# Climate Models: Bending the Rules

James Soane

Director of Critical Practice, London School of Architecture, London, UK

Project Orange, First floor Cosmopolitan House, 10A Christina Street, London EC2A 4PA, UK.

T 00 44 2077393035 E j.soane@projectorange.com

James Soane is a qualified architect, teacher and writer based in London and runs *Project Orange* with his partner Christopher Ash. He has taught at Kingston University and the Bartlett and currently is Director of Critical Practice at the new London School of Architecture where he is pursuing his interest in the practice of architecture and new models for education. He is a contributing editor to ‘A Gendered Profession’ (*pub Nov 2016*).

Abstract

Climate is commonly defined as the weather averaged over a long period. Today statistical evidence shows that our climate is changing fast, which in turn is affecting the architecture of our planet. The model is now in flux.

Recent research has led me to explore the connections between climate change action and the LGBT rights movement. Both require creative narrative-led strategies in order to affect changing perceptions. It seems that grassroots level action can be more powerful and more effective than political debate. At its most basic, these are human rights issues.

This paper seeks to further interrogate the changing political, economic and physical environment as we find that the very fabric of our world is mutating. No longer are we in a space where the cause and effect of climate change can be debated – it is now about working backwards to change the cause. How might the inclusive thinking of fourth wave feminism coupled with the inertia of LGBT campaigning, be instructive when considering the need for radically re-modelling our world? As Naomi Klein points out in ‘This Changes Everything’[[1]](#footnote-1), the capitalist system is unable to react and resists change, so we need new narratives and new ideas to engender critical transformation.

As evidence of how this is being enacted the *Women's Earth and Climate Action Network* is particularly clear in its goal as being:

*“To stop the escalation of climate change and environmental and community degradation, while accelerating the implementation of sustainability solutions through women’s empowerment, partnerships, hands-on training, advocacy campaigns, and political, economic, social and environmental action."[[2]](#footnote-2)*

I will present alternative models of engagement and seek out architects of change prepared to challenge the status quo with reference to what Nicole Seymour calls ‘Queer Ecology’.[[3]](#footnote-3)

Keywords: Climate Change, Ecofeminism, Queer, Model, Architect, Intersection

**Climate Models: Bending the rules**

 *“July 2016 was the hottest month the world has endured since records began in 1880”.[[4]](#footnote-4)*

**Model behaviour**

Architects love physical models: they can be empowering and yet cute; they can be made of junk yet be profoundly spatial; they can be perfect or they can be an approximation. At best a model is a way of understanding a context, a scale and a form. Conceptually they were seldom the thing itself but rather a tool for representation. Today the idea of ‘model’ has been disrupted; it has morphed into a series of phenomena through gaming, art-practice and predictive science to becoming a fetishised purpose and the object itself. Our gaze is distracted and we struggle to separate fact from fiction, dream from reality. We model ourselves to fit into a world we believe we can control; but the truth could not be more different. The behaviour of our model is capricious.

 Traditional forms of climate modelling take data from the atmosphere, oceans land surface and ice in order to study and predict future climate trends. The World Climate Reseach Programme (WCRP) recently reported:

 “While as a climate research community we do not tune our modeling efforts to achieve specific temperature targets, we must be aware that political interest in these targets is high and growing.”[[5]](#footnote-5)

 It is increasingly clear that society, whether political or social, is unable to conceptualize a future that will be progressively disrupted by climate change. Whilst the weather is understood to be both natural and sometimes destructive, the idea of it being fuelled by our own pollution seems impossible to digest (although it is actually happening). To many, while the question of futurity is mediated through a belief in Geoengineering technology, that may even be able to disentangle or at least mitigate our own mess, this option belongs to a far future, rather than a near present that is measured in decades if not years. As architect and critic Peter Buchanan describes, the crisis we face is that the model has evolved:

 “Constant change has been the backdrop of our lives. But now the nature of change has changed. Instead of, or besides, being subject to the forward propulsion of ‘progress’, we are in the throes of comprehensive systemic collapse.”[[6]](#footnote-6)

 We must necessarily engage with perceptions of the ‘modern’, where modernisation equates to progress and progress equates to success. Increasingly critics suggest that the project of modernity and unsustainability are intertwined. David Roberts suggests that this is a scale problem, which pitches climate against the individual:

 “Climate is so unfathomably large and diffuse, and our actions — individually, even as countries — so local and parochial in comparison. It’s difficult to live with that gap.” [[7]](#footnote-7)

 So, if we know that big-change is happening, and we recognise that something has to be done, then we need to engage with those in power. Not surprisingly this has proven to be anything but straightforward. But who are ‘we’?

**Straight to the point**

One of the conflicts at the heart of the identity question remains one of labels – queer theory often pitches LGBT identity against the heteronormative paradigm as a binary opposition where, as Jose Munoz states:

 “Queerness is essentially about the rejection of the here and now and insistence on potentiality of concrete possibility of another world”[[8]](#footnote-8)

This reflects an underlying belief that normative existence is seen as the true blueprint for the future. However in light of the knowledge that climate change is and will continue to disrupt the circumstances that have created the arguably successful Neocapitalist project, we require new narratives that recognise the entanglement of identities as well as an understanding that the future will not be conditioned by what is or what has been, but what it may have to be. Even if current generations will not be affected by the build-up of greenhouse gases, there is no question that the next generation will be. And yet to fully understand the question of futurity we need to interrogate the common presentation of the future as belonging to straight, white nuclear families. Certainly we are used to seeing pictures of ‘happy families’ with scaremongering slogans suggesting that the hetronomative lifestyle is under threat. Futhermore by pushing the connection between family and home with environmental health and wellbeing, the responsibility is privatised or at least deferred by the very system that causes environmental instability. As ecofeminist writer Greta Gaard[[9]](#footnote-9) writes, it is significant that those who link queer with anti-nature claim to value nature – when in fact these are the very people who sanction destructive behaviours.

 Returning to the common cultural paradigm that cisgender is natural and therefore, by extension, belongs to nature in contrast with queerness which is understood as unnatural and therefore not belonging to the natural order, we see how redundant this two dimensional position has become. Indeed this belief is convenient and useful precisely because it validates the stable, powerful minority; whereas looking in the other direction at environmentally unstable settings we see the poor, those who work in low paid jobs and those with few choices. In other words climate chaos has been created out of societal inequalities with those most at risk being the least responsible. However this pervasive view has been called into question, not least through the lens of ecocriticism, to the point at which Nicole Seymour is able to suggest that in order to empathise with environmentalism it is necessary to do so through a queer eye.[[10]](#footnote-10) Her arguments invite us to rethink what we know about our relationship to ‘mother nature’ in terms of gendered readings and power structures. This kind of radical re-thinking is necessary if we are to have a chance of critiquing other more tangible and dangerous responses.

**We want NUCLEAR power**

**But the question remains: R-U-CLEAN?**

**The answer appears to be: UNCLEAR**[[11]](#footnote-11)

In 2006, in an extraordinary apparent turn-around, environmental activist James Lovelock wrote that he supported nuclear power. To many this seemed to be a reversal of all that he had held dear; the idea that humanity would introduce further jeopardy to an otherwise fragile world. However reading his book ‘The Revenge of Gaia’ one senses the deep pain with which the author has reached this conclusion. His argument is that things have got so bad, we do not have time to incrementally repair the damage; and that given society is addicted to electricity, he suggests nuclear generators may be the least harmful way to produce power for now. However he warns over any reliance on technology as a permanent fix, reminding us that we can never replicate the natural process’ and cycles of the earth:

 “The idea that humans are yet intelligent enough to serve as stewards on the Earth is amongst the most hubristic ever”.[[12]](#footnote-12)

He makes the point that we all know we need to do something, but what? Looking from the position of deep ecology, where the right to wellbeing of all the living and non-living is seen as equal, we begin to sense that the very foundations of our civilization were predicated on the idea that the world was so big, it was an endless resource. We have since come to know that this is not the case. We are running out of space and materials – poisoning the earth in the process – but more importantly we have run out of time. Whether nuclear power is the answer is a big question, and I doubt it, there is a surge in building such power plants, so clearly it is happening. However this is not a sign that government is subscribing to the Lovelock model of Gaia, but rather the re-emergence of the lucrative nuclear energy industry. In the UK the £18bn Hinkley Point deal was signed in September 2016, making it the most expensive infrastructure project in the world, ever. We seem to be hedging our bets.

**Risky Business**

Inevitably we come round to discussing the question of risk; to ourselves, to the environment and to the future. We have seen how the idea of the future is often framed by a hetero/wealthy/white viewpoint, even when they are talking about threats, and where the threats are to their offspring. However the realization that this is not just a risk to the future, but a risk to the present is beginning to gain traction. Naomi Klein talks about how China is fast becoming an eco-conscious nation, not least because the children of the new establishment are sickly due to the toxic urban environments of the power cities.[[13]](#footnote-13)

 The threat of climate change is also registering as a matter of national security, with the Pentagon concerned about the 1,774 coastal military installations the US operates; they refer to it as a ‘threat multiplier’.[[14]](#footnote-14) However the problem remains how to model this threat? In theory science should be able to provide useful data, and yet has proved risky time and time again. The Australian government have admitted that the emission cuts they undertook to implement at the COP 2015 summit were based on false data. Independent models have suggested little will change in the next 15 years[[15]](#footnote-15). Meanwhile globally, some $14tr is slated for new fossil fuel extraction and freight over the next 20 years.[[16]](#footnote-16)

 With so many examples to drawn on, we see that the real risks are being played out between government and big business. Government does not wish to alienate the business interests of commerce, especially the extraction industry, while industry wants to be seen as sensitive enough to the ‘issues’ in order to maintain their market share. In fact this symbiotic relationship is a closed loop, as they rely on each other to survive and thrive. There is no critical feedback in this co-dependence, no real consultancy with the people they serve and certainly no sense of urgency. Business is worried about the risk of not being successful in the political short term. We, on the other had, are increasingly desperate; searching for ways to shake up this cozy, dualistic reciprocity and to effect deep change. We therefore find that in order to make our voices heard, we have to resort to grass roots strategies – to tell stories between ourselves and for once technology is on our side. Communication has never been easier.

**Networking the future**

 “Let us be clear. Our planet and all species are in serious danger, humans caused this - and our response must be substantive, urgent, and everywhere.”[[17]](#footnote-17)

The Women’s Earth and Climate Action Network, WECAN, calls for a paradigm shift in how we all live on the planet and to protect the Earth’s diverse ecosystems and communities[[18]](#footnote-18). They talk about the importance of leadership by women and of having a diverse network embracing a whole-systems approach. The urgency is reflected in calls for climate justice, again noting that those most affected by climate change are paying the price for the growth, development and pollution model that has not helped them. So, if we engage in the challenge to redefine the old view of our ecosystem as something that is straight-forward and under our control, how might a new definition or model advance the conversation?

 A useful precedent resides in the progress made by the LGBT community who through strategic action fought for equality and rights for same-sex couples across the world. It is no coincidence the popular symbol of the rainbow flag, was conceived, in 1978, as a statement of human rights. Each colour conveyed a meaning and in this context it is timely to remind ourselves that many of them reflect a deep connection to the planet: red is life, yellow is sunlight and green is nature. It is also a spectrum of colours and values, the significance of which continues to be understood and played out. While this flag is internationally recognised, it seems that there is no such symbol or flag for the environmental movement. The nearest universal symbol is that for re-cycling…which is hardly the same thing. In a world where ethical positioning has become reduced to a logo or a brand strapline we see how the wishes of climate change activists are mirrored in rhetoric, and yet there is no genuine follow through, no commitment to change. We need to move beyond petitions that live and die in a couple of weeks, hashtags that trend then disappear and headlines that become yesterdays news, into a progressive joined up conversation with multiple participants. As Cam Fenton reported:

 “It’s 2016, politicians don’t need the climate movement to apologise for them not doing enough, they need to us to organise to force them to do more…For the climate movement to be successful, we need a movement ecosystem that’s dynamic and full as the rainforest”[[19]](#footnote-19)

**(Trans)action**

The crisis faced by many activists is whether it is better to attack from the inside or the outside, whether to assimilate or transform and can be particularly true when it comes to the examination of queer identity. However I would argue that the question of how to rebalance our relationship with the planet goes beyond the question of individual identity, and even of national identity, to one of casting a new identity for democracy; one that is able to transform our worst habits of Capitalist consumption and to embrace a constellation of identities. In a world so deeply interconnected and entwined we have observed how so many facets of modern life have become similar; an indication that despite claims to cultural diversity, we are in fact being regularised. We want to wear the same things, eat the same food, travel to the same places and be the same people. The fight to be different is critical to the success of any climate-led strategy precisely because the very nature of our planet is one of massive diversity. This ecology is the result of millennia of evolution and yet in the past 100 years we have begun to effectively and systematically destroy it. The natural world demonstrates that the question of ecology, nurture and survival is a symbiotic paradigm where reliance is dependant on circumstance. Being different is the key to participating in the model. If you eliminate and destroy parts of the framework, then inevitably the laws of cause and effect will ensue. While the planet is not going anywhere soon, the nature of the plant is in a state of agitated flux, and we the architects. There is further concern that the so called success of the Paris Climate summit is being politically leveraged to suggest we have cracked the issue, and made serious progress. As John Vidal puts it:

 “Climate change has become for government an excuse to build nuclear power and ditch other green policies… After 20 years of battling to get government to take the climate seriously we must wake up to the fact that the very air we breathe is killing us and making us bankrupt.”[[20]](#footnote-20)

 Some radical thinkers there is only one solution; to deploy all the resource currently used in the extraction industry and elsewhere into making tools for renewable energy. Only by cutting out CO2 emissions can we expect to keep some kind of climatic status quo. The situation has been likened to a war, and it is hard to argue that the aftermath of nearly all climate related disasters resemble a war zone. The problem is no one wants another war, and the metaphor is unhelpful.

**Less power is more power**

 “This is a change model which requires us to reimagine leadership from being an organisational issue to one of building movements around shared purpose and mission”[[21]](#footnote-21)

Off course the supreme irony when it comes to climate justice, is that all of us are in the about-to-be if not already oppressed majority. In thinking about any major societal change; be it gay marriage, legalization of drugs, age of consent, human rights, we know that such changes to the law are preceded by years of grass roots campaigning.

 “Twenty years ago, nobody would’ve thought that gay marriage was possible, but the culture has changed. And a lot of that definitely has to do with smart, strategic, interesting and nonstop organising and campaigning by LGBT people and their friends, family and allies”.[[22]](#footnote-22)

The problem for climate action is that it requires more than a few new amendments, successful legal challenges and high profile political wins. This question comes down to the architecture of our power base, the accepted model for (unstustainable) growth and for the ongoing plundering of our resources. So far, stories of destruction, the tracking of lost environments and the death of species only seem to re-enforce how lucky and privileged ‘we’ are (especially when the ‘we’ are the powerful few). Large corporations, nationalised industries, banks and the global financial system are based on a model that is not only out of date, but has become carnivorous. We are now feeding our own destruction.

 The only way we can mitigate the damaging consequences of future disasters is to recognise that we can build alternative societal models, ethical financial structures and systems enabled by technology that work to nurture not destroy. We have to be radical; we have to engage in queer tactics to celebrate diversity and we have to beat on the doors of power. As architects, we know that within experimental new forms we can create a sense of place, a house and a home, a habitat and an environment. We can find the familiar within the unfamiliar. We need to believe the mantra ‘think globally, act locally’ has traction. The future is not an organization or a manifesto, not a government or an industry rather it is a communal consensus with multiple opportunities; shared intentions to redefine what climate leadership can look like. Stop extraction, stop burning fossil fuel. This means living with less, changing our routines and investing in other ways of living.

 If there is one thing we can take away from the political debacles of recent years, it is that change happens unpredictably. Not always in a good way, but in a way that reminds us that we have responsibilities to make the right sort of change happen. As architects we also know that the future lies in our creativity; design is projective. We are trained to model the future.

**Postscript**

By chance I came across a recent interview[[23]](#footnote-23) with Lovelock who, at 97 in 2016, is energetically provoking the establishment, revealing that some of the climate change predictions and models he had referred to in his earlier work had proved to be overly pessimistic and doomsday. In fact he has turned his gaze to the future of artificial intelligence and robots, which he sees as another path towards destruction, reflecting that robots won't care one bit about climate change. And yet, while indeed there may be other causes for concern, surely as the unelected custodians of the planet, we know we have to believe we can do better.

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