Concrete drawing: Intra-active potentials in drawing, objects, and urbanity

Simon Twose

In designing built space, a series of material engagements impress themselves on the process. Desires and hopes find shape in the virtual forming of space, and in this drawing, or drawing out, the implacable scale and substance of building acquires ambiguous presence. This merging of tacit and concrete characteristics gives a way of understanding built contexts, such as cities, through the lens of design. This paper proposes the *Concrete Drawing* as a means of grappling with such a confluence. It suggests that designing and urbanity impress on one another; they are, to paraphrase Barad (2007), entangled, inseparable and intra-acting. This points to the city as having the restless potentiality of drawing.



Fig. 1
Simon Twose (2015). Concrete Drawing [Helicon image with combined focal points; photo: Paul Hillier].

Commonly understood, building binds with architectural drawing through imaginative projection; a plan can reveal spaces that are grand or mean, oppressive or uplifting. In drawing, this understanding of the affective consequence of built objects mixes with other, parallel gestures; the stretch and pull of a mouse on a digitally created surface, for instance, or the rotation of a model in the hand. In architectural drawing these two presences intra-act; building's implacable mass is imaginatively paired with drawing's delicate material feedback, the two combining in what Jean-Luc Nancy (2013) describes as a "formative force", shaping the drawing and consequently the built object. This co-presence of two forceful aesthetic agents allows inanimate things in both building and drawing to have agency in the design process. A concrete wall, for instance, impresses itself as a massive element at the same time as being an ephemeral line on a screen. The forcefulness of things, both drawn and built, is what Concrete Drawing sought to explore and what this visual submission elaborates. The project aims for an architecture of unfinished-ness and potentiality - neither drawing nor building, but an object that hovers between both.









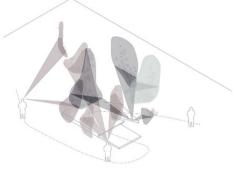


Fig. 2
Simon Twose (2015). Concrete Drawing [1:20 model of wall surface extracted from Te Horo House design, CNC model in Kauri, 1mm bit and 0.5mm linear passes; images: Simon Twose, Paul Hillier]."

Concrete Drawing takes one wall from the Te Horo house, an unbuilt project on a rock-strewn site on the Kapiti coast, and draws it at full scale using one of its proposed construction materials. The wall/drawing measures eight metres by three and is cast as two metric tonnes of concrete. The design for the Te Horo house entailed large concrete walls being brought into compositional equilibrium according to site dynamics and a complex domestic brief. Concrete Drawing extends this interest in the play between objects and inhabitation through tracking more intimate dynamics within designing. The Te Horo house is an ongoing research project and the aesthetic results of the Concrete Drawing will feed back into the design with the intention of jolting or shifting it into other forms.

Concrete Drawing was exhibited at the Adam Art Gallery in a show titled "Drawing Is/Not Building", which ran during April 24 – June 28, 2015.



Fig. 3
Simon Twose (2009).Te Horo House [Unbuilt design showing dynamic composition of concrete walls and detail explorations, Revit renders and drawings, Rhinoceros drawings and 1:1 plaster castings; images: Simon Twose].

The surface of the *Concrete Drawing* is marked with 300 smaller-scale versions of the same wall surface, arrayed into constellations. These little walls swarm over their larger sibling in various orientations and attitudes, depending on which point in space they are oriented to. Viewers who happen on these points see clusters of miniature walls solely in edge-on view or, in other clusters, frontally. The wall surface is so designed to actively engage viewers as they move around it, drawing them in through the discovery of various points of alignment. These smaller-scaled walls allude to viewing models used while designing, i.e., objects turned in one's hands to assess their aesthetic merit. The constellations of small-scale objects pucker the larger surface, which is a kind of record of their dynamic positioning. As such, they push and distort the larger surface in a plastic way that belies its solidity. Further, these constellations of tiny walls are arrayed as if they were being rotated by hand, except in this case the walls are fixed and rely on the viewer's movement to disclose their rounded complexity.

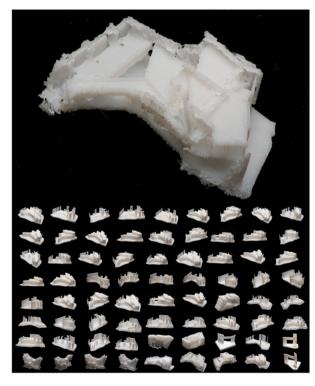


Fig. 4
Simon Twose (2014). Te Horo House [Exploratory models, UP printed models; Photo: Paul Hillier]."

The Concrete Drawing draws out the material and non-material dynamics shaping its surface, a process entailing several iterations of digital drawing and prototyping. Concrete Drawing has been designed in analogue and digital media, and is cast in concrete in forty panels using moulds routed from a CNC (computer numerical control) machine. The completed wall surface has been extensively recorded through photography and digital 3D scanning, which returns the built object to the realm of representation so that its built presence can be fed back into the design process. The project is intended to be a concrete record of engagement: an interplay between small-scale objects, the weightless plasticity of digital drawing and the implacable presence of the built.

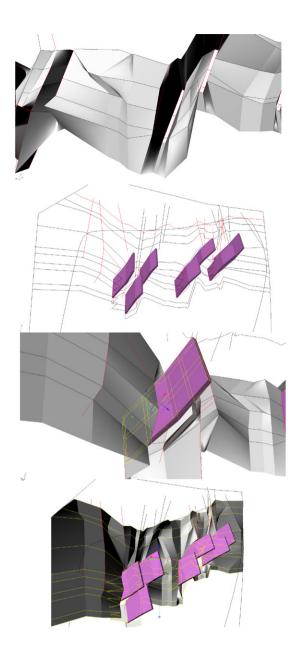
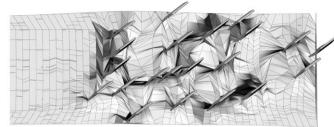


Fig. 5
Simon Twose (2014). Concrete Drawing [Development of wall surface in Rhinoceros; images, Simon Twose, Declan Burn]."

Concrete Drawing picks up on many contemporary threads. It locates itself within the context of a great deal of work in the humanities which looks at the intricate mix of human and material agency - something specifically theorised by such thinkers as Karan Barad (2007) and Bill Brown (2004). In much of this thinking, objects are argued to be aesthetic/affective agents in their own right, things at once alluring and incomprehensible, orientating and withdrawn. Concrete Drawing draws on these theoretical speculations, but it is not a project intending to be illustrative of them or deriving conceptually authority from them. It is a built experiment that explores ideas through spatial and material means, and, as such, the results are bound in to the object, in part as an un-recordable atmosphere of strangeness.







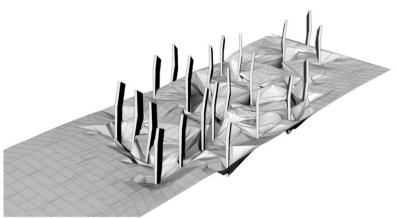


Fig. 6
Simon Twose (2015). Concrete Drawing [Helicon Images with shifting focal points, animation stills, Drawing Is/Not Building, Adam Art Gallery Te Pātaka Toi, Victoria University of Wellington; images: Paul Hillier]."

Concrete Drawing further draws on a great deal of work from the early nineties, when drawing was understood as both a critical activity and coded in parallel with language. The early work of Peter Eisenman has clear resonances both visually - in the fractured forms of some of his early work like the Rebstock Park Masterplan for instance (Carpo 2014: 260) - and in terms of the procedural methodology where drawing was a primary tool for intellectual speculation. However, Concrete Drawing departs from the work of early Eisenman, for rather than pursuing understandings solely framed in representational, linguistic terms, it attempts to discover other contingent and non-representational understandings given through the immediacy of humans and thing, but also drawings and buildings.

Lastly, Concrete Drawing arises via an iterative design process that puts material engagement centre stage to better distil potentialities in drawing, object and, by extension, the city. It is a speculative work and as such problematises as much as concludes, but the results are thus: the various design entanglements between objects, materials, scales and subjects parallel those of built things, and point to new designs for the city, where urban objects are aesthetic agents in drawing and, as such, authors in the potentiality of their forming.

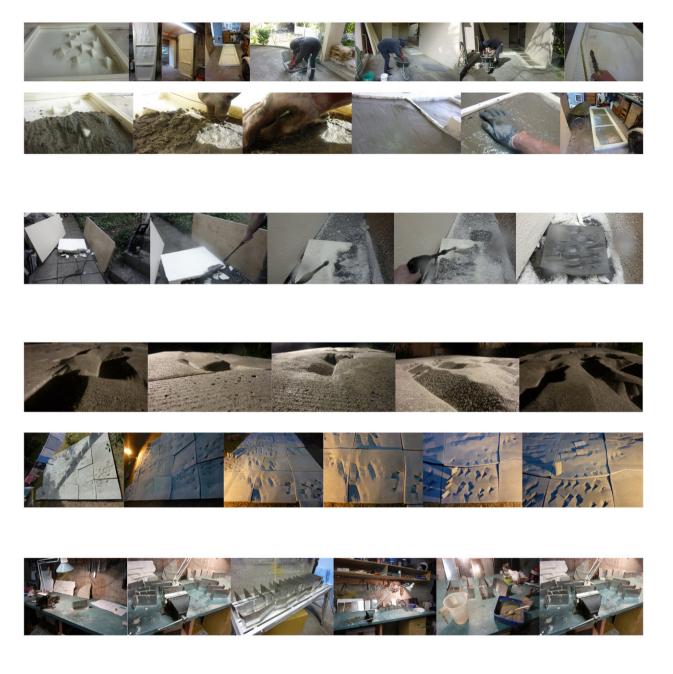




Fig. 7 Simon Twose (2014). Concrete Drawing [Development of wall surface in Grasshopper; images, Simon Twose, Declan Burn].



Fig. 8Simon Twose (2015). Concrete Drawing [Patterns, forms, scale shifts in the making of Concrete Drawing, XPS, concrete, water, stainless steel, wax, plaster; photos, Simon Twose].



Fig. 9
Simon Twose (2015). Concrete Drawing [Installation view in the Lower Chartwell Gallery in the exhibition Drawing Is/Not Building, Adam Art Gallery Te Pātaka Toi, Victoria University of Wellington; photo: Shaun Waugh].



Fig. 10
Simon Twose (2015). Concrete Drawing [Detail view of installation, Drawing Is/Not Building, Adam Art Gallery Te Pātaka Toi, Victoria University of Wellington; photo: Shaun Waugh].



Simon Twose (2015). Concrete Drawing [Detail view of installation, Drawing Is/ Not Building, Adam Art Gallery Te Pātaka Toi, Victoria University of Wellington; photo: Shaun Waugh].



Fig. 12 Simon Twose (2015). Concrete Drawing [Detail view of installation, Drawing Is/ Not Building, Adam Art Gallery Te Pātaka Toi, Victoria University of Wellington; photo: Shaun Waugh].





Fig. 13
Simon Twose (2015). Concrete Drawing [Detail view of small scale concrete walls and surface, Drawing Is/Not Building, Adam Art Gallery Te Pātaka Toi, Victoria University of Wellington; photo: Paul Hillier].



Fig. 14
Simon Twose (2015). Concrete Drawing [viewer engaging with installation, video still, Drawing Is/Not Building, Adam Art Gallery Te Pātaka Toi, Victoria University of Wellington; photo: Tom Ryan].

References

Ahmed, S. (2006). Queer phenomenology: Orientations, objects, others. Durham, NC & London, England: Duke University Press.

Barad, K. (2007). Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Durham, NC & London, England: Duke University Press.

Brown, B. (2004). Thing theory. (pp. 1-22). In B.Brown (Ed.), Things. Chicago, Ill & London, England: The University of Chicago Press.

Carpo, M. (Ed.). (2012). The digital turn in architecture 1992-2012: AD reader. Chichester, England: Wiley.

Davidson, C. (Ed.). (2006). Tracing Eisenman: Complete works. London, England: Thames and Hudson.

Eisenman, P. (2004). Eisenman inside out. Selected writings 1963-1988, London: Thames and Hudson.

Harman G. Aesthetics as first philosophy: Levinas and the non-human, Naked punch (2007), 9, (Retrieved October 2, 2015 from) www.nakedpunch.com/articles/147.

Hayles, N. K. (2014). Speculative aesthetics and object orientated inquiry. Speculations: A journal of speculative realism, 158-179.

Nancy, J-L. (2013). The pleasure in drawing (P. Armstrong, Trans.). New York, NY: Fordham University Press.