Kathy Waghorn & Nick Sargent

THE CITY AS A SCHOOL:
AN URBAN PEDAGOGY

08

DRAWING ON ⌴

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ABSTRACT

'The City as a School' describes an urban pedagogy, an approach to design teaching and research that leaves the exclusivity of the school as a space apart, and the safety of a discrete studio-based project behind, to immerse students and teachers in the contingent space of the city. It describes two exemplars of this urban pedagogy, developed at the University of Auckland; the Lab and the Event Studio. These exemplars explore the city as an assemblage, and inquiry as a performative form of pedagogy that embraces the uncertainty that such an understanding of the city-as-assemblage brings forth. Four emerging ideas are explored: hybrid research forums, shared uncertainty, material politics and fragile democratisation. Borrowed from the field of urban studies—specifically from the work of Ignatio Farías and Anders Blok—these four ideas determine the dimensions in which urban pedagogy takes place. Considering design research teaching and learning as a kind of social labour set within these determined dimensions re-contours the subjectivity of teachers, students and communities as collaborators in design research projects and, we propose, prepares students for contemporary and future forms of expanded architectural practice.

BIOGRAPHIES

Dr. Kathy Waghorn's research sits at the intersection of art, architecture and urbanism and acts to critique normative architectural procedures and concepts of agency, instrumental design and disciplinarity. With her collective HOOP-LA [www.hoop-la.nz], Kathy develops public realm initiatives in her neighbourhood of Tāmaki Makaurau Auckland. In this work the agency to transform place is opened to a wider constituency and is as much social and performative as it is material. At the time of writing, Waghorn taught architecture design studio at the University of Auckland; she has recently joined AUT University's Huri Te Ao Hoahanga / School of Future Environments as Associate Professor.

Nick Sargent is a lecturer at AUT's Huri Te Ao Hoahanga, a new program established to teach architecture in relation to participatory, climate and indigenous politics. He has previously taught and practiced in New Zealand and Australia, and recently completed an M.Arch (supervised by Kathy Waghorn) exploring some of the political implications that the ontological claims made by actor-network theory might have for architecture.

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In this essay we will discuss a form of design teaching and research that leaves the exclusivity of the school as a space apart, and the safety of a discrete studio-based project behind, to immerse students and teachers in the contingent space of the city.[01] This approach is underpinned by the idea that the field of architecture is shifting. No longer "done by an 'architect'," architectural work is increasingly "distributed and dispersed, collaborative and entrepreneurial, knowledge-based and open sourced, specialized and flexible."[02] As a result, as Peggy Deamer notes, designs are developed by "a socially diverse panoply of contributors" engaged in collective processes.[03] Alongside this opening up of the skills, knowledge, processes and persons engaged in design-making, others propose architectural practice re-cast as 'spatial agency', where buildings "enter into socially embedded networks, in which the consequences of architecture are more significant than objects."[04] When design-making is understood as a social and ethical practice, produced through dialectical forms of social labour, and set within the complexity and incompleteness of the city, what might this mean for design research and teaching?

We will first briefly describe two studio approaches developed at the University of Auckland that take students outside the studio spaces of the university and embed their study and design work within urban environments. We will then explore the city as an assemblage, and inquiry as a performative form of pedagogy that embraces the uncertainty that such an understanding of and approach to the city brings forth. Finally, we will introduce the ideas of hybrid research forums, shared uncertainty,

material politics and fragile democratisation. Borrowed from Ignacio Farías and Anders Blok, these four ideas are explored as the dimensions in which these types of urban pedagogy might take place. Considering design research teaching and learning as a kind of social labour set within these 'dimensions' re-contours the territories of teachers, students and communities in design research projects and, we propose, prepares students for those shifting contemporary and future forms of architectural practice described by Deamer.

TWO APPROACHES TO THE CITY AS A SCHOOL: THE MUDDY URBANISM LAB AND THE EVENT STUDIO

APPROACH 1. MUDDY URBANISM LAB.

The **Muddy Urbanism Lab**[05] was based on the supposition that the urban estuarine spaces of Tāmaki Makaurau Auckland are poorly utilised. The research conducted by this Lab focused on the Whau River, a tidal waterway bisecting the city's inner west, which was once an important food source and transport route but is now a site of neglect and ecological degradation. Through critically mapping the river's neighbourhoods such issues were bought to light, and new interfaces were proposed to operate between urban policy, ecological systems and projects involving community participation in the regeneration of the catchment. These proposals—made by students in this Lab—ranged across scales
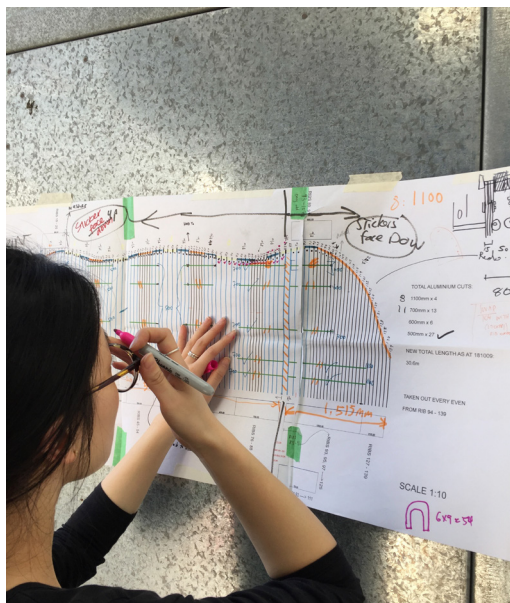
01–04:
Installation component of the curated event 'Sustainable Sustenance', produced during an Event Studio for FESTA, Christchurch, 2018.

and programmes, and in scope from realist/pragmatic to speculative/utopian. They included:

- lowering or removing boundary fences on riverside properties, disrupting the 'no man's land' designation of the river's edge that is frequently used for rubbish dumping;
- re-imagining the network of pylons that use the river as a corridor as multifunctional resources for locals, contributing to the micro-scale of the neighbourhood below while still supporting the national power grid above;
- devising an active river edge, reintegrating the marginal, disconnected reserves of post-industrial 'waste' land on this coastal edge into a linear pathway, re-connecting neighbourhoods cut off by arterial traffic routes, and thereby reinstating the mobility of the river under new urban conditions; and,
- harnessing the extensive coastal mangrove forest for energy production and for mitigating the effects of climate change.

Each proposal in the **Muddy Urbanism Lab** responded to the particular conditions and conflicts identified in the Whau river catchment, while also proposing strategies and tactics that might be employed for rethinking urban policy and modes of urban intervention in Tāmaki Makaurau Auckland more broadly. Working backwards from each situated proposal, students and teachers together identified a series of research questions, and used these to generate diagrams of the complex assemblages of property and cultural rights, material entities, legislation, infrastructure and spatial planning, environmental policy, and the array of sanctioned and unsanctioned activities within which these speculative design proposals were situated.

Initiated for 'The LAB' at the 5th Auckland Triennial at Auckland Art Gallery, and in collaboration with architect-activist Teddy Cruz, the **Muddy Urbanism Lab** has involved the work of post-graduate students, university staff, independent researchers, municipal agencies and community stakeholders. This speculative research has transitioned from the space of the academy as a result of a position of advocacy adopted by us as organisers, distributing the research through exhibitions, publications, presentations and websites. Advocacy from the **Muddy Urbanism Lab** has led to the establishment of a partnership between a community trust and Auckland

Council for the realisation of Te Whau Pathway, a thirteen-kilometre shared path that connects riverside reserves. This is currently under construction.

APPROACH 2. EVENT STUDIOS.

Event Studios[06] are live projects where architecture students, working in groups, produce large-scale installations for civic public events. These studios focus on architecture as both material culture and collaborative enterprise, where the work is made and tested with publics. Here, design research is not a private project, bounded by a screen or notebook, but is instead given a collective, physical presence. In **Event Studios** students source their own materials and fabrication services, they locate and negotiate access to spaces for fabrication and assembly and they handle transport logistics. In so doing they produce not just the project but the ecosystem needed to materialise that project, and in this ecosystem they take on roles and develop expertise beyond those normally attached to the architecture design studio—the material technician, the facilitator, the logistics expert, the project manager, the promoter, the producer— and which extend into the social realm—the host, the confidant and the colleague. In **Event Studios**, students work collaboratively in trying circumstances (including the inner city of post-earthquake Christchurch), within the shifting constraints of large public festivals, meeting non-existent budgets and tight non-negotiable deadlines. Although temporary, the work made in these studios collectively makes places, and students, who have often never so much as lifted a hammer, realise something both speculative and material, and have the opportunity to register its civic presence and reception.

AN URBAN PEDAGOGY

These two approaches are examples of a developing urban pedagogy, an approach to design research and teaching that hinges on two interrelated positions. First, it adopts an attitude that posits urbanism as an assemblage, and second, it understands knowledge making as an inquiry, as an emergent, locally situated and inherently social practice.

Adopting such an attitude toward urbanism is to put a "highly complex, multiple and evolving entity, the city," at

the core of our inquiries.[07] In advocating for an approach to design teaching predicated on an assemblage attitude we appreciate the advantage that such a schema allows in that it prompts a "move away from a notion of the city as a whole to a notion of the city as multiplicity, from the study of 'the' urban environment to the study of multiple urban assemblages."[08] This attitude is informed by Ignacio Farías, who provides us with an ontological framework within which the world is understood as incomplete, and as continually being made and unmade.[09] Drawing from Latour and Stengers, assemblage urbanists conceive the city as the recombination and continual re-constitution of materialities, objects, human and more-than-human life-forms, technologies, processes and phenomena, through which urban life is constantly composed.[10]

Manuel DeLanda notes that the assemblage is an elastic theory (perhaps better a tool, method or, as we have used, an 'attitude') geared towards avoiding the intellectual habit of privileging either the macro or micro view, and his appreciation of the assemblage schema lies in its resistance to such reduction. Assemblages are wholes constituted from the interactions between multiple heterogeneous parts that relate contingently, and consequently an assemblage cannot be reduced to an essential notion (the essence of a single part). The parts constituting the whole of the assemblage can be assembled in different ways and at different scales based not only on their own properties but also on their capacities, that is what the parts are capable of when in combination with other parts (in more or less numbers, in denser or looser configurations etc.). Moreover, these component parts, "may be detached from and plugged into a different assemblage in which its interactions are different."[11] DeLanda explains, "cities are assemblages of people, networks, organizations, as well as a variety of infrastructural components, from buildings and streets to conduits for matter and energy flows."[12]

As Farías points out, in taking the 'attitude' that underpins assemblage urbanism Lefebvre's 'right to the city' can be understood not as a democratic right to the singular and complete city-as-object, with a coherent, legible and stable form, but instead as the agentic capacity to engage in multiple, overlapping, fragmentary and synchronous urban-life assemblages, that are open to political contestation.[13] For Farías and Blok "urban democratic participation is based on a sense that cities are assembled, not structured,"[14] and the actual urban

situations we find ourselves in define our spaces of intervention. They cite John Dewey's position that the city is a "universe in which there is real uncertainty and contingency, a world which is not all in, and never will be, a world which in some respect is incomplete and in the making, and which in these respects may be made this way or that according as men [sic] judge, prize, love, and labor."[15]

In articulating the difference between assemblage urbanism and other positions on the urban[16] Farías and Blok claim that assemblage perspectives "promote a more open and explorative form of engagement with the world", which they construe as a process of inquiry.[17] Inquiry in their work is positioned as a methodological mode by which to avoid reduction (to either an essence or a grand narrative) and through which urban students confront "radically uncertain situations in which we don't know what we are looking for until we find it."[18] In working with such 'radical uncertainty', new modes of inquiry, of collective experimentation and representation are necessary. If an urban pedagogical approach to architectural design teaching—such as that we are developing—adopts an assemblage urbanism attitude, we need also to develop ways of working that can embrace such radical uncertainty and the city as a multiple, ever incomplete entity. In such an inquiry there is no place for the 'objectively distanced' design researcher, and the position of a singular 'expert' who can 'teach the city' is similarly dubious. Instead, as students and teachers we are together cast as part of the continuous worlding with which the assemblage approach contends. The feminist economists J.K. Gibson-Graham describe their adoption of an "up-close, piecing-it-together, participatory approach to understanding (or performing) the world rather than a big-picture, spectator approach that captures and reduces everything via universal laws."[19] This piecing-it-together approach, they say, "is a way of being in the world; it's improvisational and experimental."[20] Like Gibson-Graham, in developing an urban pedagogy we are exploring how teaching and learning can take place, and how knowledge can emerge, when immersed 'in the world', and we ask; how does our entanglement in such 'radical uncertainty' differently contour the relations of students, teachers, design schools, publics and cities?

Education philosopher Paulo Freire vigorously critiques a so-called 'banking' model of education, where the one-way transfer of knowledge from teacher to student takes

place in a space especially set apart for this process. Instead, for Freire, knowledge emerges only through "the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world and with each other."[21] Invoking learning as a process of knowledge making through inquiry, immersed in and with the world, aligns Freire with Farías and Blok's assemblage urbanist approach. Learning, for Freire, is an inherently political process and social practice, through which the iterative actions of inquiry and dialogue cultivate knowledge. Freire proposes that the work of learning is one of praxis, where thinking "does not separate itself from action, but constantly immerses itself in temporality without fear of the risks involved."[22] Farías and Blok note that Dewey in his work on pedagogy similarly places an emphasis on knowing not as abstract knowledge (or theory) but as a social practice. For Dewey, knowledge is achieved "not when things are 'found out', but when they are also 'known', and 'known' means here that they are shared, socially accessible, discussable, open."[23] This proposes that knowledge has an implicit social dimension, one that combines the 'up-close' capacity of Gibson-Graham, and the action emphasis of Freire.
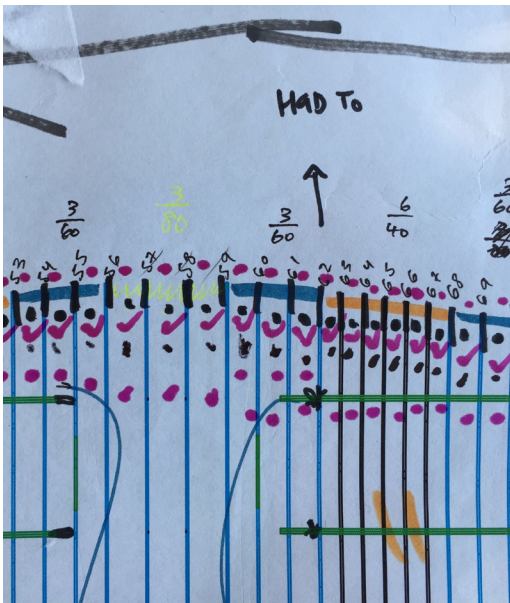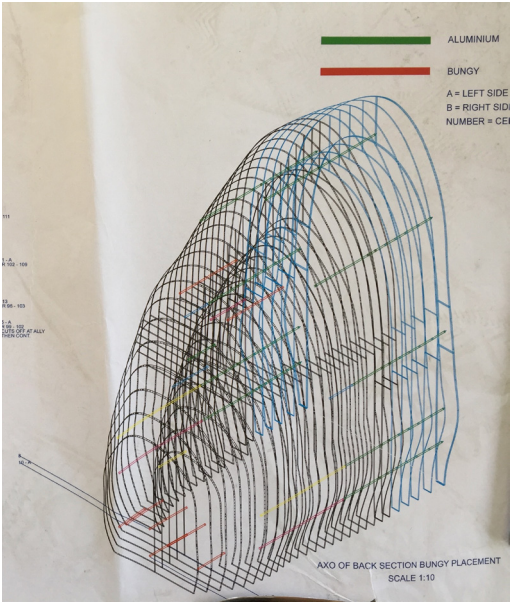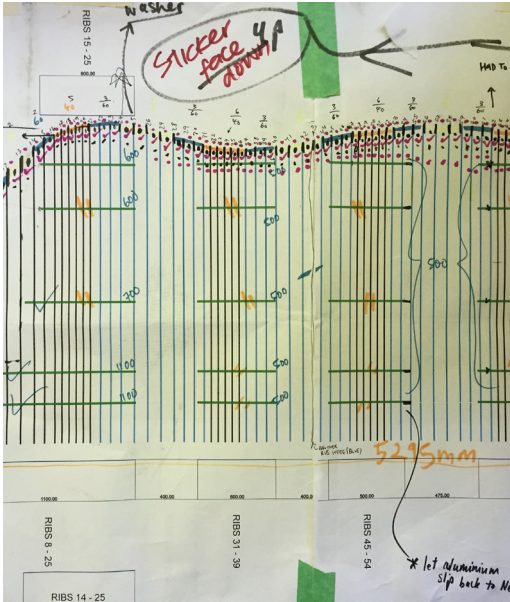
From the perspective of cultural anthropology, David Turnbull considers the production of knowledge as itself an assemblage process. For Turnbull, the process of formulating knowledge is a dialectical one, produced through "the work of negotiation and judgement" that each participant has to contribute to in order to produce meaning.[24] This knowledge-making labour does not take place in an objectively distanced, universal 'no-where'. Instead, this dialectical process of knowledge-making produces a social space, a space located in and emerging from specific local conditions. This combination of social labour produced within the specificities of place Turnbull calls a 'knowledge space'. In his knowledge space schema, theory can be understood not as a universalising master structure, to which local knowledge must defer, but as a "pattern that connects" different knowledge spaces.[25] Turnbull, like Freire, Gibson-Graham and Dewey, places a focus on the social, situational and performative nature of knowledge production in contending with the uncertainty and contingency of the assemblage.

The **Muddy Urbanism Lab** situated the university design studio in the civic art gallery. As well as exploring topics in such a highly visible space, adopting the label 'lab' framed the city as an experimental terrain, open in real time for active inquiry. In the gallery this experimental work was not concealed from publics or stakeholders, rather students and teachers were together answerable to and in conversation with a much wider audience. In this way, the students are 'socialised' into the role that Dewey describes of the architect as a knowledge-maker working with others. The design educator and researcher Anthony Dunne has recently proposed that focussing design education on 'the real' leads "to the ongoing suppression of the design imagination."[26] He calls for designers to be "realists of a larger reality" and for design education that "would encourage designers to be constructively unrealistic." To do so "it would be necessary to embrace new ways of thinking."[27] This is the terrain of the **Muddy Urbanism Lab**, where the focus was not on problem solving but on problematising, not on fixes as much as provocations and speculations, set within an emergent knowledge of a specific urban assemblage.

The **Event Studios** generate an experience of city-making as a material effort, and of design as a socially collaborative enterprise, both within the student groups and with a wider body of constituents convened in the making and testing of work in the public realm. Students register this in their commentary, recalling their experience of knowledge making as a temporal and performative endeavour, the "realisation that an idea or proposal doesn't have to be 'complete' or 'perfect' before you expose it to a community/place - that makeshift or incomplete tests can facilitate more productive engagement due to their openness to change and discussion" as key learning experiences fostered by the studios.[28] Another student commented that the **Event Studio** developed their "understanding of 'the architect' [to be that] value of making yourself vulnerable as a designer to clients, communities, collaborators."[29]

Evidently, through the **Event Studios** students register space in the sense of Lefebvre, as inherently social, constituted through encounter, assembly and simultaneity,[30] and design-making as a practice immersed in the contingent, even risky conditions, in which as part of an inquiry one might actively welcome vulnerability. To draw out a specific example from one event studio in Christchurch (as part of FESTA 2018), students experienced their projects forming a temporary assemblage. Operating on a post-disaster city they devised and used mobile architectural elements to help form a public around the festival's aim to promote a

05-08:
Drawings, diagrams, components and schedules. Working documents developed during construction of the 'Sustainable Sustenance' installation for FESTA, Christchurch, 2018.

discussion of food production, access and equity in the city rebuild.[31] The students designed a performative object that transported and deployed furniture requiring diners to coordinate their bodies to balance shared tables, speculatively challenging the norms of food consumption in public and contributing a "constructively unrealistic" material experience to larger public discussions about the future of food production and consumption in Ōtautahi Christchurch.

A PEDAGOGY OF RADICAL UNCERTAINTY

To further think through an urban pedagogy, we have found it productive to position these approaches to design research teaching alongside the aims and actions of 'technical democracy', a concept advanced through Science and Technology Studies. The movement towards technical democracy arises from the contemporary situation of uncertainty, whereby science and technology cannot provide certainty to policy makers, where the expansive qualities of science and technology now contribute to the generation of greater uncertainty.[32] Technical democracy is the pursuit of increased democratisation in the policy development process through attempts to foster "dialogue and collaboration among experts and lay-people in processes of technology design, knowledge production and attendant world-making."[33] For Farías and Blok, power in the contemporary city does not reside in institutions or government, but in an ability to forge 'hybrid research forums' that can navigate states of 'shared uncertainty' and 'material politics', working through collective experimentation towards the 'fragile democratisation' of civic agency. We are interested in these dimensions as frames through which to describe the methodological terrain in which an urban pedagogy operates.

HYBRID RESEARCH FORUMS

Bringing ideas of technical democracy to the realm of urban studies, Farías and Blok identify the creative collaboration of experts and lay people, who in groups and communities collectively experiment with and prototype fragments of urban life. Such 'hybrid research forums'[34] support collective experimentation and learning in the face of complexity and uncertainty as they "facilitate a process in which what counts as expertise, and who

counts as an expert, becomes open to discussion and contestation."[35] In urban-realm hybrid research forums, a local's knowledge is valid and maybe as useful as that of a technical expert, and expertise emerges as a collective achievement.[36]

Compelled by this means of engaging the city, we see an urban pedagogy as a kind of 'training' for the practice of such an approach, in which 'hybrid forums' coalesce around design research projects and where an experimental attitude is fostered. In the approaches to the City as a School we have described here, the 'teacher' sets up relationships through which a project is established. However, the teacher is not cast as the knowledge expert, instead the roles of teacher and student are hybridised, embarking on the project through social labour within an assemblage, we are together co-inquiring, making knowledge and invoking meaning.

SHARED UNCERTAINTY

Farías and Blok note that occupying a contemporary state of shared uncertainty is at the core of the politics of technical democracy and the *raison d'être* of hybrid research forums.[37] Experiences of shared uncertainty in the urban realm often coalesce around matters of concern[38] where hybrid forums undertake the hard work of "un- and re-framing" techno-political issues in the city "according to their emerging sense of how experts fail to deal in satisfactory ways with the shared uncertainties of the urban."[39] Generation Zero is an example of a hybrid forum in Aotearoa New Zealand, where youth, not normatively considered 'experts', have convened around climate change issues and the need to transition from a dependence on fossil fuels. This non-partisan youth-led organisation invites diverse solutions "from all backgrounds,"[40] and has gained considerable traction and political agency in re-framing and communicating the issues of carbon based transport in Aotearoa New Zealand.

In our urban pedagogy, an example of the fertile capacity of shared uncertainty is when the Muddy Urbanism Lab worked with the ecological restoration NGO Friends of the Whau. Together we convened a forum around our shared uncertainty in relation to 'top down' government's capacity to imaginatively embark on caring for the river's future in the face of complex and intertwined urban

impacts on the catchment. While we did not always agree, in the **Muddy Urbanism Lab** the open investigative approach, combined with the expertise of the students in imagining and imaging speculative or 'constructively unrealistic' propositions through various documents and models, was valued for opening future-oriented dialogues about the river.

In **Event Studios** shared uncertainty is palpable within student and staff groups. In these studios the value of the architectural render as a document of certain outcome quickly becomes anachronistic. As students engage with the contingencies of a public event outside the confines of the classroom, other documents take on more valuable rolls; documents which translate assembly systems into codes in attempts to manage the choreography of many parts and people, yet open to disruptions of weather, access, material constraints and competing interests. Such documents help the student-teacher-event management forums to 'un- and re-frame' the techno-social issues that inevitably arise in these projects. In such work, as Till notes, the tutor assumes a new role, no longer the "possessor and purveyor of power and knowledge," the tutor is cast as "one potentially fragile human among others, with past experience in coping with contingency as the main point of support to the students."[41]

MATERIAL POLITICS

Rather than operating in a purely philosophical, theoretical or policy domain, the dimension of material politics registers the materiality of objects of concern in the urban realm. Contemporaneous with 'vital materialism' and 'thing power',[42] this aspect attempts to "bring things back into the picture of urban politics."[43] Farías and Blok note here the need to "recognize the recalcitrance, contingency and indeterminacy of urban materialities, and the way this shapes and conditions urban-political conflict."[44]

Such a close attention to 'urban things' is at the core of this urban pedagogy. Using critical mapping as a means of inquiry, the **Muddy Urbanism Lab** immersed students and staff in the materialities of the river catchment. A proposal to address the interstitial space of the river bank grew from an 'up-close piecing it together' approach, whereby dumped rubbish was closely recorded and described through its incidents, variety and placement in relation to the height, materiality and

location of differing boundary fences. From this detailed recording a proposition was made for different kinds of adjacencies and neighbourhood spatial relations to the river, addressing the conflict between the needs of domestic space and the degradation of the river. The **Muddy Urbanism Lab** found other recalcitrant, contingent and indeterminate urban materialities and imagined their potential 'plugged into' other assemblages and producing alternate urban politics; long concrete driveways recast as suburban social spaces, mangroves considered as energy supply, submerged shopping trolleys as reef structures supporting oyster beds, power pylons re-deployed as infrastructure for neighbourhood-scale solar farms, and in one particular site, the presence of ponies, radio controlled model cars and skateboarders as indicative of forms of 'industrial recreation', ill-suited to the inner city but perfectly attuned to this specific river-side light industrial suburb.

In the most recent **Event Studio** the agency of materials became a central challenge, especially in relation to transport and afterlife. Students produced agential effects through a series of light-weight wearable furniture items which were eagerly adopted by the event public. Made by adapting readily¬ sourced components (buckets, hula-hoops and night lights) the furniture generated intimate conversational spaces for strangers to meet within the broader public realm. These items have successfully found an afterlife in the ownership of a Steiner school, who plan to use them in support of their annual fundraising fair. However, another aspect of the project, made from hundreds of CNC-cut Corflute parts, is proving a recalcitrant thing. A visual and performative success at the one-night-long event, and supposedly designed for re-use, this 'thing' has proved too complex for easy and ready re-assembly. With no future owner yet identified and with consignment to landfill ruled out on ethical grounds, this 'thing' remains stubbornly indeterminate.

COLLECTIVE EXPERIMENTATION

Callon, Lascoumes, and Barthe's depiction of technical democracy refers to processes of research 'in the wild', amidst real-world uncertainties and through collaboration between affected parties.[45] Through the shifting constituencies of urban 'hybrid forums', technical democracy is an inherently experimental process, where

urban collectives are convened and recomposed in partial and open-ended ways. Anyone who has belonged to a community advocacy group will know that aims and goals shift as knowledge is generated and group expertise is formed. There is often reluctance to arrive at final decisions as the emergent expertise necessitates an ongoing process of "new knowledge, voices, events and visions."[46] Farías and Blok observe the performativity of such urban knowledge, whereby "knowledge production is never a purely descriptive or analytical practice, but has performative effects, that is, the capacity to (trans-)form the objects and subjects it refers to."[47] Such performative affects are at work in our urban pedagogy, as was indicated by the student quoted earlier, who acknowledged her own transformative subjectivity in 'making oneself vulnerable as a designer'. This performative effect is articulated by Elizabeth Grierson who, in considering creative practices as conditions of knowing and being says, "implicit in the process or events of knowing are inevitable reflections on processes of self-making through creative actions and activities as one is mediated by, and opens up to one's research process to the point that one 'becomes' a subject."[48] For Grierson, in the creative arts (and here we include designing and *architect-ing*) we work with materials, technologies and bodies to reveal something about the world and ourselves in the process.[49] This underscores a new attention to practice as a way of knowing, entailing a focus not on the realm of theory or ideas, but on the lived world, where knowledge has been out of sight, "hidden in the thick undergrowth of the everyday."[50] This shift in focus "relocates social agency in practice or performance rather than discourse."[51]

This is what we see happening through urban pedagogy. Through acting as an advocate in the **Muddy Urbanism Lab** or inhabiting one's installation with the public in an **Event Studio**, such processes of self-making occur. The contours of the roles of teacher, student, expert and colleague, and the situated places in power structures these imply, are unsettled in carrying out such urban pedagogies. An urban pedagogy that is inquiry-oriented, can and does have effects beyond the course's completion. The **Muddy Urbanism Lab** has led to the establishment of a hybrid collective growing beyond the limit of the studio. While the students who undertook this work are now graduates, their advocacy has led to the partnership between a community trust and Auckland Council for the realisation of a materially transformative project, a thirteen-kilometre river-side shared path

currently under construction. Here the urban pedagogy studio is truly performative, even if its action is only to stimulate or initiate an external project.

Importantly then, this urban pedagogy is preparing students not for the realm of the architect as the transcendent expert, dropped into a situation with their complete 'property' of disciplinary knowledge,[52] but rather for the more messy and open ended 'design researcher' roles many in the field of architecture are now occupying and describing. In concert with Deamer's distributed and dispersed, collaborative and entrepreneurial, knowledge-based and opensource, specialised and flexible architectural worker, Awan, Schneider and Till advocate for an 'expanded architectural intelligence' with the intent to "posit a much richer set of activities that give new scope, and hope, for architectural activity."[53] It is this richer set of activities that an urban pedagogy fosters. Such expanded bodies of knowledge might be cultivated and convened through opening pedagogy (and practice) to the hybrid forums Farías and Blok describe and through understanding design research pedagogy as a transformative process, even a 'wild' process, not easily captured in the pre-determined learning outcomes and course metrics that universities often prefer.

CONCLUSION

The City as a School, such as we have described it here, is counter to the one-size-fits-all direction in which many universities are currently travelling.[54] In the contemporary university, learning generally takes place apart from the world, it is broken into discrete moments of individual assessment, tested against rubrics of pre-determined criteria, quantified and 'managed' via learning management software. This model of pedagogy is by nature risk averse and does not sit easily with the "radically uncertain situations" that we seek in an urban pedagogy.[55] Such a pedagogy also neglects current understandings of the bond between learning, emotion and affect. Those who champion the development of a more locally inflected 'situational intelligence' (as is emerging through an urban pedagogy) tell us that "students and teachers think more effectively in the context of a community—as opposed to a collection of separate individuals,"[56] and that "what motivates students to persist with difficulties are the positive emotions arising from 'affiliation' or belonging."[57] Tied to this, as Latour notes, a public only forms around

09: *Collected projects in 'Skyrise City', a one-night-only city produced for Auckland Architecture Week.*
10: *Installation for the Rugby World Cup Fan Trail, Event Studio, Auckland, 2011, tutor Mike Davis.*
11: *Installation 'Luxcity', providing the first public access to the post-quake city center. Produced during an Event Studio for FESTA, Christchurch, 2012, Led by Uwe Rieger, tutor Craig Moller.*
12: *Event Studio 'City Ups', post-quake red zone, part of FESTA, Christchurch, 2014, led by Uwe Rieger.*

a concern or interest.[58] A public forming around the Whau river (that can also continue forming beyond the studio) is very different than the limited publics that form in individualised studios and their moments of the architectural critique and assessment.

Despite the employment risks and bureaucratic difficulties that crop up in disrupting the structures and temporalities of the normative university education model,[59] the approaches to an urban pedagogy we are developing are effective in coalescing communities of praxis; students and teachers become affiliated with each other in pursuit of the project at hand and in company with the many other associated groups, publics and individuals engaging with our work. If we subscribe to a view of the contemporary urban realm as one of assemblage and emergent technical democracy (as sketched by Farías and Blok) then as architectural educators we are obligated to develop design research pedagogies that attend to the dimensions of shared uncertainty, material politics and collective experimentation. We must also recognise and tap into the performativity of knowledge, and the fluid subjectivity and forms of collective expertise found in 'hybrid research forums'. Developing an urban pedagogy, that treats the City as a School, is a move towards this.

DRAWING ON ⌐

NOTES

01 The phrase 'the city as a school' has been used by other authors, for example in McLuhan, Hutchon and McLuhan's book The City as Classroom which expands on Marshall McLuhan's argument that "the amount of information that is embedded in young minds per minute outside the classroom far exceeds anything that happens inside the classroom." McLuhan, Marshall. 1966. "Electronics & the Psychic Drop-out." *THIS Magazine is about SCHOOLS*, Vol.1, No.1 (April), p.38. See also: McLuhan, Marshall, Hutchon, Kathryn, and McLuhan, Eric. 1977. *City as Classroom: Understanding Language and Media*. Agincourt, ON: Book Society of Canada.

02 Deamer, Peggy. 2015. *The Architect as Worker: Immaterial Labor, the Creative Class, and the Politics of Design*. London and New Delhi: Bloomsbury, p.72.

03 Deamer, Peggy. 2015. *The Architect as Worker*, p.72.

04 Awan, Nishat, Schneider, Tatjana and Till, Jeremy. 2011. *Spatial Agency: Other Ways of Doing Architecture*. Abingdon & New York: Routledge, p.32.

05 *Muddy Urbanism* was instigated as part of 'If you were to live here . . .' the 5th Auckland Triennial (Auckland Art Gallery 10th May – 11th August, 2013) with architect/activist Teddy Cruz (Professor of Public Culture and Urbanization in the Department of Visual Arts at the University of California, San Diego), and from the University of Auckland Kathy Waghorn, graduate teaching assistant Esther Mecredy, independent researcher Nina Patel and post-graduate students Herman Haringa, Raimana Jones, Chia Venn Khoo, Sophia Whoi Seung Kim, Antonia Lapwood, Zee Shake Lee, Steven Lin, Vinni Paget, Hannah Ryan and Angela Yoo. It included discussions with guests Robyn Mason (historian), Marcus Williams (curator of the Rosebank Project), staff from Auckland Council and from the following NGOs: the Whau River Catchment Trust, Friends of the Whau, Sustaining Our Streams, Ecomatters and the Keep Waitakere Beautiful Trust.

06 Event studios have been led by Uwe Rieger (2011, 2013, 2014) and Kathy Waghorn (2009, 2010, 2012, 2018). University of Auckland staff have included: Mike Davis, Chris Holmes, Anna Tong, Rob Aerts, Jennie Aerts, Nina Patel, Judy Cockeram, Cameron Rowe, Kate Rogan, John Hayden, Sou Muy Ly, Jessica Knight, Harriet Richards, Andrew Johntson, Jessica Barter, Michael O'Sullivan, Sue Hillery, Graham Burgess and Craig Moller. The studios have contributed to public events such as FESTA (Christchurch), Auckland Architecture Week and the 2014 Rugby World Cup (Auckland).

07 Farías, Ignacio. 2011. "The Politics of Urban Assemblages," in *City*, Vol.15, No.3-4, p.368.

08 Farías, Ignacio. 2011. "The Politics of Urban Assemblages," p.369.

09 Farías, Ignacio. 2011. "The Politics of Urban Assemblages," pp.365-74.

10 See Farias, "The Politics of Urban Assemblages," in which Stengers' "The Cosmopolitical Proposal" and Latour's Politics of Nature are frequently cited (Stengers, Isabelle. 2005. "The Cosmopolitical Proposal" in Bruno Latour and Peter Weibel (eds.), *Making Things Public*. Cambridge, MA: MIT Press. Latour, Bruno. 2004. *Politics of Nature: How to Bring the Sciences into Democracy*, trans. Catherine Porter. Cambridge, MA: Harvard University Press).

11 DeLanda, Manuel. 2006. *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London and New York: Continuum, p.10.

12 DeLanda, Manuel. 2006. *A New Philosophy of Society*, p.5.

13 Blok, Anders, and Ignacio Farías. 2016. "Technical Democracy as a Challenge to Urban Studies: Introduction," in *City*, Vol.20, No.4, pp.539-48.

14 Farías, Ignacio. 2011. "The Politics of Urban Assemblages," p.372.

15 Dewey, John. 1918. "Philosophy and Democracy," *University of California Chronicle*, Vol.21, p.44, cited in Farías, Ignacio, 2011. "The Politics of Urban Assemblages," p.372.

16 Specifically, 'critical urbanism' as defined by Neil Brenner, David Madden and David Wachsmuth that rejects Farias' "more open" ontological proposition, arguing instead that any theory of the urban must understand the city as a structural effect of capitalism. See: Brenner, Neil, Madden, David and Wachsmuth, David. 2011. "Assemblage Urbanism and the Challenges of Critical Urban Theory," in *City*, Vol.15, No.2, pp.225-40.

17 Farías, Ignacio. 2011. "The Politics of Urban Assemblages," p.366.

18 Farías, Ignacio. 2011. "The Politics of Urban Assemblages," p.367.

19 Gibson-Graham, J. K. 2011. "A Feminist Project of Belonging for the Anthropocene," in *Gender, Place and Culture: A Journal of Feminist Geography*, Vol.18, No.1, pp.1-21.

20 Gibson-Graham, J.K. 2011. "A Feminist Project of Belonging for the Anthropocene," p.4.

21 Freire, Paulo. 2000 (1970). *Pedagogy of the Oppressed*, 30th Anniversary Edition. New York: Continuum, p.72.

22 Freire, Paulo. 2000 (1970). *Pedagogy of the Oppressed*, p.73.

23 Farías, Ignacio. 2011. "The Politics of Urban Assemblages," p.372.

24 Turnbull, David. 2000. *Masons, Tricksters and Cartographers: Comparative Studies in the Sociology of Scientific and Indigenous Knowledge*. Amsterdam and Abingdon: Harwood Academic, p.13.

25 Turnbull, David. 2000. *Masons, Tricksters and Cartographers*, p.42.

26 Dunne, Anthony. 2018. "A Larger Reality," in Mullin, Mary V. & Frayling, Christopher (eds.), *Fitness for What Purpose: Essays on Design Education celebrating 40 years of the Sir Misha Black Awards*. London: Design Manchester/Eyewear Publishing. Available at: ⟨https://www.readingdesign.org/a-larger-reality⟩ (Accessed 29th January, 2020).

27 Dunne, Anthony. 2018. "A Larger Reality." Available at: ⟨https://www.readingdesign.org/a-larger-reality⟩ (Accessed 29th January, 2020).

28 Anonymous student reflection gathered as part of course evaluations.

29 Anonymous student reflection gathered as part of course evaluations.

30 Lefebvre, Henri. 1974. *The Production of Space*, trans. Donald Nicholson-Smith. Oxford: Blackwell, p.101.

31 The Festival of Transitional Architecture (FESTA) is a free public architecture festival in post-earthquake Christchurch that features a headline event where hundreds of architecture students from around New Zealand and Australia design and construct temporary pavilions to house a one-night street party. See http://festa.org.nz.

32 Callon, Michel, Lascoumes, Pierre and Barthe, Yannick. 2009. *Acting in an Uncertain World: An Essay on Technical Democracy.* Cambridge, MA: MIT Press. pp.18-19.

33 Farías, Ignacio, and Blok, Anders. 2016. "Technical Democracy as a Challenge to Urban Studies," in *City*, Vol.20, No.4, p.546.

34 'Hybrid forums', described in STS studies by Callon, Lascoumes and Barthe, facilitate dialogue and "cooperation between specialists and laypersons", providing "visibility and audibility to emergent groups that lack a spokesperson." Callon, Michel, Lascoumes, Pierre and Barthe, Yannick. 2009. *Acting in an Uncertain World*, p.36.

35 Farías, Ignacio and Blok, Anders. 2016. "Technical Democracy," p.542.

36 Farías, Ignacio and Blok, Anders. 2016. "Technical Democracy," p.542.

37 Farías, Ignacio and Blok, Anders. 2016. "Technical Democracy," p.544.

38 Noting Latour's use of the term 'matters of concern.' Latour, Bruno. 2004. "Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern," in *Critical Enquiry*, Vol.30, No. 2, pp.225-48.

39 Farías, Ignacio and Blok, Anders. 2016. "Technical Democracy," p.544.

40 Generation Zero. 2011. 'About', *Generation Zero*, viewed 29th January, 2020, <https://www.generationzero.org/about>.

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43 Farías, Ignacio and Blok, Anders. 2016. "Technical Democracy," p.545.

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49 Grierson, Elizabeth. 2009. "Ways of Knowing and Being," p.18.

50 Cresswell, Tim. 2002. "Theorizing Place," in Tim Cresswell and Ginette Verstraete (eds.), *Mobilizing Place, Placing Mobility: The Politics of Representation in a Globalized World*. Amsterdam and New York: Rodopi, p.21.

51 Whatmore, Sarah. 2006. "Materialist Returns: Practising Cultural Geography in and for a More-Than-Human World," in *Cultural Geographies*. Vol.13, p.603.

52 Lefebvre describes architects, among others, as specialists with "carefully drawn property lines" who "view social space through the optic of their methodology and their reductionist schema." Lefebvre, Henri. 1974 (1991). *The Production of Space*, p.108.

53 Awan, Nishat, Schneider, Tatjana and Till, Jeremy. 2011. *Spatial Agency: Other Ways of Doing Architecture*, p.30.

54 This changing academic culture is outlined by Berg and Seeber who note the rise in contract positions, expanding class sizes, increased use of learning management technology, downloading of clerical tasks on to faculty and the shift to managerialism as aspects that distinguish the 'corporatisation' of the university. See: Berg, Maggie and Seeber, Barbara K. 2016. *The Slow Professor: Challenging the Culture of Speed in the Academy*. Toronto and London: University of Toronto Press, p.3. For this overview they draw on a number of researchers in this area including Collini (2012), Donoghue (2008), Ginsberg (2011), and Washburn (2005).

55 Farías, Ignacio. 2011. "The Politics of Urban Assemblages," p.367.

56 Berg, Maggie and Seeber, Barbara K. 2016. *The Slow Professor*, p.39.

57 Berg, Maggie and Seeber, Barbara K. 2016. *The Slow Professor*, p.39.

58 Latour, Bruno. 2004. "Why Has Critique Run Out of Steam?," p.237.

59 A number of these risks and difficulties, as well as the very real rewards, are traversed in Harriss, Harriet and Widder, Lynette. 2014. *Architecture Live Projects: Pedagogy into Practice*. Abingdon and New York: Routledge; and Dodd, Harrisson and Charlesworth. 2012. *Live Projects: Designing with People*. Melbourne: RMIT University Press.

FIGURES

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