

Lisa Meaney

## Towards Posthumanist Design: With-Water

### **Abstract**

*The article presents an investigation into the performative as developed by Hensel (2010) and the posthumanist as developed by Haraway (1988) within a broadly architectural context. By assuming the agency and continuous becoming of the material world, the culturally located and anthropocentric notion of the designer is called into question. The practice of posthumanist and performative design collaboration across the human-nonhuman spheres is presented as an alternative. The development of a collaborative process between water as matter, and the maker/designer is the focus. A practice based investigation of theoretical ideas around agency, irony, relational dialectics and situated and embodied knowledge as developed by Barad (2003), Haraway (1988) and Linton (2010) is documented through a series of collaborative experiments with water. The article concludes that the enactment of our human-nonhuman, material-semiotic relationships precludes our knowledge. It posits the process based practice of designing from a performative and posthumanist site of irony, embodiment and continuous socio-natural becoming as an effective environmental strategy for design.*

**Keywords:** Agency, performativity, posthumanism, architecture, making, environment, ethics, embodied knowledge, human-nonhuman.

### **Introduction**

1st May, 2012

I want to work within the openness, the possibility, the “getting to know you through what you do” of collaboration, and see what it means to collaborate with something not human, but with its own complex intention.

Focused on water, in a loosely architectural context, this paper presents research practices and theoretical contexts that explore the question, *How does an investment in the agency of nonhumans change the process of design?* The question is anchored in a broader interest in the relational dynamics between humans and nonhumans, the role these dynamics play in generating design, making and knowledge practices, and how these practices in turn effect relationships.

The work brings together the unwieldy and emerging discourse of posthumanism, and its presentation of alternatives to an anthropocentric way of being, with the concept of the performative, and its description of reality as a social, contextualised construct. Agency – as inherent to both posthumanism and the performative – is understood to be the capacity of entities to act within the world and affect events. Making is referred to in its crafted, embodied sense, and in the context of this paper is understood as inherent to the design process.

Through enactment and analysis, the performative is explored in specific reference to its architectural manifestation, which, in its contemporary form, describes how a building interacts dynamically with its natural and cultural environment. Posthumanism, which explores the relationships between humans and nonhumans across natural and/or technological territories, here focuses specifically on exploring the relationship between humanity and water.

The author is a designer and maker of tents, and has a particular interest in the articulation of relationships between humans and meteorological phenomena, and, like the discourse of posthumanism, seeks to discover non-anthropocentric practices.

The research is needed to understand what a performative, posthumanist approach to design might look like, in terms of a practice of making, and to explore its value as an alternative to a scientific approach to design research. The transfer of theories developed by science philosopher Donna Haraway (1988) around the world's independent agency, and their effect on current architectural notions of the performative developed by architect Michael Hensel is of specific interest. Research is also required to understand if and how the current scientific conception of human-nonhuman relationships propagates the environmental crisis, and how design, in both its processes and products, shapes the facts of this.

For this endeavour a self-conscious negation of one's knowledge about water and the design research process is required. Juhani Pallasmaa (2009, p. 143) describes how 'In any creative field the process of unlearning is just as important as learning, forgetting as important as remembering, uncertainty as important as certainty', and it is in this spirit that the present research is undertaken.

What follows are excerpts documenting three of many collaborative experiments between the author and water during the summer of 2012.

## Experiments

'...matter is substance in its intra-active becoming - not a thing, but a doing, a congealing of agency.' (Barad, 2003, p. 822)

2nd May 2012

The rain has been thrashing down for three weeks... the noise as it hits the PVC roof is relentless, really loud. Things are beginning to feel biblical. My washing has been out on the line for a week and I have not dared to go out to bring it in. Eventually I open the door and go outside. Standing in the garden it's still chucking it down but it's not the brittle assault it sounds like from inside. There is no collision of forces as the water hits the ground. The rain meets the grass and weeds quite gently, and buffered through its layers and forms, soaks quietly into the soil.

Using the soft plastic/cotton mix of a worn-out, waterproof bed sheet, I model a conservatory 'roof wig' to the forms of the grass and weeds in the garden. Its soft spikes and geometric curls create an awkward surface that the rain can land on softly. It is a comical type of biomimicry – a bad architectural hair-do – but I imagine myself to be reconciled with the rain, and that it is doing its thing in a less frenzied fashion, leaving me in peace to do mine. We are engaged in an entirely different event.

The change of material on one's roof will have an obvious effect on the sensory experience of the human sheltering underneath from the rain, this in turn influences the human understanding of the rain. The material on the roof can be described as having agency – an ability to act upon and affect the event it is part of and create meaning.

But agency is not isolated or singular. All things participating in an event have agency, and in turn are being acted upon by other things, both human and nonhuman. Water may come to us through pressure fronts, gravity, atmospheric dust and the material through which we shelter. We come with our hearing, our desire to keep the laundry cycle in flow, our thoughts about climate, our own extended network of agency. These agents meet to articulate the rain – as both meaning and matter.

The flow of agency across the spheres of the natural and the cultural is not dichotomous. Whilst agency in its most radical sense strives to express that the nonhuman

world has independent, meaning generating power - the ability to code and construct a reality in the same way that one might assume of humanity, it does not assume to be completely 'other' or manifest only of itself. Agency is determined by a complex exchange that is both physical and biocentric and evolves continuously across the scales of the molecular, human and metaphysical.

All agents are internally related, both within and across the human-nonhuman. The fact that water freezes at 0 degrees centigrade at sea level is as much a property of sea level as it is of water. Jamie Linton describes this as 'relational dialectics' (Linton, 2010, p. 34). Similarly, all things can be described as having an 'exteriority within', or 'intra-activity' (Barad, 2003, p. 803). Whilst there is a boundary between the things enabling relationships, all relationships, and boundaries, are based on that fact that things already exist as part of each other.

In this sense, rain has power because it already has the meaning of other things within it – the roof, the laundry, the politics of climate... In its eternal and networked material-semiotic mutation, it is also intra-actively within the roof, the laundry, the politics of climate.

If the power of the rain is lent in part through the material of the roof, the human material-semiotic decision to stay inside comes in part through the material on the roof and the rain acting upon each other. The act of staying in, in turn, lends meaning to both of these things, the rain as being heavy and fierce, the roof as a necessary protector.

To counter-intuitively step outside of this prompts an act of making that changes the mutual articulation of both the maker and the rain. A roof wig disrupts the material-semiotic loop. The rain and the maker become changed by whatever meaning this congeals.

'The only way to find a larger vision is to be somewhere in particular' (Haraway, 1988, p. 590)

17th June 2012

Standing on the edge of a swimming pool, I take two of those long, thin, foam, spaghetti-like things, and start to bounce them up and down on the surface of the water. I mull over the substance before me in my mind. The water resists the long foam floats, and I feel this resistance transfer through the foam up to my arms. I start to imagine they are extensions of my arms. After five minutes or so I begin to get a sense of water as a completely different substance, and begin to feel myself as a different body – more like a skater fly on a pond. Water is no longer something that I could fall through, but a viscous dense form that I cannot penetrate – a mass, a silvery transparent solid. I realise it is both of these things, all the time. When fluid to the human it is solid to the pond skater. What is it to the hollow-boned bird or a type of fungi? I start to understand that water has a colourful life beyond what it reveals to me as a human.

Although many forces, be they political, geological or physiological act upon and are acted upon by our understanding, they also locate it, and mean that it can only be partial. All knowledge is located within a particular material-semiotic paradigm and intra-action, and this means it can never tell the full story. For Haraway (1988), the fact that knowledge is situated within a body is essential and significant. Our bodies are of the human species and react with water in a certain way due to their structure and purpose. Other species have intra-actions involving water as having weight, textures and purposes unknowable to us. And, just as the pond skater knows water differently to the human, difference is experienced within species – the human infant has watery interactions unknowable to the human adult. All intra-actions are peculiar to oneself – unrepeatable and ultimately unknowable to others.

The properties we each understand of water on a daily basis are in fact the properties of water and our unique selves, as part of our species, reacting together. The posthumanist

designer, also, is part of located and partial intra-actions, unique to the materials, meanings and apparatus of the moment, and her own body.

‘We think with water as well as about water’ (Linton, 2010, p. 38).

16th August 2012

I find that in relation to a certain type of cotton, water manifests itself in a way that I have not seen before. It becomes at once mercurial and mischievous – hiding in the crevices and folds and then popping out in miniscule sculptural globules – sometimes to surprise me days later when I have forgotten about it. I form this fabric in my hands and place it under the tap. As I watch at eye level I notice that at a slight angle water rolls itself into a slug-like body and springs enthusiastically at me. This combined with my own skill at catching it in my mouth enable it to dive purposefully down my throat in one manoeuvre. I make a cotton hand held ‘water slugger’ – through which to consummate our relationship. Its prototyping causes much frivolity and dribbling. With the water slugger, I am not drinking the water – it is jumping into me – or somewhere in between? I begin to imagine its journey through my body as being part of some sort of larger watery mission. I wonder what would that make me?

Our understanding of water informs our understanding of ourselves. The idea that in the act of drinking, water is an inert substance transformed by and reformed by the consumer before being expelled, is described as the ‘conquest model of consumption’ (Bennet, 2009, p. 133). Within this model, water is an externally sourced fuel for the human engine, a necessary re-hydrator, which we decide to pass through ourselves. Urinating is a mechanical expulsion, tears are triggered by an emotion as causal switch. Through this particular material-semiotic relationship we can come to see our bodies – and perhaps architecture, as an extension of the body - as machine like isolated systems.

But water can also be understood not as a substance but as process (Schwenk, 2007). Like a metabolism, there is not much to be gained from studying it in isolation from that which it metabolises. A radical decision to focus on water as process, to consume water as process, to make or build with water as process, enables one to conceive oneself also as process.

In agential terms, consumption can be understood as a process of mutual transformations (Bennet 2009, p. 134). When one drinks, one is participating in a moment of cellular intimacy impossible to objectify, isolate or halt. Beads of perspiration are not a sign of human exertion, but waters desire to transfer minerals. Tears are not a result of extreme human emotion, but water and the body manifest together as part of a wider, unstoppable flow of transformation. Matter and meaning reinforce to the human self that both s/he as water, and water as s/he, are in a state of becoming.

### **Design, the performative and the posthumanist**

‘Perhaps our hopes for politics, for ecofeminism, depend on revisioning the world as a coding trickster with whom we must learn to converse’ (Haraway, 1988, p. 596).

In Europe, the scarcity of potable water in some regions has prompted architectural designs such as The Las Palmas Water Theatre (Pawlyn, 2011, p. 71). Here the building becomes infrastructure that evaporates and condenses salinized water – a biomimicry inspired biological engine that creates freshwater for vulnerable human communities. In America, closed loop solutions such as the ‘Living Machine’ (Pawlyn, 2011, p. 73) offer alternative approaches to water utility and are installed in buildings to treat sewage at source. The Living Machine enables water to be reused locally, whilst questioning the integrity of centralised infrastructure.

The adaption of biological structures or systems for architecture as biomimicry, biomorphism and sustainable design is common to buildings that aspire to be ‘environmental’. Australian design theorist Tony Fry criticises these approaches for reinforcing ‘a metaphysic’ that installs a ‘techno-functionalist way of viewing the world’ (Fry, 2004, p. 33). He critiques biomimicry as being instrumentalist – its references, although biological, are ultimately contextualised within the utilitarian. The Las Palmas Water Theatre and Living Machine are primarily means to an anthropocentric end – to solve the water supply problems for people. Central to Fry’s argument is that the technological appropriation of the biological propagates the humanist ideology that the human race has the capacity to save itself and the planet through its inventions and technology.

The success of the Las Palmas Water Theatre or the Living Machine might commonly be measured in terms of functional success and representation, which together define their architectural performance. Hensel suggests that within architecture, the notion of performance itself needs redefining, in order to enable us to create buildings that serve to benefit the natural environment. To do this, he develops the ‘performative turn’ – a paradigm shift that originated in the humanities to understand human behaviour as relating to its context – to architecture. Hensel defines a buildings performance not as an objective quality but as ‘a paradigm enabling the study of nature and the built environment as active agents, rather than as passive context’ He describes how ‘this understanding and critical evaluation must precede an instrumental approach to the concept of performance... This may commence by embracing the ‘active’ status of the built environment much more broadly’ (Hensel 2010, p.41).

Hensel advocates that methods of research and knowledge production be evolved that can consider architectural agential interaction across the multiple and dynamic domains of the natural, cultural and social. This calls for an interdisciplinary approach to knowledge production. Hensel looks to biology for inspiration for this approach (Hensel, 2010, p. 51), not in order to mine the systems and structures of organisms – like biomimicry, but because Biology, as an academic discipline, has advanced analytical methods for discovering how its own sub-disciplines interact. It is this methodology that can help to describe and forward a contemporary notion of performance in architecture.

Feminist science philosopher and biologist Donna Haraway is widely credited with developing the ‘performative turn’ to her discipline of biology and to science at large. She asserts that just as the humanities described how humans actively construct their social reality together, science as a method of knowledge creation is also a social construct. The notion of objectivity, of the discovery of objective facts, that science depends upon, is part of a constructed self-fulfilling performance, played out within and reinforced by the boundaries of scientific discourse, lab apparatus and the expected behaviours of scientists.

In ‘Situated Knowledges’, Haraway argues that ‘the codes of the world are not still waiting to be read’ (Haraway, 1988, p. 593), and suggests that knowledge creation be understood as a complex and extended exchange in which object, subject and apparatus have the capacity to mutually articulate one another. Haraway replaces objectivity with the unsettling concept that the nonhuman world, other species, even matter, meet humanity with an independent capacity to create meaning.

Like Fry, Haraway asserts the ethics of a techno-scientific approach. A knowledge of ‘nature’ manufactured by science and the belief that water, like everything else in the world, has qualities that are fixed, reducible and objectively knowable to humanity serves to subjugate it. This can lead to a ‘desired form of very objective power’ (Haraway, 1988, p. 577) and enables the false propagation of an anthropocentric reality.

If for all the right reasons, architectural performance becomes framed by biology, its interactions may ultimately be restricted to operating within the metaphysics of objectivity. Architectural theorist Sanford Kwinter describes how the totality of a work’s virtual relations,

‘the universe expressed – determines... what it is capable of affecting, transforming or doing in the world’ (Kwinter, 2001, p. 215). A default to the methodology of science will form a powerful part of architecture’s total relations and ultimately frame them within its inherent human-nonhuman power structures. This may limit what Hensel’s notion of performance is capable of doing or transforming in the world.

Whilst looking to biology for a paradigm, Hensel also states that ‘what is still missing from the discussion of the interrelations of the four domains of active agency is the more direct relation between subject and environment’ (Hensel, 2010, p. 41). Like the notion of performance, this discussion must not default to science for its framework.

In ‘Posthumanist Performativity’, Karen Barad, like Haraway, deconstructs the traditional methodology of science and advocates that scientific knowledge construction be replaced by a re-enactment of boundaries between the human and nonhuman. She describes the urgency of a new posthumanist ‘relational ontology’ (Barad, 2003, p. 814) of doings, actions, practices, that have no finality and are understood as part of an ongoing and mutual human-nonhuman becoming.

To attempt to enact this relational ontology as part of a design practice, to try to operate on an open human-nonhuman border, to allow the nonhuman capacity to create meaning – to revision water in this instance, as a coding trickster with whom one must learn to converse – begins to reveal the potential of posthumanist performativity in design.

## **Reflections**

An exploration of the posthumanist and the performative does not manifest in any clear design solutions. This is a strength. Instead, it has the capacity to entirely relocate the designer, both as part of an extended material-semiotic web, and within human-nonhuman relationships. This transforms the attitude with which she designs and the places within herself she designs from.

### ***The creative act – demands unknowing***

To enact posthumanism one must first suspend one’s knowledge and one’s knowledge practices and invest in the active unknowing of established human-nonhuman relationships. To do this is to unlock an unpredictable creative force. A commitment to the agency of all things and a negation of the designer as author offers all sorts of possibilities and starting points that anthropocentrism precludes. Within a posthumanist approach, one finds oneself creating a Water Slugger, not even because one found a biomimetic solution to the question ‘How can we make water seem more alive to us?’ but because posthumanism enabled the understanding that our liveliness resides in water.

If architecture invests in the fact of its human-nonhuman unknowing, it too can extend its possibilities. Hensel (2010, p. 45) refers to Unger (1993) and Kipnis’ (1993) notion that architecture’s performative capacity relies on a reduction of meaning: to yield the possibility of agency, architecture must be ‘blank’, suppressing established references, but also ‘point’ to a ‘transformation of a prevailing political context’ (Kipnis, 1993, p. 43). Where Kipnis conceptualises blankness in a building, it is lived experience within the designer. To suspend what one knows and embrace water as a lively, intentioned collaborator leads to creative acts one would not have considered alone.

## **Play**

The experience of working in this way with its curious and open ended possibilities, is akin to the experience of play. However, when one is trying to deconstruct and observe the system one is in, whilst accepting that one is inevitably part of it, and hold the complexities of exteriority within, relational dialectics, agential interaction, in flux and together at once whilst also trying to look outwards, one is constantly tripping over one's own thoughts and experiencing a state of confusion. A meltdown feels perpetually immanent.

Haraway describes how deconstructing the truth claims of science 'lays us out on the table with self-induced multiple personality disorder' (Haraway, 1988, p. 578). Cognitive dissonance, the discomfort one feels when ones beliefs and behaviour do not add up, is also prevalent. However, discomfort when not endorsed can slowly fade. One begins to sink into a material-semiotic playing field where the fact that nothing is certain seems less and less of a problem.

By repeatedly doing, making, being this way, a sensibility of practice emerges that one is no longer at the centre of, and water emerges as a lively and colourful force. One starts to feel less a designer, and more a participant in an unfolding game, where mind and body alike are challenged. As the material-semiotic complexities congeal and mutate, a strong sense of irony emerges – which is somehow united with water, and unexpectedly empowering. It feels like very fertile ground.

## **Embodied knowledge**

The act of entering into an intimate and personal meeting with water as a form of design research is evocative of, but also serves to negate, the practice of design collaboration between humans. It is an extension of design's human-to-human, social and relational practices that knocks the designer off her pedestal, and serves to remind us that the environmental crisis plays out in the relationships between humans and the nonhuman world, not within the human species.

On a conceptual and molecular level, we are both personally and as a species part of water, and it is part of us, bound together geologically, politically and physically in what Linton describes as a hydro-social, and not a hydrological cycle (Linton, 2010, pp. 229-230). Whilst the designer inherits a material-semiotic ancestry, her work and actions will propagate material-semiotic progeny. The embodied realisation that what one designs for the watery world designs both the conception and physical state of one's own body, is a good motivation for the designer to consider the ethics of her approach.

To uphold one's body and its consequences as valid within a meaning generating process is broadly justified by phenomenology, but posthumanist performativity proposes its vitality. While science argues that its way of being 'nowhere' means it is closer to the truth, Haraway argues that there is no 'nowhere'. An honest account of the world can only emerge from a distributed, situated, embodied knowledge in a state of flux.

When the techno-scientific architect meets the maker of tents, they both arrive in bodies, but the fact that the world may exist very differently within them is a potential. If all knowledge is partial and imperfect, it is valid only in its capacity to be 'stitched together imperfectly' with another in order to enable possible new worlds, 'the joining of partial views and halting voices into a collective subject position... [that] promises a vision of the means of ongoing finite embodiment, of living within limits and contradictions' (Haraway, 1988, p. 586, 590).

There is an irony and a vulnerability at the heart of all of this. If knowledge cannot settle, if our conception of water and ourselves is constantly up for grabs, we cannot claim as individuals or communities to know anything. We render ourselves powerless, dependent on each other and other entities for an ongoing and continuously becoming account of the world.

This can be embraced as an opportunity. An acceptance of the vulnerability and vitality of embodied and partial knowledge has the potential to diffuse power relationships across the human-nonhuman. To bring one's body to the design process can become a type of design activism.

### **Conclusion**

*How does an investment in the agency of nonhumans change the process of design?*

Together, these posthumanist and performative experiments can be understood as a relational version of architectural form finding – a process of ‘letting’ things mutually organise themselves before one brings one's assumptions and goals to the situation – but across the human-nonhuman, and material-semiotic spheres.

This relational type of form finding is bound to ethics. As we design ourselves further into the anthropocene, and embrace the fact of an uncertain natural-cultural future, to locate the performative capacity of a building in terms of its extended agency begins not a new genre, but a reconceptualisation and prioritising of ethics in design. The posthumanist desire to question the boundaries between the human and the nonhuman is not a theory, but an ethic in action.

We choose how to construct our knowledge. The choices we make about knowledge construction preclude what will be revealed to us. More importantly, the processes we choose to go through to construct knowledge define the relationships we have with what we are trying to understand. This relationship fulfils itself in design objects that in turn re-enforce relationships. Whilst science, with its inherent objectivity and anthropocentrism, remains the form of knowledge construction that we value above all others, we will continue to miss ontological tricks that might re-shape design and the facts of the environmental crisis.

To bring the performative and the posthumanist together in a design context, we must first pause and remove the building, or any design object, from focus and begin an open-ended, deconstructive, embodied, creative meeting between the designer and the nonhuman world. This is a meeting that we can admit to being part of, so as not to limit the expression of the very relationships it seeks to understand.

Within design education, design research, or any design practice that claims environmental concern, to make time for active unlearning, uncomfortable play and the establishment of personal, but extra-human, embodied methodologies is a decision by the educator that puts a responsibility for human-nonhuman relationships in the hands of each individual designer. Whether the individual embraces agency, intentionality and material-semiotics as a diversion from a techno-scientific default, as a truth, or as one knowledge-generating game among many, its value will exist in its embodied enactment. It must succeed in its convoluted and uncomfortable way in the designer before it can succeed in the object, in the processes of architecture before its buildings.

To invest in the agency of non-humans, to think, do and act posthumanist performativity is speculative, but its effect is tangible.

The tap runs, the rain falls, the toilet flushes, but I experience an internal shift in conception, a quiet repositioning. It is evenly distributed around my body – an insecure enlightenment, a visceral, fluid and personal version of Copernicus relocating the sun.

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