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Scenographic materialism, affordance and extended cognition in Kris Verdonck's *ACTOR #1*

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Abstract:

This article addresses the theme of the 'scenographic turn' from the perspective of a spectator's experience of scenography. By focusing on the materiality of scenography, I intend to draw particular attention to the role of the spectator's body in the perception and reception of performance. The expansion of scenographic practice to incorporate forms where objects and materials are central to the audience experience requires us to rethink the ways we account for scenography. Recent interest in the use of concepts from cognitive science as a means of analysing theatre might provide some help with this. In this article I consider concepts of affordance and extended cognition to see how they might be useful in thinking through an experience of attending Kris Verdonck's *ACTOR #1*.

Keywords

affordance, ecology, embodiment, extended cognition, materialism, scenography

Audience experience and the scenographic turn

The "revolutions" of Appia and Craig (Baugh 2013: 243) over a century ago seem to mark a significant turning point in terms of the way the materials of space and light might be employed as part of western theatre practice. But it is only lately that the significance of developments in practice have been researched and discussed as part of emerging body of knowledge about the role of scenography in audience experience. Christopher Baugh develops the idea of scenography not simply as a series of illustrative effects, but as a material and structural component of performance (2013: 92) and this, he suggests, might now be seen in contemporary work where scenography, particularly in a "post-dramatic culture of performance" (2013: 224), seems to have become "the principle dramaturgy of performance-making" (2013: 240). That is to say that the characteristics of particular places,

the materialities of the objects at work within them and the spatial arrangements between the spectators and the things of performance are now often the foundation for “applied art practice that is finding new ways to engage and interact with audiences” (2013: 224). It is this concern with audience experience and the various ways in which spectators might be engaged through the material and structural aspects of scenography that I think marks a contemporary turn in scenographic practice and in research.

Approaches to scenographic reception

There is a recognition that the literary foundations of theatre audience research where spectators are modelled as “readers” has led to “substantial problems” because it does not recognise the unique characteristics of “the live presence of spectators and performers in shared time and space” (Freshwater 2009: 14-15). This is also problematic from a scenographic perspective as it neglects the specific material conditions and qualities that become apparent only at the point of performance. As Patrice Pavis has suggested, contemporary scenographic practice “calls into question the traditional hierarchies of the text, the performance of the actor, and the general interpretation of *mise en scène*” (Pavis 2013: 71) and requires us instead to engage with “the gathering of elements deployed in space and time” (2013: 72). We need to experience a scenography rather than read it.

Freshwater points to the investigation of the “bodily engagement” of audiences as a significant way forward (2009: 19). These approaches (for example in Shepherd, 2006 and Baner and Lepecki, 2006) deal with the interconnection of senses as registered in the body as the foundation for theatrical experience and this is important for scenography. Focusing on the body helps us to account for the impact of scenographic aspects such as spatial arrangement and structure, textures and densities of materials and the effect of shifts in lighting. Traditionally we have been accustomed to think about scenography as an almost exclusively visual (and often largely cerebral) experience that works in tandem with what we hear, but acknowledging the influence of other sense systems such as those of smell, touch, kinaesthetic sense (that deals with sense as registered through movements in muscles, joints) and vestibular sense (the way we register balance and direction) allows us to take a fuller account of the richness of scenographic environments, especially those that provide a

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material and spatial dramaturgy of performance. Some of this, as we shall see, has been influenced by scientific thinking about the body as much as the brain as the site of perception, however Freshwater also points to the profound influence of theories of phenomenological perception (especially those developed by Maurice Merleau-Ponty, 1963) and says that these ideas have legitimised scholarly discussion of “corporeal responses” and helped to overcome some concerns that the effect of a performance might rest on “a mysterious form of osmosis” (2009:19).

Affordance and scenographic reception

In addition to accounts of perception and reception that derive from theories of the body in space, scholars such as Bruce McConachie (2008) have looked to cognitive science for further legitimisation of some of the basic elements of theatre spectatorship. Crucially for McConachie, theories of cognition that are grounded in empirical evidence are, when applied to theatre spectatorship, likely to lead to the discovery of more reliable “truths” (2008:14), even where this is applied to performances of the past (2008: 207). His approach, whilst it leaves room for “secondary theories” such as phenomenology as supplements (2008: 14), prioritises insights from cognitive science such as conceptual blending, empathy and affordance and he applies these, largely, to examples of mainstream theatre and he does not deal with scenography in detail. Others, meanwhile, have found it useful to apply cognitive theories specifically to experimental and socially engaged examples of scenography, for example Melissa Trimmingham (2013) has both explored the use of a participatory scenographic environment to enable collaborative social interaction, using concepts of empathy, affordance and extended cognition. Teemu Paavolainen has focused specifically on the interaction of performers and objects, using theories of cognition and ecology (Paavolainen, 2012) and has also explored the idea of affordance in relation to theatre objects (Paavolainen, 2010)ⁱ.

The concept of affordance, developed by James Jerome Gibson seems to be particularly valuable to thinking about the spatial, material and temporal nature of scenography. Gibson’s theory aims to account for “the complementarity of the animal and

the environment” and it is a foundational idea in theories of perception. It accounts for the latent action inherent in environments and the interactive possibilities that environments offer: “The *affordances* of the environment are what it *offers* the animal, what it *provides* or *furnishes*, either for good or ill” (Gibson 1979: 127). The offer may be something functional such as shelter, food, or a tool, but the offer can be more ambiguous, for example, fire or terrain. The nature of the affordance (“for good or for ill”) depends on the animal’s capacity or disposition in relation to the offer. The affordance is realised in the interaction between animal and environment so what for one may be a welcoming place might for another seem threatening. Paavolainen describes affordance as reciprocity of “agent and world” that implies a “continuous awareness of both the environment and of oneself” (2010: 119). It is helpful to understand that the “offer” of affordances is made apparent through the way the perceiving body detects changes in the environment. Gibson describes perception as the process of picking up information from the environment principally through distributions of light “as it is reflected from surfaces of objects, both animate and inanimate” (Heft 1989: 2). But visual systems do not work independently from the other senses. Kinesthesia or the detection of movement, “cuts across the functional perceptual systems” (Gibson 1968: 111) and the “flux of energy” (Gibson 1968: 319) between our bodies and the environment is picked up not just through our eyeballs, but through ocular musculature associated with directing our view and through vestibular systems that contribute to our sense of movement, balance and gravity.

There are some legitimate concerns that, in reaching for explanations of how the mind works as a model for what happens in performance, we risk overlooking the depth of aesthetic experience. The “truths” that cognitive science seems to offer need to be carefully and cautiously considered in relation to scenographic experience. Philosopher and cognitive science researcher Dustin Stokes suggest that the “explanatory goals and resources of both aesthetics and cognitive science should expand to include those of the other” (Stokes 2009: 715). Recent developments in “enactive” cognitive science that “de-emphasize mental representation and emphasize body and action” (Stokes 2009: 715) hold the way open for this. Advocates of enactive cognition stress “the interaction between autonomous agents and their environments” (McGann, no date) rather than internal processes alone as the

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foundation of all cognitive processesⁱⁱ. Stokes not only stresses the necessity to emphasise bodily processes of reception in aesthetic experience, but also points to a reciprocal relationship between sensing bodies and the environments and objects that they engage with. Although Gibson was writing in an era before the term “enactive” cognition was coined, his theory of affordance provides a helpful basis for thinking about the interaction between sensing bodies and the environmentⁱⁱⁱ.

In theatre reception, the emphasis is often placed on the perceiving subject as the centre of operations. But the reciprocal relationship of body and world that Stokes presents would suggest a more distributed approach to perception might be necessary. The aesthetic experience of scenography involves not only the embodied response of the viewer but the action that occurs between the body of the spectator and the objects and environments it encounters, stimulated by the particular material qualities of the scenography. This is where ideas about extended cognition or the extended mind may have a role. The extended mind, first proposed by philosophers and cognitive scientists Andy Clark and David Chalmers in 1998 identifies “the active role of the environment in driving cognitive processes” (2010: 27) and thus distributes the cognitive process beyond the limits of the human body and incorporates the environment. The theory proposes that objects such as notebooks and computers can become part of a cognitive system and therefore part of the mind. It suggests that delineations between sentient human beings and inert non-human things need to be re-considered as part of more widely distributed operation of cognition.

My aim is to counteract notions of reading scenography by exploring the bodily engagement of the spectator as part of a meaning-making process. In this article, I propose to explore affordance and the extended mind to see how far they are helpful in analysing an experience of a particular scenographic performance, Kris Verdonck’s *ACTOR #1*. In doing so, I will consider the distinctive contribution that scenographic materialism makes to the audience experience of performance.

Kris Verdonck’s *ACTOR #1*

Kris Verdonck is a Belgian artist and director of A Two Dogs Company. With a background in visual art, architecture and theatre and Verdonck’s work sits somewhere

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between “visual arts and theatre, between installation and performance, between dance and architecture” (A Two Dogs Company, no date) and has been presented in theatres, galleries and museums. Verdonck’s work is of particular interest as an example of work that reflects the scenographic turn discussed above because it uses objects, materials, machines and technologies to explore how the relationship between humans and their environment is changing:

Verdonck’s work deals with the complex relationship between human and technology – ‘the machine’ – that characterizes our time. This dualism or symbiosis considers both small everyday situations such as our dependence on cell phones and laptops, and the larger machines of ideology and economic systems.

(Van Baarle, Stalpaert & Verdonck, 2013: 54)

Often the work seems to present this relationship as a blurring or switching between human and non-human and it also appears to imply the need for “a more humble position for humans” (Van Baarle, Stalpaert & Verdonck, 2013: 62)

In discussing another of Verdonck’s performances, *End* (2008), Katia Arfara says that it explores “new modes of performativity through an embodied dialogue between listening and viewing, imagining and experiencing, mental and material, realism and abstraction”. This then allows “new sites of spectatorship to emerge” where the stage becomes an “extensive space, open to innumerable ways of thinking” (Arfara 2014: 55). *ACTOR #1* provides a similarly extensive space for the spectator to engage with different modes of thinking that are primarily stimulated by objects and materials.

In this article I will be reflecting on a performance of Kris Verdonck’s *ACTOR #1* and analysing my own experience using the theories outlined above. Because I want to focus particularly on the materiality of Verdonck’s scenography, I have chosen to adopt a broadly ethnographic approach whereby I attempt to record and investigate my own embodied responses to the work as it occurs in performance. As Stokes points out:

Perceptual experience is not just the result of internal representations formed in response to external stimuli, but also of the fact that we plan and execute action in the world, and in ways dependent upon the physiological details of our body and brain. (Stokes 2009: 726)

I hope that by recalling in detail the interaction between myself as the spectator and the things that I encountered in the performance will help elucidate something of the processes of reception and provide the means by which the theories I have introduced can be tested. I have used fieldnotes that were made shortly after the performance to reconstruct particular moments of my experience and to inform the further discussion of my experience. The hand-written notes made on the night of the performance were transcribed a few weeks later. I have returned to these to provide snapshots of key episodes and they are presented in italics below. No doubt, the notes themselves have been informed by my broader interests in the agency of scenographic objects and therefore my experience cannot be offered as a claim to an understanding of other spectators' responses, but nonetheless I believe an examination of some key moments allows us to think further about perception and reception in relation to scenographic materials.

ACTOR #1 is a performance in three parts; three installations in separate rooms of the same venue that dramaturg Marianne Van Kerkhoven says articulates "three variations on the metamorphosis from chaos to order" (A Two Dogs Company, no date).

The three parts are: *MASS*, a large tank of fog that swells and rolls; *HUMANID*, a small figure about a third the size of an adult human that delivers part of a speech on a miniature stage; and *DANCER #3* where a small robot powered by compressed air jumps repeatedly, eventually unbalancing and falling to the floor, only to be pulled upright to begin the jumping and falling over and over again. As well as being an example of performance that is largely determined through its scenography, the subject matter of the piece is also apposite in that it addresses creation and the relationships between materiality, technology and human beings:

One of the starting points for this work was the history of the creation of the 'homunculus', the artificial miniature human that philosophers, alchemists and

scientists have sought over the centuries since Greek Antiquity. *ACTOR #1* is about genesis: what has, is or might come into being. (A Two Dogs Company, no date)

The performance that I attended was on 26th May 2011 at Huis aan de Werf, in Utrecht. This venue is a large arts centre situated in an old Victorian era building with rehearsal rooms, studios and exhibition spaces spread over what seemed to be four or five floors. The first part of the performance, *MASS*, was shown at the very top of the building in an attic-like space that had angled roof beams and a planked wooden floor. The audience of about 25 needed to ascend an external fire-escape staircase to gain access to the space. The only object in this room was a large tank, roughly three and a half metres square, placed centrally. Front of house staff guided us discretely to stand around the tank for the duration of the performance and then on to the next part *HUMANID*. This was somewhere in the centre of the building in a small theatre studio space with a low ceiling. Here the audience was invited to sit on theatre-style seating facing a small stage. The final part, *DANCER #3*, was placed in the basement. This was the largest space with a high ceiling, a concrete floor. The main focus of this performance was a spot-lit platform where the robot jumped and the audience tended to stand and watch this, but there was room to move freely and explore other objects in the room; what seemed to be a computer for monitoring or controlling the robot. Each part of the performance seemed to last for about 30 - 45 minutes. On leaving, a short film in which the philosopher and mathematician Jean-Paul Van Bendegem “outlines the history of the homunculus” provided an “epilogue” (A Two Dogs Company, no date).

MASS

The first installation I encountered was *MASS* and this excerpt from my field notes describes how the fog in the tank elicits a visceral response:

We, the audience, stand around a large square tank as the fog which fills it heaves and swells. There is a sound track consisting of hissing, whistling and crashing noises which sound vaguely industrial or chemical. The performance lasts at least thirty minutes, the fog becomes more active, more turbulent, heaving like a stormy sea. The movement is hypnotic and I can feel in my upper body an echo of the churning, swelling movement. For a moment the fog seems limitless. Then, just as gradually, it

subsides and calms and I notice the other bodies standing around the edge of the tank their faces illuminated by light from inside the tank, filtered through the fog.

It seems to me that the material qualities and movement capabilities of the fog are registered as a reciprocal feeling in my body. The movement of the fog is replicated in my musculature and in visceral sensation. It is a slightly queasy, disorientating feeling that is complemented by the sound track. Even though I understand that the action of the fog is planned and controlled by the artist, I allow myself to respond to the fog by attending to its material qualities. I respond to the fog, but does the fog respond to me? The fog is still a mysterious and unpredictable entity. When it churns and swells it starts to escape the tank and engulf the spectators that are peering into it. But as the fog subsides, I see myself as one of a ring of viewers, encircling and containing the fog once again. Although I know that the behaviour of the fog is programmed and controlled that doesn't stop me feeling that there is a moment when the fog might encroach on us as viewers, but that by surrounding the tank our presence has the effect of calming and quietening the fog.

In Gibsonian terms, the fog affords a certain physical sensation and bodily disposition as I watch it bubble and roll in the tank. I can feel my body adjusting itself, responding in a complementary fashion to the quality and movement of the fog. The physical sensation that the fog affords in me is informed by the context of the performance and my role as a spectator; whilst paying attention to the spatial and physical aspects of the environment, I am alert to possible cultural meanings as well. My disposition as a spectator, informed by practice as a designer interested in and attuned to the properties of materials, aware of cultural and aesthetic conventions, undoubtedly contributes to the effect (and to the affect) that the fog has on me. Gibsonian affordances have been criticised for underestimating the value of this kind of cultural knowledge (see Knappett 2004) and Tringham distinguishes between Gibsonian affordances which she sees as simple sensory-motor opportunities and "richer" intentional affordances that lead to imaginative and meaning-making actions (2013: 233). But it is important to point out here that Gibson's affordances do not transmit information; affordances are latent and dependent on the capability of the individual animal/person to produce action from them. Whilst this does not, however, imply a subjective dimension to affordances, it does suggest a relational one (Heft 1989: 3). Harry Heft criticises the dualist approach that he says underpins standard accounts of perception

where sensory input and behavioural aspects as strictly separated from mental activity (Heft 1989: 24). Instead, he shows that Gibson supports the idea of an embodied mind where sensory input is the foundation of cognition. Drawing on phenomenological perspectives, especially Maurice Merleau-Ponty's account of the *Phenomenology of Perception*, (1962) Heft shows that Gibson's idea of perception is one of an embodied mind, where the body is not just simply in the world, but that it inhabits the world in an intentional way:

Both Merleau-Ponty and Gibson emphasize that perceiving simultaneously entails an awareness of both the environment and the body. Just as affordances are perceived properties of the environment, our body is also phenomenally present as we move around and engage the world. (Heft 1989: 12)

From this Heft instead puts forward an argument for the relational and, potentially intentional, nature of affordances. If affordances are relative to what an individual can do, what their capacity for action might be then they are also relative to the "individual's intentional repertoire" (Heft 1989: 17). The way we respond to an environment is not simply "the dumb moving of parts" but rather "the expression of a comprehension of things" and our relationship to those things (Mazis 2008: 54). Or as Merleau-Ponty puts it, "...to move one's body is to aim at things through it; it is to allow oneself to respond to their call" (1962: 139). In this way, Heft claims, "the extension of affordances to the culturally based meanings of objects is justified if we view affordances in relation to what an individual can do, or rather what an individual knows how to do" (1989:18).

In Heft's reading of Gibsonian affordances it becomes easier to see how my response to the physical properties of *MASS* offer me not just sensory motor opportunities, for example, an impulse to reach out and touch the fog, but also open out on to the beginnings of aesthetic experience and meaning that is informed by cultural knowledge and training. Furthermore, Heft points to the "multiple affordance possibilities" (1989:21) which are apparent once a relational and intentional view of affordance is adopted. In my experience of *MASS*, the emergent meanings I begin to try out (primordial soup? chemical reactions? an alien being? a view into the centre of the earth?) are shaped by the physical properties of

the fog, supplemented by the sounds I can hear and the image of partially-lit, disembodied faces looking into the tank.

HUMANID

The second part of the performance, *HUMANID*, takes place in a small room with a theatre-style seating and little curtained stage:

There is a figure in a pale blue suit on the empty stage that is curiously lifelike, speaking and moving like a live actor but impossibly tiny, like a doll. It becomes apparent after a while that the figure is perfectly still but animated by some kind of scaled-down projection of an actor. The movement I thought I saw turns out to be a flickering in the projection. But for several minutes I struggle to make sense of what I am seeing and even when I settle on a possible explanation, I am left with a profoundly unsettling feeling towards the figure. Its size makes it seem vulnerable, especially as it is surrounded by fathomless black. The contrast of the figure and its surroundings; the differences in scale, colour and texture have some effect. And I suddenly notice the figure is barefoot.

The affordances of the environment of *HUMANID* are a little harder to locate than they are for *MASS*. The seating, for those who choose to sit, certainly affords a particular viewing orientation to the stage and, therefore, to the figure that appears on it. The seats condition a certain posture and direction and sitting in them my body recalls the many other times that it has been in this position looking at an actor on a theatre stage delivering text. The actor figure, though, confounds expectations of what I am used to seeing. The contrast between the small pale figure, devoid of weight and density, and the cavernous black stage, framed by red velvet curtains, is striking and the slight glitches in the video projection make it seem as though the actor might break down or dematerialise into the dense black surroundings. The size of the figure makes me lean forward and concentrate, but I am unsettled by what I am looking at. The apparently contradictory qualities of the figure offer a complex set of affordances. Heft suggests that affordances often work through their “pervasive influence”, whereby environmental affordances seep into our body “even though

we may not always be able to isolate their impact at some specific moment in time". (1989: 11).

Meanwhile, other elements of the performance have started to make themselves felt:

The words that the actor is speaking start to register with me, first at the level of the sound of his voice, deep, sonorous and slightly hoarse and then through the words themselves; grey earth, dead dust, body, living dust and phrases; 'unfinished body', 'standing still', 'no relief' which circle and repeat.

Later I read that these phrases are taken from *Lessness* by Samuel Beckett, but in the moment of the performance I can only grasp the feel of the words and fragments of their possible meaning in relation to the things I have seen. The affordance of the sound of the text operates as a pervasive influence rather than as clear-cut cause and effect. Together with other pervasive influences (for example, the effect of the seats on viewing position and the uncanny construction of the figure), the affordances of *HUMANID* frame and inform the ideas and images that are evoked by the text. Together these elements make a complex and elaborate network of the kind Gilles Fauconnier and Mark Turner (2002) have aimed to address using their theory of "conceptual blending" where several different kinds of mental input, including that which is based on bodily sensation, are combined to produce a rich cognitive blend of heterogeneous information. Edward Hutchins (2003) explores how "material anchors" can be used to stabilise a conceptual blend and enable "more complex reasoning processes than would otherwise be possible" (2003: 1562). For the purposes of this article, this line of enquiry is potentially very interesting in that it accords a key role to physical and material structures as part of a distributed cognitive process. That is, objects and materials in performance can be considered as tools for thinking and feeling. Hutchins, however, is mainly concerned with the way cognition might be offloaded on to the physical structure of tools such as slide rules in order to develop higher-order more complex conceptual feats which would not be possible by mental resources alone (2003:1575). For him, material anchors are tools to more effective reasoning and they don't have the affective impact that objects may have in performance. The objects in *ACTOR #1* do not seem to be helping to stabilise the cognitive process. Quite the opposite. Their material

qualities, instead, seem to suspend and interfere with cognitive blending. The contradictory material characteristics of the figure in *HUMANID*; human/not-human, live/recorded pervade and unsettle my experience as a spectator. Clark and Chalmers (2010), however, envisage a much more active role for the environment than that proposed by Hutchins. Their notion of the “extended mind” where the environment drives cognition, is distinct from the conventional notion of cognition as a function of the brain. The extended mind is not contained within the brain but rather is distributed across the brain, the body and the environment. The objects in the environment are not just providing external input into my internal processes, they are fully a part of a distributed process and capable of altering that process. This is much more in keeping with my experience of *HUMANID* where the figure continually provokes a complex network of thoughts and feelings that will not settle into a blend.

The extended mind is a concept that seeks to displace the centrality of the human subject in order to gain a more holistic view of cognition as part of a larger ecology. As Clark and Chalmers put it: “once the hegemony of skin and skull is usurped, we may be able to see ourselves more truly as creatures of the world” (Clark and Chalmers 2010: 39). The concept of the extended mind has affinities with Gibson’s much earlier ideas about affordance and the complementarity of animal and environment. For Paavolainen, both the ideas of affordance and those of the extended mind help us to account for ecological relationships between actors and objects on stage. He says it is important to think about the objects in performance by “focusing on the fluid relations and interactions between actors and objects, people and things”. In a cognitive ecology of scenography it is necessary to note that objects and materials are not simply there to set the scene for cognition, but that, to borrow from Paavolainen, they constitute the “world” within which cognition is “embodied, situated, distributed, and enacted” (2012: 46).

DANCER #3

For the final installation, *DANCER #3*, we descend to the basement of the venue. Here in a large room with a high ceiling a small robot performs in a spotlight on a raised platform.

The robot seems to be made of metal rods and plates assembled in a piston-like construction. The robot about the size of a child. Round discs near the top of it suggest eyes. It is attached to an apparatus above by a long pipeline that delivers compressed air to the robot to activate it. Beside the platform there are computers with monitor screens that seem to measure and track the performance of the robot as it is made to jump. The robot gradually builds up speed, bouncing and rocking on a central footplate, then jumping higher and higher until it falls over. It has a low centre of gravity and easily starts to wobble and fall. When it falls it is pulled upright again by the pipeline and is moved, swinging and dangling, back into place and the process starts again. Each time the rhythm of the air supply and jumps produced is different; the volume is loud and the sound is harsh, like the noises you might expect to hear in a foundry or a heavy manufacturing facility. As it jumps it looks like an Irish dancer, arms tightly by its side. It is funny and sad; brave and stupid. We know it is doomed to fall, but we are disappointed when it does. Meanwhile whistles and bleeps suggest some kind of communication between the robot and the thing that lifts it.

The effort that the robot in *DANCER #3* expends quickly connects with me on a bodily level, reinforced by the noise of the compressed air and the heavy thump of the foot as it lands. My own body reflects something of the bouncing sensation as I silently encourage the thing to jump higher. There is a degree of anthropomorphisation involved here and this clumsy inept dancer has an appeal that sometimes verges on the sentimental. Yet it is also the case that the jumping, falling, failing and starting again comes, over time, to feel familiar within my in body. This response to action is in the context of other elements; the machine-like structure that controls the robot, the relentless, thumping, banging noises that accompany the jumping and the small platform, about the size of a boxing ring, around which the audience stands. As in *HUMANID*, the material and structural aspects of this performance assert themselves in complex and unsettling ways. The tendency to empathise with the robot is compromised by being part of an audience group that wanders around the

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large space circling the platform and watching, bemused, as the robot tries and falls again. Meanwhile, the apparatus that controls the robot towers over us all.

Gibson's theory of affordances has been used by Paavolainen to consider the way that theatre props form part of an ecology of theatre where the boundary between performers and props is blurred such that we can begin to see theatre objects as active agents:

Once we loosen our anthropocentric views of agents and artifacts, and allow for a fuzzier boundary, again, between *ourselves* and our environments, we begin to see the fundamentally distributed character of agency and cognition. (2010: 126)

In *DANCER #3* the boundaries between myself as spectator, the technological objects, the space itself keep shifting. At times I am conscious of being able to process the rich variety of materials, images and ideas that are present to begin thinking about relationships between the technological and the human, but at other times the material qualities of the environment assert themselves. Density, texture, sound, scale and movement intervene and make their presence felt and influence my disposition towards the scene, my mood.

The shift away from the "hegemony of skin and skull" that Clark and Chalmers call for in cognition can be seen as part of a broader movement across political, philosophical, environmental and cultural disciplines that has been termed "new materialism" (Coole and Frost 2010). This movement seeks to account for all kinds of artifacts and natural matter that we encounter daily, but often without noticing. A foundation of this approach is to recognise the inter-relatedness and inter-dependence of the human and the non-human in contemporary life. But it also asks questions about "the nature of matter and the place of embodied humans within a material world" (2010: 3), suggesting that we need to reconsider the way we have tended to privilege human subjectivity so that we can come to see "differences between humans and animals or even differences between sentient and non-sentient matter" as a "question of degree more than of kind" (2010:21).

Paavolainen says that adopting this kind of thinking in the theatre may mean that "we refrain from defending very essentialized boundaries between actors and objects,

liveness and technology” (2012: 226). In the context of the historical examples (Grotowski, Kantor and Meyerhold) that he talks about, this makes good sense; the relationship between actors and objects in particular is one that scenographic studies needs to address. But in considering contemporary scenography, especially the kind of work, like Kris Verdonck’s that concerns itself with doing rather than acting, with the “concrete and functional” presences of bodies and objects (Arfara 2014: 49), it is the capability of things themselves, human and non-human alike that need to be taken into consideration. The emphasis that new materialists place on the “productivity and resilience of matter” (Coole and Frost 2010: 7) suggests that the agentic capacities of non-human need to be recognised in order for us to properly understand the ethical and political challenges that face us now. New materialist thinkers such as Jane Bennett insist on the “vitality” of material (2010) and says that the agentic capacities of non-human materials can produce effects that are above and beyond those that are intended by human agents. The vitality of matter, therefore, offers a provocative frame of ideas against which to consider postdramatic and expanded forms of scenography^{iv}.

In *ACTOR #1* the categories of human, object, technology and matter are called into question and the boundaries between them blurred. In the process of perception, too, the collection of materials and objects that I am confronted with appear to have agentic capacity distributed amongst them that goes beyond affordance. Bennett discusses the vitality of matter in relation to the operation of assemblages:

Assemblages are ad hoc groupings of diverse elements, of vibrant materials of all sorts. Assemblages are living, throbbing confederations that are able to function despite the persistent presence of energies that confound them from within. They have uneven topographies because some of the points at which the various affects about bodies cross paths are more heavily trafficked than others, and so power is not distributed equally across its surface. (Bennett 2010: 23-24)

ACTOR #1 is not ad hoc. It is a carefully crafted and staged performance. And yet it draws much of its affect from an assemblage-like structure and mode of operation. Although I have focused on specific elements – the fog, the stage figure, the robot – these are all encountered, cumulatively, as members of a larger assemblage which includes the spaces

and structures that contain and support them (the scenography, the site) and includes, too, the audience. In *ACTOR #1* I propose that processes of perception and cognition are set to work by an assemblage of objects, images and ideas that operate as a “material cluster of charged parts” (Bennett 2010: 24). The assemblage provides a complex environment for the spectator and affords ways into the scenographic experience that are grounded in embodied responses.

Conclusion

The objects in *ACTOR #1* can be seen as part of an ecology of scenography. Following Gibson’s ideas of affordance has allowed me to focus on the relationships between my body and the environment of the performance and to consider the offer of particular scenographic objects. Their material qualities are crucial in determining the particular offer that they make towards my aesthetic experience. However, readings of affordance that separate behavioural (doing) and mental (thinking) are limited in their capacity to account for the complex and pervasive influence of the material environment of scenography and here Heft and his phenomenologically inflected reading of Gibson is very helpful. Meanwhile, considering the extended mind has allowed me to accord scenographic materials a key role in my experience. By linking this to new materialist theories, I have tried to show that the distinctive contribution of scenography as a material practice insists on the vitality of materials and their capacity to engender reciprocal relationships with spectators. Thinking of scenography in this way also helps us to re-consider matter, hitherto overlooked, as fully a part of ecological, cultural and political operations. But in trying to account for the impact of scenographic materials as part of an aesthetic experience it is important to reiterate the fundamental role of embodied responses that may be occurring at a level of which I am barely conscious. In pointing to the value of objects in cognitive processes it would be wrong to neglect the material qualities of objects that provide the basis of an emotional and aesthetic response.

The scenographic turn that I have dealt with herein is marked by a contemporary expansion of scenographic practice, beyond the theatrical stage and into an array of other cultural and social settings. This practice is accompanied by a growing body of research into the way audiences make sense of this work and the particular kinds of spectatorship that

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scenography encourages. In this way the scenographic turn might be considered to be as much about the embodied imagination of audiences as it is about current scenographic practices. And if this is the case we might then think about how theories of scenographic experience leads us to reconsider a wider array of aesthetic experience as part of effort to understand more fully the richness and complexity of the ecology of human and non-human material.

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ⁱ See also Di Benedetto, Stephen. 2010. *The Provocation of the Senses in Contemporary Theatre*. London: Routledge where neuroscience perspectives are employed to examine examples of scenography, exploring how light, sound, environments, objects and materials might have a direct impact on the "sentient body" of the attendant and stimulate thoughts and feeling through a "patchwork" of sensations (2010: 167). I have written elsewhere about kinesthetic empathy between audience and objects, see McKinney, Joslin. 2012. "Empathy and Exchange: Audience Experiences of Scenography" in Reynolds and Reason, eds. *Kinesthetic Empathy in Creative and Cultural Practices*. Bristol: Intellect. And the usefulness of cognitive science in exploring scenography is the focus of Xristina Penna's practice-based PhD study, 'Towards a Cognitive Scenography: Applications of Cognitive Science in Scenographic Reception', currently being conducted at the University of Leeds.

ⁱⁱ In Francisco J Varela, Evan Thompson, Eleanor Rosch.1992. *The embodied mind: Cognitive science and human experience*. Cambridge: MIT Press. Varela, Thompson and Rosch say that "cognition is not the representation of a pre-given world by a pre-given mind but is rather the enactment of a world and a mind" (1992: 9). For other perspectives on enactive cognition see also Alva Noë. 2004. *Action in Perception*. Cambridge: MIT Press.

ⁱⁱⁱ Bleeker and Germano say that enactive perception is "a modernization" of Gibson's theories of perception (2014: 365). Bleeker, Maaïke and Isis Germano.2014. "Perceiving and believing: an enactive approach to spectatorship". *Theatre Journal*. 66:3. 363 -383

^{iv} See Donald, Minty.2014. "Entided, enwatered, enwinded: Human/More-than Human agencies in site-specific theatre" in *Performing Objects and Theatrical Things*, eds. Marlis Schweitzer and Joanne Zerdy. Abingdon: Palgrave. Donald, writing about her own site-specific scenography, uses Bennett's idea of "vital matter" (Bennett 2010: 119) to develop an argument for work that helps us re-appraise human relationships to the material world, and more ambitiously, challenge normative and anthropocentric views of "human/more-than-human interdependency" (Donald, 2014: 131).