Review Article

Ambiguous Territory: Aesthetic Practices Against Agrilogistics

Kathy Velikov, David Salomon, Cathryn Dwyre, and Chris Perry

What can one do when the things and processes used to sustain oneself - physically, economically, emotionally-are executed at a scale and intensity whereby they become poisonous? Such a scenario describes certain addictions. What had originally been procured to alleviate a problem becomes the cause of a different, even more dangerous disease.1 What happens when such a scenario exists at the scale of an entire species?

An instance of such an addiction on a planetary scale is exemplified by the neologism agrilogistics.2 This planned approach to the environment began with the advent of agriculture, the so-called Neolithic Revolution in the early Holocene era, and sought to organise, divide, and manage the earth in order to increase the likelihood of human survival.3 Remarkably, agricultural practice had an immediate and measurable impact on global ecologies.4 One of the first climate scientists, geochemist Vladimir Vernadsky, wrote in 1924 that

in our geologic era - a new geochemical factor of paramount importance appears. During the last 10,000 or 20,000 years, the geochemical influence of agriculture has become unusually intense and diverse. We see a surprising speed in the growth of mankind's geochemical work. We see a more and more pronounced influence of consciousness and collective human reason upon geochemical processes. Man has introduced into the planet's structure a new form of effect upon the exchange of atoms between living matter and inert matter.5

Vernadsky's prescient observations have become a widely accepted fact. This application of logistics to wilderness resources, whose practice began thousands of years ago, has come to define not only the onset of the Anthropocene epoch but also the birth of a recursive and addictive relationship between humans and the planet.

If one can understand agrilogistics as the defining mechanism of civilisation - of which neoliberalism is only one of the more recent and globally pervasive frameworks - it is possible to recognise how humankind's massive manipulation of environments and energies to feed and sustain its sedentary societies has expanded to the point of collapse. The wouldbe smooth space of exchange promised by logistics can only be made possible by an unrelenting rule of separation and by the increasing ability to transform all qualities into quantities so that the only relations possible are those of computationally exact management and control. Yet this ambition to eliminate frictions and anomalies through the management of calculated flows and productivities regularly produces mutations and monstrosities at multiple From parasite-vulnerable monocrops, scales. rapidly rising global temperatures, uncontrollable algae blooms, and drained lakebeds, to systemic biopolitical violence upon indigenous peoples as well as factory and migrant labourers. These conditions expose the dark and unwanted externalities to the logistical algorithm that we have only recently begun to understand as deeply intertwined with atmospheric, biological, and geological processes and as impactful not only at their immediate scale but at the scale of the planet itself.

What can art and design do to intervene in this positive feedback loop of economic growth and environmental catastrophe? The late author Ursula K. Le Guin argued that

we have got to change our minds. To use the world well, we need to relearn our being in it. Renew our awareness, our belonging to the world. How do we go about it?... we need the language of both science and poetry to save us from ignorant irresponsibility.⁶

Perhaps one thing we can do is to use the media of art and design to start to think the world differently; to think what it means to abandon boundaries between the human and the nonhuman, to find kinship with other species, to decentralise the human from a position of privilege, to think by way of timescales outside of one's own existence, to reveal the strangeness of this normalised and therefore invisible state of affairs, to consider how we might 'love our monsters' as opposed to abandoning or ignoring them, and rethink the nature of nature.7 Now self-conscious of the planetary agency of our species to radically alter the global climate, the behaviour of ecosystems, and the possibilities of our own survival; aware of our being in the world and our being with other species, how do we prepare ourselves 'for a radically new environment, with its own internal landscape and logic, where old categories of thought would merely be an encumbrance'?8

Ambiguous Territory: Architecture, Landscape and the Postnatural is an exhibition curated by Cathryn Dwyre, Chris Perry, David Salomon, and Kathy Velikov, that first opened in the autumn of 2017. [Fig. 1] The exhibition assembles over forty contemporary projects by architects, landscape architects, and artists whose work challenges the division between the built and the natural environment and whose deployment of alluring yet unnerving aesthetics, of sensibilities that overcome the senses, work to expand our capacity to make sense of and find new ways of operating within the Anthropocene. Defined by uncertainty and indeterminacy, ambiguity would appear to be the antithesis of knowledge production and problem solving. Yet, in this assemblage we position it as a possible device of knowledge making itself. Ambiguity is productive to critical intellectual and aesthetic inquiry, with its ability to hold multiple, sometimes contradictory ideas together at once, ultimately producing a fertile source of novel relations. William Connolly argues that an appreciation of the ambiguous character of its own most cherished standards and principles is essential to political life in order for democratic politics in modern society to flourish. An aversion to ambiguity is what characterises societies of control, and the social politics of the disciplining and normalisation of the self, as well as the logics of separation.9

The works assembled in *Ambiguous Territory* indicate a shifting tide of practices, objects, and images that points to ways of operating within this new paradigm. In an age where humans have been fundamentally displaced from their presumed place of privilege, philosophically as well as experientially, and the status of nature as an antidote or respite from humans' hubris has vanished, can architects, landscape architects, and artists propose new affiliations and avail new ways to approach contemporary questions regarding the environment? In other words, what new worlds, what new natures, and what new sensibilities can art and design reveal and create that other modes of inquiry and knowledge cannot? This assemblage of work aims



Fig. 1

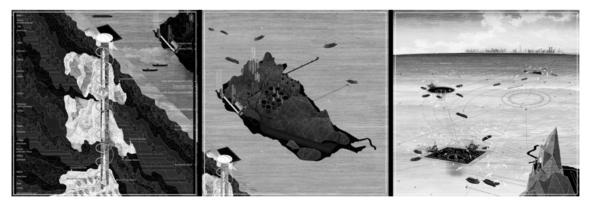


Fig. 2

Fig. 1: Ambiguous Territory Exhibition, University of Michigan Taubman College of Architecture and Urban Planning, 2017 © Peter Smith Photography

Fig. 2: Design Earth, Das Island, Das Crude (2016)

to expand the discourse and design possibilities of ecological thought beyond the constraints of the clear-cut, comforting, and utilitarian and bring them into the realm of the ambiguous and the unsettling. This work draws upon and highlights the often violent methods and unsightly outcomes of our existing age and the urgent need to respond to them with new aesthetic, social, and political forms.

In this context the artists and designers in Ambiguous Territory are positioned neither as problem solvers nor as priests; they are not the keepers of sacred knowledge. Rather, they are fictional truth-tellers who present alternative visions of the present as well as the future. They are not just witnesses to an unfolding and inevitable tragedy but are actors in it, often taking on an extreme form of action; an aesthetic and an ethic that is at once truth and fiction, ambiguous yet tangible, excessive and, ultimately, necessary as a response to the extremity of our age.

Note: All project description texts quoted from statements submitted by the artists to the exhibition.

Das Island, Das Crude [Fig. 2]

Design Earth (Rania Ghosn and El Hadi Jazairy)

Das Island, Das Crude is one of three projects in the After Oil series that renders visible the geographies of fossil fuel and speculates on the long-ranging effects of such crude relationship to the earth. Das Island is a major Emirati offshore oil and gas industrial facility that has financed the urbanisation of Dubai and Abu Dhabi. The significance of such underground resources has been abstracted from the prevalent city-centric framing of urbanism that relies on the 'designed erasure' of such technological geographies. In response, the series of three drawings accounts for the above and the below, for the architectural and geological dimensions, to situate the urban transformation of Dubai and Abu Dhabi as fragments of narratives within the

thickness of the earth's crust. The sectional portrait of the territory indexes the displacement of value in the history oil urbanism by drawing together, and within the same timeline, the country's architectural icons and the depth of oil extraction. Accounting for all material externalities of crude extraction, the project gives form to the accompanying volumes of excavated soil and stone. Such matters of the earth are assembled into an artificial mountain, a land-form monument to the age of oil.

Atacama Lithium Mine, Chile [Fig. 3] Unknown Fields (Kate Davies and Liam Young)

The image of the Atacama Lithium Mine is from the Unknown Fields publication, The Breast Milk of the Volcano. Here, Unknown Fields travels through the energy-rich landscapes of the Bolivian Salt Lakes and the Atacama Desert. Here the ground is charged with potential, for buried beneath the mirror of the world's largest salt flat, the Salar De Uyuni, is a grey gold called lithium, the key ingredient in batteries, a substance in every one of our pockets, in every gleaming device, and every electric car. Over half of the world's reserves lies untouched under these ethereal inverted skies. This is the feeding ground of the green energy revolution, pregnant with billion dollar prospects. If the future is electric then the future is here, lying in wait for the world. Unknown Fields chronicles this electric landscape, investigating the infrastructures that serve as energy conduits, to trace a wild journey of electrons from the glow of our radiant gizmos deep into landscapes far form home. The book is an account of a contemporary creation story, from the Big Bang to the battery, from the birth of lithium at the beginning of the universe to the low power warning flashing on our screens. We power our future with the breast milk of volcanoes.



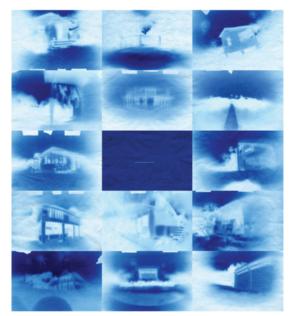


Fig. 3 Fig. 4



Fig. 5

Fig. 3: Unknown Fields, Atacama Lithium Mine, Chile (2015). Image from The Breast Milk of the Volcano.

Fig. 4: Smudge Studio, Conveyance (2016). Print on paper, 51cm x 61cm.

Fig. 5: Ursula Biemann, Subatlantic (2015). Still from video, 11:15min.

Conveyance [Fig. 4]

Smudge Studio (Elizabeth Ellsworth and Jamie Kruse)

Conveyance responds to our sense that there is an urgent need for practices that invite humans to pay close attention to the changes that constitute the Anthropocene, to hold the thought of the reality of this new epoch, and build psychological and emotional capacities to meet and respond creatively to the unstable conditions we will continuously encounter in these new times. For us, close observation assists in fostering a deeper awareness of what we face as a species and capacities to invent new ways to live in the Anthropocene in our daily lives. The act of cultivating psychological, physical, and spiritual capacities for co-existing with big and fast change in the Anthropocene are as vital as any infrastructural, scientific, and preparatory or adaptive actions. They generate new sensations and meanings – potentials that open the future to new actions and arrangements - even as the future seems to be closing down.

Subatlantic [Fig. 5]

Ursula Biemann

Appealing simultaneously to the various meanings of the term 'Subatlantic' - a climatic phase beginning 2500 years ago, as well as the submerged regions of the Atlantic – Subatlantic immerses its camera deep in oceanic waters to ponder the entanglements of geological time with that of human history. As the voice-over narrates the accounts of a female scientist traversing the pan-generational timescales of the Subatlantic, we navigate through the mental and ecological dimensions of the melting Arctic icescapes. In this narrative, thoughts materialise. They reconfigure to engage the changing ecology, they merge with frozen methane, become part of weather events, unhinge new maritime cohabitations. This speculative video-essay is as much about the physical and natural environment as it is about the psychic space we inhabit, and of which we are part, because the transformations

occurring in the atmosphere affect not only the physical but also the mental climate on earth. *Subatlantic* interweaves vast cinematic landscapes with documentary footage, science fiction poetry and academic findings to narrate a changing planetary reality.

Post Rock: Summerhouse Prototype [Fig. 6] **Meredith Miller and Thom Moran**

This prototype is part of an ongoing research initiative called Post Rock. Through hands-on material experimentation and design speculation, this research anticipates a future material economy where waste plastic becomes a valued source for building. Post Rock captures a recent geological phenomenon where plastic waste in oceans and coastal areas are fusing with sand, rock, and other inorganic substances. Scientists have established a new classification for this stone, identifying them as 'plastiglomerate'. Plastiglomerate is a postnatural product of human and geological processes. Claiming this post-natural rock as a new building material, we design fabrication methods that emulate the geological processes behind its formation. The research is both a technical investigation into thermocasting tectonic elements and a design speculation on the aesthetic potential of the material. Just as each plastiglomerate rock's unique and heterogeneous surface results from the particular geography where it was formed, Post Rock visually communicates a sense of territory through its component materials.

Cyborg Ecologies [Fig. 7] **Bradley Cantrell**

Approximately 40% of people across the globe are living within 100 kilometers of coastal and riverine environments. This means that three-quarters of the world's mega-cities and critical infrastructure are situated next to the ocean and will be required to adapt to fluctuating sea levels over the next century. This adaptation will be a monumental task, requiring huge adjustments in the physical



Fig. 6



Fig. 7



Fig. 8

Fig. 6: Meredith Miller and Thom Moran, *Post Rock: Summerhouse Prototype* (2016). Plastic multimedia, 90cm x 90cm x 106cm. Photo (detail): Peter Smith Photography.

Fig. 7: Bradley Cantrell, Cyborg Ecologies (2014-2017). Still from video, 5:04min.

Fig. 8: Lisa Hirmer, Dirt Piles (2011). Print on paper, 74cm x 54cm.

location of cities and the construction of new forms of barriers and mediations through levees, sea walls, and control structures. The research outlined in this presentation posits that the energy embodied in the hydrological systems that build coastal lands. can be choreographed to mitigate the effects of sea level rise. The research focuses on sediment transport, the suspension and movement of sediment within the water column and how small modifications to the water system can be used to construct new land. This research connects global sensing systems, machine intelligence, and simulation to the construction of coastal environments, particularly how remote and embedded sensing can be used to choreograph the real-time construction of coastal landscapes through micro-interventions.

Dirt Piles [Fig. 8]

Lisa Hirmer

The law of conservation of mass states that matter can neither be created nor destroyed. It can only be rearranged. This means that the by-product of a certain kind of place - sprawling, well-drained parking lots, ribbons of level suburban backyards, and topographically featureless industrial land - is extra material, dirt mostly, that needs to be rearranged and put somewhere. Neither useless nor particularly valued, it's heaped into a pile somewhere out of the way until a use for it is found or it can be moved. Sometimes these dirt piles are ephemeral, remaining for only a short period of time during construction, but often they remain, at the unfinished end of a suburban street, or looming behind new storage units, perhaps dissipating from consciousness but never from physical presence. The dirt pile is both relic of the landscape that used to be and a monument to the act that changed it. It is a measure of the forces of technology, industry, culture and economy that make large scale reshaping of the terrain possible, profitable and desirable. It could be understood as the reciprocal form of how and what we build. The dirt pile also reveals the fickleness of the earth's surface. It has become something that is infinitely malleable, something that can be opened up, turned inside out, rifled through and piled up.

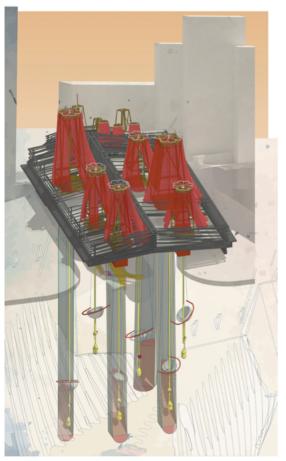
LA Recalculated [Fig. 9]

Smout Allen (Laura Allen and Mark Smout)

LA Recalculated speculates on Los Angeles's future incarnations and reinstates LA as a site of astronomical observations and scientific experiments. Its natural history, shifting alignments and unstable ground conditions reinforce the proposition that Los Angeles is a place of both seismic risk and existential uncertainty, lending further metaphoric and even philosophical importance to the role architecture can play in such a landscape. Seen through the lens of this expanded context, Los Angeles becomes an archipelago of scientific instruments often realised at the scale of urban infrastructure: densely inhabited, with one eye on the stars, sliding out of alignment with itself, and jostled from below with seismic tides. The endless jostling of the city, whether due to tectonic activity or to LA's relentless cycles of demolition and construction, can be tapped as a new source of renewable energy. Vast flywheels convert seismic disturbance into future power, spinning beneath generation facilities built throughout the city's sprawl.

The Birds and the Bees [Fig. 10] Harrison Atelier (Ariane Lourie Harrison and Seth Harrison)

Why limit architecture to building for one species? Harrison Atelier's *The Birds and the Bees* proposes a space of cohabitation for pollinators and humans. The wall surface is an important site: can it be used more opportunistically for a greater number of inhabitants? We think yes and have been working on a paneling system that can be applied to exterior wall surfaces. Cast-concrete modular wall panels propose combinations of form and aperture sizes to create new dwelling typologies for local cavitynesting birds. Panels at the base of a building have smaller apertures designed for solitary bees,



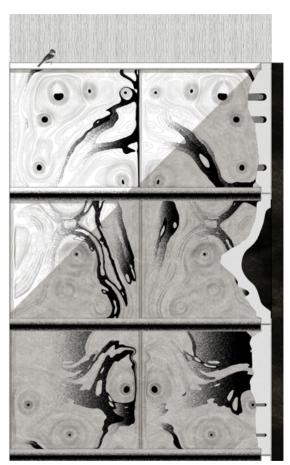


Fig. 9 Fig. 10

Fig. 9: Smout Allen, *LA Recalculated* (2015). Print on paper, 47cm x 76cm.

Fig. 10: Harrison Atelier, *The Birds and the Bees* (2016). Print on paper, 43cm x 69cm.

which stand among the most valuable pollinators. A suite of drawings, moulds, and prototypes were displayed at CR-10 in Linlithgo, NY in 2016 in an installation tracing the development of panels for a multi-species façade system. This paneling system was displayed in a freestanding pavilion at the Clermont Historic Site in Germantown, NY in 2015 and is currently under development for a pavilion in a Hudson Valley ecological art park. *The Birds and the Bees* is part of a series of speculative building projects that explore human/non-human species cohabitation in the Anthropocene period.

Concert for Plants by Plants [Fig. 11] Lindsey french

Can we consider practices where we rearrange traditional hierarchies, querying power in such a way that we value the marginal, become comfortable with ambiguity, imagine an alternative past, and maybe, be with the pain of realising ourselves as the aggressor? Are there postcolonial practices we might begin to embody by reconsidering the ways in which we treat the other? The landscape is a projection surface, the landscape fades into the background, is the background. The landscape is what we investigate when we want to understand cultural and biological histories. It is where human and nonhuman meet. It is here that we can develop reparative practices. Proposal: go willingly, thrillingly into exposure. Proposal: consider the sensation not only yours, but a shared sensation; consider the sensation a link that implicates both you and the other. Allow yourself to consider yourself the other. Proposal: find solidarity in objecthood. Proposal: seek quiet, repeated, cumulative conversations. Proposal: consider your body the words of a conversation. Have that conversation often. Proposal: relate to an other sensually. Notice your sensation in the fallout. Proposal: don't prepare yourself. Proposal: resist instrumentalisation every day. Proposal: create a singular experience through increased exposure. Consider your experience not only yours but shared, a link between you, your

body and another body across time and material. By complicating simple hierarchies, by considering ourselves as the environment to a plant, might we be able to imagine the past having gone differently, and position ourselves differently in the future so that rather than enact old traumas or re-inscribe old scripts, we might re-enact old possibilities.¹⁰

Conclusion

If there is a sensibility that binds the works gathered here it might be characterised by the following qualities. There are no compositional strata, no regulating lines, no geometric or other proportional systems governing their forms. Their edges are rough, their limits are unclear, shapes are soft and surfaces unfinished. Despite this informality, nothing is natural and nothing has been left to chance. This purposefully ambiguous aesthetic speaks to the liberating potential of art and design to be at once of the world and of the world-yet-to-be; they are what Jacques Rancière calls the alternative 'distributions of the sensible' necessary for envisioning and enacting heretofore unimagined physical and social realities.11 Hence, the forms and environments presented in Ambiguous Territory might be seen as fundamentally uncanny. As such, they serve to remind us that we live in a world isolated from its own nature in no small measure via the processes of agrilogistics. This unsettled world is no longer experienced as a home but rather, an 'unhomely home'. 12 Through various forms of material and philosophical estrangement, then, the works gathered here seek in part to function as instruments of defamiliarisation, not unlike the uncanny itself, engendering new ways of seeing and knowing. In this sense, they might be seen as functional, in terms of producing critical awareness through visual forms of communication. That is, they seek to visualise a world in which previously held categories and distinctions – for example between humans and animals, or living and nonliving beings - have been displaced and thus made strange. And while such forms and environments of displacement have become more visible and thus



Fig. 11: Lindsey french, Concert for Plants by Plants (2012/2017). Still from video, 6:30min.

knowable in the world itself, particularly through the increasingly tangible effects of climate change, they remain abstract enough for continued repression and denial at both individual and collective scales. It is here that the work presented in *Ambiguous Territory* renders undeniably visible and thus recognisable, in all of its alienating and potentially anxiety-inducing ways, the contemporary haunting of a planet estranged from itself.

Notes

Ambiguous Territory, Architecture Landscape and the Postnatural has been exhibited at: University of Michigan Taubman College of Architecture and Urban Planning, September 27 – October 18 2017; University of Virginia Elmaleh Gallery, September 4 – October 6 2018; Pratt Manhattan Gallery, December 7 2018 – February 7 2019.

- Jacques Derrida, 'Plato's Pharmacy', in Disseminations, trans. Barbara Johnson (Chicago: University of Chicago Press, 1981), 65–119; Gregory Bateson, 'The Cybernetics of "Self": A Theory of Alcoholism' Psychiatry 34 (1971): 1–18.
- 2. In Dark Ecology (Columbia University Press, 2016), Timothy Morton deploys the neologism agrilogistics. The term is also generally deployed as agri-logistics or agro-logistics, e.g., the World Bank's recent position note defines agro-logistics as such: 'Agro-Logistics can be seen as a sub-discipline of Logistics. An agrofood supply chain comprises organizations that are responsible for the production (farmers), processing (industry) and distribution (service providers and traders) of vegetable or animal-based products.' Jack G.A.J. van der Vorst and Joost Snels, Multi-Donor Trust Fund for Sustainable Logistics (MDTF-SL) Position Note on Agro-Logistics (Washington, DC: World Bank Group, 2014), http://documents.worldbank.org. Morton's formulation extends to a larger theoretical position that he suggests is at the core of humans' continuously deployed control regimes vis-àvis the environment.
- 3. Will Steffen, Jacques Grinevald, Paul Crutzen, and John McNeill, 'The Anthropocene: conceptual and historical perspectives'. Philosophical Transactions of the Royal Society, 369 (2011): 845. One theory of the Anthropocene ties it to the advent of agriculture. The article states: 'This hypothesis for the beginning of the Anthropocene argues that two agriculture-related events - the clearing of forests and conversion of land to cropping about 8000 years ago and the development of irrigated rice cultivation about 5000 years ago - emitted enough CO2 and methane (CH4), respectively, to the atmosphere to prevent the initiation of the next ice age. The hypothesis is that the early forest clearing reversed a downward trend in CO2 concentration that had been established in the Holocene by increasing CO2 concentration by 5-10 ppm. A recent model-based analysis claims that these modest increases in greenhouse gas concentrations were enough to trigger natural ocean feedbacks in the climate system strong enough to raise global mean temperature significantly and release additional CO2 to the atmosphere.' (p. 847).
- From Bruce D. Smith, 'The Onset of the Anthropocene', Anthropocene 4 (December 2013): 4-6. 'Although evidence for this global intensification of human niche construction efforts in the early Holocene is limited ... one result of increased human manipulation of biotic communities does stand out - the appearance of domesticated plants and animals. These sustained, multi-generation human efforts at manipulating and increasing the abundance of economically important species in resource-rich environments during the Early Holocene (ca. 11,000-9000 BP) provided the general co-evolutionary context within which human societies world-wide brought a select set of pre-adapted species of plants and animals under domestication. These domesticates in turn have provided the lever with which we have transformed much of the earth into agricultural landscapes that feed an ever increasing global population, and it is this domestication process ... that provides the archeological signature for major human

manipulation of terrestrial ecosystems, and the onset of the Anthropocene.' (p. 5).

- 5. Steffen et al., 'The Anthropocene', 845.
- Ursula K. Le Guin, Keynote 5 August 2014 online at: https://vimeo.com
- Donna Haraway, Staying With the Trouble, Making Kin in the Chthulucene (Durham NC: Duke University Press, 2016).
- 8. J. G. Ballard, *The Drowned World*, (New York & London: WW Norton, 2012 [1962]), 25.
- William E. Connolly, *Politics and Ambiguity* (Madison: University of Wisconsin Press, 1987).
- Transcribed from presentation by Lindsey french at the Ambiguous Territory Symposium, October 6 2017.
- Jacques Rancière, 'The Aesthetic Dimension: Aesthetics, Politics, Knowledge', Critical Inquiry 36, No. 1 (Autumn 2009): 1; Félix Guattari, 'The Object of Ecosophy' in Chaosmosis (Bloomington: University of Indiana Press, 1995).
- 12. Anthony Vidler, The Architectural Uncanny: Essays in the Modern Unhomely (Cambridge, MA: MIT Press, 1992), 13. Vidler explores the aesthetic quality of the uncanny, along with its various discourses of estrangement and defamiliarisation, in the context of experimental architecture in the 1980's. In the context of the work presented in Ambiguous Territory, we are interested in what might be thought of as a new iteration of the uncanny for the twenty-first century, what might be thought of as the environmental uncanny.

Biographies

Cathryn Dwyre, Chris Perry, David Salomon, and Kathy Velikov are co-curators of the exhibition and symposium Ambiguous Territory and co-editors of a forthcoming publication through Actar.

Cathryn Dwyre is coprincipal of pneumastudio and Adjunct Associate Professor of Architecture at Pratt Institute's School of Architecture.

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David Salomon is an Assistant Professor of Art History at Ithaca College, where he is also the coordinator of the Architectural Studies program.

Kathy Velikov is Associate Professor at University of Michigan's Taubman College, founding partner of RVTR, and President of ACADIA.