Digital Parts / Modular Doubles: fragmenting the 'digital double'

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In digital performance, video and sound technologies are frequently used to establish simultaneous presences of performers and their non-material counterparts. From the early explorations of closed circuit television by artists such as Dan Graham and Bruce Nauman to the advanced digital sound and video synthesis by contemporary groups like Blast Theory and the Chameleons Group, the use of technological means to multiply performers' presence has been an important strategy to thematize issues of the subject's embodiment and consciousness. The combination of 'live' and 'mediated' presence in performance has been discussed by theorists such as Philip Auslander and Steve Dixon. Whilst Auslander discusses the tension between the 'live' and the 'mediated' presence of performers, and argues how this opposition tends to contract in people's perception in present day's mediatized culture, Dixon suggests that, in digital performance, a simultaneously present 'mediated' performer may be considered as a 'digital double'.

Dixon identifies Artaud's *The Theatre and its Double* as the primary cue for his concept of the digital double and describes Artaud's notion of the double as 'theatre's true and magical self' (2007: 241). In a letter to his publisher, Artaud concisely, and in an equally mysterious manner, described the theatre's double as 'reality untouched by the men of today' (1989: 87-8). Possibly giving somewhat more insight into his understanding of the concept, Artaud's call for a 'Theatre of Cruelty' proposes a cruel, violent attitude to performance. Not in a literal, physical sense, but in an endeavour to confront audiences with uncomfortable realities of life (theatre's double) and remind them of the fact that '[w]e are not free. And the sky can still fall on our heads' (1958: 79).

Since the publication of *The Theatre and its Double*, a number of theorists have debated how Artaud's confusing concept of theatre as 'real life' may be understood. Jacques Derrida (1978) has argued that Artaud's project to stage a 'pure presence' is doomed to fail since theatre (and language) will always be part of a system of representation. Likewise, performance theoretician Herbert Blau (1990) points out that the fact that performance is always framed (if not spatial, then at least temporal) makes Artaud's objective impossible. Dixon's discussion, however, is not directly concerned with a critical engagement with Artaud's concept of the double. Rather, it uses the concept in its somewhat mysterious form in reference to cyberculture discourses, which are poetically described as 'romantic utopianism hailing spiritualized virtual realities […] pitted against a dystopian skepticism' (2007: 241). As a second point of reference, Dixon draws parallels between the 'digital double' and Lacan's illusory image of the subject's double, which is perceived in the mirror stage, as well as Freud's notion of the uncanny. Thus, Dixon's concept of the digital double might seem somewhat confusing: In Artaud's notion of the theatre and its double, the 'reality' of the double is not actually present. The theatre has a double, which it supposedly refers to and is based on, but this double is not perceptible in the work itself. Dixon's double, on the other hand, is a digital artefact which is actually present in the performance and can be perceived by the audience. Also, Artaud's double

concerns a notion of reality, whilst Lacan emphasizes that his double is merely an 'orthopaedic' illusion (1949: 4).

In this paper, I will explore Dixon's notion of the digital double in context of my performance installation *Feedback,* which encompasses technologically generated sound, video and movement, based on my body's activity. In an endeavour to address the somewhat confusing aspects of Dixon's 'digital double', I will discuss how the digital doubling in *Feedback* complicates the common idea of a unified digital double which is clearly distinguishable from the 'live' performer: Unlike the examples of digital doubling discussed by Dixon, the technological representations of the body in *Feedback* may be read as a constellation of multiple, fragmented doubles. Taking this discussion as a starting point, I will then consider the potentially uncanny aspects of performances with multiple, fragmented digital doubles in context of Lacan's notion of the 'corps morcelé'. I will conclude the paper, by revisiting Dixon's notion of the 'digital double' and suggest a slightly different analytical approach which takes into account digital technologies' potential to conveniently control the extent to which a body may be represented as either a Lacanian double, or a fragmented body.

In his book *Digital Performance*, Dixon distinguishes four types of digital doubles, whilst acknowledging that the boundaries between these categories are not necessarily fixed. In performance or installation work where the image of the beholder plays an active role in a digital environment, or where it is used as a (technological) mirror, the double is considered as a 'reflection'. As an example of such work, Dixon describes Dan Graham's *Present Continuous Past* (1974), where the spectator is confronted with delayed video recordings of herself inside a cube lined with mirrors. Another example is Blast Theory's *10 Backwards* (1999), in which the main character Niki exactly reflects and copies the actions of a video recording of herself. In the second category, the double functions as the performer's 'alter-ego'. Most prominent example here is Chameleons Group's *Chameleon's 4: the Doors of Serenity* (2002), in which Dixon himself plays the role of a cyborg who has a discussion with two digital *Doppelgängers*, both having distinct personalities.

Digital doubles that are depicted as more fluid shapes, often composed of clearly distinguishable particles, are defined as doubles that function as a 'spiritual emanation'. This kind of digital double occurs in Igloo's *Viking Shoppers* (2000), where live video recordings of the performers are converted into body-like shapes composed of computer characters. Also, Dixon identifies the somewhat magical floating in space of the projected video recordings of the performers in Troika Ranch's *The Chemical Wedding of Christian Rosenkreuz* (2001) as digital doubles that function as spiritual emanations. The fourth category - the digital double as 'manipulable mannequin' - concerns computer generated avatars that act as a double of a 'live' performer. Such computer controlled mannequins have been used in theatre productions such as David Saltz's interpretation of Shakespeare's Tempest, *Tempest 2000* (2000). In this production, Ariel is played by a performer who is locked up in a cage on stage. The movements of this performer are registered by means of a movement tracking suit on her body and subsequently used to control the movements of a computer generated image of Ariel. In the same category, Dixon also mentions Stelarc's *Prosthetic Head* (2002 -), which is a virtually intelligent copy of the artist's head which speaks in response to questions typed by exhibition visitors.

A detailed discussion of this categorization and the accompanying examples would be beyond the scope of this paper. However, what is of relevance for the discussion here, is the fact that, in all of the examples Dixon discusses, the double can be clearly distinguished as separate from the performer's body: there never seems to be any confusion concerning the place of the boundaries between 'live' presence and mediated presence. If read in conjunction with Auslander's notion of 'liveness', the concept of the digital double may be a useful contribution to the liveness debate: Whereas Auslander is primarily concerned with an investigation of 'live performance's cultural valence' (2008: 2), Dixon's considerations clearly engage with the conceptual substance of this phenomenon within specific performance contexts. However, considering the obvious parallel between Dixon's digital double and Auslander's mediated presence, the fact that all doubles discussed in Dixon's examples are clearly identifiable as separate from the performer's body is somewhat surprising. Taking his cue from Baudrillard, Auslander argues that the formerly distinct poles of the 'live' and the 'mediated' are contracting in a technologically mediatized culture so that a live performance may now at times function as a copy of a mediated spectacle (2008: 73-127).

Accordingly, one would expect the clear-cut distinction between the 'real' performer and her digital double, which is suggested by Dixon's examples, not to be so self-evident. Indeed, work can be imagined in which multiple doubles each represent different parts of a performer, where the distinction between the performer and her double is at times ambiguous, or where the difference between 'real' and double relies on perception rather than an intrinsic aspect of a performance setup. Here, one could think of video artist Gary Hill's *I Believe it is an Image in the Light of the Other* (1991-92), in which close-ups of different parts of the artist's body are projected onto books scattered around the floor. In clear opposition to a reading based on a concept of a unified double, art historian Ewa Lajer-Burcharth has argued that the fragmented representation of the body in this work foregrounds 'the problem of spatial and psychic interruption' and that the 'fragmentary and fragmenting space represents a subject whose fond narcissistic illusions of wholeness have been dispersed' (1997: 187).

Another remarkable aspect of Dixon's examples is that, despite his claim that 'the digital double projects itself online and on stage to take numerous forms' (2007: 242), his examples are all focused on visual representations. As an example of a prominent work which features non-visual representations of the body, Alvin Lucier's *Music for Solo Performer* (1965) comes to mind. In this work, brainwave activity data is collected by means of EEG (electroencephalogram) sensors worn by the performer and subsequently used to trigger percussion instruments. Sound artist and theorist Brandon Labelle suggests that this work induces an exploration of 'presence as situated within various spaces and environments and their conditions' (2006: 127), thus clearly indicating the fragmentary nature of the sonic representations it features. In the remainder of this paper, I will concentrate on a closer analysis of the concept of the digital double in context of work that combines multiple aural and visual strategies of digital doubling and complicates attempts to identify one singular digital double. This analysis will be focused on my performance installation *Feedback* (2010), which features a combination of visual, sonic and haptic representations of my body*.*

Feedback is set up in two spaces[1]. I am standing in the first space, whilst a video monitor and a suspended loudspeaker are presented in the second space. I have a Doppler flow sensor attached to my chest and a prepared loudspeaker attached to my back. The sensor registers the movements of my heart and converts this data into an audio signal. This signal is sent to the loudspeaker on my back. However, the loudspeaker's cone has been removed and the signal is sent through an extreme low-pass filter, which removes high frequencies from the signal. Normally, a loudspeaker generates sound because it causes the air around it to vibrate by means of moving the surface of the cone. If the cone is removed, the loudspeaker does not move enough air to generate sounds in the lower frequency range. If the audio signal is additionally sent through a low-pass filter, the speaker will stop to sound altogether and merely follow the movements of the lower frequencies of the signal. Thus, the coil of the loudspeaker silently replicates the movements of the contours of the signal from the heart sensor. Metal pins have been attached to the loudspeaker coil and prod the skin of my back. In the second space, which is much larger than the first one, the video monitor shows a real-time close-up of the part of my back where the metal pins touch the skin. Next to the monitor, an unmodified loudspeaker (the same type as the prepared loudspeaker attached to my body) is suspended from the ceiling. This loudspeaker emits the unfiltered signal of the Doppler sensor in the first space and therefore generates sound. The visually perceived movements of the prepared loudspeaker displayed on the monitor and those of the sounding loudspeaker suspended from the ceiling are practically identical.

Image 1. Daniël Ploeger – Feedback (2010) (first space)

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[1] Video documentation of Feedback can be found on: http://www.vimeo.com/18818354

Image 2. Daniël Ploeger – Feedback (2010) (second space)

If one would analyze this setup in accordance with Dixon's theory of the digital double, one might say that the loudspeaker and video in the second space constitute a digital double of my 'live' body with the prepared loudspeaker in the first space. However, if a digital representation of Stelarc's head may be read as a digital double of Stelarc, as Dixon suggests, the movement of the pins of the prepared speaker on my back could surely also be regarded as a double of me. In addition, if we consider that these doubles may, in turn, be doubled themselves (why would Stelarc's Prosthetic Head not be able to have a digital double?), the constellation becomes even more complicated: The loudspeaker in the second space, which produces sound but also moves according to the sound signal in a visually perceptible manner, could be regarded as a double of the moving pins on the video in the same space, or vice versa… The perception of these 'body' – 'double' constellations changes particularly whilst the beholder moves through the installation. Whilst watching the video and the loudspeaker in the second space, without having been in the first space yet, the video might be perceived as a double of the loudspeaker. On the other hand, whilst in the first space, a beholder who is aware of the process of the Doppler heart-sensor might at first perceive the pins of the prepared speaker as my visceral body's double. Later on, after moving between the two spaces, the video and loudspeaker in the second space might together be experienced as a double of my visceral body with the prepared speaker in the first space. Thus, the possibility of multiple readings of this setup clearly unbalances the distinctions between the 'body' and its 'double', which seemed well secured in Dixon's examples.

If the oppositions between performer and its double are not fixed and multiple constellations of these oppositions may be read simultaneously in this work, what might this suggest concerning the notion of the 'digital double'? As mentioned above, Artaud claims that the theatre's double is (or should be) 'reality untouched by the men of today' and Dixon accordingly suggests the digital double as a potential representation of otherwise hidden aspects of a performer. In case of *Feedback*, however, the shifting nature of the multiple doubles might give us a hint that Artaud's 'untouched reality' is actually a fluid construct, which is largely dependent on the beholder's perspective rather than it being a reality that exists in a singular form somewhere 'out there'. Or maybe it simply indicates that the relevance of the Artaudian double in this context should be questioned? However, before I will further discuss the relevance of Artaud's double in a digital performance context, I would like to approach *Feedback* from a different perspective…

As I mentioned in the beginning of this paper, Dixon also draws attention to the

correlation between the concept of the body and its double in digital performance and Lacan's notion of the imagined perception of a whole body in the mirror stage. In the passage where the mirror stage is discussed, Lacan's fragmented body is also mentioned. However, here Dixon quickly continues to link the fragmented body to Freud's uncanny and subsequently elaborates on the uncanniness Freud ascribes to the 'robotic double' of Olympia in The Tales of Hoffmann. How the notion of the fragmented body relates to the suggested 'wholeness' of the double is not further explained, nor is the fragmented body referred to again in the following discussion of examples of 'digital doubling'. I suggest to consider Lacan's notion of the fragmented body in context of my analysis of *Feedback* in order to further inquire the occurrence of multiple, fragmented digital representations.

Lacan argues that from the mirror-stage, which a baby enters when it is 6-18 months old, the image of the body's double in the mirror functions as a trigger for an 'orthopaedic' illusion of a unified body. This illusion compensates for the loss of the sense of original unity (primarily with the mother), which used to be experienced earlier, in the phase of the Real (1949: 4). After the mirror-stage, Lacan writes, a fear of the fragmented body may return in dreams with 'disjointed limbs, or of those organs in exoscopy, growing wings and taking up arms for intestinal persecutions' (1949: 4), thus challenging a subject's image of the unified body. This clearly shows that the image of the fragmented body should not be regarded as another manifestation of the double, as the casual incorporation of the notion in Dixon's text might suggest, but rather as it's opposite. Lacan points out that the dream images of a fragmented body occur in a very accurate manner in the paintings of Hieronymus Bosch, thus suggesting that art may also function as a manifestation of the fear of the fragmented body (1949: 4-5). Interestingly, several aspects of *Feedback* show a significant resemblance with the dream images Lacan describes: Both the pins on my back mimicking my heart movements and the loudspeaker suspended from the ceiling which emits the sound of the Doppler heart sensor may be read as what Lacan calls 'organs in exoscopy'; (pseudo-)medical observations of organs outside the body. Furthermore, the video transmission of only part of my body (my back) in a separate room can be seen as a technological version of Lacan's 'disjointed limbs'.

Image 3. Hieronymus Bosch – The Garden of Earthly Delights (probably late 15th Century) (fragment)
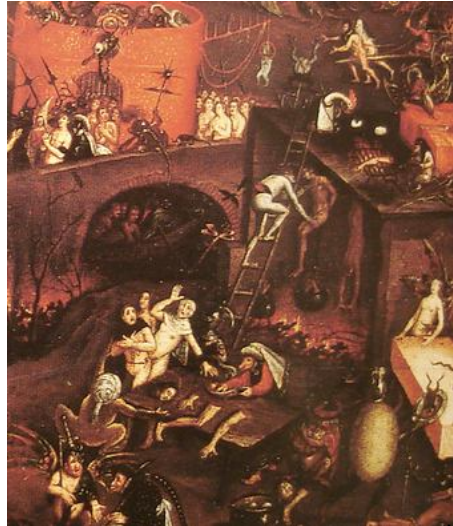
Image 4. Workshop Hieronymus Bosch – Hell (early 16th Century) (fragment)

Audience feedback has suggested that *Feedback* is often experienced as uncanny. Surely, this experience may, to a certain extent, be traced back to the perception of my skin being prodded with metal pins and the intimate sensation of listening to a sound that obviously originates from the inside of my body. However, in accordance with my analysis above, I suggest that the uncanniness of the work may also partially lie in the multiple and fragmented digital representations of parts of my body that the beholder encounters in the work. These virtual manifestations of disjointed limbs and external organs may well manifest themselves in a Lacanian fear of the fragmented body.

In this paper, I have tried to demonstrate that the 'digital double' is an even more 'mysterious and capricious figure' than Steve Dixon suggests in his book *Digital Performance* (2007: 244). The concept cannot simply be mapped on Artaud's notion of the theatre's double as a reality outside the work, and often cannot easily be read in conjunction with Lacan's mirror-stage double either. Contemporary digital technology enables advanced manipulation of images and sound and accordingly facilitates convenient, detailed control over the characteristics of digital representations. A digital artefact may therefore constitute a recognizable representation of a 'whole' performer, as becomes apparent in the examples in Steve Dixon's discussion, but a performer may also be represented partially and in multiple, fragmented manners simultaneously. Thus, the boundaries between a 'live' body and its representations may be ambiguous and paradoxal and blur the opposition between the live and the mediated, which appears to be presupposed in Dixon's text. Furthermore, when read from a Lacanian perspective, the process of digital doubling may fluctuate between the comforting image of the unified body in a mirror reflection, as is the case in Dixon's description of Graham's *Present Continuous Past*, and the uncanny threat of the fragmented body, cut up into technological bits and pieces, as suggested in my analysis of *Feedback*.

To conclude, I would like to reconsider the value of the concept 'digital double' in the analysis of digital performance. As I already suggested in the beginning of this paper, a digital representation of a performer – an artefact which constitutes a perceptible part of a performance – is difficult to relate to Artaud's notion of the theatre's double, which concerns a 'reality untouched by the men of today' that is obviously not present in the performance itself. The fluid character of the (multiple) relationships

between 'real' and double that became apparent in the discussion of *Feedback* further complicates a correlation with Artaud's double. Later on in the discussion of *Feedback,* it also became apparent that digital representations of (parts of) a performer's visceral body may also constitute a manifestation of Lacan's *corps morcelé,* which is in clear opposition to the 'orthopaedic double' of the mirror stage which is emphasized in Dixon's text. Accordingly, I suggest that both Artaudian and psychoanalytical notions of the double are rather instable points of reference for a defined notion of 'digital doubling'. Though both Artaud's and Lacan's notions of the double may at times be useful tools of analysis for techniques of technological representation in digital performance, I suggest that the usefulness of a categorized concept of the 'digital double' should be questioned. Instead of a categorization based on a pre-supposed division between 'real' and 'double', I suggest a further exploration of digital representation in context of Auslander's notion of the 'live' and the 'mediated', whilst drawing from notions of the double and the fragmented body to analyze specific strategies in digital performance in this context.

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