness of the venue, 150 watt are converted into an energy consumption of 750 watt.

Needless to say, that he was compelled to reassess his composite art in consequence of the Fukushima Daiichi nuclear plant explosions, the energy conservation policy and mandatory power cuts implemented in the aftermath of the disasters. In the months following 11 March he stopped performing not only for technical, but, above all, for ethical reasons and due to the dilemma of electricity consumption, while engaging in street protests and antinuclear activism.

Without denying his performance-making put forth until the detonation of the nuclear crisis he started to reset his art of intervention under a slightly different protocol. While manifesting explicitly his political stance and antinuclear activism powered and fuelled by open criticism and dissent, his artistic endeavour, already focused on making perceivable the unperceivable, has been extended to showing (physical) infrastructures by bringing to the surface, and thus denouncing, the framework and network hidden by the system of the “nuclear nation-state”.²⁵ Under this register he explored the hidden underlying structure in his performative photo collection *Shibuya Water Watching* (2013), a survey based on the soundscape of Sentagai and its sewerage network in link to the 1964 Tokyo Olympics, the repent urbanisation and environmental pollution.

In 2011, revealing mechanisms of *power*, he developed alternative ways for self-produced electricity joining the project *Tokyo Art-Power Plant* at Tokyo University of the Arts (8-16 October). Yamakawa contributed with his experiment “Human Power Generation” generating energy by pedalling a bicycle with an alternator installed on the rear wheel, and enacted

²⁵ I refer here to the definition “*genshiryoku kokka*” 原子力国家, which has been frequently addressed during the discussion of the symposium *Multitude and Power: The World after 3.11* (2013).

in collaboration with Itō Atsuhiko *Electric Generation Live Performance*, while coadiuvated by voluntary students, who mounted on the power-generating bicycle.

Nevertheless, the incandescence of life expressed in the *shinzō no pafōmansu*, standing in opposition to efficient energy use, structurally necessitates standard lightbulbs disposed with heated wire filaments producing the glowing luminosity. As Yamakawa (2015) states, his own life is burning, therefore, it is impossible for him to employ energy saving LED lamps, which are cold in respect to the incandescent bulbs based on the mechanism of combustion.

Since 2011 Yamakawa's practice stems from the dilemma he formulates in the following way: "In order to make my music I need electricity, therefore, I depend on TEPCO" (Centonze 2015c).

He overturned this situation of uneasiness into a starting point for a new project. As a consequence, his voltaic cardioperformance and the *Atomic Guitars* installation turned into being strictly site-specific and possible only in the districts of the Kantō area supplied by TEPCO. His goal is to give shape to the energy dilemma, and to make evident dysfunctional mechanisms TEPCO and the nuclear village are trying to conceal. In brief, TEPCO's electricity is used by the artist in order to reverberate their responsibility through the radioactive sound. In this sense, Yamakawa enacts a revolt from within the establishment itself. He would never execute this energy-consuming performance in Fukushima, for example, where the Tōhoku Denryoku (Tōhoku Electric Power Company) operates, he says (Centonze 2015c).

5 Khoomei and Sustainability: Re-Sonorising the Environment

Yamakawa, who views his production in terms of inputs and outputs transversing his body (*shintai*), explores the corporeal system and its possible aesthetic effects, while orchestrating his somatic apparatus. It might be said that his body inhales, elaborates and then exhales things, which cannot be heard and seen. As a result, he engages in sound creation and its performative execution (*ensō*), instead of "producing music" (Centonze 2015c).

It is important to consider, though, that his approach to art may be defined as ecomusicology, englobing ecocriticism, pedagogy and sustainable music (cf. Aaron et al. 2014).

As exposed in his lecture at EARTH Gallery (Yamakawa 2015), he trained khoomei, which he re-maps under an avanguardist register, in relation to invisible, inaudible and undetectable phenomena. He describes khoomei as a portrait of nature in respect to the extended, uninhabited ecoregion of the Tuvan steppe, non-polluted by anthropogenic soundings and dominated by a vast gamma of natural sonancies (also known as infra-

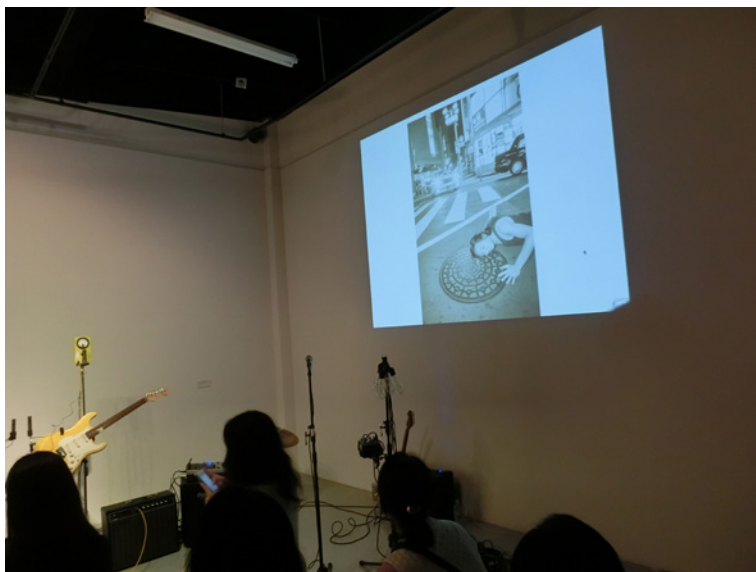


Figure 9. Yamakawa Fuyuki explaining his project *Shibuya Water Watching*.
Lecture performance, EARTH Gallery (Tokyo), 27 June 2015.
© Katja Centonze

sounds), which are not receivable by the human ear, such as the sound of the wind, for instance. In order to be able to achieve outputs in this discipline of sound mimesis, inputs (listening, seeing, smelling) from nature are required. While getting acquainted with the peculiar tone intervals and frequencies of the surrounding soundscape the practitioner sharpens the faculty of perception.

As highlighted by Levin and Edgerton (1999), throat-singing and its vocally reinforced harmonics is just one means used by herder-hunters to interact with their natural acoustic environment and vocalists achieve this tuning through biofeedback.

It is further added that, harmonics resonating in the vocal tract of the performer, since these often “sound disembodied”, appear difficult to be distinguished from sounds produced/existing in the surrounding physical space or in the mind of the listener:

The sculpting of sounds does not end once it escapes from the mouth. As the wave wafts outward, it loses as it spreads over a larger area and sets the freestanding air in motion. This external filtering, known as the radiation characteristic, dampens lower frequencies to a greater extent than it does higher frequencies. When combined, the source, filter

and radiation characteristic produce sound whose harmonics decrease in power at the rate of six decibel (dB) per octave - except for peaks around certain frequencies, the formants. (Levin, Edgerton 1999, 84)

Yamakawa (2015), considered as the “Jimi Hendrix of *khoomoi*”, sustained, that *khoomoi* artists have an electric identity and connected it to contemporary electricity, human identity and the origin of life.

He suggested that the Tuvan dyplophonic vocalisation is paralleled in Japanese tradition by the oral performing arts of *naniwabushi* 浪花節 fluctuating between narration and chanting performed in *damigoe* ダミ声 (pressed voice, thick voice or hoarse voice).²⁶ This technique has been at the centre of his multimedia installation *The Voice-Over* (Tokyo Photographic Art Museum, 1997-2008) based on the tape-recorded voice of his father, Yamakawa Chiaki, anchorman of Fuji TV, who passed away in 1988 affected by throat cancer, which determines hoarseness (see Yamakawa 2008b).

As highlighted by Igarashi et al., “[t]he atmosphere is the major medium into which radioactive materials were directly injected by nuclear tests and accidents” since the 1950s (2015, 1). Radioactive material emitted and dispersed into the air leads to external and internal exposure. Ionising radiations enter the body by ingestion or inhalation, increasing the risk of thyroid cancer. With evidence, in Yamakawa’s aesthetics the chain and interdependence between radioactive contamination (including detrimental effects of long term exposure to low doses), throat-singing and thyroid affection is addressed.²⁷ I would say that, along with his art-making, which unfolds as a political praxis and as provocation, the nuclear crisis pervades intrinsically and structurally the body of the artist himself.

Since 2011 Yamakawa is using his body not only as an energy source, but also as a radiation source.

When we sing, too, we have no choice but to sing with breaths that have radiation mixed in. Even so, the song might contain some kind of heart. What was contained in those nuclear power plants scattered

26 Considered as a lower-class form of entertainment, this practice of storytelling traditionally accompanied by shamisen, is expressed through peculiar voice modulations (cf. Rupert 2015, 45-51), and has been a vehicle for war-propaganda until around 1945 (Bold 2012). For a study on frequency fluctuation of *damigoe* see Fujisawa et al. 2000.

27 In their scientific survey published in 2013 on the possible risks of thyroid cancer, principally based on officialised knowledge regarding cases emerged in the years following the Chernobyl nuclear power plant accident affecting a large number of children, Yamashita and Suzuki (2013, 131) emphasise that “[t]he risk of radiation-associated thyroid cancer in Fukushima is quite different from that of Chernobyl at the standpoint of the level of thyroid dose exposed by the accident”. They further assure that “the doses to a vast majority of the population in Fukushima were not high enough to expect to see any increase in incidence of cancer and health effects in the future” (128).

and reached us from Fukushima. I feel so strongly, as an internal skin sensation throughout my body, a sense that I have become one with radiation. And it tries to get out by breaking out of my body as vibration. (Yamakawa 2011)

To put it in other words: for his radioactive *khoomi* and heartbeating nuclear electrification Yamakawa uses the poison produced by TEPCO as fuel for his biological machine (the Yamawaka machine), i.e. his somatic built. His body recycles the radionuclides and spits them back into the area power-controlled by TEPCO, propagating through vibration – compareable to the phenomena of “advection, diffusion and convective transport” as analysed in Igarashi et al. (2015, 10) – his artistic denouncement. He literally voices radioactivity and embodies the nuclear crisis in a feedback loop of corporeal paradox and dystopia. Yamakawa (2015) further maintains, that when he goes to Fukushima, he tunes his body, while testing to which extend he is able to be exposed to radiations.

The “convective wind” (Igarashi et al. 2015, 13) scattering radiation since the fallout becomes pivotal in the transnational and long term project *Don't Follow the Wind*, initiated by Chim ↑ Pom and curated by Kubota Kenji, Eva and Franco Mattes, and Jason Waite.²⁸ This invisible exhibition, opened on 11 March 2015, is taking place within the Fukushima mandatory evacuation zone, “the difficult-to-return zone”, and its abandoned dwellings. At the present the irradiated exhibition site, where time seems to be obliterated, is inaccessible to visitors, and the project is made possible thanks to the collaboration offered by the disrupted residents.²⁹ The artists, clad in protective suits, operate in loco with direct interventions, and create “spaces for resisting falsification of knowledge”, as Antonio Negri (symposium *Multitude and Power*, 2013) would say. They manifest preoccupation for social discrimination and our relation to environment, with the hope that, although in an uncalculable time, one day the evacuees and the future generation may enter the rehabilitated exclusion zone. Yamakawa joins this arduous art challenge as a member of the group Grand Guignol

28 The title derives from an account by a collaborator and Fukushima resident, who, despite the reassuring information given by the official media, evacuated immediately his residence with his family by car, thanks to the warnings of a friend working inside the nuclear plant. At a certain point, drawing on his knowledge as hobby fisherman, he checked the direction of the wind, and understood that he was driving in direction of the wind blowing. He immediately changed his route driving in opposition to the government's instructions. The other contributing artists are Ai Weiwei, Miyanaga Aiko, Nikolaus Hirsch, Jorge Otero-Pailos, Takeuchi Kōta, Koizumi Meirō, Takegawa Nobuaki, Ahmet Ögüt, Trevor Paglen, and Taryn Simon. The satellite project *Don't Follow The Wind: Non-Visitor Center* (2015) at the Watari Museum of Contemporary Art was joined by further artists such as Sion Sono.

29 For this project see the imageless official webpage displaying only vocal information: <http://dontfollowthewind.info/> (2015-11-15).

Mirai composed by Ameya Norimizu, art critic Sawaragi Noi, and photographer Akagi Shūji. Their continuously revived installation and performative project, *Demio Fukushima 501*,³⁰ re-elaborates in light of the nuclear accident in Fukushima Ameya's past research-performance drawing on the Japan Airlines Flight 123 accident.³¹ By investigating associations between the complex socio-political and economical situation regarding Okinawa, Fukushima and Hiroshima, the unit dedicates this work to media artist late Minami Seiko, implanting remains from her installation *Information Weapon 1: Super Clean Room* (1989-90) into the highly polluted area. In Sawaragi's words, they "transition" Minami's artwork concerning contamination "to actual radioactive waste" (Sawaragi 2016).

As many artists and scholars, Yamakawa moves his sharp critique against the rhetorics framed by corporate media around *kizuna* 絆 (bond), pivotal in the propagandistic campaign and revitalisation policies promoted by governmental agencies invoking collaboration, alliance and social bond in "disaster affected Japan".³²

Conversely, the artist conceives *kizuna* as physical (*butsuriteki*) junctions: the channel of transmission connecting a breastfeeding mother to her child after the nuclear explosion; the voice, which connects Yamakawa genetically to his father's and his future child's voice. The energy supply network stretching from Fukushima throughout the Kantō area, which wires its everyday electric life into the nuclear facility, articulates as *kizuna*, since "all sockets in Tokyo lead to Fukushima" (Centonze 2015c). With this expression, Yamakawa gives a clearer vision of the historical hierarchy established between the two regions.³³

30 They use the remains of a crippled Demio, car fabricated in Hiroshima by Mazda.

31 The aircraft crashed near Mount Osutaka on 12 August 1985.

32 In her analysis of economical and political interconnections between the state, corporations and aid associations in response to 11 March, Robertson (2012), who denies the definition of "post-disaster" emphasising, instead, the perspective of "inter-disaster", highlights how the *kizuna* propaganda has been endorsed in the strategies of tourism promotion by national touristic agencies. Richter (2015), in her critical investigation on techno-nationalism and the trope of "strong *kizuna*" in opposition to "weak *kizuna*", underlines the emergence of an 'alternative' *kizuna* which interconnects the participants of antinuclear demonstration and movements opposing the technocratic state machinery.

33 For an historical analysis on Tōhoku as a source for food, water, cheap labour force and electricity for Tokyo, Japan's largest consumer market, see Oguma 2011.

6 Art as *Pharmakon*

A further attempt to intervene with his art into social texture, while stimulating participatory actions and inviting people to react,³⁴ is *Gen "pa" tsu Counseling Room (Atomic Site, 2011)*.³⁵ Definitely inverting the role of listener and performer, this interactive installation was meant to receive in a hut those, who suffer the taboo imposed by society regarding the free expression of their fears caused by the nuclear crisis. Many visitors confided him the actual problem they have with their family, partner or colleagues, and the impossibility to break the general stonewalling and obstructive attitude which prevents from speaking out nuclear issues.³⁶ Yamakawa conceived these encounters as a sort of noise performance produced by the vibration of the visitors' vocal chords. While giving voice to their repressed distress,³⁷ the sound of anxiety propagates through the air as a form of social resistance in association and synchronicity with the vibrations of the earth(quake), the city and the environment (Centonze 2015c).

This installation focuses on the socio-political dynamics of consent and self-restraint based on anticipated obedience (*fukujū*) interweaved with the surmise (*sontaku*) of the other's intentions typical in Japan's "mura shakai" (village society), as Yamakawa defines it.³⁸ As discussed also by Ichida Yoshihiko during the symposium *Multitude and Power* (2013), consensus flows as air (*kūki toshite nagarete iru*). The *kūki* policy is addressed in detail also by Manabe (2015, 111-15), seen in its interconnections with

34 For a detailed discussion on "participatory style", which obliterates the role between performer and protester, and "presentational style" in sound demos see Manabe 2015.

35 This project is connected to the ongoing series and voice performance "PA" *nisshi ment* which began at midnight on 1 January 2011, when the artist sold his right to pronounce the syllable "pa" for the duration of one year. In consequence of the 11 March disasters, the project has been protracted for a still undefinable period (<http://pa-nisshi.net/>).

36 Yamakawa was also involved in the exhibition *Artists and the Disaster-Documentation in Progress* (Art Tower Mitō, 2012), which was oriented towards small-scale situations of "bewilderment and indecision", and created "opportunities and spaces for people to have free and uninhibited conversations", while helping each person "to generate individual memories" about the disasters opening perspectives for the future (http://www.arttower-mito.or.jp/gallery_en/gallery02.html?id=331).

37 In their survey on the post-disaster distress impact on suicidality in the tsunami-stricken areas of Miyagi Prefecture, Ōrui et al. (2015) show the delayed increase of male suicide rates, which differs from the female trend. It is underlined that the data are difficult to be collected, and that the continuous improvement in mental healthcare system is necessary for assisting people still forced to live in temporary housings, while trying to rebuild their lives. Suicidal rates on a national scale notably increased after 1998 in connection to economic instability and employment policies in late capitalism.

38 The actual situation in his country based on the construction of the myth of safety induces him to take the distance from his national identity (Centonze 2015c).

mainstream media strategies and cyberspace. Here I would like to suggest, that the *kūki* policy resembles radioactivity: it is an omnipervasive, invisible, soundless and powerful mechanism of control and a tacit form of self-policing in Japanese society.

It should be underlined that the purpose in Yamakawa's sound-creation, which oscillates between cacophony and euphony, is not that of healing the audience. Instead, his radioactive sonic art is connected to the contradicting function of *pharmakon*, halfway between poison and medicine.³⁹

I believe art has the power to reincarnate that "ultimate end point" to a "starting point". [...] Radiation creates beautiful sounds. It is a very cruel sound, but it is an expression of the current reality of our lives. The idea of going forward with our lives while changing such poison as radiation into medicine we call music - I believe the piece contains such hopeless hope, the idea of *pharmakon*-like ambiguity. (Yamakawa 2011)

This atrocious beauty of noise definitely addresses the aesthetics of catastrophe combined with Yamakawa's perspective that art can be a very effective tool and that everything should continue to vibrate. Disaster is converted into an aesthetic event and the re-elaboration of catastrophe explores the (positive) potentialities of the adverse and unfavourable circumstances.

Yamakawa's ecocritical stance, electrically charged art, wiring music, pedagogical and social engagement retrace aesthetical principles configured since ancient Greek tragedy.

As Lehmann argued during his lectures at Waseda University (24, 31 October 2011) concerning the concept of *chatarsis* in Aristotle's *Poetics*, tragedy operates like a *pharmakon*, taken in its etymological meaning of venom and cure. *Pharmakon* provokes illness and is its remedy. Aristotle considers tragedy a fundamental moment of cognition and recognition (*anagnorisis*), a transition from a state of non-knowledge to knowledge in a process of *logos*, i.e. tragedy is a "lecture" and implies a change from a negative situation into a positive one. Therefore, a further important process, besides the highly affective effect of *chatarsis*, is *peripeteia*, when the plot suddenly changes or has a break at a certain point (cf. also Lehmann 2013, 211-12). As Lehmann further observed, *peripeteia* may lead to catastrophe. More than in theatre, the scholar considers the efficacy of performance art and post-dramatic theatre, as these involve a criticism of subjectivity and the awareness, that our own will is conditioned by the social structure.

39 Cesium-137, for instance, may cause damages, but is also used in medical therapy.

7 Atomic Performance at Dance Truck Project

In 2012 Yamakawa enacted an untitled performance during the *Dance Truck Project* (7-9 September), which took place within a special site in front of the Shinkō Pier entrance in Yokohama.⁴⁰

This outdoor festival was conceived in 2011 by Okazaki Matsue founder of the NPO Off Site Project.⁴¹ Using the back of a rental truck as a stage this site-specific and mobile festival is originally meant to promote innovating contemporary arts, dance and music establishing a network with the hosting city and its inhabitants (Centonze 2015b). Thanks to co-curator Higashino Yōko and lightening designer Fujimoto Takayuki (Kinsei R&D), its first edition in 2012, based on environmental criteria, has been integrated with technologies designed to improve energy efficiency and sustainability, and with activist art.⁴² Higashino and Fujimoto shaped the event series as a platform for denouncement and protest, whereas Okazaki's purpose is neither of contestation nor antinuclearistic.

This demonstrates the complex reality of the art scene and its response to the disasters, and that even in alternative projects there is not a collective aim to react against an historical situation that involves Japan since the postwar era, when, to put it in Tsurumi Shunsuke's (1986, 111) words, after the New Mutual Security Treaty in 1960 the country has been "firmly placed under the nuclear umbrella of the United States".

As explained by Fujimoto (Centonze 2015a), in 2014 the truck has been solar-powered and the Yokohama edition was coupled with the project *Smart Illumination*, which experiments with latest energy-saving technology and art within the townscape.⁴³

Yamakawa's performance, which re-enacted his installation *Atomic Guitars*, was in my eyes a twenty minutes synthesis of the earthquake, tsunami and meltdown.

On the back of the truck was installed the body of a Stratocaster connected to a Geiger counter, which already started to react to the atmosphere of Yokohama. The audience was sitting on the ground on blue plastic sheets. At the beginning Yamakawa climbs the high fence, and gets outside the zoned area confining with a ground, where previously a wireless microphone has been placed, which gradually caught the sound of Yamakawa's footsteps. His figure was fading out of our sight, and the audience's expe-

40 Participating artists on that day (9 September) were Higashino Yōko, off-Nibroll, Haino Keiji, Shirai Tsuyoshi/Dill and Tetsuwari Albatrossket (<http://dance-truck.jp/2012/>).

41 Okazaki draws on a concept by light technician Malina Rodriguez.

42 In 2013 the truck travelled to Fukushima and Miyagi involving local artists and staff.

43 *Smart Illumination*, started in 2011, shows that one of the most diffused strategies undertaken in reaction to the disaster has been the energy saving agency.

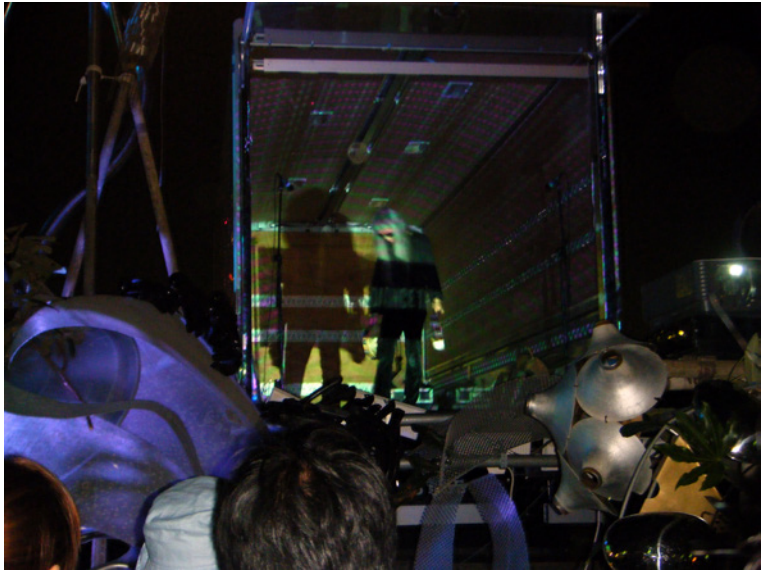


Figure 10. Haino Keiji on the truck at *Dance Truck Project 2012* (Yokohama).
© Katja Centonze

rience shifted exclusively towards the aural happening. He picked up the microphone and the sound became clearer shifting from footsteps on the soft field to those on the hard asphalt, as soon as he got onto the street, while greeting eventual passersby. He approached the sea and left the microphone on the water's edge, which transmitted a peaceful and light, but horrifying waving sonancy, arousing feelings inevitably emotionally charged with an inexpressible sense of tragedy.

Yamakawa re-enters the common performance space reclimbing the fence, gets onto the truck and starts to vocalise his *khoomei*, while the sea and the reacting Geiger counter were resonating in the background. At a certain point he stops the chanting, puts on a white mouth mask and slides his hands into plastic gloves as in a medical operation. He then pours from a plastic bag a sample of soil into a tray and explains that it comes from the ground of the Toride Campus of Tokyo University of the Arts in Ibaraki prefecture, where he works as a lecturer. As soon as he put the tray next to the Geiger counter the guitar started to emit strong noise vibrations, provoked by the movements transmitted to it through the tactile transducers applied on its back, which captured the nervous ticking of the counter. At this point the musician took a second Stratocaster opening a dialogical noise session with the installed instrument, played by the radiations. While convulsing his body, he firmly shook the electric guitar

without touching its strings, and violently shivered in 'dissonant unison' with the trembling body of the instrument, while engaging in a corporeal 'talking' to and 'answering' to the set up guitar excited by radiation.

As on that occasion low-pitched acoustics could not be amplified he could not execute his *shinzō no pafōmansu* and had to re-arrange his plans. In this aesthetical display the soundless radiation definitely gained a sensitive and perceivable texture. By conveying the cruel beauty of noise, the shrill contrast between the actual historical situation and the unavoidable necessity to express through art the sense of beauty was emphasised.

It is though difficult to understand, whether Yamakawa is obsessed with or simply possessed by beauty, a preponderant factor interweaved into his high-tech/organic circuit, which oscillates between automatic sound, impersonal drones and self-centred dynamics.

In consequence of the environmental change, Yamakawa claims his sonic art as a new form in respect to "ambient music" as has been conceived by Brian Eno, a category the Japanese artist re-evaluates in contemporary terms considering the severe and harsh atmospheric condition following the meltdown (Centonze 2015c).

I would like to suggest here the possible definition of "ambient seismic noise" in connection to the recent approach in seismological studies by retrieving the random wavefields of seismic noise, which is defined as "a permanent vibration of the Earth due to natural or industrial sources" (Campillo, Roux, Shapiro 2011, 1231).

The image given by trembling Yamakawa shaking the electric guitar is applicable to the earth, which shakes our body, and its seismic activity.⁴⁴ The sensation of the ground moving, shaking under the feet, involving our entire built and the electricity transmitted throughout the whole body, may persist for weeks (or even more).

Studies demonstrated that earthquakes cause PTSD (post-traumatic stress disorder) in those who experienced and survived (cf. Ōrui et al. 2015), emphasising the "emotional" trauma. I wonder, if there are studies, which explore the coseismic phenomenon of corporeal perturbation for which *seismic bodies* continue to shake for a long time, even after the geological disturbance, when the earth 'stands still'. Our body is a portable biological seismometer and in some cases may have the potential for physically sensing and signalling with physiological symptoms an impending geological disturbance reacting to foreshocks. Being wired into an artificial electrical power supply system, as Yamakawa does, is a personal choice, but the fact of being wired into our ecosystem and environment through our body is a reality one simply chooses to be aware of or not. It goes without saying, that my respect goes

⁴⁴ The shivering of the body (*keiren*), or as I call it "seismic body", is a distinctive aspect in *butō* dance and noise music.

to those bodies which are characterised by the impossibility to exchange perceptions with the outside, and to the *tōjisha* (in this context, the person involved in the disasters). As Osawa Masachi suggested, the real *tōjisha* are the deceased victims of the multiple disaster, who are not able to tell.⁴⁵

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