

Despite numerous developments in technological manufacture and computational design that provide new grounds for art and architecture, the act of drawing still plays a central role as a vehicle for speculation. There is a rich and long history of drawing that is tied to innovations in technology as well as revolutions in our philosophical understanding of the world. In reflection of a society now underpinned by computational networks and interfaces allowing hitherto unprecedented views of the world, the changing status of the drawing and representation as a political act demands a platform for reflection and innovation.

Drawing Futures is a compendium of the many approaches and directions in which drawing practice and research is heading. Featuring 60 projects from architects and artists to computer engineers and educators, the book opens up the discussion of how drawing may expand synchronously together with technological and computational developments. Produced alongside an international conference held at the Bartlett School of Architecture, UCL, Drawing Futures serves as a marker of what drawing currently is, but also as a signal of drawings yet to come.

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Drawing Futures

Laura Allen & Luke Caspar Pearson

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Drawing Futures

Speculations in contemporary drawing for art and architecture

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Future Fantasticals

Drawing has always been a tool to speculate on the future. It forms a surface for enacting the desires of society and proposing new ways in which architecture can facilitate them. From the seminal speculations of Archigram to Paul Rudolph's hulking megastructures in pen and Hugh Ferriss' crystalline 'Metropolis of Tomorrow', the twentieth century took drawing towards a multitude of possible futures. Most of these futures will never come to pass, but the potent power of speculative drawing continues on. If science fiction is always using the future to say something about the present, then speculative and fantastical drawings speak of our contemporary concerns. It could be the utopian desire to build the world again from scratch, or simply the making of a critical argument about today via the imagery of tomorrow – but either way, fantasising through drawing remains an evocative and seductive act.

In the following chapter, we will see work that speculates on the future of drawing as much as the future of worlds. *Future Fantasticals* takes us on a journey from Neil Spiller's singular world manifested in drawing through to the work of science fiction legend and *Blade Runner* concept artist Syd Mead. As we zoom towards the horizon, we will encounter strange machines for drawing, buildings that combine with biological creatures and cities that revel in their unrestrained scale. Within each of these projects, there is a sense of contingency, of a future that might never come into being except through the act of drawing it. Yet in each case, there is the sense that drawing as a speculative tool, with its human subjectivities and missteps, still has the power to pull us into its realm and let us dream of things to come.

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Drawing as Communicating Vessels: An Apologia (or Not)

Neil Spiller

"Let us watch him with reverence as he sets side by side the burning gems, and smooths with soft sculpture and jasper pillars, that are to reflect a ceaseless sunshine, and rise into a cloudless sky; but not with less reverence let us stand by him, when with rough strength and hurried stoke, he smites an uncouth animation out of the rocks which he has torn from among the moss of the moorlands, and heaves into the darkened air the pile of iron buttresses and rugged wall, instinct with a work of imagination as wild and wayward as the Northern Sea; creations of ungainly shape and rigid limb, but full of wolfish life, fierce as the winds that beat and changeful as the clouds that shape them."

John Ruskin, 'The Nature of Gothic', *The Stones of Venice*

For me, the 1980s were a perfect storm of architectural education and creative inspiration. During this time, I was taught the conceptual, tasteful modernism of the Cambridge School but was really inspired by Archigram and Cedric Price; his era also coincided with the halcyon days of high-tech, architectural postmodernism, Alsopian and NATO splurge and deconstruction – a heady, eclectic mix of styles and ideas. I was also reading a lot about Victorian neo-gothic architects – Billy Burges, Goodhart-Rendel's rogues and Pugin also loomed large in my fevered imagination.

Also at the same time, while still a student, I had read an article by Charles Jencks that looked at ancient and contemporary column orders as microcosms of architectural epistemology, and asked: what might new contemporary orders look like? I picked up this idea in my diploma project and designed the *Dorian Gray Column* – a column for the foyer of an architectural school to be 'dressed' by generations of students, creating a barometer of architectural fashion and preoccupations.

Towards the end of the 1980s, a college friend and I set up a fledgling architectural practice; we were full of young men's bravado, energy and iconoclasm. The new practice's goal was to invent a new architecture, element by element. We developed a way to work as a team, yet independently – neither of us wanted to lose what we believed to be our innate talent by fully collaborating with the other. We divided up drawings and worked in a surrealist exquisite corpse sort of way. This method of working we called 'schizophrenic architecture' and it produced 'interstitial drawings' (between art and architecture). Railings, columns, monuments, tombs, lights, a gallery, exhibition designs, stage sets and even master plans for Milwaukee and Genoa followed.

As the 1980s drew to a close, and with a number of projects under our belts, we went into self-publishing

(making architectural books continues to be a preoccupation for me). We managed to convince Cedric Price to write a preface. The booklet was entitled *Burning Whiteness, Plump Black Lines* (1990). Cedric was very flattering in his writing and tried to explain to us that we didn't need to use all our architectural fruit in every architectural cake we baked. Like 1980s heavy metal guitarists, we liked a good 'noodle' up and down the fretboard. But Cedric was talking about architectural blues – slower, more emotional, with space between the architectural notes: "There is no lack of richness but the resultant 'cake' may contain too much fruit. Accepted disciplines of cost and timing are not ignored but too often add to the mix rather than refine it. This is not so much a criticism as a suggestion that future works need not use the whole palette all the time. The avowed 'Search for Architectural Language' could well be a task left to the grateful receivers of this intelligent, delightful practice. I for one will be watching".

The early 1990s were marred by economic recession, but *Burning Whiteness...* brought us some notice and regard. In particular, it brought us to the attention of Peter Cook, who was just assembling a teaching team to rejuvenate The Bartlett School of Architecture. After a few years, my practice disintegrated and I was on my own again; but thrown into the creative turmoil that was The Bartlett, my drawn work changed – it embraced colours and evolving technologies, such as cyberspace and nanotechnology, and it became more informed by surrealism and science fiction writing. I also started to write about spatial ideas and technology. This writing became my book *Digital Dreams – Architecture and the Alchemic Technologies*, written between 1993–95 and published in 1998. I was already teaching about the architectural ramifications of new technologies on architectural design at The Bartlett in my diploma unit.

Digital Dreams featured projects that included *The Alchemist's Church* and the first panel of the *Genesis to Genocide* triptych. This triptych was a harbinger of another phase in my architectural trajectory – a return to a series of black and white Rotring pen drawings exploring protein geometries, DNA ribbon models, surrealism, Bosch and the impact of technologies on human bodies.

In 1992, *AD* invited us to exhibit in the *Theory and Experimentation* exhibitions. This was the first time my work was shown alongside some of my idols – including Lebbeus Woods, Peter Cook and Himmelblau – which was a great thrill. After this exhibition, I remained in close contact with *AD* and was asked in 1994 to guest-edit an edition with Martin Pearce, *Architects in Cyberspace*. This was the first international established journal to

explore these issues. A series of guest-editorships of *AD* have followed. In 1998, I was asked to collate a monograph on my work to date – *Maverick Deviations*. This was again another cathartic moment in my career, and a celebration of my greatest hits to date.

After *Maverick Deviations* was finished, it heralded the beginning of a new project, one I'm still pursuing: *Communicating Vessels*. I have always admired architectural theoretical projects that were long-term, open-ended and speculative, such as Mike Webb's *Temple Island*, Ben Nicholson's *Appliance* and *Loaf Houses* and Daniel Libeskind's *Micromegas*, *Chamber Works* and *Theatrum Mundi* – projects not borne out of the financial expediency of traditional practice but full of the prima materia of architecture. *Communicating Vessels* was to be my contribution to this canon; it began in 1998 and runs to this day. Everything I have drawn and designed in the last twenty years is part of this project; it now consists of around a thousand drawings and thousands of words of text.

Communicating Vessels is a rumination on the impact of twenty-first-century technology on architectural space and materiality. It is also a personal memory theatre, a surreal contemplation on the house/garden dialectic in the contemporary world and a meditation on reflexive space and augmented reality. The project re-examines traditional paradigms and elements of design such as the house, gazebo, garden shed, walled garden, birdbath, entrance gates, riverside seats, love seats, vistas, sculptures, fountains, topiary and outside grown rooms, among many other objects and spaces. It redesigns them, electronically connects them, explores their virtual and actual materiality and their cultural and mnemonic importance, and reassesses them in the wake of the impact of advanced technology and the surreal protocols of contemporary architectural design in the twenty-first century. The project was initially conceived as a set of objects set in a psychogeographic landscape that resonated with my youth – a very small island in the River Stour, two and a half miles outside Canterbury in Kent, near where I was brought up. So it is an island of memories, of hot sunshine bicycle rides, burgeoning sexuality, secret underage beers and illicit 1970s liaisons. The site exists simultaneously both geographically and in my memory.

As I have written: "*The Island of Vessels (Communicating Vessels)* is a huge chunking engine, a communicating field, full of witchery and sexuality. Its neurotic things are 'pataphysically enabled and surrealistically primed. The island's geography is cyborgian and always teetering on the edge of chaos. Its groves and glades are haunted by ghosts, some impish like Alfred Jarry, some nude on staircases, some with Dali-esque moustaches and some muttering about defecating toads. On the island lives a Professor – a madman, an idiot savant or a genius – perhaps all three. The Professor is attempting to work out the shock of the new, its architectures and its desiring poetics. The Professor likes his things – they tell

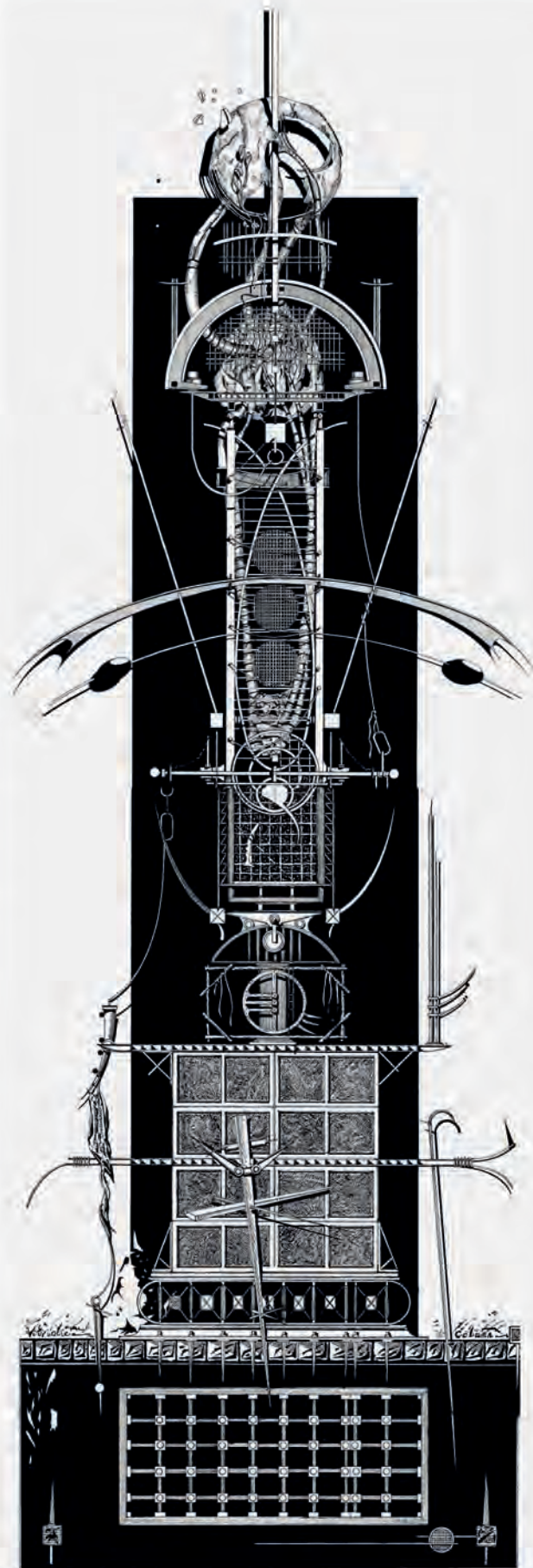


Fig. 1: Spiller Farmer Architects, *Vitriolic Column*, 1986.

him where he's been and where he is. He dwells in this world and builds in it everyday, without fail. He works at the intersection of art, architecture and science. He uses desire as a welding torch and the pen as a scalpel. Like Duchamp's *Handler of Gravity*, he likes to surf on precarious and fleeting equilibriums".² initially, the first ideas for the project were about the simultaneity of forms in different fields and the embroidering of architectural space through various scales of technology. So the first phase of *Communicating Vessels* was in developing surreal reflexive systems that utilised the virtual, the nano and the chance dynamics, both within the site and further afield.

The assorted architectural tableaux are powered by mysterious grease, a nanotechnological substance, highly flammable, created within desiring machines. Desire is the other great motivational force on the island, alongside memory. This is the celebration of the marvellousness of desire fuelled the Surrealists' creative odyssey.

Another cathartic moment occurred late in 2012, when my friend Lebbeus Woods died. Lebbeus had championed my work since I first met him back in the early 1990s. I set about weaving my memories of Lebbeus into *Communicating Vessels*. This resulted in *The Walled Garden for Lebbeus* and coincided with a massive outpouring of work that galvanised the *Vessels* project further.

"Initially, there were only a couple of drawings of the Garden; over the past year, these have blossomed into a suite of twenty-five or more. I wanted the Garden to channel all manner of architectural ambiances and make

some familiar quotes, not only from my architectural lexicon, but also from Leb's, Aldo Rossi's *Moderna Cemetery* and OMA's *La Villette Competition* entry. October 30th was also the day Hurricane Sandy ripped through New York, where Leb lived (this is not to suggest that the two events on the same day were connected). As the year has progressed, a series of ideas has evolved in the work, mainly about the choreography of augmented reality and gravity gradients over time. I wanted the Garden to have another virtual side, a side that would augment the simple world of walled space, trees, conic forms and statues I had created. This I saw as a new area of architectural detailing, one barely explored by contemporary architects. I wanted the drawings to explore this juxtaposition of virtual and actual, of points of view, ghosts, light and black."³ The garden is presided over by a statue of Electra, the back of whose head is hollow. It is through this hollow, if one's head is placed within it, that one can see and hear a storm rising and abating, formed of augmented reality vectors.

The Garden has a frustum within it, consisting of an upper and lower chamber. The upper chamber is an homage to Piranesi's *Plate IX of the Carceri* and Bocklin's *Island of Death*. The lower chamber is reflexively linked to moving figures in the upper chamber that dodge the storms, real and augmented, as they pass over the open top of the frustum. This movement above activates grease below and it starts to create a surreal tableau of *Leda and the Swan* – another myth beloved by the Surrealists.

By 2015, it was clear that it was time to start to design the major piece of the constellation, the Professor's house,

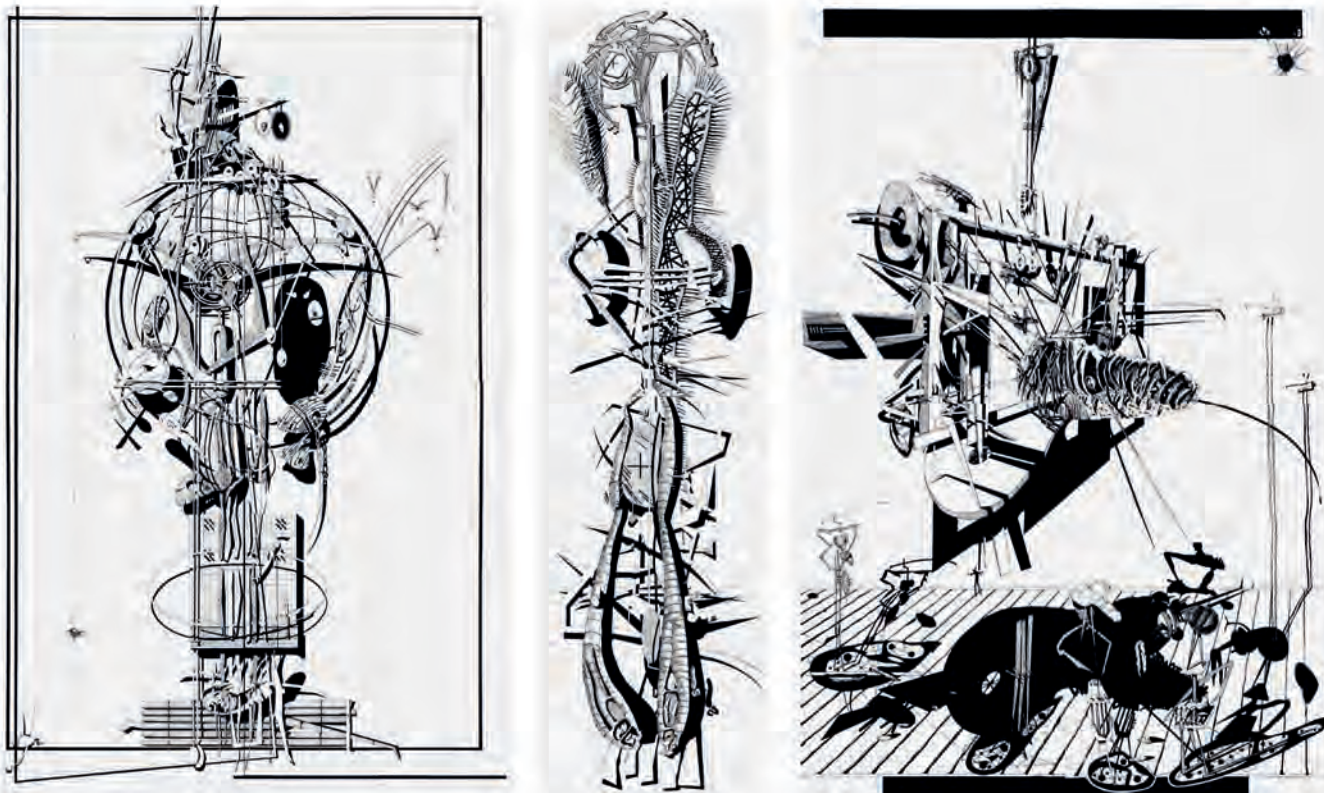


Fig. 2: Neil Spiller, *Genesis to Genocide*, 1995.

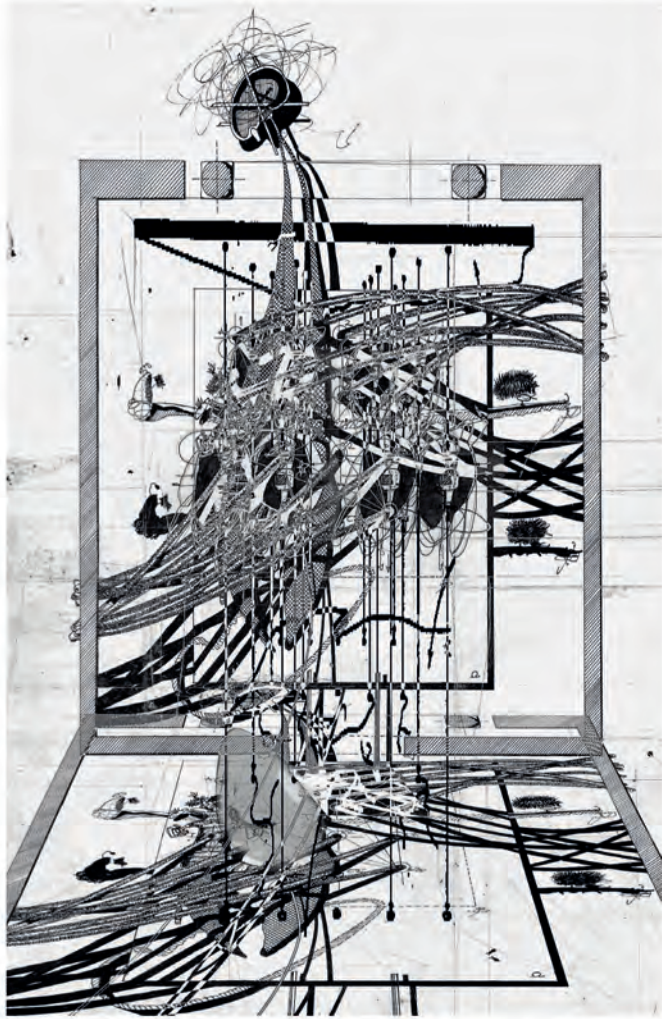


Fig. 3: Neil Spiller, *Communicating Vessels, Genetic Gazebo*, 2005.



Fig. 4: Neil Spiller, *Communicating Vessels, Genetic Gazebo*, 2005.

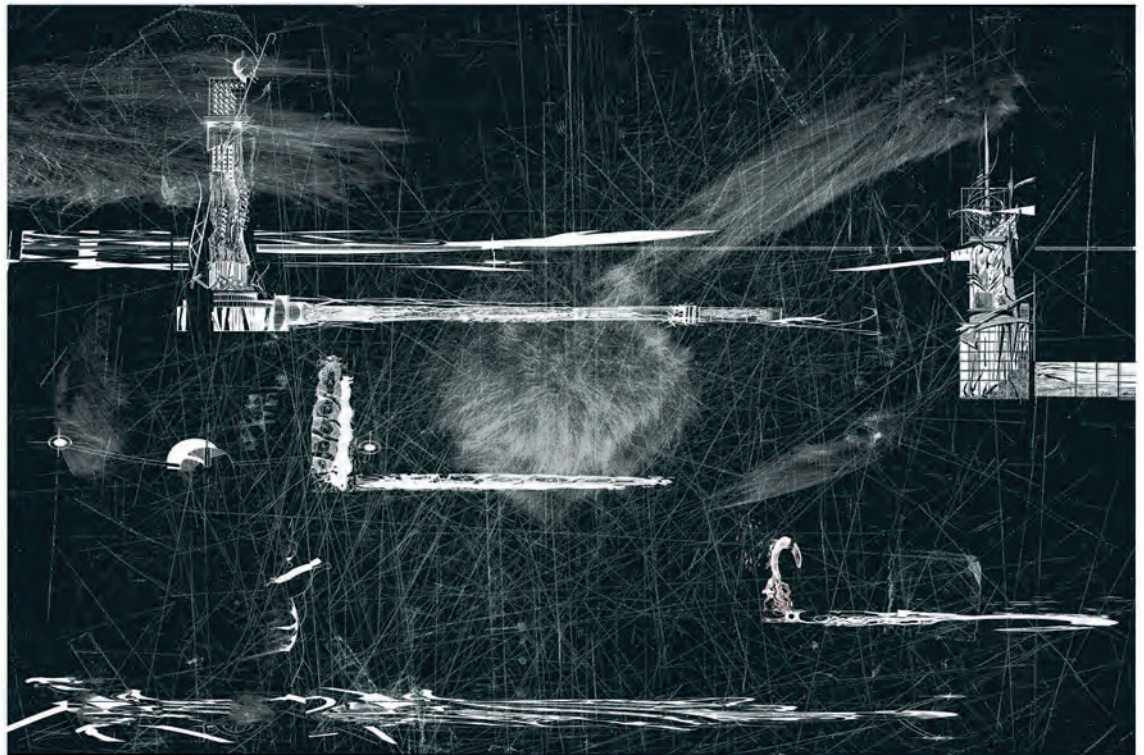


Fig. 5: Neil Spiller, *Communicating Vessels, The Walled Garden for Lebbeus – Ballard of Crafty Jack*, 2013.

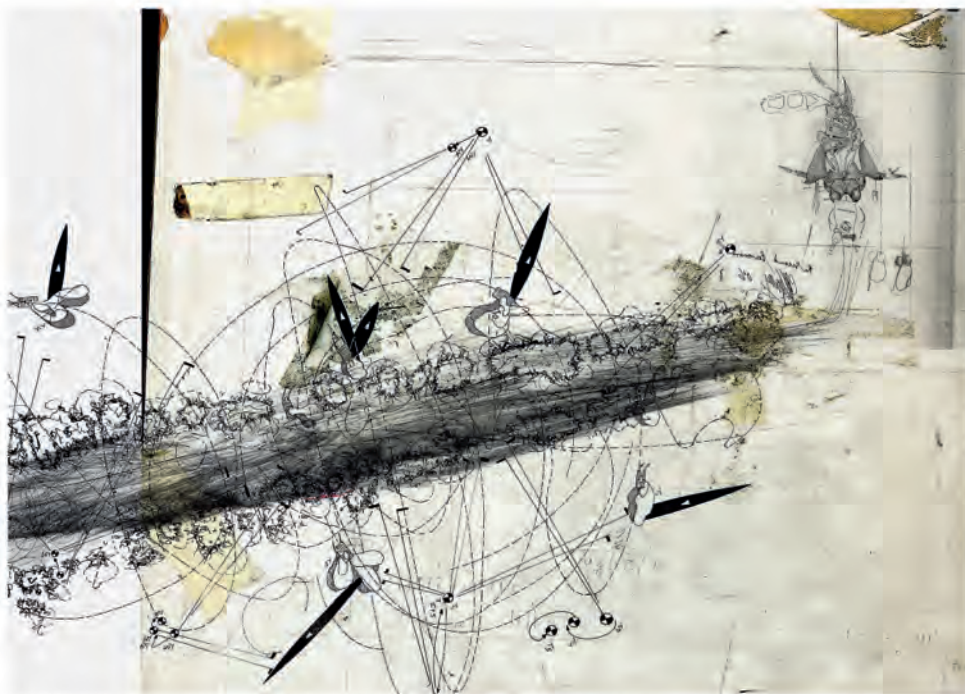


Fig. 6: Neil Spiller, *Communicating Vessels, Baronesses Filaments*, 2008.

which had by then become called the *Longhouse*. It is a *prytaneion*, a place of surreal banquets inhabited by ghosts, dreams, desires and mythic creatures; a memory palace of shifting relationships, momentary flutterings, cartographies and trajectories, where objects have the same accountability as people. It is a place of flame, of heat, of a rotten sun, of dusk and dawn, where the vertical is assimilated into the horizontal and where modernism breaks down. The *Longhouse* is a highly reflexive and responsive series of spaces and relationships. The house choreographs itself and develops this daily choreography by reading its site; this site is a virtual changeling site.

The traditional lexicon of tactics that architects use to place their works in the context of specific sites – how they respond to the *genius loci* – has been radically augmented by myriad new, virtual and reflexive technologies. Changes are upon us; the vista has changed, is changing and constantly changes. Cyborgian geomorphology is a movable feast and here to stay. Permanent architectural context, material sympathies and synthesis, massing, phenomenological and anthropocentric sensitivities are now imbued with the accelerating timescales of virtual and chemical metamorphosis, combined with the virtual choreography of chance. Both positions of, and the nature of, objects and architectures are conditioned by mixed ontologies, scopic regimes, numinous presences and reversible time. This reversible time stalks objects and disturbs their gentle entropy and peaceful rest. The vitality of architecture has increased a thousand-fold. To the twenty-first-century agile architect, these disruptive technologies breathe new life into the language of architecture. The verbs of architecture are being recast.

Time-based sensitivities are mixed in the cauldron of the virtual world, seen by augmented eyes enhanced by dimensions of chronological slippage, coalescing

in a digital dance above and beyond the pragmatics of actuality. This is a house of augmented reality, nano-enabled ghosts and mythic chimeras whose movements are cross-programmed with the house's sites, both real and imagined.

The house interiors are yet to be fully designed; this is my next task.

What drives some architects to make drawings/models of architectures that are clientless and therefore unbuilt or currently unbuildable? Firstly, the commercial world of architecture is a world of value engineering, of committee consent and limited material palettes – a world that is highly legislated and therefore often normative and often, arguably, having lost its lifeblood, ARCHITECTURE. What is architecture, and can it be held within a drawing/model as well as a building? Architecture is the 'mother of all arts'. It is a synthesis of poetry, fine art, sculpture; it flows over time like music and its spaces have establishing vignettes, oscillate across the scales (from macro to micro) – and have a *dénouement*, as in film or prose. One could go on. Above all, architecture is the manipulation of space, in all its manifestations. Space can be both imagined and graphically represented.

Indeed, as our world sails headlong into culturally, demographically, ecologically and technologically uncharted waters, we badly need our ability to speculate about the future of our discipline and its centrality to society. This is not utopian, and it is not something that the prevailing capitalist mentality often encourages. This is shortsighted and could potentially cost us our whole discipline.

Fig. 7 (opposite): Neil Spiller, *Longhouse Hecate both within and without*, 2015.



A good architectural drawing is about, on one level, what one leaves out. A very good architect over the years develops a series of personal protocols and idiosyncrasies that have connected histories and evolutionary metamorphosis from one drawing to the next. This is also true for buildings as much as it is for drawings.

Our era will hopefully be seen as being responsible for the blossoming of the virtual word and the beginning of a sustainable world. We are here, now, to find and achieve positive outcomes – and to this achieve this, we need to speculate to accumulate.

This is what I have done and will do. Simultaneously, my day job is making students see the same but different opportunities in this bizarre but beautiful world. All my work is connected in the massive Communicating Vessel of my mind. It's a life's work and I make no apologies for it! It's what architects should, but seldom, do!

- ¹ Spiller Farmer Architects, *Burning Whiteness, Plump Black Lines – A Search for Architectural Language* (London: Spiller Farmer Publications, 1990).
- ² Neil Spiller, "The Poetics of the Island of Vessels in Drawing Architecture", ed. Neil Spiller, *Architectural Design*, Sept–Oct 2013, 112–119.
- ³ Neil Spiller, "Detailing the Walled Garden for Lebbeus", in *Future Details of Architecture*, ed. Mark Garcia, *Architectural Design*, July–Aug 2014, 118–127.

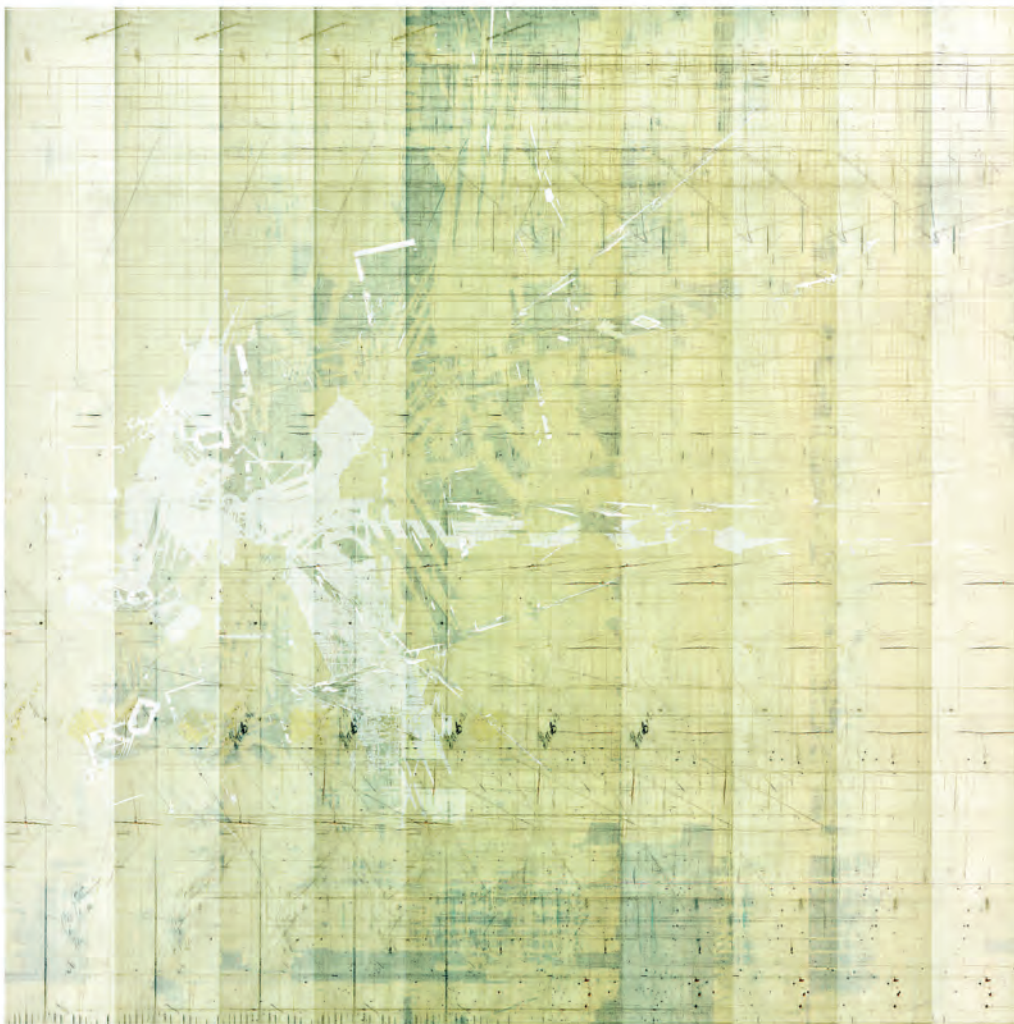


Fig. 8: Neil Spiller, *Longhouse Figured Ground Plan*, 2015.