Making My Skin Crawl: Representations and Mediations of the Body in Miya Masaoka's *Ritual, Interspecies Collaboration with Giant Madagascar Hissing Cockroaches*

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A cockroach crawls over a naked body. It explores. A red toe nail, an arm, a hair. It stumbles across a movement sensor, and is played a recording of another cockroach's hissing. It explores this new terrain, its quivering antennae leading the way. It continues its journey while an audience looks on; their private thoughts and experiences separate, but shared in the common experience of having 'been there', of having witnessed this ritual.

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What of the naked body? A woman lies still. What is she hoping to communicate to her audience, through this public presentation of something usually deemed private (the ritual, her nakedness)? She wraps herself in the sounds of the cockroaches and fragmented sounds of a koto.

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And a watcher, listening somewhere distant from this ritual, creating a ritual of her own. Her skin twitches from the touch of a cockroach exploring a shoulder on another body, in another time and place.

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That is my ritual. Its completion brings not enlightenment, but questions: in watching this performance, what have I shared with this body, described in sound through the tracing of its outline? Is this sonic body in any way the same as the one lying naked on the stage?

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And then another set of questions, which may help to answer those already asked: What were the composer/performer's intentions for this piece? How has she realised them? How has she chosen to represent her body on stage, both aurally and visually? How do the presentation methods she uses – video screens, digital audio, and her live presence – mediate the body that is presented? How is the body of the listener implicated in her interpretation of the piece? What part does it play in the ritual?

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Ritual, Interspecies Collaboration with Giant Madagascar Hissing Cockroaches, devised and performed by composer and performance artist Miya Masaoka, prompts me to ask all these questions, and more. Written between 1997 and 1999, this interactive piece uses 'the human body as a canvas', and 'confronts

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the audience with issues of gender, sexuality and ethnicity.'[1] In performance Masaoka lies naked on stage, while a number of giant Madagascar hissing cockroaches explore her body and break infra-red sensors that trigger sound samples. A video screen at the back of the stage shows close-up shots of the cockroaches moving across Masaoka's skin.[2] I argue that understanding the presence of the body and modes of its representation within the work are crucial to understanding *Ritual* and its reception.

By necessity this is also an investigation into the possibilities and problems associated with experiencing the performance 'second-hand', through varying forms of documentation including video, written accounts and photographs. My experience of the work is pieced together from the specific and the general, from the written first-hand account to my own second-hand experience. It is therefore an examination of *Ritual* as a concept or blueprint, a 'score' for a musical performance and an examination of particular realisations of that score, both through my own and others' experiences. I draw particularly on a video of the work held in the collection of the Live Art Development Agency, assorted reviews, and the writings of ethnomusicologist Deborah Wong.

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This is a tale of bodies. This is a personal story of an encounter. It is a story told by and through my (the author's) body.

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Methodology (The Writing Body)

Richard Leppert writes of the importance of understanding music as an embodied practice – a practice where what the audience sees is potentially as significant as what it hears.[3] What would be the benefits of investigating *Ritual* as a sum of its aural and visual parts, and the interactions between them? Masaoka describes *Ritual* as 'a very strong image. It's really more like performance art, I would say, than an audio piece.'[4] However, the sound, and its apparent method of manipulation by the cockroaches, is an integral part of the work. The interactivity between sound and image, between the physical presence of the performer and what the audience hears, is a fundamental element of the performance. I would like to investigate here how both visual and sonic elements of the performance interact to influence my reception of the work.[5]

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> The visual code functions through the human body in its efforts to produce and receive music. When people hear a musical performance, they see it as an embodied activity. While they hear, they also witness: how the performers look and gesture, how they are costumed, how they interact with their instruments and with one another, how they regard the audience, how other listeners heed the performers.[6]

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Leppert stresses here not just the process of producing music, but also the process of receiving it – something in which the body is further implicated, but that is often left out of musicological discourse. One way of writing this bodily experience back into the study of music is to undertake some form of 'embodied

reception' of the work under examination. A recent example of this is Gascia Ouzounian's study of Maryanne Amacher's *Sound Characters* and Bernhard Leitner's *Kopfräume (Headscapes).* Ouzounian writes of 'wanting to explore the intersection of sound, space and sensation as it occurs between [her] body, its surroundings and its imaginary points'.[7] This appears to be a potentially revealing way of approaching *Ritual*. It is based on the body, and it was conceived as a performance to be experienced through the eyes as well as the ears.

Ouzounian raises some interesting questions that I will attempt to answer through an embodied reception of *Ritual*:   **11**

> Transferring the listening point from the ears to the tissues of the body – a tangle of information, memories, and physical and psychic relationships – requires new models of aural reception and analysis. How does the body get mapped out as a score or sound stage? How do these mappings privilege certain bodies and kinds of relationships between bodies and spaces? How does a situated, embodied listening inform and disrupt traditional models of hearing and describing sound?[8]

Do both my body and the performing body act as score or sound stage? How do I deal with the fact that there are at least two bodies involved in the production of the sound and its ultimate reception? How will I describe the sounds I hear and feel? And how do I go about putting this experience into words, without the embodied nature of the reception getting lost in translation?

Ouzounian draws on the work of Donna Haraway, particularly her 'notion of   **12** embodied objectivity introduced as a way to re-focus the relationship of the (female) body to scientific methods, historically positioned as the neutral and objective work of (male) actors.'[9] The aim of this is to write bodily experience back into the text, subverting 'the (normalized) neutral, disembodied and implicitly objective stance traditionally taken by historians and critics towards their subjects. When the listening and viewing body is deleted from the written text, readers are left with the pale impression of the "impartial" mind. By including the body in the reception and analysis of the work, authors […] cannot avoid or avert self-representation.'[10]

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At the same time as I examine my relationship to the performance of *Ritual*, I   **13** need to take into account that my experience is one step removed from the original live performance. My primary experience of the work was through documentation, especially video.[11] There are obvious benefits to studying a work through its video documentation. The video can offer the possibility of repeated viewings, by both myself and others. As Hannah Bosma describes: 'A recording, like a score, is a far more convenient form to analyze than a volatile concert performance, and others can listen to a CD recording as well and form their own opinion about the music; thus, the analysis is opened to criticism and intersubjectivity.'[12]

To what extent is it possible to undertake any form of analysis based on **14** embodied reception, when the analyst was not present at the 'actual' performance? Amelia Jones suggests that a lack of direct phenomenological relation with the performing body may not be as problematic as it first appears, or rather, that live engagement with this performing body does not necessarily confer greater understanding: 'While the live situation may enable the phenomenological relations of flesh-to-flesh engagement, the documentary exchange (viewer/reader ↔ document) is equally intersubjective.'[13] Although live performances of *Ritual* allowed physical presence in the same room as the performer, there was not necessarily any possibility of literal or metaphorical contact with her. Jones further argues that the performing body acts merely as a documentary trace of the subject it claims to represent; thus it is as inaccessible in the moment of performance as it is through documentation. The performing body never 'deliver[s] in an unmediated fashion the body (and implicitly the self) of the artist to the viewer.'[14] Therefore, although my contact with the body presented through *Ritual* is mediated contact, contact through live performance would likewise not allow any form of unmediated insight. Moreover, Jones argues that the very impossibility of such contact is played upon and deliberately exposed in body art: 'The representational aspects of this work – its "play within the arena of the symbolic" and, I would add, its dependence on documentation to attain symbolic status within the realm of culture – expose the impossibility of attaining full knowledge of the self through bodily proximity.'[15]

Contact with the performing body is made doubly problematic by technological **15** mediations in addition to the performative mediations that Jones describes. Philip Auslander argues that mediated performance is no longer ontologically distinct from live performance, since live performance has been 'contaminated' not only by its own mediations (such as the presence of video screens at rock concerts, or the presence of the video screen or use of pre-recorded sounds in *Ritual*, for example), but also by the initial modelling of media, such as film or television, on the forms of live performance. In the stage performance of *Ritual* it is difficult to tell where the live performance ends, and technologically mediated performance takes over. Is there any ontological difference, for example, between listening to sampled sounds being played back live, and listening to the same sounds being played back on a video?

Despite this, I undertake my embodied reception remembering that it is a video **16** that I am watching, not the live performance, and taking into account how this may affect my understanding. I attempt to keep a watchful eye (and listening ear) on the effect that such recording and playback technology may have on reception. In Ouzounian's study the possibility of the storage medium contributing to the aural effect is played down,[16] although it is alluded to indirectly in her consideration of embodied reception as a situated practice. She describes how her embodied listening is *situated*, that her analysis 'focuses not only on what is being heard, but *where* and *how* it is being heard.'[17] Employing similar tactics here, I undertake my embodied reception based on my experience of the recording. What I experience is the product of my particular conditions of listening: I saw the performance on tape, listened using headphones, sat in a small room on an incredibly hot July day. These are what Ouzounian describes as, 'the particular, contingent situations of hearing specific

listening environments.'[18] These conditions become a part of my experience.

My experience of listening through headphones, according to Aden Evens, **17** would 'generate a misleading experience of a music that is no longer in an acoustic space as such but now within the listener's head. Not only do they eliminate the social element from music listening, to the point of isolating the listener, but personal stereos foreclose the space that would allow the appreciation of musical subtlety.'[19] Although *Ritual* was not intended for headphone listening, the headphones nevertheless become a significant part of my experience of the performance, and I will attempt not to 'write out' any affect that listening in this way may have on my reception. I do not feel that listening through headphones necessarily detracts from one's ability to undertake an embodied reception of a work; if anything, the transferring of the acoustic space to the listener's body increases the relevance of this approach.

I was also cautious in how I chose to organise my viewing. While (re)viewing the **18** performance on video may be beneficial for examining small musical or visual details that would otherwise be missed, it must be remembered that this ability to go back, to hit the rewind button and listen again, is a fundamental difference between experiencing the performance live and on tape. While agreeing with Bosma about the potential benefits of experiencing the work through recordings, I do not want to deny the power of the volatility of the concert performance. This is especially important to embodied reception, because repeated playing of the recording can obscure as well as reveal; what shocks or surprises on the first viewing risks becoming predictable or stale by the fifth. Experience and understanding of the work will differ between a second, third or fifth run-through of the video.

In order to combine these states of understanding – first impressions combined **19** with later, more reflective experiences – I have deliberately separated my thoughts during my initial viewing from my later thoughts and reactions. The first time I watched the performance I did not stop the tape. I made a few notes as I watched, but the majority were made shortly after the tape had finished; I wanted my first experience of the performance to be as close to 'live' as possible. Although I could not recreate the atmosphere of the original performance space, I sought to keep the temporal organisation of the piece as close as possible to how it had been in the live performance. In order to avoid erasing my embodied reactions, I have tried to separate my thoughts at the moment of my experience of the performance from thoughts that came later, as I sit away from the place of that experience.[20] Therefore, I have chosen to separate writing from these periods, which I quote directly, and without substantive editing. This is shown through the use of italic for the notes written during or shortly after my first viewing of the video, while I remained in the same listening space. As Ness argues, such a form of writing allows the representation of events as ongoing, as processes. This, then, is my attempt to write my embodied reception back into the ongoing process of understanding *Ritual*. Incorporating these field notes 'expos[es] the difference between "what one feels oneself to be and what one would claim in public."'[21] The notes compel me to examine my actual (sometimes surprising, occasionally disturbing, and frequently contradictory) bodily experience, rather than tidy it up in order to

preserve the flow of my argument. My listening, thinking, feeling body interrupts, forcing itself between the cracks in the text.

These experiences and my embodied reception form the backbone of this account of *Ritual*, but I also attempt to flesh out its body. I examine *Ritual* through the models of multimedia and interaction demonstrated by Nicholas Cook and Todd Winkler, in an effort to understand how the relationship between *Ritual's* constituent media is shaped, and how this may affect reception. I also examine other accounts of the performance of *Ritual,* and consider both the creation of the performance and its reception in light of Haraway's concept of the cyborg.

The Performing Body

> The curtains opened to reveal a dimly lit stage with Masaoka's nude body, absolutely still, stretched out on a white-shrouded table in its center. The video projection started, filling the back of the stage with such extreme close-ups of her body that precise anatomical locations were unreadable. In the wings, I punched the Start button on the CD player and the amplified sounds of hissing Madagascar roaches moved stereophonically across the hall. Asian American graduate student Yutian Wong, dressed in black, appeared stage right and slowly struck two Tibetan hand cymbals together. Another Asian American student assistant emerged from stage left bearing a box in her hands: she solemnly approached Masaoka and slowly, carefully, began to take Madagascar roaches out of the box one by one and place them on Masaoka's body. The roaches sluggishly explored her arms and legs until all thirteen were on her body – and then the assistant began to gather them up, one by one, putting them gently back in the box and finally walking offstage with them. The video ended; the soundtrack ended; the curtains were pulled closed. . . After a long moment of silence, the audience began to applaud.[22]

To see a naked body on stage is striking, perhaps even shocking. Even though I was expecting it, the initial encounter was discomforting, despite the distancing effect of the video. What affect is achieved through Masaoka's absence of clothing? Anthony Howell, in *The Analysis of Performance Art,* offers a number of possible interpretations of nudity.[23] Nudity could be 'a species of costume', imply rebirth, or could signify 'a necessary stripping away of presumptions and pre-suppositions as one attempts to establish the foundations of being'. It could also signify vulnerability, obscenity, or sexual availability, with nudity identifying 'the body as lure'.[24]

Masaoka's decision to perform (as a) nude (body) could signify vulnerability or, considering the title of the piece, some kind of ritual re-birth. Masaoka's nudity may also be related to 'the social construction of […] eroticism in performance', an issue that Masaoka attempts to address through the work.[25] Howell draws on the theories of Jacques Lacan to discuss potential audience reactions to nakedness: 'Desire is evoked at the moment of revelation, or prior to it, or when what is revealed is snatched away and again hidden from view. Our attention is

aroused by the suspense of these threshold experiences rather than by the total state of nakedness.'[26] Masaoka, however, remains naked throughout the performance; there are no 'threshold experiences', at least none related to the revelation of a naked body, in the performance other than the first sight of the body as the performance begins. *Ritual* does not appear to mediate desire or eroticism through the gradual unclothing of the body, although as I discuss later, the body is gradually revealed through other means of performance.

Is it possible that Masaoka achieves something other than simply arousing desire in her audience through the (re)presentation of her naked body? Rebecca Schneider writes that nudity (as distinct from sexual display) can confer cultural power on the performed body, demonstrating 'the agency of the body displayed, the author-ity of the agent.'[27] Although Schneider is describing why body art performances such as Carolee Schneeman's *Eye/Body* created such institutional uproar, her theories are of relevance here. She claims that this 'author-ity' of the artist comes about through the artist using her own explicitly female body as subject ('the nude *as* the artist') leading to an overturning of the association of femininity with passivity and masculinity with activity, because 'the active, creating force of the artist […] manifest[s] as *explicitly female'*.[28] As in Schneider's description of *Eye/Body*, *Ritual* blurs boundaries between the expected characteristics of femininity, the artist, and the work she produces. The artist's use of her body in this way also breaks down, or sets in motion, distinctions between subject and object. Masaoka doubly achieves this through using her body both as performer and as determinant of musical sound, something I will discuss in more detail in below.

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The method of presentation, especially the presence of a large video screen showing close-ups of the body, leads to a focus on the skin. Skin is a significant (and signifying) surface in *Ritual*. Skin is important in the composer's conceptualisation of the piece. In the accompanying programme notes, Masaoka writes: 'The bare skin is the border between our interior self and exterior world while symbolizing cultural representations.'[29] Just as she uses nakedness to explore the performativity of eroticism, Masaoka uses the visibility of the skin to explore the social construction of race, emphasising its visual representation through use of the video screen. This plays on the constructed nature of the race concept through the way it juxtaposes separate body parts to construct but never quite reveal a whole.,It is significant that Masaoka should question this through a visual medium, because the race concept has been 'historically […] inseparable from a discourse of display and from the logic of vision. Skin color, hair color, and eye color became marking devices for those who seek to situate the genetic history of humans within the narrow confines of the phenotype.'[30] The visual construction and hierarchical organisation of the race concept has had – and continues to have – a concrete effect on the lived experience of many.

Masaoka's skin, through its being 'laid bare', performs as a signifier of her Asian ethnicity, something that is emphasised by her use of Asian co-performers. She performs race as part of her assumed and performed identity. Masaoka exploits

what Howard Winant describes as the concept of race having become 'a fundamental principle of social organization and identity formation',[31] whose role in the construction of identity shapes the experiences of everyday life, especially because, Winant argues, 'U.S. Society is so thoroughly racialized that to be without racial identity is to be in danger of having no identity.'[32]

Masaoka's highlighting of race as a socially constructed concept (emphasised through her programme notes, as well as her performance), and her subjective experience of the concept of race as determining – in part – her social identity and social agency, again blurs the boundaries between (female, Asian American) artist as subject, object and active creative force.   **26**

Howell points to understanding body language or performative gestures as a means of 'decoding' what nudity in performance might signify. In *Ritual*, the body appears still and passive. Howell divides stillness into three categories: 'Stillness as arrest', 'Stillness as a state', and 'Breaking out of stillness'.[33] *Ritual* seems to be most reliant on 'Stillness as a state', as the position Masaoka assumes on stage does not change from beginning to end. Howell also mentions other stillnesses, stillnesses that threaten to transgress his previous three categories, that appear to fit into one category, but imply the possibility of existence within another. One example he gives seems particularly pertinent to *Ritual*, considering the work's title: 'Stillness as Death or Collapse'. This is characterised by limpness or rigidity.[34]   **27**

But Masaoka's body in *Ritual* is neither limp nor rigid. If this is a ritual related to death, it is also one that offers the possibility of rebirth. The apparent stillness is not complete stillness; the appearance of a dead, unmoving body gives way to the sight of a living, (visibly) breathing body, shown by the video screen. Interestingly, Howell sees congruity between nudity and stillness: 'being nude *is* as being still: a basic level of being.'[35] However, Masaoka makes no change from the basic appearance of stillness; the performance begins and ends with the body lying on the table on stage. Is it possible that the action, a transformation, takes place through the music?   **28**

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The musical materials of *Ritual* consist primarily of samples of the cockroaches' hissing, and the koto. In performance, these are joined by the sound of Tibetan hand cymbals. The 'soundtrack' begins with the sound of a cockroach's hiss, then other sounds are added, interspersed with periods of silence: **29**

It begins with a sudden burst of hiss, much louder than the quiet tranquil atmosphere leads me to expect. This is followed by a return to silence. The cockroaches seem to be moving quite slowly, exploring. A bell of some kind chimes.[36] The shot changes to a close up of a cockroach – I can see it in some detail. Hissing, hissing, kkkkkssssss (sounds like a recording), a longer burst of hissing. Silence – the cockroaches continue to move around. A sampled string sound – like a bow bouncing on strings. Low, legato string sound – moving in semitones. String sound repeats. Repeated 3-note figure. Plucked string – tremolo – relatively high pitch – feeling of increasing tension.

Change in tempo and timbre – flute-like sound – string harmonic? Percussive and string sounds jumbled together. Ear-grating sound of a string being scratched. Small pieces of samples assembled into larger motifs, which are then repeated. Bell/chime. Hisssssssssssing. Ksssttcchhhssssssk.

The hissing starts to sound 'processed'. Camera zooms in and out – slowly. There are bursts of hissing, then silence, then hissing, then silence. Will there be more hissing? A cockroach falls off a leg, and the screen goes blank.

The music is fragmentary. Samples are initially heard separately, punctuated by periods of silence. Masaoka builds the piece by gradually layering these initial sounds and adding new, but similar sounding, samples. Periods of silence occur throughout, preventing the music from feeling goal-oriented. The sound builds but creates no expectation of where it will go; the layering is organic, rather than a teleological process. The composition process is reversed towards the end of the piece, when the layers are peeled back, leaving the hissing sound that the piece began with, and then decaying to silence. Although I was not aware of it at the time of watching the video, it becomes clear from Wong's account that this structure is determined by processes taking place in the performance. As the cockroaches are placed one by one on Masaoka's body, the rate at which the samples are triggered increases, along with the possibility of multiple samples being triggered simultaneously, creating the layered effect I heard. This decreases as the cockroaches are removed.

Excluding the chimes (cymbals), the samples mainly comprise the sounds recorded from the koto (plucked and bowed) and the cockroaches. Percussive sounds occur approximately two-thirds of the way through the piece. The hissing and bowed and plucked koto sounds form the foundation of the soundtrack and occur most frequently. Sounds such as that of a string being scraped occur only once or twice, but share sonic qualities with the sound of the hissing. It is interesting to note from my embodied reception that this sound actually causes physical discomfort.

Why these particular sounds? The sound of the cockroaches allows Masaoka to incorporate 'nature' and 'animal' into the sonic portrait she creates. This relates to her concerns with inter-species collaboration – the cockroaches are involved at various points throughout the composition process, both providing the sound and being involved in determining its eventual form. The sampling of the koto may simply have arisen from the practicalities of access to it; Masaoka herself is a skilled and innovative performer on the instrument, and therefore would have little difficulty in obtaining samples. The koto's Japanese origin and the fact that it is Masaoka's instrument also relate to her self-presentation/self-performance in *Ritual*.

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It is in performance that sound and body become linked. Only through live performance is *Ritual* fully realised. But how are visual and sonic elements of the work related, and how do they interact within the performance? When the

music contains some level of indeterminacy and will change (subtly or dramatically) with every performance, does the interplay of the different media combine to create a slightly different musical soundtrack each time? Analysis of such performances – whether of one particular 'output' (or performance) or of the conceptual set-up or framework that leads to each realisation – needs to take into account the relationship between composer, performer and technology, and the role of each in shaping performative outcomes.

Considered within the analytical framework offered by Nicholas Cook in 33 *Analysing Musical Multimedia*, *Ritual* would appear to show a high degree of conformance, as it 'begins with originary meaning, whether located in one medium or diffused between all'.[37] The various media (music, video, and live performance) are all used to illustrate Masaoka's concern with the social production and performativity of concepts such as gender, race and desire.[38] The media also echo each other in form and content. The stillness of Masaoka's body in *Ritual* is, in some ways, reflected in the musical materials of the piece. There are many 'silences' between the triggered sounds, creating a feeling of space or emptiness. Masaoka regards this as a feature of her work, though she 'prefer[s] to be in a flux about how to approach silence' in order to create unpredictability within the music.[39] This unpredictability, or flux, is a feature of the music in *Ritual*. The music does not sound goal-oriented. Although there is a building up of musical materials, a layering of different sounds, this does not feel in any way climactic. However, this does not mean that the 'soundtrack' may only be experienced as still. The moments of silence and emptiness can lead to a sense of anticipation, of waiting for something to happen and wondering what it might be.

There are lots of gaps between sounds. I watch the cockroaches exploring Masaoka's body, wondering when I will next hear them hiss. Anticipation. Or will I hear a koto sound instead?

Howell equates silence in music with stillness.[40] Though this may be problematic post-Cage, there remains some level of similarity if the focus is moved from the moment of silence or stillness itself, to the point where the silence or stillness is broken. In the moment where movement breaks the stillness, or a triggered hissing interrupts the silence, the attention of the audience is focused on that particular event. These events mark boundaries, just as the cockroaches' wanderings mark the boundaries of Masaoka's body.

At the level of their output being fixed – as having come into a particular form of 34 existence (whether that is in live performance or on video) – the multiple media in *Ritual* appear to show conformance. This is one of three models of multimedia defined by Cook: the others being complementation and contest. For Cook, a work shows conformance when the different media of the performance can be seen to 'project' each other.[41] Where the media are conformant, each embodies the same content and meaning is produced through coherence between media rather than through a clash of different meanings presented by separate media. However, can this be connected to the relationship of these media at a conceptual level? How are the media interactive on a technical level, as opposed to how they interact in the negotiation of meaning? Following Todd

Winkler, it is possible to assess the model of interactivity used in *Ritual*. Winkler offers three models based on 'traditional' musical relationships: the 'conductor model' (in which musical materials are largely predetermined with some parameters being altered live by a 'master controller'), the 'chamber music model' (characterised by reciprocity between performers and computer) and the 'improvisation model' (characterised by use of predetermined rules and algorithms to create new musical material).[42] I have already described how interactivity occurs in the composition through the movements of the cockroaches triggering sound samples, and how the process of the cockroaches being added to, and removed from, the body in part determines the layered form of the music. *Ritual* mainly relies on what Winkler terms 'the conductor model,'[43] the performer (in this case the cockroaches and, indirectly, Masaoka's material body) exerts control over the musical output, by selecting from a predetermined selection of samples. Although the form of the music is determined live in performance, no new musical material is generated by the computer.

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Can the music represent the body? Perhaps the closest connection that can be **35** *drawn between sound and body is to think of the music as somehow mapping the body at a particular collection of points in time (and space?). The next performance, the next mapping, will differ. The sound is not equal to the body. To follow this map is to get lost.*

The sound may map an outline of Masaoka's body. This is not to say that a particular sound represents a particular anatomical characteristic (a recurring bass pattern somehow represents a leg). It is not possible to tell, from watching the recording of the performance and listening to the soundtrack, precisely how the breaking of the laser beams relates to the triggering of particular sounds from within the available 'library' of samples. Does a cockroach crossing a laser beam over the lower part of Masaoka's body, for example, trigger the hissing sound, while a cockroach crawling up her arm trigger the koto sound? What does happen, however, is that at some point (partly determined by the topographical possibilities offered by Masaoka's body) a cockroach will cross a point where it triggers a movement sensor. These points are central in determining the musical output. A musical mediation of the body is produced. However, it is only these particular points that directly make it into determining the sonic output, however much the body offers the cockroaches possibilities of tracing other paths. This reduces the body to an artificial construction, to nothing but a series of mappable points, providing a link with Masaoka's concern with the body as (socially) constructed.

The Extended Body

Masaoka frequently relies on the use of technology to augment her musical and **36** performative materials. She regards technology as integral to many of her performances, 'as a rigid interface shaping how work is created.'[44] Technology plays a significant part in *Ritual*, both in terms of the sound produced and the visual presentation of the performance. Masaoka fuses the technological with the natural, to increase musical and visual possibilities:

There's a piece I've done called *Ritual With Hissing Madagascar Cockroaches* where I lie naked on a table and giant cockroaches crawl on me freely, and I have laser beams going over me and when they trespass and break the laser beam it triggers their own sound and it's very amplified. The natural hissing of a cockroach is like sssshsks, it sounds like white noise, and when it's amplified and layered it can be very effective in terms of an electronic sound.[45]

The sounds heard in *Ritual* are both natural and technologically determined. The use of recording and playback technology allows the combination of sampled cockroach and koto sounds. Amplification allows normally quiet sounds, such as a cockroach's hiss, to become audible from a distance.

Masaoka also uses technology to change the role that the performer's body plays in the production of musical sound in traditional performance contexts. Ordinarily, in a performance given by a violinist or pianist for example, it is the *movement* of the body that leads to the production of sound. Even in the case of singing there is an association between bodily movement (despite this not always being readily visible, such as the vibrations of the vocal cords) and the emergence of sound. In *Ritual* the use of lasers as interface, combined with the movement of the cockroaches, allow a still body to play a part in determining the sound produced. 37

However, one characteristic of more traditional gesture-sound relationships is retained. Sapir characterises the relationship between gesture and sound production as 'a cause to effect link.'[46] In *Ritual* the cause to effect link remains, despite not being readily visible – because of Masaoka's physical stillness it is not her gesture that is captured. The gesture that triggers the sensor (laser) is, in fact, the movement of the cockroaches. Nevertheless, this gesture is affected by two elements in conjunction: the cockroaches' movements, and the determination of these movements by the topographical possibilities offered to them by the surface of Masaoka's body. The cockroaches become like a needle tracing the grooves of a record to produce sound. 38

It is the technology, both hardware such as computer and laser/movement sensor interface and software, that allows Masaoka to exploit the use of stillness in performance, and be part of the creation process while remaining still. Sapir describes the necessity of a 'software layer' between gesture acquisition and sound production. Gesture management software deals with the input (detecting a broken laser beam), while the performance software possibly consists of some type of rule-based application, which Sapir describes as allowing the computer 'to be charged with specific tasks in order to relieve performers from some low level controls.'[47] In *Ritual* this could entail the software making any programmed 'decision' regarding choice of particular sonic output (which sample to play and when), and the actual playback of the sound. Thus Masaoka can use her body to shape a live output of musical material, without making any significant physical movement. While Sapir describes physical gesture as having an expressive quality, I would argue that a lack of gesture, an apparent stillness, that visibly contributes to the production of musical material is just as powerful. 39

Yet the presence of the software layer causes an inescapable mediation of the body from which the gesture derives. It mediates both the input and output of the interface within set parameters, some controllable by the composer/performer, others not. The computer (via the program – for example, MaxMSP) analyzes the input, which in *Ritual* involves detecting when the laser beams are broken. The level of detail at which it does this is decided by the programmer, but also by technical limitations.[48] Masaoka uses the MIDI communication protocol, which various theorists have found limited due to constraints placed on it during its initial design.[49] This, along with factors such as sample rate – the frequency with which the software checks for a broken laser beam – will affect the overall musical output.

<div style="text-align:center">40</div>

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Masaoka also employs technology in the visual presentation of her body. The body is not simply present as a performer, lying on a bed in the centre of the stage, but in its representation as a series of close-up images on a video screen behind the performer. This presents the audience with a larger view of Masaoka's body incorporating more detail, and from a different angle, than would be possible from where they are sitting. Such representation places the audience in a position of proximity to Masaoka – unusually close to another's naked body.

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The body is gradually revealed to me. At first it is just a collection of (mostly unidentifiable) body parts, an expanse of skin. It is strange, and strangely fascinating, to see another naked female body so close.

The presence of the video screen presents the audience with a second, simultaneously viewable body. The 'live' body (which, from the distant position of the audience, appears still, motionless, passive, but 'whole') exists concurrently with the one shown on the video screen (who breathes, moves, but appears as a series of often unidentifiable body parts, that are only gradually revealed to the viewer). There is a second disjunction between the performing body and the 'on screen' body; they appear to be separated in time. In the documentation I watched, the movements of the cockroaches shown on the (video of the) screen do not appear to be the same as the live movements of the cockroaches on Masaoka's body. It is possible that the projected images were prerecorded, rather than showing what was happening on stage during that particular performance. If this is the case, from a position in the audience it is possible to see, at the same time, multiple 'versions' of Masaoka's body. There is a merging of the body as was, with the body as is, and the body as it is to become. The body exists in transition, not as fixed at any point.

The Body in Bits

An increasing amount of recent work in musicology has borrowed Haraway's concept of the cyborg in an attempt to understand the relationship between the body and technology. Barbara Bradby uses the cyborg concept to investigate technological manipulation of the female singing voice and the consequent

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juxtaposition of this voice with a body, often not the one that produced the voice, in the video that accompanies the song. She describes a 'process of technologisation of women's bodies at the level of representation, which includes the intervention of digital technologies in the female voice as we hear it, and the fragmentation of audio and visual body images, or of the voice and the body.'[50] Bradby characterises the resultant body as cyborg, and argues that this cyborg contradicts 'the Enlightenment equation of women with nature'.[51] Another use of the cyborg concept occurs in Andra McCartney's discussion of Hildegard Westerkamp's composition *Breathing Room*.[52] McCartney argues for a cyborg identity for the body created through Westerkamp's soundscape, which has a natural, organic breathing pattern (and sound), but a mechanical heartbeat. This merging of the boundaries between human and machine, between representation of a body and simulation of a body, are crucial to Haraway's cyborg.[53] Hannah Bosma also discusses the possibility of the cyborg within electroacoustic music, focusing especially on 'electrovocal' music.[54] Her study finds similar results to Bradby's: the voices are provided by women, the technology is predominantly operated by men, and the resultant body transgresses gender boundaries, becoming cyborg.

The music of *Ritual,* through its merging of body and machine (the computer and software, or motion sensor, for example), subject and object, human and animal, constructs a similar cyborg body. The use of the body to shape musical material, and the associated technologies cause multiple shifts between body as object, and body as subject. The body is converted into a dataflow via the peregrinations of the cockroaches. Points on the body coincide with points on the laser beams, which become part of the data input to the performance software. At this point the body is represented as a series of data within the performance software; this is not necessarily visible or audible to the audience.[55] *Ritual* causes a constant shifting between the body as material, and the body as immaterial. The ritual that takes place is the transformation of the body: into data (and digits), then sound. Evens conceptualises this transformation to the digital as a reduction, as a loss of materiality and a reduction of actuality (of experience) to pure form.[56] The use of digital practices as a way of transcending the flesh and bodily experience, moving into the digital realm of 'disembodied rationality' has been criticised by feminist scholars.[57] However, *Ritual* does not offer a complete escape from the organic, material body. By presenting her audience with both technologised versions of her body *and* her material body (albeit presented in such a way as to explore the performed or constructed nature of such related concepts of race and gender) Masaoka prevents the dissolving of her body into pure dataflow. The cyborg created through the 'soundtrack' remains somehow fixed to the cyborg collection of flesh and lasers and video screens seen on stage.

The Listening Body

Deborah Wong writes about the audience reaction to a particular performance of *Ritual*, given in 1997 at the Riverside campus of the University of California. *Ritual* summoned angry responses from members of the local community, even before the performance took place. Many of these responses were a result of reports publicising the upcoming performance. Wong describes a range of

responses, from disapproval to outrage. However, the publicity for the performance intrigued as well as provoked:

> By Friday, the day of the performance, the calls were more focused. One woman caller told the secretary answering the phone that the chair of the music department (Philip Brett) was "no better than a pimp standing out on University Avenue". Another warned that if Masaoka disrobed on stage, he would effect a citizen's arrest on the spot. Others called to threaten disruptions. While most of the phone calls were apparently from community members, UCR students, faculty, and staff were also intrigued, but in other ways. I assigned concert attendance to the undergraduates in my class, "Music and Gender in Cross-Cultural Perspective", and they reported that prurient curiosity was inspiring many of their friends to attend. They assured me that I could expect a full house.[58]

Despite all the uproar, Wong goes on to describe that the performance was packed, drawing a much larger audience than the chamber music concerts usually held in the same venue. The performance took place without any of the threatened interruptions. So what may have provoked such a strong initial response? Is there something inherently discomforting in the conception of the work, or was the reaction Wong describes simply sensationalism encouraged by the local press? Is it possible that being presented with a naked body on stage may cause discomfort for the audience? In addition to this, the listener-viewer is confronted by a naked body crawling with cockroaches, a creature normally regarded as unpleasant and unclean. What does the audience member understand from Masaoka's decision to perform naked with thirteen cockroaches as collaborators?

Elizabeth Grosz offers a theorisation in which 'acts or materials which cross or question [the body's perimeter] are defined as "abject", to be viewed with disgust.'[59] Drawing on the work of Julia Kristeva and Lacan, Grosz describes the need for the expulsion or separation of disorderly or unclean aspects of corporeal existence in order to allow the creation of 'a symbolic position as a social and speaking subject'.[60] However, Colin Counsell and Laurie Wolff describe a power in abjection that Masaoka exploits in her work: 'if abjection guards the borders of the subject and society, abject materials and acts can also be used to affirm our corporeality, subverting those symbolic systems in which our sense of self is enmeshed.'[61] Thus Masaoka can be seen as affirming her corporeality by covering her bare skin with cockroaches. In transgressing the unwritten rules of what is expected in a musical performance, and also the unwritten rules of socially acceptable behaviour, Masaoka forces her audience to focus their attention on the body. This visual signification of the abject is echoed by the sampling of the cockroaches' hissing within the musical fabric of *Ritual*, making the hissing much more audible than it would be if the cockroaches were simply crawling unamplified over Masaoka's body. This could have the effect of making the listener feel they are themselves closer to the cockroaches, perhaps even going as far as to imagine themselves into Masaoka's skin. During my embodied reception I found that this effect was intensified through listening using headphones, which had the effect of bringing

the apparent source of the sound even closer.

From Grosz's theories, it is possible to see how the work might engender discomfort in an audience. Nevertheless, Wong does not report that the audience expressed outrage at the performance, only at the advance publicity: though of course personal reactions to the work could well have remained private, unlike letters printed in a newspaper. Does experiencing the performance of *Ritual* arouse the same feelings as those Wong quotes as responses to the publicity? Here it is perhaps helpful to draw on my own relationship with *Ritual.* My first encounters with the piece were through descriptions of it given on Masaoka's website, and through Wong's own article. Reading these accounts had, perhaps, prepared me for a sensationalist performance, a performance that would literally make my skin crawl. **46**

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My initial reaction was to feel slight disappointment. I did not find *Ritual* to be as shocking or as sensationalist as I might have been led to believe. At moments within the performance I experienced an entirely different sensation: one of fascination. I developed a sonic fascination with this body: not a desire based on the visual representation of the subject, but on its gradual revelation through music. In his discussion of stillness, Howell draws on the Lacanian notion of 'desire being linked to the crossing and recrossing of margins or edges,'[62] yet he ignores the possibilities of desire existing in the crossing of the boundaries of silence, which he considers to be musical stillness. **47**

Despite my fascination, however, I did find the performance discomforting at times, but I did not feel that this was necessarily related to seeing Masaoka's naked body, or even the cockroaches. **48**

There are moments when I feel a vague discomfort. Is this because I can see the performer, and imagine myself lying in her place, the cockroaches crawling over my skin? Or is it because I am, in the end, experiencing this performance alone? I am not in the same room as Masaoka's live body . . . just a removed, mechanised representation. My role as audience is a solo one. There are no shoulders to glance over to check surreptitiously on other people's reactions. Are other people enjoying it listening carefully, fidgeting distractedly, looking on with fascination, or are they perhaps looking away in disgust? Whatever the performance makes me feel, I experience it alone, without the safety net of other reactions to conform with.

There is something about the performance that I find discomforting. I am watching the part of the video that shows what is projected onto the video screen in the live performance. The cockroaches crawl slowly, exploring Masaoka's skin. The video is filmed close-up, so it's almost impossible to tell which part of the body they're on. The soundtrack continues, triggered by the cockroaches crawling over parts of Masaoka's body that I can't see. The music I am hearing is shaped by a body I can't see. Perhaps what I feel discomforted by is 'hearing' a body I cannot see.

Of course, in the live performance the audience was presented with Masaoka's 'live' body on stage at the same time as these close-up shots were showing on the video screen. However, the exact possibilities of seeing Masaoka's body varied from venue to venue, and even according to position within the audience.[63]

Conclusions

Numerous mediations of the body take place through the creation and **49** performance of *Ritual*. These include visual and musical mediations, the conversion of the body to digital data and also a performative mediation of the body. Mediations take place (whether deliberately or unintentionally) through the technology that Masaoka employs to realise her performance. *Ritual* collapses the boundaries between the female body as subject and object. Both the simple visual identification of the body with technology, such as seeing a body surrounded by movement sensors, and less obvious juxtapositions of body and technology – and the blurring of boundaries between dyadic concepts such as body/technology, subject/object, human/machine and presence/absence, can be interpreted in terms of the cyborg concept proposed by Donna Haraway.

The audience is also implicated in the creation of this cyborg. Although it can be **50** argued that the body is fragmented by its representation as a series of 0s and 1s within the digital sound production, I found that a process of embodied reception subverts this digital mediation, this lack of the actual, by changing the locus of experience; its projection of the sound onto the recipient's body offers something actual, something with which to fill in the gaps between the 0s and the 1s. Although the sound she hears may be digitised, its difference compressed (and not experienced), her body, through which she hears, is not. The body becomes, as Ouzounian describes, both score and sound stage. It is present in the exchange that takes place between the performing body and the listening body.

Notes

[1] Bean with Gino Robair, 'Electric Ladyland', in *Electronic Musician* (1 April 2001). Archived at <www.miyamasaoka.com> (accessed 12 June 2006).

[2] Miya Masaoka, 'Compositions', www.miyamasaoka.com/music/compositions/ (12 June 2006).

[3] Richard Leppert, *The Sight of Sound: Music, Representation, and the History of the Body* (Berkeley: University of California Press, 1993), xxii.

[4] Declan O'Driscoll, 'Miya Masaoka: The Usual Turmoil', 1999, http://www.btinternet.com/~rubberneck/miya.html (12 June 2006).

[5] Masaoka has made a number of versions in this piece, in which the technology used differs slightly. Masaoka writes: 'I have done several versions of this piece, using different software and configurations of the samples. For the most part, I had a bank of pre-recorded individual cries of individual cockroaches. The cockroach would walk on me, and break the lazer beam and trigger a sample of the cockroach cry. The more … the roaches moved, the more the samples would be triggered. (There were four lazer beams, and sometimes infrared light beams projected over my body on the table).' (Email correspondence with author, 4 May 2009.) While the precise use of technology may have changed between performances, its overall role remains the same throughout: some form of light beam is used to detect movement, and something is used to play back the sounds in response to this trigger. Despite extensive research I have been unable to ascertain which configuration of technologies was used in the particular performance I watched.

[6] Leppert, *The Sight of Sound*, xxii.

[7] Gascia Ouzounian, 'Embodied Sound: Aural Architectures and the Body', *Contemporary Music Review* Vol. 25, No.1-2 (February, 2006), 69-79: 70

[8] Ouzounian, 'Embodied Sound', 70.

[9] *Ibid.*

[10] *Ibid.*

[11] The video I watched forms part of the collection of the Live Art Development Agency (www.thisisliveart.co.uk) [Masaoka, *Ritual*. San Francisco [n.d.]. VHS documentation (ref. V0316)]. It shows the projections from the video screen, followed by an audience's view of the performance, although I was not aware of this until I had watched the complete video.

[12] Hannah Bosma, 'Bodies of Evidence, Singing Cyborgs and Other Gender Issues in Electrovocal Music', *Organised Sound* Vol.8, No.1 (April 2003), 5-17: 12.

[13] Amelia Jones, '"Presence" in Absentia: Experiencing Performance as Documentation' *Art Journal*, Vol. 56, No.4, (1997) 11-18: 12.

[14] *Ibid.* 14.

[15] *Ibid.*

[16] Ouzounian transfers Leitner's works from CD to her iPod in order to listen in different locations, yet she does not consider how any data loss as a result of this transfer may affect her embodied listening experience.

[17] Ouzounian, 'Embodied Sound', 72. Ouzounian derives this from Derrida's notion of 'ontopology'.

[18] *Ibid.*

[19] Aden Evens, *Sound Ideas: Music, Machines and Experience* (Minneapolis and London: University of Minnesota Press, 2005), 119-20.

[20] See Sally Ann Ness, 'Dancing in the Field: Notes from Memory', Susan Leigh Foster (ed.), *Corporealities: Dancing Knowledge, Culture and Power* (1995, Routledge: London and New York), 154-129.

[21] Ness, *Dancing in the Field*, 129. Ness quotes a remark made by Mary Russo in a 1993 discussion session.

[22] Deborah Wong, 'Listening to Local Practices: Performance and Identity Politics in Riverside, California', in Sue-Ellen Case, Philip Brett & Susan Leigh Foster (eds), *Decomposition: Post-Disciplinary Performance* (Bloomington and Indianapolis: Indiana University Press, 2000) 18-36: 27.

[23] Anthony Howell, *The Analysis of Performance Art: A Guide To Its Theory and Practice* (London and New York: Routledge, 1999).

[24] *Ibid.* 19.

[25] Miya Masaoka, programme notes for *Ritual*, quoted in Wong, 'Listening to Local Practices', 27-28.

[26] Howell*, The Analysis of Performance Art*, 20.

[27] Rebecca Schneider, *The Explicit Body in Performance* (London and New York: Routledge, 1997), 35.

[28] *Ibid.* 36.

[29] Masaoka, programme notes to *Ritual,* quoted in Wong, 'Listening to Local Practices', 27-28.

[30] Jennifer González, 'Morphologies: Race as a Visual Technology', in Coco Fusco and Brian Wallis (eds), *Only Skin Deep: Changing Visions of the American Self* (New York: Harry N. Abrams, 2003), 379-393: 380. Fusco, however, points out that there is 'no visual truth about race,' (González, 'Morphologies: Race as a Visual Technology', 380).

[31] Howard Winant,'The Theoretical Status of the Concept of Race', in Fusco and Wallis, 61:55.

[32] *Ibid.*

[33] Howell, *The Analysis of Performance Art*, 1.

[34] *Ibid.*

[35] *Ibid.* 20.

[36] Watching the video for the first time I am unsure of whether this is live, or sampled.

[37] Nicholas Cook, *Analsying Musical Multimedia* (Oxford: Oxford University Press, 1998), 39.

[38] See Masaoka's programme notes, quoted in Wong, 'Listening to Local Practices', 27-28.

[39] Declan O'Driscoll, 'Miya Masaoka: The Usual Turmoil'.

[40] Howell, *The Analysis of Performance Art*, 6.

[41] Cook, *Analysing Musical Multimedia*, 98-100.

[42] Todd Winkler, *Composing Interactive Music: Techniques and Ideas Using Max* (Cambridge and

London: MIT Press, 1998), 221.

[43] Winkler, *Composing Interactive Music.* See Chapter 2.

[44] Masaoka, quoted in Marianne Messina, 'Challenging the Koto-Monster', www.metroactive.com/papers/metro/07.20.00/koto-0029.html (12 June 2006).

[45] Declan O'Driscoll, 'Miya Masaoka: The Usual Turmoil'.

[46] Sylviane Sapir, 'Gestural Control of Digital Audio Environments', *Journal of New Musical Research* Vol.31, No.2 (June 2002), 119-129: 122.

[47] *Ibid.* 120.

[48] See Winkler, *Composing Interactive Music*, 135-172.

[49] See, for example, Winkler (*Composing Interactive Music*) or Sapir ('Gestural Control of Digital Audio Environments', 119). Sapir describes: 'This protocol has often been judged insufficient, because of its narrow bandwidth and its limitations due to the pianistic gesture reproduction.'

[50] Barbara Bradby, 'Sampling Sexuality: Gender, Technology and the Body in Dance Music', *Popular Music* Vol.12, No.2 (May 1993), 155-176: 157.

[51] Ibid.

[52] Andra McCartney, 'Cyborg Experiences: Contradictions and Tensions of Technology, Nature, and the Body in Hildegard Westerkamp's "Breathing Room"', in Pirkko Moisala and Beverley Diamond (eds), *Music and Gender* (Urbana and Chicago: University of Illinois Press, 2000), 317-335.

[53] Donna Haraway, 'A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s', *The Haraway Reader* (New York and London: Routledge, 2004), 7-46: 20-21.

[54] Bosma, 'Bodies of Evidence', 5-17.

[55] See Sapir, 'Gestural Control of Digital Audio Environments', 122.

[56] Evens, *Sound Ideas.*

[57] Catherine Waldby, 'Circuits of Desire: Internet Erotics and the Problem of Bodily Location', http://wwwmcc.murdoch.edu.au/ReadingRoom/VID/Circuits3.html (18 August 2006).

[58] Wong, 'Listening to Local Practices', 25.

[59] Colin Counsell and Laurie Wolf (eds), *Performance Analysis: An Introductory Coursebook*. (London: Routledge, 2001), 140.

[60] Elizabeth Grosz, quoted in Counsell and Wolf, *Performance Analysis*, 143.

[61] Counsell and Wolf, *Performance Analysis*, 140.

[62] Howell, *The Analysis of Performance Art*, 20.

[63] Accounts of past performances that include pictorial representations seem to show different arrangements of the audience in relation to the performer. See Masaoka, *Ritual* (San Francisco [n.d.]. VHS documentation, part of the collection of the Live Art Development Agency [ref. V0316]) and V2_ Gallery's archived documentation, available at: <http://framework.v2.nl/archive/archive/node/event/default.xslt/nodenr-1613>.

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