

Wasting Time? Art, Science and New Experience.

Examining the Artwork, Knowmore (House of Commons).

***Knowmore (House of Commons)***

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**Introduction**

Today the future is travelling rapidly towards us, shaped by all that which we have historically thrown into it. Much of what we have designed for our world over the ages, and much of what we continue to embrace in the pursuit of mainstream economic, cultural and social imperatives, embodies unacknowledged 'time debts'. Every decision we make today has the potential to 'give time to', or take 'time away' from that future. This idea that 'everything' inherently embodies 'future time left' is underlined by design futurist Tony Fry when he describes how we so often 'waste' or 'take away' 'future time'. "In our endeavours to sustain ourselves in the short term we collectively act in destructive ways towards the very things we and all other beings fundamentally depend upon" <sup>1</sup>.

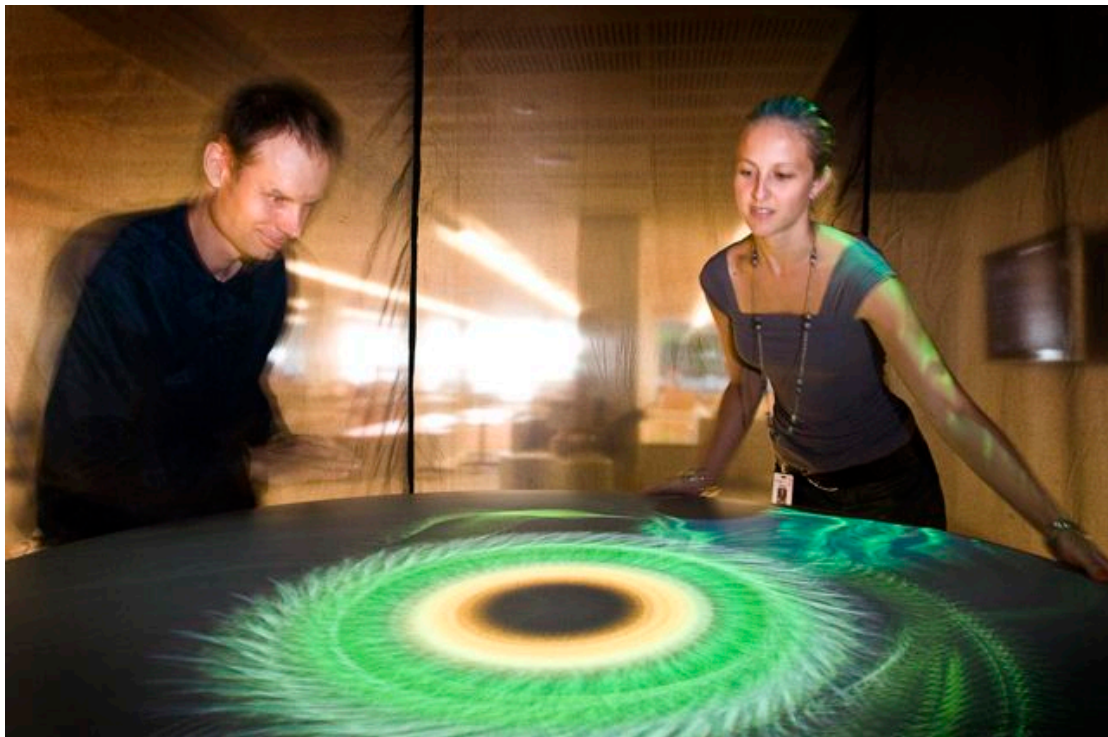


FIGURE 1: Interacting with Knowmore (House of Commons). 2009, Image Sonja de Sterke.

Economics, science, technology and commerce are routinely painted as the fundamental creators and drivers of our future possibilities, whilst the need for fundamental cultural or political shifts are much less often factored into this

equation. However a subset of cultural theorists, activists, artists and futurists have begun to illuminate the urgency of embracing fundamental cultural, and consequent behavioral changes in order to devise transitional pathways towards sustainable futures. Their thinking goes far beyond the often shallow 'greening' of business, architecture, consumption and culture, instead suggesting a project that lies far beyond much of today's popular imagination. The magnitude of this idea is encapsulated by design futurist thinking from those such as Tonkinwise, Marie Willis and Manzini, and particularly Tony Fry in his notion of "The Sustainment" – something he describes as, if implemented, the largest social, political and environmental shift in thinking and action humanity would have experienced since the Enlightenment.

The Sustainment is a very big idea, a mind blowingly big idea. It is an idea that leaves current thinking of sustainability, and the likes of 'natural capital' and 'triple bottom line reporting' on the shelf and in the shade.

It is an idea we need to creep up on.

Our starting point is to recognise that the idea of sustainability is lodged in a limited and now largely debased agenda. It's about propping up the status quo rather than making the means of redirection towards viable futures. De facto, much 'sustainable architecture' and many 'sustainable products' are implicated in sustaining the unsustainable. Equally, 'sustainable development' is bonded to 'development logic' – the 'logic' of continual economic growth – rather than the development of sustainment. It does not add up to the fundamental directional changes essential if the human race is to stay around<sup>2</sup>.

Projects such as 'The Sustainment' propose a root and branch re-designing of how we think about ourselves, and therefore consequently how we might then act in the worlds that we create; which themselves form within the greater world upon which we all depend. Change on such a scale of reach and complexity is as unimaginable for us today as would have been the changes coming over the horizon for pre-Enlightenment society. Such a wholesale 'ontological re-designing' suggests that we need to become in essence different kinds of human, propelled by alternate desires and with quite different understandings of what constitutes progress. Far-reaching visions such as these will always require the visionary thought of a relative few initially, accompanied by the production of new kinds of powerful images and experiences that might then help propel the broad scale take up of these ideas into the longer term future. It follows therefore that such change will unlikely be embodied simply through the logical processing of information, but will ultimately require a fundamental shift in 'hearts and minds', something that is arguably a central part of the work that many cultural practitioners already do.



FIGURE 2: The author interacts with Knowmore (House of Commons). 2009, Image Sonja de Sterke.

Visions of this magnitude, and the projects that surround them, must by definition sit at the nexus of science and culture – a truly potent place where urgent conversations are beginning to form and shape. .

It is these nascent understandings, and my own compelling desire to make whatever contributions are possible to this meta project, that has long driven my practice. I will now further frame this ‘politics’ and outline my artistic response via a resulting media artwork called *Knowmore (House of Commons)*<sup>3</sup>. I will also describe the relationship between the ideas and thinking that both instigated it and underpinned its development and presentation, and explains how they ultimately manifested in the final work. I will then discuss how I use such work as a conversational vehicle or point of instigation to discuss the ideas put forward by Fry, Tonkinwise, Marie-Willis and others.

### **Wasting Time**

We all make inadvertently ‘time-wasting’ decisions on a daily basis; decisions that frame in some way how the future will then manifest for others. We do this in mostly small and seemingly insignificant ways, and in virtually every case we are, and will probably never be, called to account for our decisions. If we were however able to plot the relational outcomes of our daily actions into the future (e.g. with respect to our consumption, travel or leisure), we would undoubtedly pause to reconsider the tacit assumptions upon which those daily decisions are made. Necessarily living would become far more complex. Take the thorny example of air travel for example. We do have some increasing awareness about the time debt incurred by jet emissions, but we have in no way reconciled how we will deal with that as a global community. Every time

we jump on an aeroplane and cross the globe we contribute in some way to future climatic chaos<sup>4</sup>. Nonetheless, this inconvenient fact hasn't significantly mitigated flight frequencies. For those of us who choose to think through such dilemmas, the environmental, social and political costs of something like mass fuel consumption has to be somehow subjectively balanced against the social, cultural or political benefits of making such journeys – a particularly DIY process of (uncertain) self-justification. Set within a general climate of peer inaction or indifference there are few if any fundamental tools or resources that can really help us to act upon these facts at more than a cursory level.



FIGURE 3: Screen capture, Knowmore (House of Commons). 2009, Image Sonja de Sterke.

Of course a few of us may choose to purchase carbon credits, or skip or combine a trip or two, but beyond those small tokens we all typically join the airborne throngs. Whilst we 'know' the stakes through freely available information, the ultimate affect on others, the world and a future seem understandably abstract and far away. The problem is most often seen as being 'out there', sitting, awaiting the technical expertise of others to solve.

But do we really have this luxury? Do we fundamentally misunderstand the time our species has left so badly? Even if there is still no broadly understood and applied framework on what sustaining the future requires, the ecological crisis we are facing cannot sensibly be conceived as being simply 'out there'. Nor can it be conceived of as just a series of technical problems waiting to be solved, because in reality the crisis is in here: We are the crisis.

## **Cultural Change**

Despite our access to pertinent knowledge increasing exponentially we are increasingly becoming a threatened species, because we are not fundamentally learning and adapting to the uncomfortable facts of climate chaos, environmental degradation and cultural stasis. Most of us would see the root and branch change those such as Fry and others have proposed as both inconceivable, too hard or simply futile – in other words ‘a waste of time’ (right now) – and yet the irony remains that by not at least attempting to project our actions into the future as a means for refining them, we are blatantly ‘wasting time’ for those who come after us.

And so the designs that scientists, economists, miners, manufacturers, artists, accountants, economists, food manufacturers, farmers, product designers, technologists and builders produce for us, and that go on themselves designing through their usage, collectively define this shrinking of the future, thereby refining what will and will not be possible for the future.

The future is of course not an empty vessel waiting to be filled by our innovations. The future is already a place replete with the designing power of things, processes and structures from the past. How could, for instance, Henry Ford have realised how his groundbreaking designs would go on to fundamentally re-design the city, architecture or the atmosphere? How could those who first mined coal to tap its rich, embodied energy have known or begun to predict that it would result in the climatic instability that we are witnessing today. Once we are weaned onto practices such as fossil fuel incineration, how can we then be triggered to seek alternate paths whilst the resource remains; paths that better protect, rather than wilfully destroying the future?

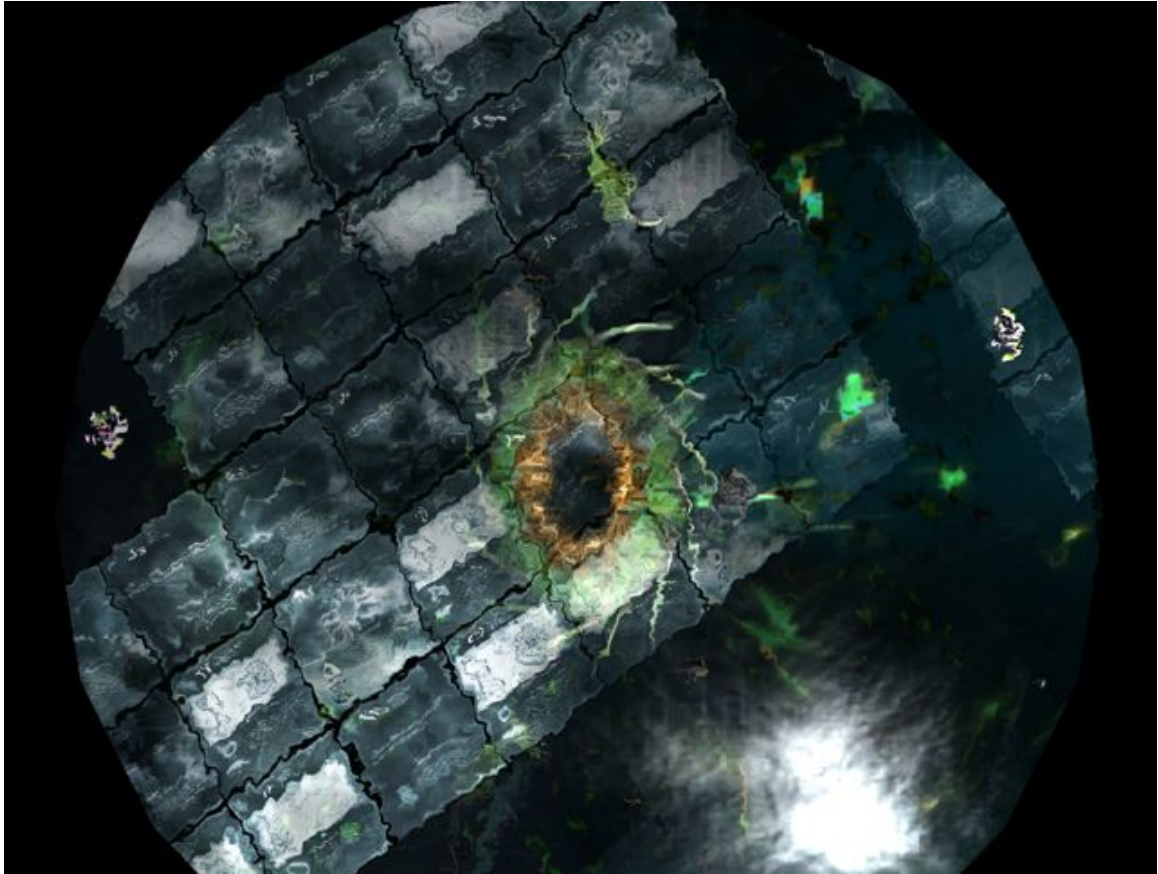


FIGURE 4: Screen capture, Knowmore (House of Commons). 2009, Image Sonja de Sterke.

### **Lost Time**

Writing in 1978, Bernd Magnus<sup>5</sup> profiled a key idea that he named 'kronophobia', describing how we are simultaneously both fearful and ignorant of the nature of time – particularly long time periods as opposed to the short snippets that we use to frame our life and work processes. Through his considerations of Friedrich Nietzsche's writings he analysed how we have long invested ourselves in furthering the illusion of human permanence.

Magnus recognized that what Nietzsche made clear is that 'we' seek permanence where and when there is none. Moreover, our very being, our being towards death, is enacted via refusal of time, as the pursuit of power, wealth and fame evidence. To make time we have to understand time not as measure but as change, with everything having its own time.<sup>6</sup>

This suggests that time should be better thought of as a kind of 'medium', recognised for its many different scales and cycles – for example the time of our lives, the time of old age, the time of mammalian breeding, deep geological time, planetary formation timescales and so forth: all constituents of a kind of meta-time that lies far beyond conventional conception.

The virtually unequivocal voice of the community of climate scientists, the IPCC<sup>7</sup> is probably the most pointed example of both the outcome of this misunderstanding. We know that our long term and ever increasing appetite

for converting stored carbon into carbon dioxide present an increasingly significant time debt to be shouldered for those who come after – lessening the time that these future generations will be able to enjoy the relative climatic stability that we have enjoyed in our short time on this planet. Here time in all of its dimensions has become ‘finitude’ and slowing this king tide has become an extraordinarily complex, shifting problem that challenges us to our ontological core.

However, understanding that ‘everything has its time’ is also an unexpectedly powerful thought that might allow us to better frame our journey towards futural change.

### ***Knowmore (House of Commons)***

Set within this thinking, I now will examine the motivations behind a major media artwork *Knowmore House of Commons*, (first shown at the State Library of Queensland in 2009 and then in the Mediations Biennale, Poznan Poland in 2010); an embodied, interactive installation investigating the cultural dimensions of sustainability and time. (See Figures 1 -12).

A large circular table spun by hand (see Figure 2) and a computer-controlled video projection falls on its top (see Figure 4), creating an uncanny blend of physical object and virtual media, accompanied by a real-time, six-channel audio work. Participants’ presence around the table and how they touch it is registered, allowing up to five people to collaboratively ‘play’ this deeply immersive audiovisual work (See Figure 1).

Participants individually and collectively experience a range of time-suggestive scenarios through synergistic, generative image and sound, allowing them to both directly and indirectly influence a complex digital environment that computationally mimics the temporal complexities of natural and artificial systems. This hints at broader ecological/cultural concerns and more generally relational timescales by encouraging each participant to look for moments where small strategic actions can make significant contributions to the whole, challenging them to image how we might “go beyond”: i.e. take newly conceived steps in a collective consideration of our temporal futures.



FIGURE 5: Screen capture, *Knowmore (House of Commons)*. 2009, Image Sonja de Sterke.

In this way the work also subtly asks what kind of resources and knowledge might be necessary to move us past simply knowing what needs to be changed to instead actually embodying that change; whilst hinting at other deeply relational ways of understanding and knowing the world. Set within an age in which we arguably ‘misunderstand’ time, *Knowmore (House of Commons)* considers the urgent need for us to better celebrate and ‘care for’ those ‘times’ which we share in common: scales that mark the cultural and biophysical environments that fundamentally sustain all life today. This requisite shift in thinking, action and knowing suggest that we need each envision new ways to re-orientate our everyday life choices in ways that better respect those commonalities, whilst also respecting the differing times of each and everything. It further suggests this idea by focusing on the power of embodied learning implied by the works’ strongly physical interface (i.e. the spinning of a full size table) (See Figure 6) alongside the complex field of layered imagery appearing upon that table top (See Figures 4, 5, 7, 11) which hints at other deeply relational, multi-temporal ways of understanding and knowing the world.

In this respect *Knowmore (House of Commons)* revolves around Magnus’ notion that everything has its time – a key idea that begins to make fuller sense when one turns for a moment away from the predominance of time



solely conceived of as a linear arrow that typically guides our daily actions and thoughts.

Set within this temporal space *Knowmore (House of Commons)* is envisaged as a speculative hybrid of art and design thinking and practice that lures its participants into a consideration of personal and collective journeys of 'futuring'. *Knowmore (House of Commons)* therefore asks us to picture futures not as voids awaiting input, but rather as fulsome storms: replete with much of the detritus of historical decision. In this way it seeks to challenge participants to think of themselves more as pathfinders rather than pioneers, clearing space for contemplation and potential futural actions. Seen in these ways it acts as a complex hybrid of participative process, contribution and visualisation: as well as an actively offered invitation to re-think much of what is routinely presented to us as given.

And so, this dilemma of time as a medium (rather than machine) becomes the central conceptual thread of the work.

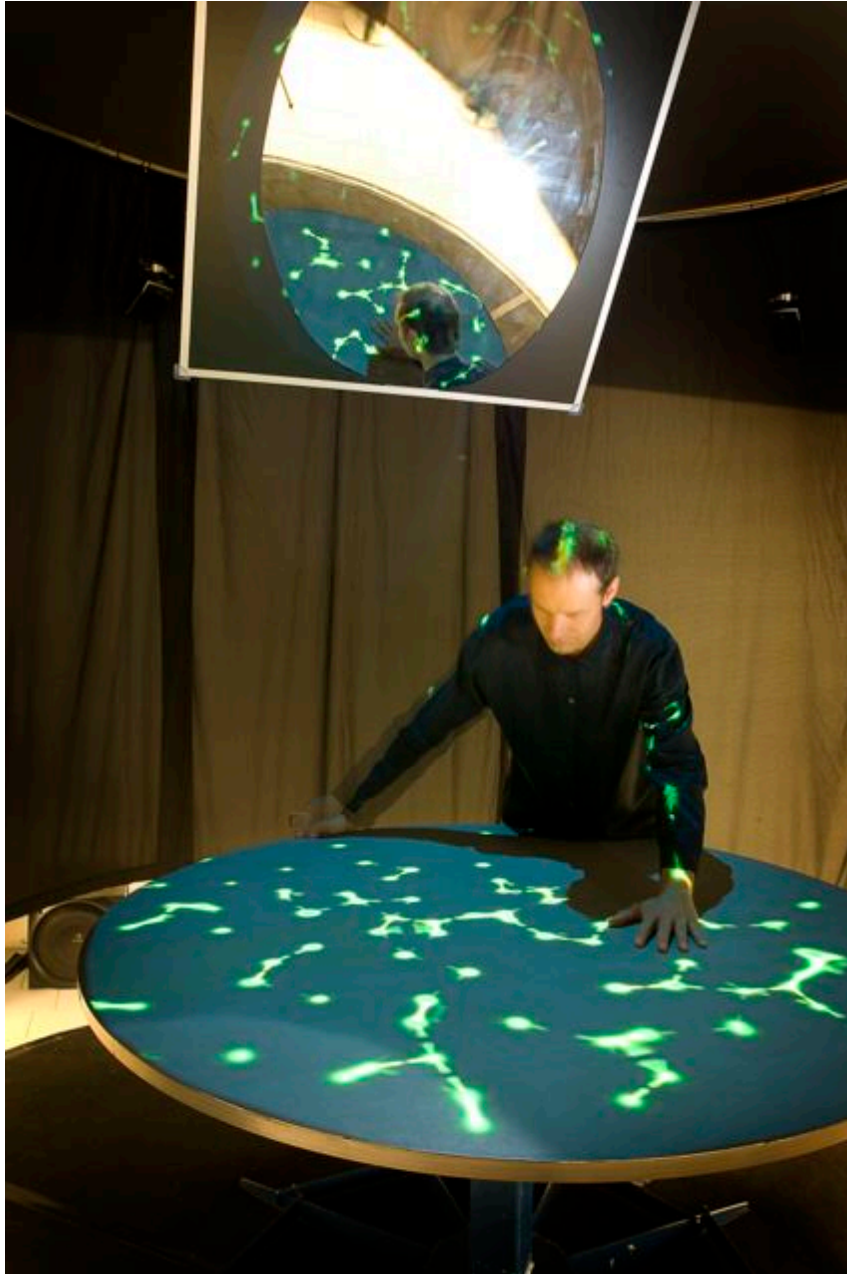


FIGURE 6: The author interacts with Knowmore (House of Commons). 2009, Image Sonja de Sterke.

### **Commonality in Difference**

Tony Fry describes how creating a new reality of future-making will require both ontological and consequent political shifts that will deeply challenge the status quo of democratic politics - aligned as it is not with the extending of time left, but typically with shorter term and often time-subtracting agendas. Critically Fry calls for place of the creative practitioner to be recognised if the kind of sociocultural political imaginaries implied by 'The Sustainment' project are ever to be realised. His strategy therefore necessarily supports the active evolution of new forms of design and designing practices that function beyond what Bataille called the "restrictive economies" of capitalism and the highly aligned cultures that predominate contemporary, globalised life. Fry calls for no less than a wholesale transformation of our being by design.

Restating design's endless circling: anthropologically, as designers we are equally the designed. We come into being by design as much as we arrive biologically and socially formed. I go so far as to say Darwin and Herbert Spencer were blind to the directive force of technics and the artificial.<sup>6</sup>

*Knowmore (House of Commons)* aligns itself with Fry's expressed need to expose the broader agency of creative practices within a personal micro-politics of change making. I carry this spirit and purpose into my own long standing practices within the realms of media arts and art-science collaborations, fertilised through many conversations and workshops I've attended over the years with both Fry and his colleagues. Both Fry's and my own intentions broadly converge in a shared community of interest and intention, although we also each understand that our commonality in difference then allows the fruitful and fluid transference of many of the foregrounding ideas to series of questions take their own routes when applied into public presentational forms.



FIGURE 7: Screen capture, *Knowmore (House of Commons)*. 2009, Image Sonja de Sterke.

### **My Own Journey**

This challenge entails and necessitates us all to each think about moving exiting cultural disciplines beyond the limits of how they are currently and conventionally understood and practiced. This stands as my own driving aim, and *Knowmore (House of Commons)* is but one thread of that time-infused journey. Towards these ends, the loose collaborative organisation that I direct, *Embodiedmedia*<sup>8</sup>, has long pursued such goals by representing a multidisciplinary team of collaborators and researchers who are collectively

motivated to think about how we can each best create sustainable pathways to the future - acknowledging that we live in an era that is in many ways 'Post Natural'. Our modality of participative practice is described by Pat HOFFIE<sup>9</sup> as having a focus upon "deep collaboration in the process and making that also "invites collaboration as an integral aspect of experiencing it".

We achieve our aim through engaging the public in deeply considered artistic works of all kinds, working in ways that avoid streams of facts or stern lectures; working instead to influence mind, body, emotion and scientific process in all areas of society and culture.

I personally have been a practicing freelance artist, creative director, media designer & system integrator of new media artworks since 1993, specialising in the development of collaborative, mixed reality productions that merge site-specific interactive installation, performance and multimedia practices. These art works include site-specific electronic arts, networked interactive installations, alternative interfaces, performance forms, public arts practices and art-science collaborations. Overall my research and writings focus on better understanding how scientific and philosophical ecologies can be used to influence and direct the design and conception of new artworks.



FIGURE 8: Knowmore (House of Commons) presented at the State Library of Queensland. 2009, Image Sonja de Sterke.

### **Time Manifesting**

The first iteration of *Knowmore (House of Commons)* was presented in State Library of Queensland in 2009 (See Fig 8) as part of a residency project for which I had been commissioned, and the second was accommodated in the darkened room of a medieval castle for *The Mediations Biennial of Art* in Poland in 2010. In the former setup you brushed past a circular curtain and entered into a dark, private space. In both setups, either with others or on your own, you were subsequently presented with a round table, upon the face of which graphics were seamlessly integrated with the tabletop whilst a responsive multichannel spatial soundscape further animated the space. Whilst the amoeba-like visuals moved gently and the sound was audible the work only began to evolve into coordinated motion and volume once one or more people grabbed the edge of the table and spun it clockwise or anti-clockwise directions. The three modalities of interaction were spin speed, physical location around table and surface touch with the work being built from a range of different scenes that merged seamlessly with a further deeper phase descending the user.

Part of the user experience is described by reviewer Greg Hooper<sup>10</sup>.

*The graphics are great—first up I'm seeing some acid green polyps, chasing each other around and around the table, flagella beating away behind them, tentacles fluffing about in front. They twist and turn, and the faster the table spins the more it acts like a centrifuge, driving the polyps outward to the edge.*

*There is a genuine sense of watching something alive and swimming in a current controlled by the lazy sense of watching something alive and swimming in a current controlled by the Lazy Susan spin of the table.*

*Another scene and another biomorphic form—circular, symmetric, hairy with cilia, more varied in colour than the polyps. I spin faster and the image speeds up and zooms to cover all the table surface. The physics of the animation is great—utterly natural in the way the cilia hairs are pulled out straighter and straighter as the speed increases. But it is the clarity of the interaction that stands out. There is no apparent lag between giving the table a spin and seeing changes in the animation—the table is beautifully engineered and the interface between table and animation is completely transparent.*

*Rather than imitating life forms, the next two animations show particles and clouded shapes sucked down into the centre, faster and faster with the table spin.*

Furthermore Antoanetta Ivanova writes in a pre-review article<sup>11</sup> for *Impact '09*, (Staged at the time of the Copenhagen Climate Talks),

*The work computationally mimics the complexities of natural and artificial systems, which do not follow linear principles but are 'composed of multiple series of parallel processes, simultaneous emergences, discontinuations... and mutations of every variety'. Thus, through the interactivity we are asked to share mutually sustaining systems and are encouraged to look for particular places in them where our small strategic actions could pay off in big results. The work draws parallel with the processes of the public governance of climate change that are self-organised, interlinked and bottom-up. The more we interact, the more we know what it is that we need to do – individually and together – in this seemingly anarchic system.*



FIGURE 9: Screen design based on the periodic table, Knowmore (House of Commons). 2009, Image Sonja de Sterke.

Whilst components of the work implicitly support the idea of the time of things that are other, strange and alive, beneath this model sits another very human orientation of things, a matrixical structure that was introduced into the artwork to speak about more about our reliance on entities rather than relationships. This is invoked by an old fashioned rendering of a periodic table but with the elements and texts reorganised into imaginary forms, that whilst apparently discrete, each invoke leading quotes from Tony Fry and others on the notions of relational time and ontological designing, as well as texts and images that hint around sustaining and non sustaining conceptions of world.

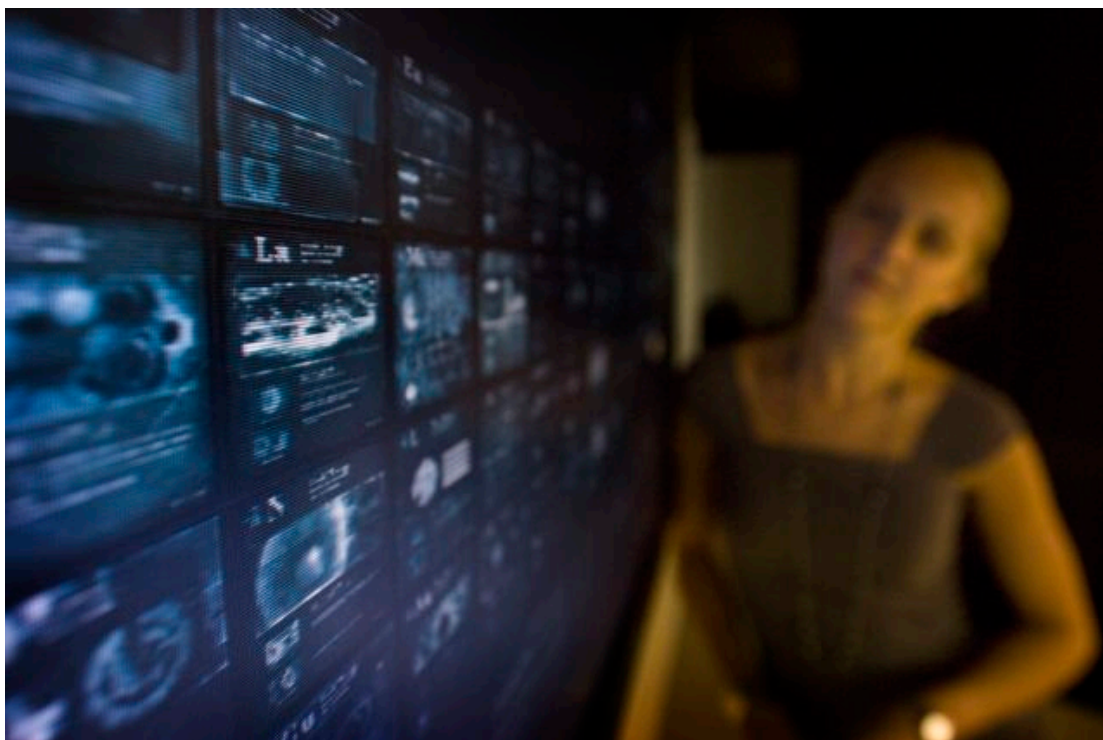


FIGURE 10: Screen designs based on the periodic table, Knowmore (House of Commons). 2009, Image Sonja de Sterke.

Greg Hooper discusses this temporal component in his review<sup>10</sup>:

*Moving around the table a little more and we see a faded database on old style microfiche—blue grey images and defocused text. Now the table spin moves our view on to the image, like driving crosshairs with a shuttle wheel. Spin one way for the X- axis, reverse the spin for Y. There's a nostalgia evoked by the monochromatic microfiche that is reinforced by arranging the information into cells. It's like the periodic table of elements with micrographs and quasi-elementary chemical symbols: Er for Erbium, and Ke for... what? But the nostalgia is not just for a look, but for a system of knowledge based on recording, codifying, naming—partitioning the phenomenal world into atomic events.*



FIGURE 11: Interacting with Knowmore (House of Commons). 2009, (Image Keith Armstrong).

*I play some more, spinning and slowing, trying to make out the images, reading the grainy cells where I can: “Observation 03: the action of language and knowing are of different registers”; “Observation 06: the should of conduct exists in relation to a crisis in conversations rather than an embodiment of concern.”*

*As I read the information in the database cells the animation slows, the direction changes. Text and image ripple like flowing water, then submerge completely. A few more steps around the table and the polyps emerge again—a few living cells chasing each other, as at the beginning.*





FIGURE 12: Elements from screen designs based on the periodic table, Knowmore (House of Commons). 2009, Image Sonja de Sterke.

## Concluding Thoughts

The emphasis in *Knowmore (House of Commons)* therefore lies for the participant ultimately in the temporal connectivity and inseparability of embodied experiences, which through their improvisational actions indirectly prompt them to taste the work's underpinning ideas, enhanced by their implicate part within the work's evolving audiovisual imagery. *Knowmore (House of Commons)* therefore offers audiences powerful images suggestive of transformational potential whilst also imprinting an associated sensibility and purpose through embodied, exploratory experience. These inclusive strategies avoid a simplistic reliance on the promotion of fear and guilt around the meta issues of time and sustainability, in the assumption that contemporary audiences may well already be largely inured to warnings about our deepening ecological crisis. Furthermore it introduces complexity through apparent simplicity.

Ultimately my hope is that this combination might in some small way encourage an increasing chorus of calls towards personal engagement and action.

It would of course be simplistic to suggest that participating within such an experience might somehow lead to change in future behaviour or action through some 'transcendental' moment. However it is ultimately the possibility of catalytic re-action in participating audiences, inspired in part by the experience of creative work such as this, and set in the context of all other experience, that as both an artist and a social activist inspires me to continue to create these types works over the decades.

This approach, I hope, ultimately serves to lessen the risk that the real problem of time will remain somehow concealed – i.e. US.

## Credits

Dr. Keith Armstrong (Artistic Director) worked in close collaboration with Dr. Chris Barker (3D Visual Design), Darren Pack (3D Authoring), Luke Lickfold (Sound Design) and Stu Lawson (3D Design). The project has been created with Artworkers Alliance and supported by The Australia Council, Arts Queensland, QUT Creative Industries and e2evisuals.

## References

1. Fry T. *Design Futuring: Sustainability, Ethics and New Practice*. New York: Berg, 2009.
2. Fry T. *Introducing the Sustainment, . 2050 'Building the Future'*. RMIT, Melbourne: RMIT, 2006.
3. Armstrong K, Barker C, Pack D, et al. Knowmore (House of Commons). Brisbane, Australia: State Library of Queensland, 2009; A 3D, Interactive Table-Top Based Installation.
4. Monbiot G. Flying is Dying. *The Guardian Online*, 1999.
5. Magnus B. *Nietzsche's Existential Imperative (Studies in Phenomenology and Existential Philosophy)* Bloomington and London: Indiana University Press, 1978.
6. Fry T. Time and the Political. *Mediating Practices: Design, Politics and their Publics* Leverhulme Goldsmiths Media Research Centre, University of London 2010.
7. Secretariat I. World Meteorological Organization. Geneva: Intergovernmental Panel on Climate Change, 2013.
8. Armstrong K. *Embodiedmedia: Armstrong, Keith*, 2013.
9. Hoffer P. Spin-Doctor (some notes on KNOWMORE [House of Commons]). Brisbane: State Library of Queensland, 2009.
10. Hooper G. Animating the Interactive Spin. *RealTime*, 2009;34.
11. Ivanova, Antoanetta, *Impact By Degrees*, in *The Danish Journal of Contemporary Art*, 2009.