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THE UNIVERSITY OF EDINBURGH
Edinburgh College of Art

EDINBURGH SCHOOL OF
ARCHITECTURE
& LANDSCAPE ARCHITECTURE



**FORMAT
MATTERS**

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FORMAT MATTERS

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The desire of this EAR issue “Format Matters” was to embrace and critique the agency of various formats in their impact on the transmission and reception of architectural ideas and concepts. The EAR journal itself, established in 1978 was a traditional print journal, the format of which had remained much the same since its inception. On discussing the call for papers and our aims for our time as editors, we considered the changed world of publication and the values attached to the everchanging mediums and technologies of communication. A concept that unites the editors and all researchers is how research is disseminated; but how often is the method and format of that chosen form of communication critiqued as having its own power to change, alter, and in some cases distort the original message?

Over the last few decades, architectural scholarship has become increasingly interested in the relevance and involvement of various media in the architectural discourse, history and design practice.¹ While matters of format are frequently incorporated into such investigations, shifting the focus decisively away from the medium to the matter of formats provides an alternative lens through which to examine the various ways architecture is produced. “*Format*,” to quote Jonathan Sterne, “denotes a whole range of decisions that affect the look, feel, experience, and workings of a medium. It also names a set of rules according to which a technology can operate.”²

In the world of bookmaking, from which the term ‘format’ originates, it addresses “the relationship between the physical structure of finished books and some of the printing-shop routines that led to this structure,” namely the size of the pages and the way the printing sheets were arranged, folded and bound.³ In everyday language, however, ‘format’ refers commonly “to the nature and order” of specific contents or information.⁴ We think of formatting and reformatting as an adjustment of information according to a set of standards or given parameters. We format our writing so that it fits a specific page format or to comply with the conventions of a specific profession, institution or referencing style. We change the format of electronic files to make their content more accessible, comparable or legible and

¹ See for example: André Tavares, *The Anatomy of the Architectural Book* (Zurich: Lars Müller Publishers, 2016); Andrew Higgott and Timothy Wray, eds., *Camera Constructs: Photography, Architecture and the Modern City* (Farnham: Ashgate, 2012); Claire Zimmerman, *Photographic Architecture in the Twentieth Century* (Minneapolis: University of Minnesota Press, 2014); Mario Carpo, *Architecture in the Age of Printing: Orality, Writing, Typography, and Printed Images in the History of Architectural Theory* (London: MIT Press, 2001); Kester Rattenbury, ed. *This Is Not Architecture: Media Constructions* (London: Routledge, 2002); Richard Koeck, *Cine-Scapes: Cinematic Spaces in Architecture and Cities* (New York: Routledge, 2013); Robin Wilson, *Image, Text, Architecture: The Utopics of the Architectural Media* (Burlington: Ashgate, 2015).

² Jonathan Sterne, *Mp3: The Meaning of a Format* (London: Duke University Press, 2012), 7.

³ Thomas Tanselle, “The Concept of Format,” *Studies in Bibliography* 53, no. 1 (2000): 67.

⁴ *Ibid.*

prepare a digital storage medium by formatting it. In fact, we constantly deal with and choose formats, yet, often without giving much thought to the process and subsequent implications.

It appears as though we only become more acutely aware of a format whenever established routines and standards for assembling, storing, distributing and working with information are called into question, for example through the emergence of new formats. While the invention of the MP3 format has reshaped the music world, how we conduct research in the humanities has changed fundamentally through the “migration of cultural materials into digital materials,” a process vitally contingent on the development and accessibility of new digital formats.⁵ This not only changed the ways in which knowledge would be stored and disseminated, it also brought about new modes and sites of knowledge formation.

We also become much more acutely aware of the significance of formats and their ability to “shape events in the creation of content by manipulating the dimensions of space and time” if the transformation of information from one format into another fails, or if specific formats render themselves incompatible with a particular program or changing environment – such as the world during the midst of the global Corona Virus pandemic.⁶ When we drafted the call, we could not have foreseen the very situation we are now facing while we are putting the final touches to the issue. With many of us confined to their homes and physically isolated, everyday life as well as work and leisure has changed fundamentally and for many of us, it continues to take place in new or at least unfamiliar formats.

Witnessing a profound alteration of our physical and virtual environment at a global and unprecedented scale, the issue of “format” takes on a new and very active meaning. In a world where we are physically isolated, this issue’s focus on the agency of format provides us with case studies and methodologies of interrogation which traverse the boundaries of disciplines, media, and the traditional virtual-physical duality. What unites all of the papers is their embracing of fluidity; fluidity of format, reception, representation, and importantly of meaning and understanding.

⁵ Anne Burdick et al., *Digital Humanities* (London: MIT Press, 2012), 6.

⁶ Timothy Pmeyer, “On Mediated Communication Theory: The Rise of Format,” *Annals of the International Communication Association* 11, no. 1 (1988): 224.

Based in this experience of perpetual change and extended into the present condition of hyper-complexity, **“Notating Not Knowing: The Oceanic Challenge to Format and Medium”** by Rachel Armstrong, Simone Ferracina, Rolf Hughes and Christos Kakalis interrogates the format of the traditional journal article in its four individual explorations of experimental architectural practices. The paper offers a series of prototypes for further experimentations on design realities within the dissolution of polarities such as formattable/unformattable, known/unknown, certain/uncertain, alive/inert, linear/non-linear. Using an oceanic approach to explore the fluid and liquid space between these binaries, experimental formats and mediums emerge in a condition of constant change. This traversing of the of the unknown provides us with examples of how uncertainty and discomfort is often what gives rise to creativity, providing methodologies for further experiments in this field.

George Themistokleous’s “Re-Format It: Techno-Logic” similarly explores the relationship and interconnectivity of architecture and new media, where various formats construct an ever-changing virtual architecture. The increasing ability to manipulate and distort these formats shifts the understanding of conventional architectural explorations. Through an analysis of a multi-media installation *diplorasis*, the division between the physical and the virtual is explored, as well as the linear notion of time. The resultant mediated image activates its agency in space-making, and by extension the interaction of the observer with architecture is altered. Our own understanding of our embodiment and navigation of the physical world through technology as an extension of the self, becomes especially significant in a world where we are reliant on digital technologies to maintain a sense of societal normality.

The desire to alter the relationship of the individual with physical space is further explored in **Jessica Bonehill’s** contribution **“Art on the Outside: The Contextualising of a Fluxus work in the Urban Environment,”** which discusses High Red Center’s *Street Cleaning Event* (1964). The radical move from stagnant modes of artistic representation to the continually moving canvas of the city in the 1960s created an urban intervention which embraced the fluidity of format. The format of *Street Cleaning Event*,

deliberately unstructured, allowed the city and the participants to direct and distort the trajectory of the work. The following representations and documentation of the event in text and photographs have determined, and in some instances, stagnated its reception. The fluidity and revolt of the 1960s is therefore confined to the modes of representation we have to record its activities. Bonehill's contribution invites us to appreciate the lessons of the past; analysing the period that followed the event itself allows us to consider the changing representations over time. Whilst a natural process, we are encouraged to actively reflect on the significance of the role of the researcher, and their choice of format, in forming and shaping reception.

Similarly, in **“Reformatting the Monograph: The Book Form as a Site of Plurality,” Deniz Balık Lökçe** interrogates the format of the conventional monograph by placing it in opposition to OMA's *Content* (2004) and BIG's *Yes is More* (2009) in their inclusion of mixed media, use of irony, and subversion of the conventional. Through a reconsideration of format, the monographs become critical sites of rethinking established canons and projecting temporary, momentary, and spontaneous visions. They render architecture visible in the public sphere as an analytical mechanism, a discursive manifesto, a research platform, and an experimental device. The multitude of roles a singular format can elicit is particularly poignant in a world where fluid technologies are all-pervasive. What OMA and BIG offer us, is the tools we can use to subvert the dominant narrative through the multiple potentialities of the conventional form.

Olga Ioannou's “Experimenting with the design studio format by devising encounters in multiple learning environments: a case study” returns the issue to the prescient question of how architectural teaching can be informed by changing formats. A consideration which takes on renewed relevance in the midst of a global pandemic. The exploration of the hybrid format of an urban design course where students and teachers move between the classroom, in situ workshops and online platforms provides us with a potential case study for a post-Covid world. The results of the exploration are offered as being mutually beneficial, developed at a time when the altered format was not a necessity, we can see the benefits of embracing new technologies and formats

to inform pedagogy and design thinking. The result is an architectural education which opens up new possibilities for positive change.

It is on this note of positivity that we would like to close the editorial. We find ourselves in unprecedented times, where modes and methods of communication are increasingly virtual and increasingly overwhelming. Yet these five papers show how through interrogating format and embracing the fluidity and uncertainty of new media and uncontrollable events, such as the interventions of multiple voices and inputs, can give rise to new and refreshing understandings of our relationship with space. Not just in questioning the way in which we communicate, or in the emergence of new design ideas and concepts which develop from the unknown, but in understanding our own agency in directing these trajectories through our choice of format, and as such altering our relationship with both the built and the virtual world.

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A R M S T R O N G ¹

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F E R R A C I N A ²

R O L F
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K A K A L I S ¹

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UNIVERSITY

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OF EDINBURGH

**Notating Not Knowing:
The Oceanic Challenge to Format and Medium**

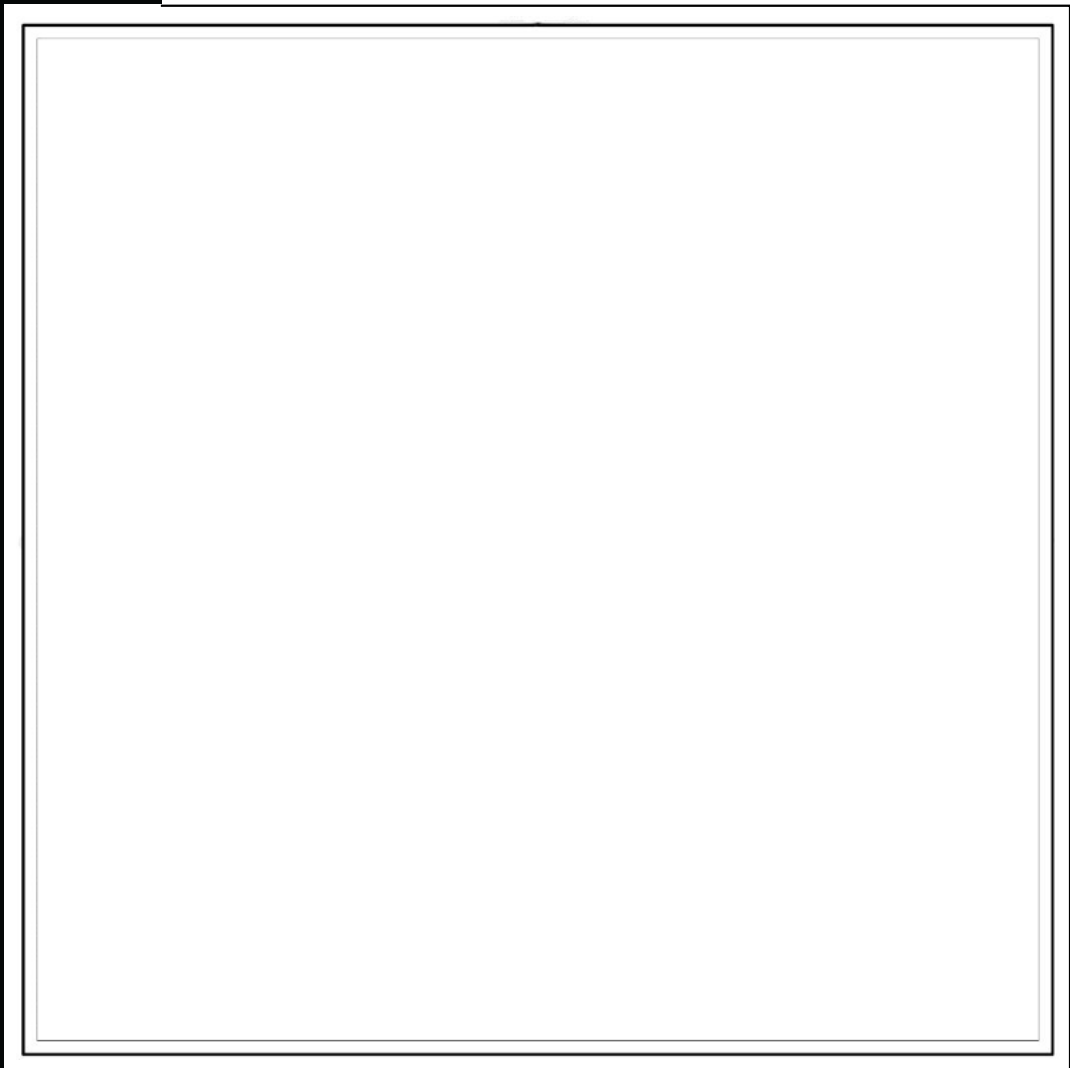




Figure 1:
*Strange
Notations:
From tabula rasa
to rasura tabulae,
Simone
Ferracina.*

Strange Notations: from tabula rasa to rasura tabulae **Simone Ferracina**

All media are active metaphors in their power
to translate experience into new forms

*Marshall McLuhan*¹

Formats enforce – and operate within – normative relational ecologies and precise functional orientations. Whereas ‘form’ can, in Aristotelian terms, be understood in isolation – as mere actualised matter – ‘format’ (from the Latin *formatus*, shaped) is, in the wider connotation used here, the result of an active chain of operations that *in-form* matter towards a specific set of relationships and contexts of use. In other words: whereas form designates individual substances, a *format* describes them in relation to one another. In this sense, standardisation consists in the selection and technical deployment of preferred – often more efficient or effective – communication channels between substances (objects and people). For example, the A4 sheet of paper is defined by the standard ISO/DIN proportions (aspect ratio of the square root of two) that afford it productive machinic interactions (the physical correspondence of printer tray and sheet of paper as the basic requisite for printing). Similarly, the shape and size of a styrofoam packing box follows that of the item it contains and insulates; a queen-sized bed affords the lying of two human bodies next to one another, as well as an ecology of mattresses, duvets, pillows and sheets; a chair is designed for sitting on; the external thread of a metal bolt matches the internal thread of a nut, etc. Formats across scales unlock relational affordances while simultaneously forcing objects into obligatory, often instrumental, interactions. Form(at) follows function, and the resulting monocultures reject, conceal and foreclose all manner of *other* – non-teleological, bottom-up, spontaneous, queer – encounter. This should not be taken as a naïve denial of the fact that such encounters occur or have value – that, as Reyner Banham beautifully points out, a chair is sometimes used as door stop, step ladder, work bench, stand, clothes hanger, and even as bongo drums; and indeed some objects may be designed to be more susceptible than others to unscripted uses – but it should remind us that the formatting intentions behind the material economy of chairs (manufacture, marketing, acquisition, disposal) inevitably hinge upon their primary function: being objects for sitting on.²

¹ Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge: MIT Press, 1994 [1964]), 57.

² See Reyner Banham, “Chairs as Art,” *New Society* (April 20, 1967). Quoted in Nigel Whiteley, *Reyner Banham: Historian of the Immediate Future* (London: MIT Press, 2002), 568.

Effectively, most violations to functional scripts (in the sense of the broken hammer famously described by Martin Heidegger, but also in a wider spectrum of valuing and de-valuing industrial and cultural practices and orthodoxies) and non-conformance to the interior laws of prescribed standards (Le Corbusier's Modulor versus André the Giant) result in rejection and eviction – in the production of waste. The devaluation of objects – their obsolescence – is not unlocked in a theatre of generic and universal worth, or in the playful context of secondary uses, but in response to deficiencies within a primary functional ecology, in the same way that the definition of dirt, for Mary Douglas, is always interwoven with (and co-produced by) a specific context.³ When the chair breaks and coffee is spilled on the sheet of paper, that is, or when the electrical cable no longer fits into the jack, they are discarded regardless of the secondary uses that might have been previously supported or tolerated, which either no longer apply or fail to claim sufficient relevance. In this sense, the functional value of an object is not necessarily determined by its intrinsic qualities (rigidity, porosity, weight, texture, etc.) but by external factors; by its equipmental fitness (in the Heideggerian sense of belonging to an ecology of interconnected tools) and degree of co-adherence. While formatting/design enables objects to productively talk to one another (to form alliances), it also installs the principles whereby they will be muted, and become obsolete. The single-use polyethylene bottle is a case in point: once it exhausts the capacity to transport mineral water from the factory to the consumer, and can no longer retrieve a 'proper' (formatted, designed) working sequence, it loses all value – regardless of whether it has undergone any actual physical change.

Media, in the McLuhanian sense of the term, promote a looser and more plastic set of possibilities, beyond the design and naming of perfectly fitting and predictable machine cogs. Rather than referring to a mere communication channel or technological extension of human faculties, the term 'medium' denotes a space for non-scripted action, an unleashing of potentialities that is as spatially situated/constrained as it is open-ended. The light bulb, for instance, creates the environment in which a wide range of actions and interactions become possible, conquering the darkness of night.⁴ And while a medium always depends on localised – implicit or explicit, simple or

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³ See Mary Douglas, *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo* (New York: Pantheon, 1966).

⁴ See McLuhan, *Understanding Media: The Extensions of Man*.

complex, designed or emergent – infrastructures, it also invites liquid encounters: the development and unfolding of unexpected and transitory *teloi*. Guided by McLuhan’s celebrated formula ‘the medium is the message,’ we might ascribe the difference between formats and media to the presence or lack of associated messages, or to their degree of readability. And while the two terms can be imbricating and even coextensive (is a light bulb, or a sheet of paper, not both?), the former potentialises by exclusion and the latter by inclusion/annexation. This different approach reflects two possible interpretations of *tabula rasa* as a figure of potentiality.

Giorgio Agamben traces the philosophical origin of *tabula rasa* back to Aristotle’s *De Anima*, in which the intellect (*nous*) is likened to a writing tablet (*grammateion*) “on which nothing is actually written.”⁵ The passage into actuality (*energeia*) of potentiality (*dynamis*) is represented by the act of writing, by engraving text (content, form) on the blank (contentless, formless) surface of the *grammateion*. Yet how can a rigid implement such as a tablet represent, even metaphorically, the indeterminacy of potential thought? Agamben seemingly condones this apparent contradiction:

The difficulty that Aristotle seeks to avoid through the image of the writing tablet is that of the pure potentiality of thought and how it is possible to conceive of its passage to actuality. For, if thought in itself had a determinate form, if it were always already something (as a writing tablet is a thing), it would necessarily appear in the intelligible object and thus hinder intellection.⁶

In other words, Aristotle employs the image of a “determinate form” (a format: the tablet) to illustrate an undetermined being (a medium: the intellect) that is, by definition, formless. Both the *tabula rasa* and the *tabula scripta* are however already actual, and exist as things. Agamben excuses this disjunction because the philosopher “takes care” to clarify that mind “has no other nature than that of being potential, and before thinking it is absolutely nothing.”⁷ After all, the tablet-thing is for Aristotle merely a vehicle for blankness. It is the nakedness of the tablet, the fact that nothing is written on it, that allows it to mirror the nothingness of mind. However, precisely in the fracture that seems

⁵ Giorgio Agamben and Daniel Heller-Roazen, *Potentialities: Collected Essays in Philosophy* (Stanford, California: Stanford University Press, 1999), 244.

⁶ *Ibid.*, 245.

⁷ Aristotle, “De Anima,” in *Aristotle in Twenty-Three Volumes* (Cambridge, Mass: Harvard University Press, 1986). Quoted in Agamben and Heller-Roazen, *Potentialities: Collected Essays in Philosophy*, 245.

to expose the incompatibility of potentiality (nothing) with actualised form (something), we might find a key to undermine the trope of “creation from scratch” and to redefine and repurpose *tabula rasa*. Our starting point is an observation by Alexander of Aphrodisias, who suggested that Aristotle should have spoken of *epitedeiotos*, the thin layer of wax covering a writing tablet, rather than of *grammateion*, the tablet itself.⁸ This apparently modest shift in focus, from *tabula rasa* to *rasura tabulae*, resolves the contradiction by replacing the rigidity of the wood with the suppleness of the wax, which, like mind, is malleable and can’t therefore be fixed into definitive, stable forms. But more importantly, it substitutes the blankness of the tablet with the plasticity of the writing surface, a formatted lack of content with a medium. It no longer matters whether the tablet is inscribed, whether the wax has been recently melted and smoothed clean or engraved with words. The wax is shapeless insofar as its shape can change: radical contingency, not blankness, is the medium of pure potentiality.

This shift from *tabula rasa* to *rasura tabulae* suggests that formats can be re-oriented towards previously unforeseen functions, *de facto* becoming media. The *Formwork* project, represented by the image at the beginning of this section, performs such transformations by using formatted discards like food packaging and e-waste as moulds for plaster and concrete casts. An ever-increasing architectural *abécédaire* emerges from this on-going practice, whereby plastic containers and disposable objects become manufacturing tools associated with a novel construction alphabet – a bottom-up notational system for spatial choreography and the recombination of parts. Yet this is not just upcycling in the narrow sense of a value increase or of a dodged devaluation that reboots (reformats) materials into new, albeit equally strict, functional roles. Rather, the resulting bricks, while carrying the indexical memory of previous equipmental ecologies, remain radically open to interpretation and subject to impromptu association, appropriation and manipulation.

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⁸ Agamben and Heller-Roazen, *Potentialities: Collected Essays in Philosophy*, 245.

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Notating Not Knowing: The Oceanic Challenge to Format and Medium



Figure 2:
Liquid Life,
Rachel
Armstrong.

Liquid Life

Rachel Armstrong⁹

Western design conventions view reality as a machine. The transition from raw matter to formatted materials – specifically in the embodiment of ideas – almost inevitably requires translation through the *bête machine*. Based on the ancient principles of atomism, this worldview proposes that fundamental objects comprise the whole of reality, and dissociates strange and super-natural events from the material real. The machine converts all ‘real’ encounters into the logic of mathematics enacted through ‘brute,’ de-animated bodies, which require external agencies to empower them. The machine metaphor applies across all scales and materials from cells to bodies, apparatuses, ecosystems and the cosmos. This worldview has been modernised and refined through industrial systems and their associated methods of making. Everything we make and describe in contemporary design practice is filtered – in one way or another – through the constructive logic of machines.

The success of the machine metaphor is that it embodies its own philosophy and therefore its structures refine and reinforce the concept of machine through its myriad expressions, enabling mechanical systems to address all kinds of contexts. The ease of demonstrating a mechanical worldview through experimental methods should not be underestimated, as it can be designed to perform useful work. While it has brought many advances in the modern understanding of the natural world – it does not perfectly speak for the extraordinary phenomenon of life, which is by nature in a state of constant transition that is sensitive to its contexts. If the capacity of formats to become media is to be unleashed, the machine metaphor must be de-centred from its stranglehold on reality.

Of course, since ancient times there have been other models for understanding the world ranging from the divine and mythological, to the flowing realms proposed by Heraclitus. Diderot argued against the mathematical mechanist conception of matter and Ludwig von Bertalanffy championed the application of ‘systems’ science and cybernetics.¹⁰ However, the weakness of these frameworks is that their arguments are not embodied but symbolised through

⁹ Notation by Simone Ferracina, movie footage from Bütschli experiments by Rachel Armstrong, 2017. These Bütschli notations by Simone Ferracina are produced by layering the events within an emerging system and begin to discuss the incalculable creativity of liquid life.

¹⁰ See Isabelle Stengers, “God’s Heart and the Stuff of Life,” *Pli* 9(2000): 86–118; Ludwig von Bertalanffy, *Modern Theories of Development: An Introduction to Theoretical Biology* (Oxford: Oxford University Press, 1933).

their associated apparatuses. The more concrete proposals, such as Bertalanffy's extended vocabulary for encounters and their operations through notions of information, control, feedback and communication, offer more complexity than classical machines. In practice, the founding ideas are constructed through modifications of inert-bodied machines, where action within the system is transduced back into its operations to maintain a steady state such as in Ross Ashby's 'homeostat,' which was imagined as an 'artificial brain.'¹¹ The emphasis on relationships between objects as the driver of change actually reinforces, rather than decenters, the fundamental atomism within mechanical systems. Without an ontological shift, cybernetics strengthens the idea that the difference between nonlife and life is merely a matter of structural and organisational complexity.

It is not. Machines and cells are very separate ontological agents. Life is probabilistic, while machines are deterministic systems. Life is observed within far from equilibrium systems while machines operate within a world at relative equilibrium. Life is deeply correlated with its surroundings while machines are not sensitive to their environmental contexts. Drawing on these differences, a counterpoint metaphor and model to the machine metaphor is used to develop an alternative discourse for life that is more than a theoretical proposal but operates through actual structures that were first described by Ilya Prigogine as 'dissipative systems,' which possess their own energy and agency.¹² The unique ability of dissipative systems to interact with their environment is not conferred by an external agency, but arises from their ontology being produced by 'charged' fields of matter/energy. These dynamic structures can be demonstrated using the chemical Bütschli system as a visualisation tool. This apparatus generates strikingly lifelike droplets that are capable of movement, sensitivity and population-scale behaviours, which arise out of the intersection of olive oil and concentrated alkali.¹³ They leave soapy trails and structures behind them, which can be read as a polysemic liquid language and interpreted, or 'scryed' by observers, as a range of recognisable events.

Moreover, changing the external environment of the field, for example by adding alcohol to the olive oil, can influence events. Altering the chemical composition of the liquid body can also produce

¹¹ British Library, "The Thinking Machine: W Ross Ashy and the Homeostat," accessed 7 June, 2017, <http://blogs.bl.uk/science/2016/04/the-thinking-machine.html>.

¹² Ilya Prigogine, *The End of Certainty: Time, Chaos and the New Laws of Nature* (New York: The Free Press, 1997), 3.

¹³ See Rachel Armstrong, *Vibrant Architecture: Matter as a Codesigner of Living Structures* (Berlin: Degruyter Open, 2015).

various precipitations – adding soluble salts like a blue copper II sulphate solution, for example, transforms it into deposits of greenish copper carbonate. The strange yet somewhat familiar images, symbols and behaviours that arise from the Bütschli system and its ‘loose’ modes of technical control, draw upon the combinatorial and contingent properties of matter at far from equilibrium states, which cannot be embodied by mechanical systems as they are not finite. The variations within the system may be understood as chemical computations.¹⁴ The Bütschli apparatus therefore offers a means of testing and producing materials and effects, which open up a space for new kinds of notation, and ultimately design processes, using liquid media that evade filtering through the *bête machine*’s logic – and provide access to the oceanic, a term that draws on the irreducibility, relative invisibility and hypercomplexity of the terrestrial seas comprising “an ideal spatial foundation... [that] is indisputably voluminous, stubbornly material, and unmistakably undergoing continual reformation.”¹⁵ Its ontology arises from the inherent creativity of agentised matter, and invites poetic readings to produce maps of events, rather than theories of concepts.¹⁶ In other words, the oceanic resists formatting knowledges and enclosures to continually invent, foster and become new media.

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¹⁴ Rachel Armstrong, *Soft Living Architecture: An Alternative View of Bio-Informed Practice* (London: Bloomsbury, 2018), 40.

¹⁵ Philip Steinberg and Kimberley Peters, “Wet Ontologies, Fluid Spaces: Giving Depth to Volume Through Oceanic Thinking,” *Environment & Planning D. Society & Space* 33 (2015), 40.

¹⁶ Matt Lee, *Oceanic Ontology and Problematic Thought*, (NOOK Book/ Barnes and Noble, 20 April 2016), <http://www.barnesandnoble.com/w/oceanic-ontology-and-problematic-thought-matt-lee/1105805765>.

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Notating Not Knowing: The Oceanic Challenge to Format and Medium



Figure 3:
Scoring-as-such.
Christos Kakalis.

Scoring-as-such **Christos Kakalis**

Mapping liquid realities suggests an embodied topography in which humans and natural/built environment are interrelated in an organic whole that keeps changing. Etymologically, “topography” combines the Greek word for place (*topos*) with the one for writing (*grafein*), relating experience to the notion of inscription, and is traditionally connected to “the accurate and detailed description or delineation of locality.”¹⁷ A phenomenological understanding of place challenges this static understanding of space, bringing to our attention its eventual qualities; place becomes the event of its interacting components. In such a non-representational understanding of topography the psychic and physiological, the natural and the artificial, the hidden and the unhidden are unified in the corporeal agency of the subject. In this context, exploring aurality, Gernot Böhme argues that “atmosphere ... is the reality of the perceived as the sphere of its presence and the reality of the perceiver, insofar as in sensing the atmosphere s/he is bodily present in a certain way.”¹⁸ Ambience is fluid and vague and its attuning dynamics emerge in the tension between the perceiver and the perceived. As the philosopher Tonino Griffero suggests:

One might wonder ... what the criteria of identity and identifiability of atmospheres are, ... whether they constitute a semantic or de dicto vagueness (the atmospheric description designates a given situation in a given way) or instead, as we like to think, a metaphysical or de re vagueness (the atmospheric description designates a vague entity in a precise way), analogous to that attributable to many other quasi-things, such as colours, shadows etc.¹⁹

Explored through the lens of aurality and atmosphere, mapping and notating opens to an oceanic experimentation of chance, indeterminacy, change and transformation. This tension is for geographer J. Wylie the most “accurate” definition of landscape: “Landscape isn’t either objective or subjective; it’s precisely an intertwining, a simultaneous gathering and unfurling, through which versions of self and world emerge.”²⁰ Challenging established conventions of formatting, mapping the spatio-temporal realities in which we are

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¹⁷ Edward S. Casey, *Representing Place: Landscape Painting and Maps* (London: University of Minnesota Press, 2002), 153.

¹⁸ Gernot Böhme, “Atmosphere as the Fundamental Concept of a New Aesthetics,” *Thesis Eleven* 36, no. 1 (1993): 113–26.

¹⁹ Tonino Griffero, *Atmospheres: Aesthetics of Emotional Spaces* (Surrey: Ashgate, 2014), 12.

²⁰ Peter Merriman et al., “Landscape, Mobility, Practice,” *Social & Cultural Geography* 9, no. 2 (2008): 203.

involved is therefore a matter of grasping moments of this organic embodied topography that are difficultly captured through established representational constructs that are informed by instrumentality and long-held historical conventions.

The analogy between musical notation and mapping is useful in questioning the latter as the liminal zone between format and medium. Difficult to transpose, reality calls for a non-linear understanding of atmospheric translations that reminds us of the musical scores. Minimalist composers such as Arvo Pärt and John Cage, sought to achieve this through compositional methods (*tintinnabulli* and charter techniques respectively) or experimental notation, have sought to performatively express ambient events. Relating human attunement to sonic atmospheres, Gernot Böhme suggests two different ways of listening.²¹ The first refers to the idea of “listening as such”, the second addresses our “listening to” an acoustic event coming from a specific source (and hence more related to its tectonic and mathematically abstracted realisation). In “listening as such,” the individual is invited to keep silent, opening up to the surroundings. The individual falls into “a listening which does not leap over ... sounds to the sources where they might stem from, listeners will sense ... sounds as modification of their own space of being. Human beings who listen in this way are dangerously open: they release themselves into the world and can therefore be struck by acoustic events.”²²

Following Böhme’s argument, a *scoring as such* challenges the rules of cartographic formatting and traditional methods of site analysis, allowing for liquid qualities to be expressed through iterational and open-ended representational schemes/models. As in the case of the indeterminate interrelation of 22 drawings in Cage’s *Fontana Mix* (1958), a *scoring as such* opens a field of ‘transparency’ in which different performers and listeners reinvent and remix a musical piece made up of the same sonic components. The paper, or the *drawing surface*, becomes the canvas upon which diverse pieces are scored according to chance operations. In this way, the map can become a kind of window. It allows its interpreter to unfocus his or her attention and read through the piece, equally accepting any datum, either intentionally expressed or unintentionally determined or experienced. This kind of

²¹ Gernot Böhme, “Acoustic Atmospheres. A Contribution to the Study of Ecological Aesthetics,” *Soundscape: The Journal of Acoustic Ecology* 1, no. 1 (2000): 18.

²² *Ibid.*

mapping follows an “aleatoric” format that, according to architectural theoretician Yeoryia Manolopoulou, is always open to change.²³ It is a matter of openness to others that allows an aleatoric transposition to produce something new that remains unpredictable in a liquid and organic realisation of space through the passage of time. In this sense, mapping can be seen as a form of questioning, a hermeneutical approach that never leads to a clear answer but keeps generating questions. This can be found, for example, in the urban strolling techniques of the Situationist International in the late 1950s, a time during which John Cage was also experimenting with notions of emptiness, active chance and indeterminacy. Mapping is therefore an expression of the juxtaposition between the absence of space and the fullness of place. Wylie famously argues:

I think space still speaks of emptiness, absence, interval. The stillness and silence of juxtaposition. Place by contrast, and even despite all the attempts to think it differently, relationally, globally, is always already too full, too full of itself and the others: a whole congregation; everybody present. But I think the landscape works precisely amidst and through both of them: presence/absence. Landscape sits precisely on this tipping-point, both joining and dividing. It tears things apart, and maybe even sometimes threads them together again.²⁴

This kind of mapping cannot be framed in conventional formats, but should start and end at the co-emergence of the voicing or expressing of its data, which keeps changing through time – an oceanic voicing of moments that are happening, or have just happened. In a similar way, the image at the beginning of this section depicts a drawing’s attempt to grasp a moment; an oceanic landscape of silence through a design methodology that is based on chance and stillness techniques informed by the aforementioned composers. The image is already “formatting” the topography in a visual way, failing, as a two-dimensional representation, to mediate its ever-changing liquidity, and rejecting all hints of representational accuracy.

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²³ Yeoryia Manolopoulou, *Architectures of Chance* (Surrey: Ashgate, 2013), 193–220.

²⁴ Merriman et al., “Landscape, Mobility, Practice,” 203.

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Notating Not Knowing: The Oceanic Challenge to Format and Medium

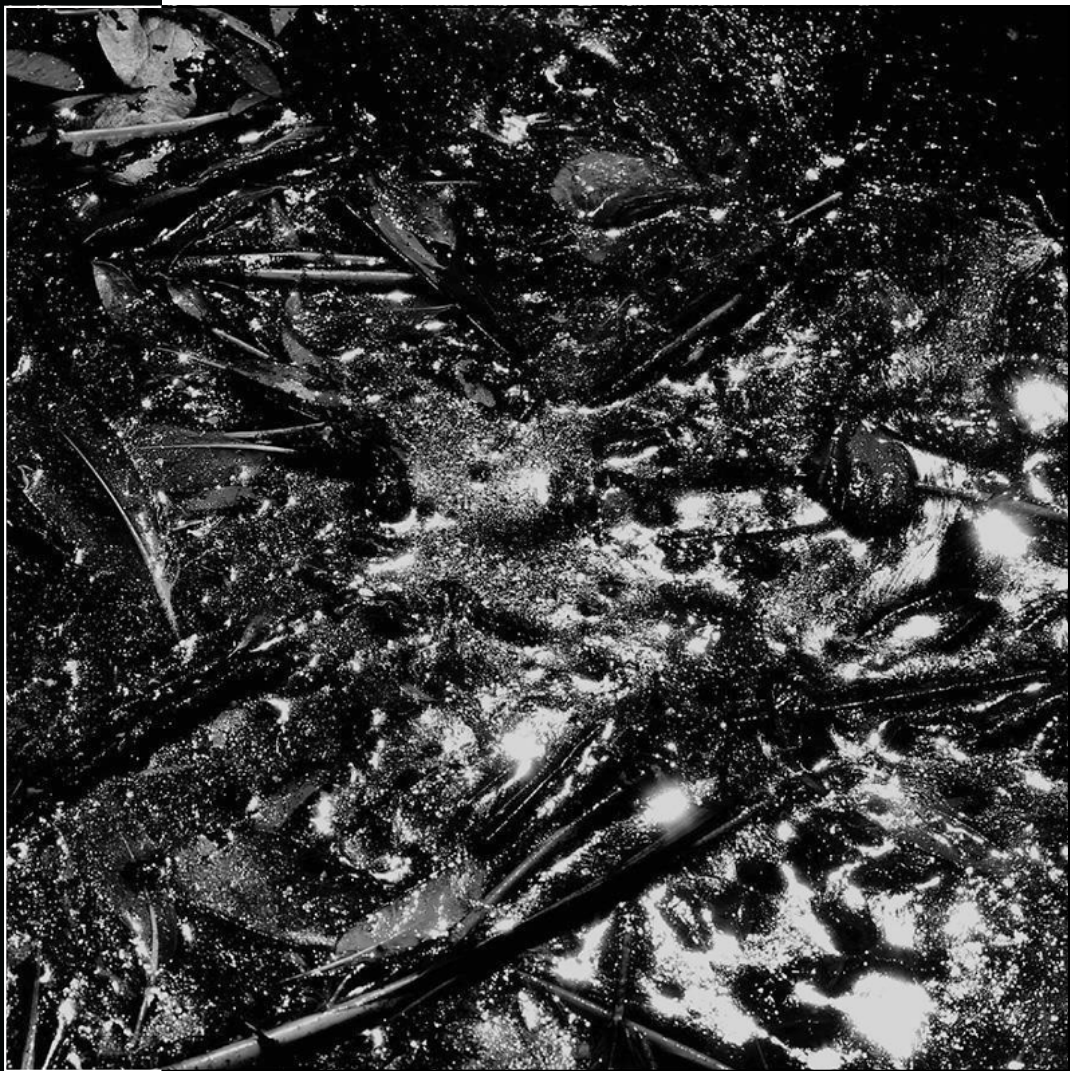


Figure 4:
Oceanic Practices.
Rolf Hughes.

Oceanic Practices **Rolf Hughes**

We should not connive in the construction of our own abject formats, the surface currents we generate, running a ruler over depth and flow while thoughts flit haphazardly from rock to sky then plunge abruptly towards uncharted oceanic depths. Our lungs, once entwined, are vulnerable to incursions of seawater, which is the source of our peerless intuition, as well as our bottomless rage.

The ocean harbours ingrown volcanoes once known as the island's multiple eyes, but today hollowed and lacklustre. Occasionally, in their manifold furrows, the explorer may glimpse flashes of defiance.

I bought a strong cage and poured in the typing pool, howling like banshees. Today I lower this into the saltwater lagoon. Mounds of swollen flesh slowly ripple, then part as sunken eyes survey their new home. I toss live rabbits and hens which they shred in seconds, gobbling guts and bones alike.

You lunge at me whenever I approach, sending showers of sparks from the iron bars. To have unloosed your soft skin, pressed my lips to your heat until rising subsides in delight, served choice meats from calfskin platters, hands encased in the finest, blood-mottled gloves – all this counts for nothing in the inferno of fury you have currently brought yourself to.

And so I wait, clinging to a rock gnawed by the ocean, drawing light and energy landscapes – my face in your wild Medusa hair, inhaling its sulphurous musk, ruptured stars – folding a trick back into itself, a perfectly purposeful accident, a ring dropped into a lagoon to summon crustaceans.

Here they come, the billion white-lipped barnacles, sucking mutely on effervescent salt blooms.

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What is its medium, this glorious siphonophore – its manifold diversity, microbial alchemy, squirming through plasma landscapes, water islands where one can live by choosing flexibility over strength; by writing liquid naming rituals in water, subjecting the metaphors of the machine to saline jaws until they rust-crumble, diffusing orange cloud-showers of iron nutrients?

Is it the back end of something becoming the front end of something else? Cambrian explosion? Origin of life as stinking pantomime horse?

Or should we prefer a middle to fronts and ends –
Liquid city: sluicing
Back and forth, slice and dice Material
silence, science Tabula rasa, thrumming...

*

Against coherence and causality, the bounded and the rational, *oceanic practices* invite us to yoke together seemingly disparate components to bring forth hitherto latent potentialities. Discourses of identity, gender, genre, disciplinarity, arising from narratives of evolution, science and progress, have framed what passes for criticality in the modern period; *oceanic practices* instead propose vibrant sites of experimentation where categories and certainties are separated and whirled together in new, provisional assemblages. Experimental ecologies within a nascent *ecocene* suggest that the nature of life itself may be choreographed into existence through rethinking interactions between bodies, spaces, soils and the many potential relations between them. Revisiting pre-modern forms of acquiring knowledge, unafraid of scrying, augury, magic and witchcraft, developing concepts and prototypes, *oceanic practices* explore what a third millennial experimental research laboratory – wet, messy, magical and dripping – might involve.

How does one *evaluate* such oceanic (or emergent) practices? By developing assessment apparatuses (languages, materials, methods and instruments) i.e. working prototypes shaped by living processes – choreographies of bodies and spaces in

which “epistemic things” appear but are never fully demystified or “solved.” The goal is neither explanation nor paraphrase (i.e. the *context of justification*), but rather inducing experiences from which moments of enchantment and insight appear (i.e. the *context of discovery*).²⁵ This is an ongoing conversation where the modes of living, tools of assessment, bodies, communities and the materials themselves relate through constant flux. The term *oceanic practices* is used to denote an exploration of our relationship to our materials within a larger story of nature. Such practices are multiple, hybrid, transdisciplinary. By liberating the *context of discovery* in this way, in place of theories and mimetic representations emerge *new practices* and *epistemic things*. These are not valued in terms of *truth* and/or *error*, but rather as *strategies* that promote *generative diversity*, *asymmetry*, and *disequilibrium*.

Effusive methods cherish anomalies. For example, consciousness makes us aware of non-linear matter which may not be aware (of) itself. Soils and oceans, all that is too ephemeral (*consciousness* itself) to be matter or format, all that is materially *unassuming*. Rachel Armstrong writes “radiation interacts with matter, is created by matter, can create matter and is emitted by matter but is not actually matter. Radiation is massless and takes up so little volume that it is just too ephemeral to ‘be’ matter.”²⁶

Our oceanic tools are the *paradoxical* and the *unquiet* – disturbances that suck in and throw out energy.

Strategies of ill-disciplined organisation that make life simultaneously possible and impossible, which is perhaps one route to the ecstatic.

Consciousness reveals to us dissipative voids alongside a capacity to navigate in the dark. And so, *shaping* – despite ourselves. Life will have life.

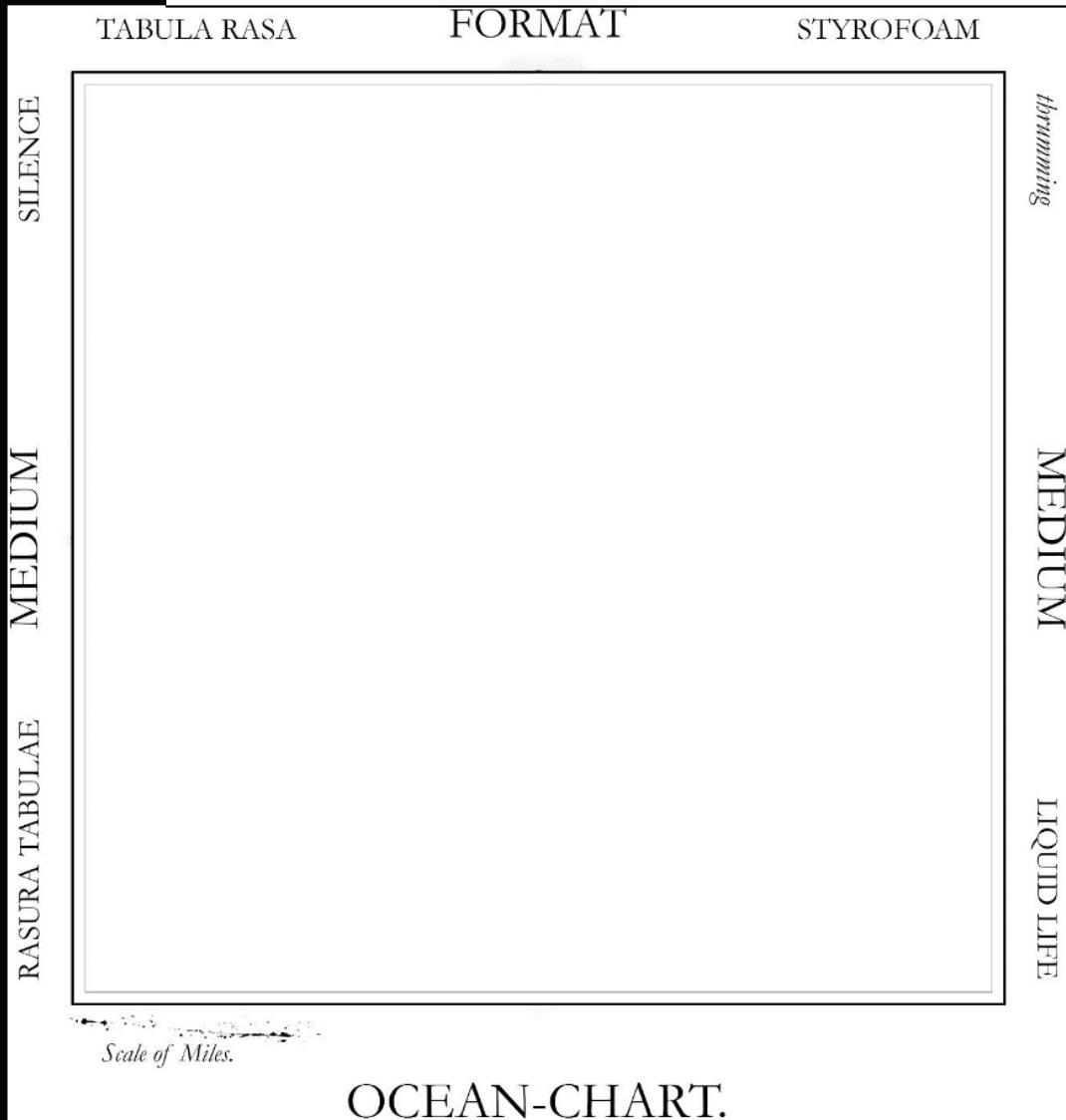
²⁵ The distinction is made by Hans-Jörg Rheinberger, director of the Max Planck Institute for the History of Science in Berlin, and cited by Henk Borgdorff in Henk Borgdorff, “Artistic Practices and Epistemic Things,” in *Experimental Systems: Future Knowledge in Artistic Research*, ed. Michael Schwab (Leuven: Leuven University Press, 2013), 113.

²⁶ Rachel Armstrong, *Star Ark: A Living, Self-Sustaining Worldship* (Chichester: Springer/Praxis, 2016), 36.

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Notating Not Knowing: The Oceanic Challenge to Format and Medium



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T e c h n o -
L o g i c

GEORGE

THEMISTOKLEOUS

Re-Format It: Techno-logic

Introduction

The music video for ‘Technologic,’ a song from the album *Human After All* (2005) by the French electronic music duo Daft Punk, will provide a starting point by which to consider the notion of format.¹ The video features the two band musicians donning their trademark robot masks and, in a rigid robot-like fashion, playing their electric guitars. Located between the pair is a robot, not a human wearing a robot mask but a doll-like, digitally controlled, robotic puppet that narrates the lyrics in a computer-generated voice. These lyrics, often projected on a screen, re-present technological procedures/processes that allude to the digital image of the twenty-first century (even whilst appropriating older media, the cathode ray tube television for example). The processes consist of a repetition of actions: “Plug it, play it, burn it, rip it, drag it, drop it, zip, unzip it, touch it, bring it, pay it, watch it, turn it, leave it, start - format it.”² The chorus – a repetition of the word techno-logic – the defining word that encapsulates all the others, is preceded by the only word amongst the series of action commands that is emphasised: *format* it. It is emphasised by a deliberate and distinct pause and accompanied by a fold in the musical composition that anticipates and pronounces the word(s) techno-logic (or rather techno... logic). ‘Format it’ always precedes ‘technologic.’ The video editing mirrors the frenetic pace of the digitised voice narration. The edited shots range from close-ups of the puppet’s face and mouth to medium shots and sequences where the puppet sees itself on a television screen performing the song. Within the video, the cathode-ray tube colour television monitor and the mosaic-like vertical pattern it generates evoke pre-digital visual imagery that are in the process of being re-appropriated by the digital.³ Whilst older media are referred to, the verbal signification is a harbinger of an electronic era that appropriates these older media formats. Through this act of appropriation, digital media are in the process of producing their own form. Informational circuitry finds its expression through the verbal pace of enunciated commands that transpose any linear structure. Zip, surf, drag, scroll, zoom are some of the recurring action commands. In *The Language of New Media*, Media theorist Lev Manovich

¹ Bobtron, “Daft Punk – Technologic,” (YouTube, June 2015), 04:51.

² Ibid.

³ Within the video there are other references to older media formats, this includes for example the ‘special presentation’ title sequence that refers to 1980s opening sci-fi film credits and television programs as well as to video game graphics.

explains in respect to the language of computer-based commands that the “human-computer interface includes ways of manipulating data, that is, a grammar of meaningful actions that the user can perform on it.”⁴ These commands thus resemble “ways in which the user interacts with the computer.”⁵ The non-hierarchical image of information is adequately captured by the enunciated action ‘format it’ that signifies and activates a constant ‘flickering’⁶.

The short video prompts, via different overlapping media (sound composition, visual editing and lyrics, juxtaposed references to both digital and analogue media), a re-consideration of contemporary media operations as becoming increasingly both a.) independent of a fixed space and time and b.) not (always) necessarily converging with one another. The importance attached to the word format in the music video is telling in this respect. According to the Oxford English Dictionary format is defined as:

Noun

1. The way in which something is arranged or set out.

1.1 The shape, size, and presentation of a book or periodical.

1.2 The medium in which a sound recording is made available.

1.3 *Computing* A defined structure for the processing, storage, or display of data.

Verb (formats, formatting, formatted)

1 (especially in computing) arrange or put into a format.

1.1 Prepare (a storage medium) to receive data.⁷

These multivalent notions of format might begin to inform a contemporary understanding of ‘technologic.’ Jean-François Lyotard in his paper on ‘Logos and Techne, or Telegraphy’ states that current technology “is thus, through its specific manner of inscription, indeed productive of a sort of memorization freed from the supposedly immediate conditions of time and space.”⁸ If memorisation is freed from immediate conditions of time and space, via new media formats, then how might we re-consider the space of the perceiving body and by extension our understanding of architecture? The same question of *format* haunts architectural representation in face of the new ‘techno-logic’ inherent in visual media. If the visual image of the self, and its actions

⁴ Lev Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2001), 69.

⁵ Ibid.

⁶ See ‘Chapter Two. Virtual Bodies and Flickering Signifiers’ in N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), 24–49.

⁷ English Oxford Dictionary, “Format,” accessed 7 June, 2017, <https://en.oxforddictionaries.com/definition/format>.

⁸ Jean-François Lyotard, *The Inhuman*, trans. Geoffrey Bennington and Rachel Bowlby (Cambridge: The Polity Press, 1991 [1988]), 50.

⁹ The *diplorasis* was developed as part of my doctoral research entitled *Mediated Visualities: Architecture Representation and the Digitized Body* (2019). Production was supported by Savvas Socratous (hardware/software engineering), George Athanasiou (photography) and Andreas Laoutas (electrical engineering consultancy). Visual material can be found at <http://www.para-sight.org/installations-devices/4589953031>. The description of the *diplorasis* has been presented in conferences, publications and featured in an exhibition. Earlier stages of its development have been exhibited at the Acadia 2016 Exhibition and published in the accompanying exhibition catalogue. *Posthuman Frontiers: Data, Designers and Cognitive Machines*, University of Michigan, Taubman College; George Themistokleous, "Diplorasis: The Other Side of Vision," in *Acadia 2016 Posthuman Frontiers: Data, Designers, and Cognitive Machines: Projects Catalog of the 36th Annual Conference of the Association for Computer Aided Design in Architecture*, ed. Kathy Velikov, Sandra Manninger and Matias Del Campo (Acadia Publishing Company, 2016), 146–51. See also: George Themistokleous, "Image as Virtual Construction," in *Inter- fotografía y arquitectura / inter-photography and architecture*, ed. Rubén A. Alcolea and Jorge Tarrago Mingo (Pamplona: Servicio de Publicaciones Universidad de Navarra, 2016), 190–99; George Themistokleous, "Mediating the Interval," in *Image Temporality: The Relation of Time, Space and Reception of Visual Media, Yearbook of Moving Image Studies (YoMIS)*, ed. Lars C. Grabbe, Patrick Rupert-Kruse and Norbert M. Schmitz (Darmstadt:

Büchner-Verlag, 2017).

¹⁰ The house is a single storey residence (built in 1948) located in the area

are being re-formatted as part of a digitised process, so too are the durational, lapsed and looped spaces that the self occupies. In this article I will attempt to explore through the *diplorasis* – a custom-made media installation of my own making – how the space of the perceiving body is affected by digital media formats.⁹

The initial section **Code It: *Diplorasis* – Autoscopic Perceptual Machines** will outline the functioning of the *diplorasis* in order to account for the split between the body and its projected image that is induced within the installation setup. This will then lead to **Write it: The Now** where the past presence generated by the *diplorasis* will be explored in relation to Lyotard's writings on time and consciousness. In the following section **View it: From Duchamp's *Étant donnés (Given)* to Akamatsu's *Time Machine! Version 5***, the understanding of the spatio-temporal body will be re-thought in relation to the temporality of vision. Marcel Duchamp's *Étant donnés* and Akamatsu's *Time Machine! Version 5* provide useful cases where visual media formats trigger a paradoxical notion of time. These visual installations incorporate particular media assemblages, yet they reverse some of the limitations that are inherent in these particular media (linear perspective, video playback). This reversal occurs by actively involving the body within specific media formats. The final section of the article, **Re-format it: Architectures of the Contemporary Body**, aims to re-think architecture through the provocations offered by techno-logical new media formats and their incorporation within the perceptual/cognitive body. The temporal explorations offered by Duchamp's *Étant donnés* and Akamatsu's *Time Machine! Version 5* might thus become extended and transformed with new and emerging media (as is the case with the *diplorasis*).

Code It: *Diplorasis* – Autoscopic Perceptual Machines

The *diplorasis* is a multi-media installation/device of my own making (2014-2019). The installation – located inside an abandoned house in Nicosia – is essentially a constructed corridor (Fig. 1).¹⁰ The corridor (6 metres x 1.2m x 2.4m tall) made from timber struts holds up more than 120 mirror panels (most of these measure 60 x 40 cm). The inside of the corridor, excluding the curtain entrance, and a sandblasted translucent glass panel (located at the far end) is composed entirely of mirrors. The outer shell of the corridor – the exposed

timber frame - contains eight DSLR cameras. The juncture between the outside and inside is negotiated via two-way mirrors.

Upon entering the mirrored corridor, the participant observes the sandblasted translucent panel at the far end of the corridor. This panel vaguely outlines a mechanical instrument that lies behind it (Fig. 1). Within this glass panel is a cavity in the shape of a human head with two peepholes (Figs. 2, 3). The participant walks towards the screen and positions their head inside the wall cavity. When the participant looks through the peepholes, they encounter a stereoscopic projection of themselves from a previous position inside the corridor space of the installation (Fig. 4). The stereoscopic images are then being replaced with another view of the participant. As the images change, they become increasingly misaligned and manipulated (Figs. 5, 6). When viewing the projected images, the visitor becomes aware that their image was captured when they were walking along the corridor, that is in the space behind them (at the very moment when they see themselves). The photographic cameras within the device are attached to sensors and have been programmed to capture different views of the moving participant, and then to digitally split (and in some cases manipulate by warping) the images before sending them to LCD screens that project the image back to the participant. The cameras are placed on the reverse side of the mirrored corridor and have been concealed from the participants' view via two-way mirrors (and controlled lighting conditions).

of Agios Andreas, Nicosia. The abandoned house was until recently inhabited but due to structural damage the owner decided not to continue renting it for tenancy. It is located less than a kilometer from the UN controlled buffer zone but shouldn't be confused with the abandoned buildings that are located in (and near) the buffer zone, and have been deserted since 1974.

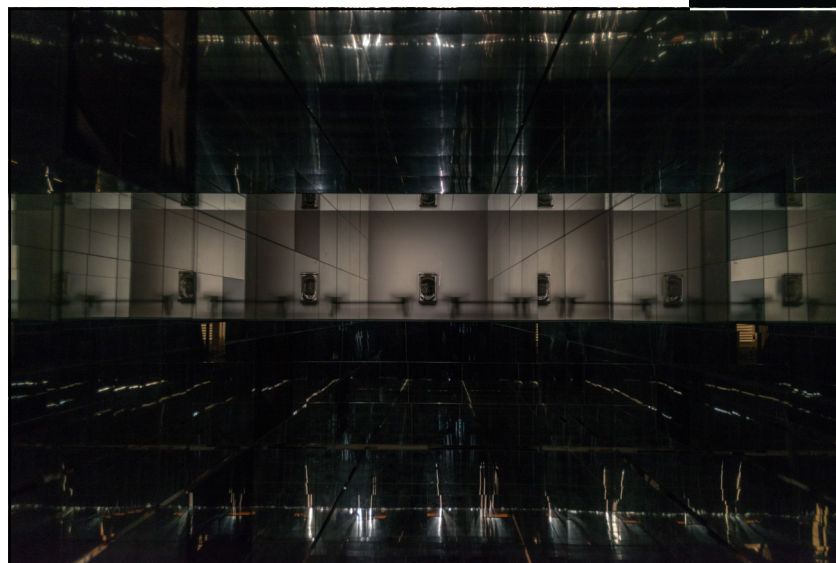


Figure 1:
Diplorasis,
2018,
mixed media,
dimensions:
700cm
x 290cm
x 320cm
(external
dimensions),
photograph by
George
Athanasiou,
private
installation,
Nicosia, Cyprus.
George
Themistokleous.

Figure 2:

Diplorasis, cavity - made from acrylic sheets - for positioning human head with two peepholes, the projected screen-images on either side would be projected on-to the mirrors, 2017, collage photograph by author, Nicosia, Cyprus. George Themistokleous.

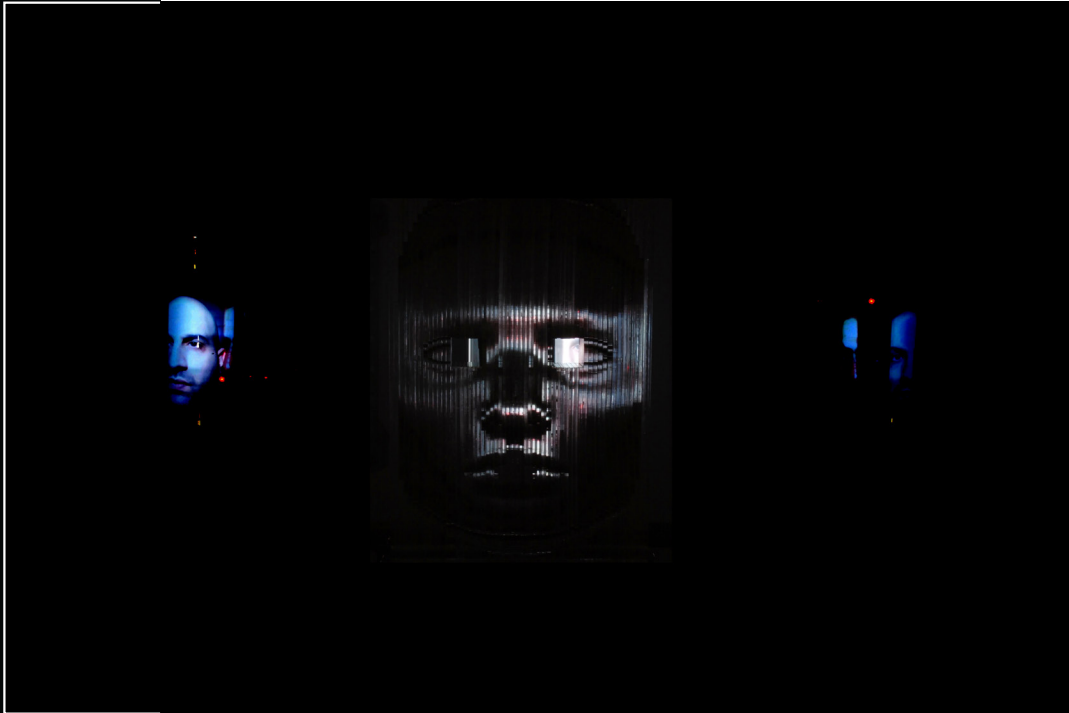


Figure 3:

Diplorasis, view of projected stereogram through one eye-hole, 2018, photograph by author, Nicosia, Cyprus. George Themistokleous.





Figure 4:
Diplorasis,
stereograms of
participant.
2018.
Automated
digital recordings.
Nicosia, Cyprus.
George
Themistokleous.

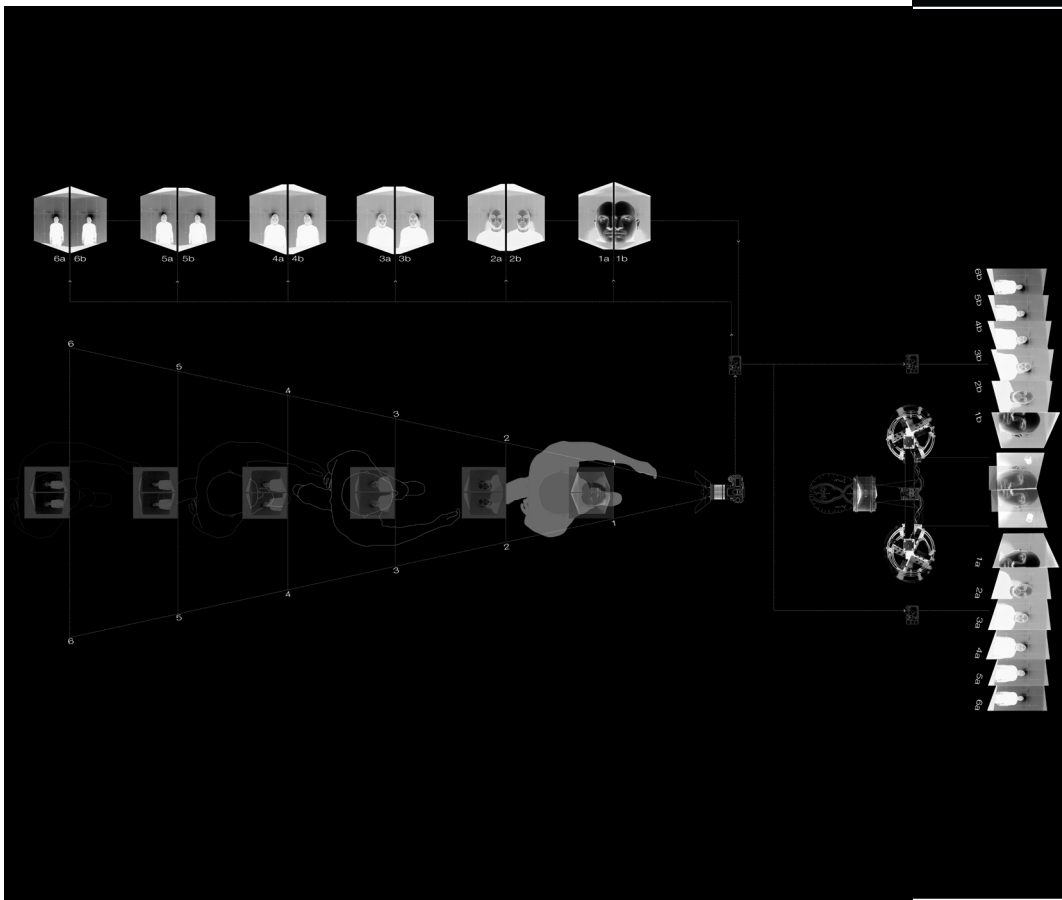
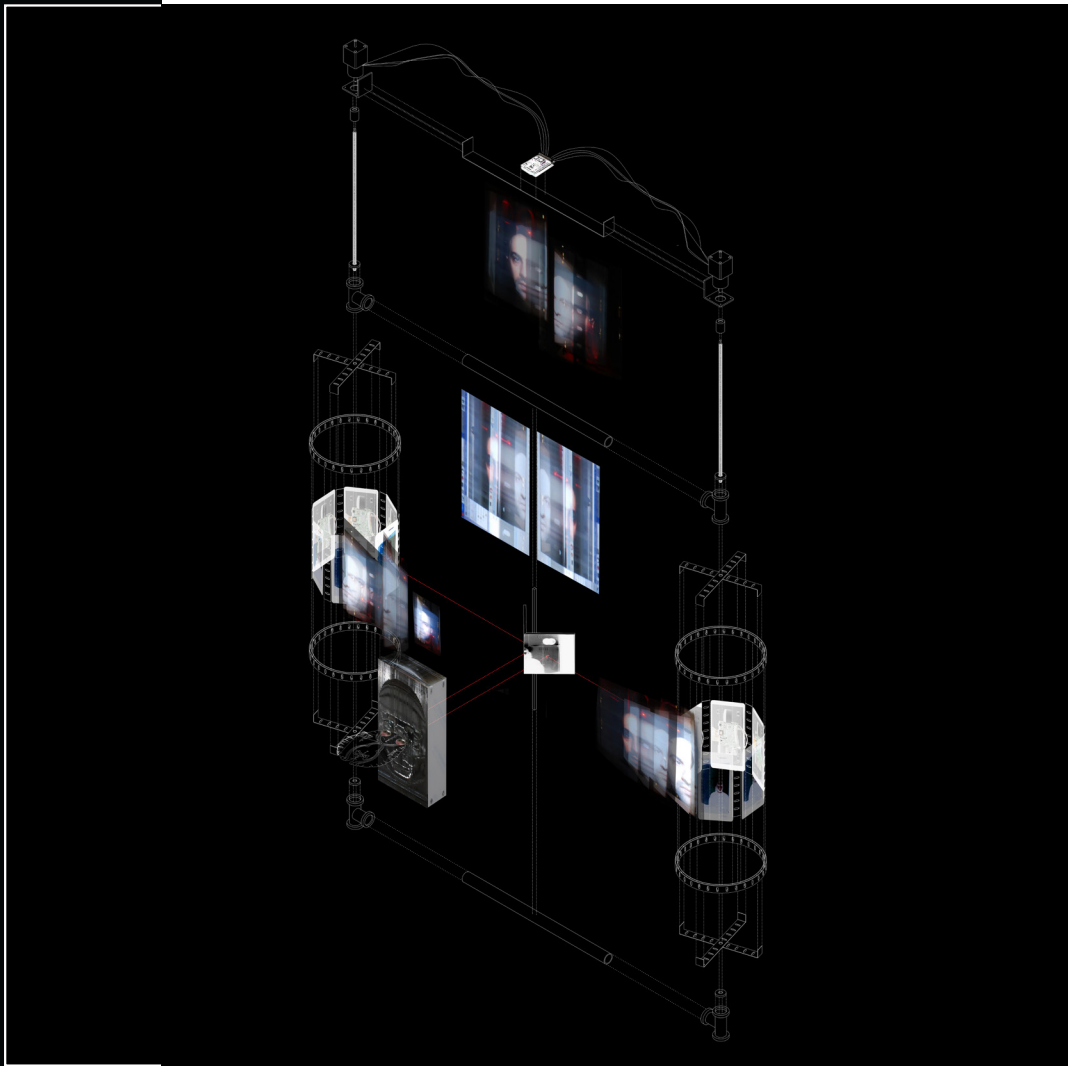


Figure 5:
Diplorasis
plan diagram,
prototype
version 2,
2016,
digital drawing.
George
Themistokleous.

Figure 6:
Diplorasis
 exploded isometric
 collage,
 prototype
 version 2,
 2016,
 digital drawing
 George
 Themistokleous.



The installation uses various software and hardware processes (DSLR cameras, stepper motors, LCD screens, Arduino microcontrollers, Raspberry Pi computer chips, ultrasonic sensors, programmable LED lighting, network router) that are set up in relation to the configuration of on an older medium, the Wheatstone stereoscope, invented in the 1830s.¹¹ The Wheatstone stereoscope frames and separates the eyes in order for each eye to view one of two corresponding but slightly misaligned images that is projected on the mirror placed directly in front of the separated eyes (Fig. 7). Thus, each eye independently receives the image projected on the slanted mirror it faces, causing the mind's visual cortex to attempt to bridge the gap and overlay the two images. This operation reveals and emphasises the transition from distinct dual monocular reception to the binocular fusion in the mind. The

¹¹ The *diplorasis* utilises the Wheatstone stereoscope, invented by Sir Charles Wheatstone in the 1830s. For more on the Wheatstone stereoscope see Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1990).

image that is induced in the mind, by bridging the two distinct but related images, becomes an image with three-dimensional 'depth.' The stereoscope is a device where the relations between referent and represented image are discontinuous. The stereoscopic image within the *diplo-rasis* aims to extend the Wheatstone stereoscopic operation by attempting to incorporate a digital feed of the viewer's own body as they have just passed through the installation space. The uncanny closeness of a neutral image 'out there' evoked by the Wheatstone stereoscope is now subverted as the digitisation of the image allows for the unexpected self-projection and self-manipulation; the device becomes an auto-scopic machine.

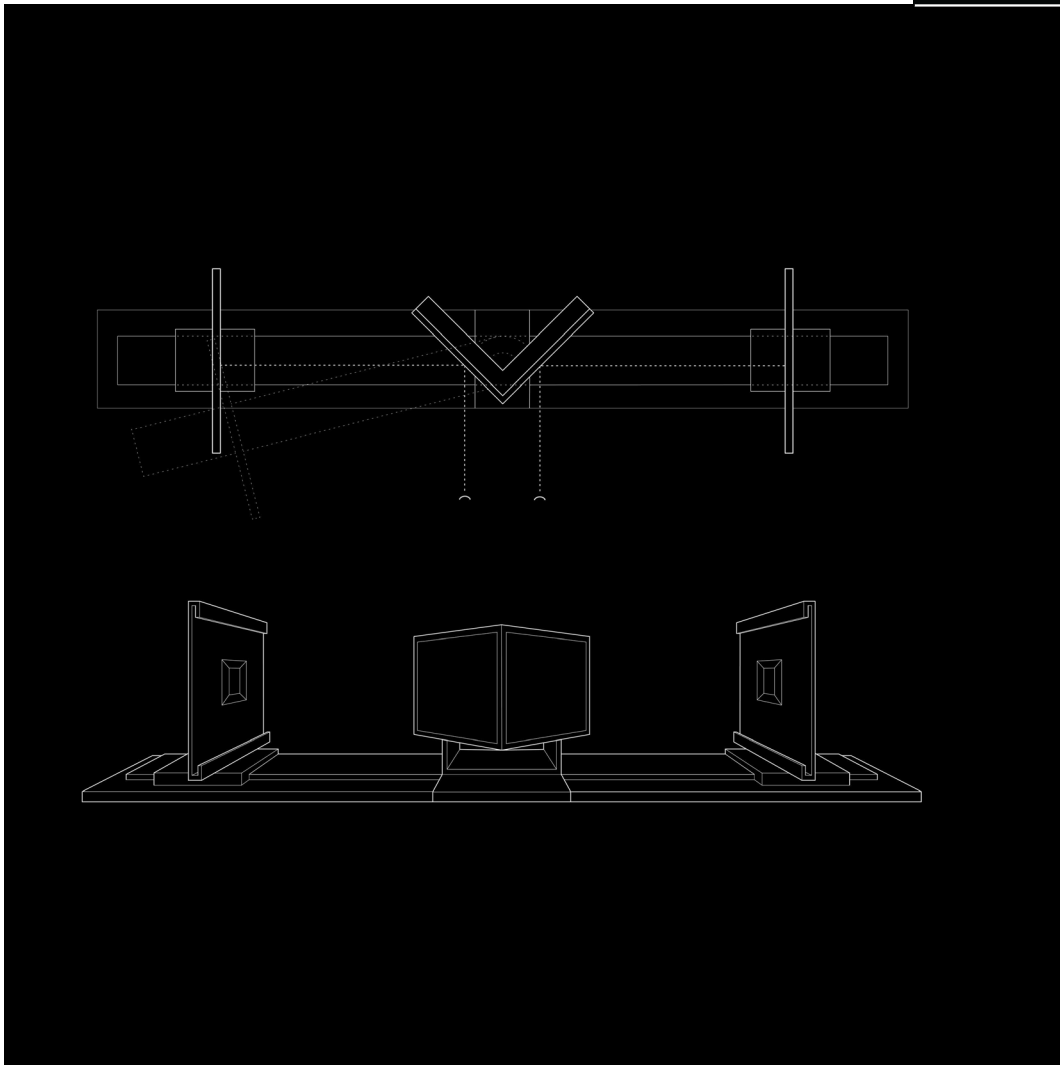


Figure 7:
*Drawing of
 Wheatstone's
 stereoscope,
 2015,
 digital drawing.
 George
 Themistokleous.*

Throughout the duration of the visual experience, one has a solipsistic perception of oneself. The space and time of the experience, induced via a precise control of the actual space (and its digital operations), produces an-other occurrence. The confrontation of the actual self and its discontinuous self-projection triggers a re-thinking of how architectural space might be considered in the informational age. The discursive nature of the project involves particular digital and analogue configurations that engage with a re-thinking of visuality. What makes the architecture of this visual encounter? As the physical environment has been designed to correspond to its electronic manipulation, the space is neither a completely immersive environment (i.e. in the sense of a VR headset environment) nor an actual space.

Write it: The Now

Material and digital formats converge and diverge in the *diplo-rasis*. The material construction provides a physical armature for the project assemblage. The conventional structure is partly offset by being almost completely covered by mirrors. Within the corridor, both standard and two-way mirrors are juxtaposed; the standard mirrors act as decoys that, to a certain extent, conceal the appearance of the two-way mirrors. The formatting of the image via code is made to operate within the material field of the mirrored corridor. The participant's moving body is captured via ultrasonic sensors. A number of these sensors and DSLR digital cameras are connected to Raspberry PI computers allowing for the capturing of images to be triggered by the person's movement. The interface between the computer and the camera is implemented via the gPhoto application that also facilitates the download of the captured image to the computer memory for further processing.¹² Effectively the images of the participant are converted into data (format) that can be processed and stereoscopically re-produced. The data image files are made into a stereoscopic pair and sent to LCD screens via Wi-Fi networks within a matter of seconds. The electronic processes involve multiple software formats (OpenCV, gPhoto). As the image is 'formatted' through the synthesis of analogue and digital environments, how does the viewer visually perceive this mediated image?

¹² Description of the electronic operation has been adapted from a text explanation by Savvas Socratous – the software engineer for the *diplo-rasis*. Unpublished.

The formatted image produces a paradoxical occurrence. The particularities of the synthetic image trigger a moment in which the viewer stereoscopically perceives themselves viewing themselves. This forming of an image of time that is already in the 'past' yet made present, might also extend to the origin of the term format as defined by the Oxford English Dictionary: "Mid 19th century: via French and German from Latin *formatus* (liber) 'shaped (book),' past participle of *formare* 'to form.'" ¹³ It is the past participle of the word form that galvanises an inchoate movement of the past with(in) the present moment. In his paper 'Time Today' (1987), Lyotard states when writing about the 'now,' that "[t]his present cannot be grasped as such, it is absolute. It cannot be synthesised *directly* with other presents. The other presents with which it can be placed in relation are necessarily and immediately changed into presented presents, i.e. past." ¹⁴ He furthermore claims that "we omit the inevitable transformation of present into past" whilst reading. ¹⁵ Interestingly, Lyotard writes on the absoluteness of this present that because "the presenting present cannot be grasped: it is *not yet* or *no longer* present." ¹⁶ Returning to the formed/forming of the image, this paradoxical state occurs for the viewer who is seeing a three-dimensional projection of themselves in the immediate past.

It is important to emphasise that the viewer does not simply encounter a reflected mirrored image but a simulated three-dimensional projection of themselves from co-existing past, future (the potential of the manipulated image) and present instances. In other words, they encounter a perception of themselves from the point of view of another, i.e. in stereoscopic depth. Such an image that folds in on itself is impossible due to the anatomy of human vision, as one can never see one's own face or back or look at oneself from a distance without some sort of technological prosthetic. In this respect, the *diplorasis* bears some resemblance to 3D scanning technologies, where cameras record the body in the round for further manipulation. In line with Lyotard's presentation of time yet moving from the medium of the text to overlapping visual media, "the event," in this case the *diplorasis*, "makes the self incapable of taking possession and control of what it is. It testifies that the self is essentially passible to a recurrent alterity." ¹⁷ Within the *diplorasis*, the digitised visual media – through a particular assemblage – tricks the conscious viewer by folding past moments within

¹³ Dictionary, "Format," accessed.

¹⁴ Jean-Francois Lyotard, *The Inhuman: Reflections on Time*, trans. Geoffrey Bennington and Rachel Bowlby (Cambridge: The Polity Press, 1991 [1988]), 59. Original emphasis.

¹⁵ *Ibid.*

¹⁶ *Ibid.* Original emphasis.

¹⁷ *Ibid.*

the presented present.

Lyotard claims that technology, in the form of writing, allows “its users to stock more information, to improve their competence and optimize their performances.”¹⁸ He also claims that the expanding technological prosthesis that facilitates knowledge of the objective world, is contradicted by another notion of the technologic, as “being prepared to receive what thought is not prepared to think.”¹⁹ In this paper and through the *diplo-rasis* I am addressing this latter notion, whilst acknowledging that the drive for optimal performance usually hinders the creative application of techno-logic. Yet, the optimal performance of a technical setup is, somehow paradoxically, necessary in the development of the *diplo-rasis*. In other words, the optimisation of the controlled (framed) parameters in the *diplo-rasis* function in order to subvert the framing of this controlled image. The conflicted meaning of the term techno-logic is already pervasive within its Greek etymology, as the compound term technology derives from *techne*, meaning art/craft and *logos*, meaning reason.²⁰ In order to further develop this line of enquiry it is worthwhile to turn to both analogue and digital installations that deal with the body’s perceived temporal dissonance.

View it: From Duchamp’s *Étant donnés* to Akamatsu’s *Time Machine! Version 5*

“Duchamp’s great pieces are a plastic gamble, an attempt to outwit the gaze (and the mind) because he is trying to give an analogical representation of how time outwits consciousness,” explains Lyotard.²¹ Duchamp’s *Étant donnés* (1946-66), a diorama accompanied by a detailed installation manual, offers a possible means by which to further consider the paradoxical relation between consciousness and time. The viewer, or voyeur as they are referred to in Duchamp’s instructions, observes, through a pair of barely noticeable peepholes, a painting of a reclining naked female body within a landscape. Her legs are spread open and the viewer faces her crotch. With one arm she holds a gas lamp. A pierced brick wall frames the overall scene. Duchamp’s optical machine makes the representational medium of linear perspective, a medium that excludes the sensory body, ironically tangible.²² The perspectival viewing and vanishing points are literally connected to the pierced brick wall (picture plane) and vagina

¹⁸ Ibid., 62.

¹⁹ Ibid.

²⁰ The vexed reading of technology that is implicit within its etymology has been explored by Martin Heidegger in the seminal essay ‘The Question Concerning Technology’. See Martin Heidegger, *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper Perennial,

2013 [1954]), 3–35.

²¹ Lyotard, *The Inhuman: Reflections on Time*, 79.

²² Leon Battista Alberti in his *Della Pittura* (trans. *On Painting*, 1436), would become the first architect to write a treatise on the theories of perspective. In the introduction to an English edition of *Della Pittura*, art historian Martin Kemp describes Alberti’s reliance on ‘a simplified version of medieval optical science’ by claiming, ‘the basis of our perception of the relative sizes of objects is the visual pyramid or cone, comprising light rays converging to or diverging from a notional vertex within the eye.’ See Martin Kemp, ‘Introduction’ in Leon Battista Alberti, *On Painting*, trans. Cecil Grayson (London: Penguin Books, 2004 [1436]), 12.

respectively, playfully reminding us that, as Lyotard stated, “he who sees is a cunt.”²³ Art historian Rosalind Krauss writes in respect to Duchamp’s *Étant donnés* that “the vanishing point, or goal of vision, is manifested by the dark interior of a bodily orifice, the optically impenetrable cavity of the spread eagled ‘bride,’ a physical rather than a geometrical limit to the reach of vision.”²⁴ Linking *Étant donnés* to Jean-Paul Sartre’s elaborations on ‘the look,’ Krauss goes on to claim that “what comes next is not the capture of the spectacle but the interruption of the act. For the sound of footsteps announces that the gaze of someone else has taken him both by surprise and from behind.”²⁵ Whilst observing the scene of the naked female body, the voyeur becomes an object of the other’s gaze. The staged optical machine thus becomes extended to its wider context, the public institutional space of the museum. The subjective/objective hinge reveals a temporal paradox, the voyeuristic subject is positioned within the space of the ‘not yet’ or ‘no longer’.²⁶

The setup in *Étant donnés* brings to the fore a particular relation between the viewer and the gaze of the other. This momentary encounter is made possible by the overall arrangement of the diorama. The peepholes are almost imperceptible and one has to look carefully in order to find them. Then when one does peek through them, the eyes are framed separately, blocking out any peripheral vision and ensuing visual control that the body has of its environment. The viewed scene of the reclining figure is further framed by the jagged brick wall outline, extending the framing of the scene within the depth of field. The painting appears to recede in depth as it is slanted while smoke is emitting from the gas lamp held up by the woman. This intimately constructed view of the erotic object binds the participant in an illicit act of peeping within a public space. The visual act is contingent on what is not seen. The nuances of experientially seeing the subtly animated scene gives way to the unexpected feeling of being watched. The body becomes thus positioned at the hinge between viewing subject and a viewed object. Drawing on this particular interval from Duchamp’s diorama, the *diplorasis* attempts to articulate this line of enquiry via digital media. The operation of *Étant donnés* is activated by the evocation of an-other body (actual or imagined). If in Duchamp’s work the gaze of an-other is dependent on another subject’s presence, what happens in the *diplorasis*

²³ Rosalind Krauss, *The Optical Unconscious* (Cambridge, MA: MIT Press, 1994), 113.

²⁴ Ibid.

²⁵ Ibid., 112.

²⁶ Lyotard, *The Inhuman: Reflections on Time*, 79.

when the gaze in the form of a hybrid – both subject and object (machinic) – is re-projected back onto the self? In order to further understand how this human/machine gaze is articulated in the *diplorasis* it becomes useful to turn to the concept of the cyborg.

Donna Haraway famously proclaimed in *A Cyborg Manifesto* that the cyborg “is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction.”²⁷ Within the *diplorasis* the organic body is positioned in relation to its computational prosthetic extensions. As such embodiment becomes mediated through informational processes. Literary critic N. Katherine Hayles attempts to trace how notions of embodiment are entwined with informational systems. In *How we Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics* (1999) Hayles states that the computer’s capabilities “indicate how the user’s sensory-motor apparatus is being trained to accommodate the computer’s responses.”²⁸ She furthermore claims that “central to the construction of the cyborg are informational pathways connecting the organic body to its prosthetic extensions.”²⁹ Echoing this line of thought, in the *diplorasis* the space of the immediate environment becomes a prosthetic extension to the body. The machinic setup directly correlates with the bodily participant, its operation attempting to overwhelm the viewer with an image that exceeds the human faculties of perception. This intensive perception moves beyond a conscious subjective framing, producing an impasse between the body and its represented (and manipulated) image. This is similar to Hayles’s description of the science fiction novel *Limbo* (1952) by Bernard Wolfe, where “the body is integrated into a cybernetic circuit, modification of the circuit will necessarily modify consciousness as well.”³⁰ If in *Étant donnés* the evocation of the gaze displaces the viewing subject, in the *diplorasis* the viewing body becomes displaced by a machine/organic body hybrid that is re-projected onto the viewer. *Time Machine! Version 5* (2005), an interactive media installation by Japanese artist Masayuki Akamatsu, explores a similar split perception of the self.³¹ In this installation, as the viewer is approaching three screens his/her image is being recorded by a video camera and then projected on the screens. By moving their hands, they can manipulate their projected image through the use of a trackball. Via these movements,

²⁷ Donna Jeanne Haraway, “A Cyborg Manifesto: Science, Technology, and Socialist Feminism in Late Twentieth Century” in Donna Jeanne Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature* (London: Free Association, 1991), 149.

²⁸ Hayles, *How We Became Posthuman*, 47.

²⁹ *Ibid.*, 2.

³⁰ *Ibid.*, 115.

³¹ Masayuki Akamatsu, “Tm5 - Time Machine! Version 5 2005,” (YouTube2015).

the image of the viewer becomes multiplied, blurred or extended. Media theorist Timothy Murray writes about Akamatsu's installation that "a turn to the left travels the image back to the future, into the present."³² The self's rupture is played out between the gesturing sensible body and its projected images. According to Murray the viewer's perception "remains open to the vicissitudes of the video image's instantiation in time and the subject's entrapment in the doublings of time itself."³³ In both *Étant donnés* and *Time Machine! Version 5* the viewer's perceptual spatiotemporal coordinates become displaced. The different media employed in each installation both utilise prior media formats yet move beyond the limitations of the media involved. *Étant donnés* by literally re-producing the confinements of the perspectival image, re-creates a psychological optical machine which impinges on the viewer's temporal perception(s). Akamatsu's installation overcomes the limitations of the analogue filmic image. Through the advent of digital interactive media, the screen was no longer a passive receptive surface for projections. Therefore, it became possible with this medium – based on the digitisation of the image – to overcome the traditional distance between viewer and screen. Despite their crucial differences, in the work of both Duchamp and Akamatsu the viewer's embodied experience is the hinge that activates a split perception of time.

Re-format it: Architectures of the Contemporary Body

The *diploresis* is situated within computer-based digital cultures. As Manovich writes "we are no longer interfacing to a computer but to culture encoded in digital form."³⁴ Digital image processes offer the possibilities to further explore how the fractured self induces a paradoxical sense of time. In the *diploresis*, the split between an informational spectral other and the sensory body that responds to this other begins to form a new understanding of the body and its representations. This becomes possible through the creative application of digital media formats.

Within the *diploresis* the viewer becomes caught in a game of identification with what they see, how this seeing comes about and who is seeing (controlling the machine). Yet, the format, any format, at the moment of perceiving the image, is dismantled – it is not so much formatted but de-formatted. De-formation here

³² Timothy Murray, "Time @ Cinema's Future: New Media Art and the Thought of Temporality," in *Afterimage of Gilles Deleuze's Film Philosophy*, ed. D. N. Rodowick (Minneapolis: University of Minnesota Press, 2010), 365.

³³ Ibid.

³⁴ Manovich, *The Language of New Media*, 70.

is linked to Lyotard's description of Duchamp's *Le Grand Verre* (*The Large Glass*, also known as *La mariée mise à nu par ses célibataires, même* or in English *The Bride Stripped Bare by her Bachelors, Even*), a large freestanding sculpture featuring, amongst other materials, two large glass panels. Duchamp's *The Large Glass* unsettles the forms that are depicted in the glass panels. The different materials used in the artwork – paint, varnish, shattered glass, lead wire, foil – affect the different densities of dust that accumulates on the panels.³⁵ Through its relation to these dust accumulations, *The Large Glass*, becomes a surface that constantly de-forms in front of the perceiving viewer. Lyotard writes: "What the viewer sees on the Glass is the eye and even the brain in the process of forming its objects; he sees the images of these imprinting the retina and the cortex according to the laws of (de)formation that are inherent to each and that organize the screen of glass."³⁶ As the image in the *diploirasis* oscillates between formations – the three-dimensional emergence of self-projections and de-formations – stereoscopic binocularity, pixilation of some images, and deformations of the self-projected images – any notion of a coherent temporal experience collapses. In line with the impossibility of representation found in Duchamp's *Étant donnés*, the *diploirasis* attempts to pursue how the temporal hinge between past and present moments plays itself out on the body via computational means.

The changing modes of formatting, reformatting and deformatting thus challenge conventional definitions of architecture and its representations. Discursive spatial practices, such as the *diploirasis*, begin to question the limits of architecture and its *modus operandi*. Architectural historian Mario Carpo in his seminal publication *The Alphabet and the Algorithm* undertakes to explore the effect of the digital on architecture. The digital age, according to Carpo the third technical age following hand-making and mechanical making, is marked by differential variation. Compared to its predecessors in the mechanical age, Carpo writes, "the degree of variability (and indeed, interactivity) that is inherent in the transmission and manipulation of digital signals is incomparably higher."³⁷ Carpo furthermore emphasises the "on-going disappearance of the object" brought about with the advent of the digital.³⁸ What is proposed here is to shift the focus from considering the digital as 'invisible

³⁵ For a discussion of *The Large Glass* in relation to dust, see 'Dust: From Form to Transformation', in Teresa Stoppioni, *Unorthodox Ways to Think the City* (Abingdon: Routledge, 2019), 144–85.

³⁶ Krauss, *The Optical Unconscious*, 113.

³⁷ Mario Carpo, *The Alphabet and the Algorithm* (Cambridge, MA: MIT Press, 2011), 6.

³⁸ *Ibid.*, 5.

algorithms' as Carpo characterises it, to re-thinking how the digital allows for new material relations to come into being, and how these relations affect embodiment. Thus, it is important to be reminded of Haraway's insistence that the virtual is not immaterial. According to Haraway, "humans wherever you track them, are products of situated relationalities with organisms, tools, much else."³⁹ The relationality that Haraway suggests exists between human and non-human agencies is crucial in thinking of the space/time within the *diplo-rasis*. It resists the systematic limitation of the body in virtual media as an informational node. Indeed, this would be akin to the body in perspectival representation. The body in the electronic age is located at a complex intersection where it confronts its spatiotemporal limits.

It becomes pertinent to speculate how architecture is changing and continues to change in relation to the changes accrued by the body's changing coupling with the machinic. Thus we are reminded of Carpo's statement that "the history of architecture features a conflation of different technological timelines – its modern history is linked to the industrial revolution".⁴⁰ And while the same materials that were introduced with the birth of modernism in the late nineteenth/early twentieth century are still predominant in the building industry, electronic technologies are what radically alter our understanding of time and space. Hence, media theorist Marshall McLuhan's claim that "the extreme bias and distortion of our sense-lives by our technology would seem to be a fact we prefer to ignore in our daily lives" becomes more prescient today.⁴¹ As imaging formats increasingly conflate with (in) the bodily schema we need to question the very boundaries between body and its prosthetic technologies. The body's perceiving coordinates, its mnemonic capacities shift with the electronic age as space and time is increasingly reliant on mediated environments. The way of thinking associated with the electronic age does not expand consciousness but instead enhances the ability to sense and conceive a paradoxical time. These shifts in the thinking of the body's space and time made possible by emerging media formats brings us in closer proximity to "what thought is not prepared to think."⁴²

³⁹ Nicholas Gane and Donna Jeanne Haraway, "When We Have Never Been Human, What Is to Be Done?" Interview with Donna Jeanne Haraway, *Theory, Culture & Society* 23, no. 7–8 (2006): 146.

⁴⁰ Carpo, *The Alphabet and the Algorithm*, 6.

⁴¹ Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge, MA: MIT Press, 1994 [1964]), 191.

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Art On
T h e
O u t s i d e :
T h e
Contextualising
Of A
F l u x u s
W o r k
I n
T h e
U r b a n
Environment

JESSICA

B O N E H I L L

Art on the Outside: The contextualising of a Fluxus work in the Urban Environment

Street Cleaning Event was performed by the Japanese, anti-establishment art-group Hi-Red Center in June of 1966 (Fig. 1). There was no canvas, nor any paint. Instead, the pavement formed a substitute canvas, cleaning fluids acted as paint and cleaning brushes offered a close facsimile for the painter's brush. Wearing white coats, artists simply, rigorously cleaned the pavement of the Grand Army Plaza in New York City. In the move from the art institution to the urban context the work revisited urbanity as the location of artistic intervention. Performed as part of the Fluxus group's Fluxfest the work has since been historicised as a Fluxus work, carrying with it a number of associations with the similarly anti-institutional 1960s, New York-based group's focus upon experiences of art beyond the gallery. As such, the act might be linked to the avant-garde and Dada movements' histories of working in an array of non-traditional formats which the performances of the Fluxus group are often placed amongst.

Figure 1:
*Street Cleaning
Event (1964),
performed during
Fluxfest Presents
Hi Red
Center Street
Cleaning Event,
Grand Army
Plaza,
New York,
June 11, 1966.*

<https://www.moma.org/collection/works/127371>

Located at the intersection of 58th Street and 5th Avenue in a busy part of Manhattan with much pedestrian and vehicular traffic the work was, to a degree, already situated in a liminal space. Directly adjacent to Central Park, the square might be considered as an extension of its South-Eastern corner and includes the civic, leisure-space signifiers of a paved plaza area and the Pulitzer fountain. However, at this time the plaza was privately owned, overlooked by tower blocks and was part of the gridded street system which exists beyond the park's gates. Consequently, constituting a space of transition to the surrounding commercial and residential urban conditions, it is not traditionally a space in which avant-garde art performances might occur. Thus, the introduction of a Fluxus performance charged this situation with a new set of meanings. This essay explores the effects of placing this artwork here. It argues that spatial context has the power to shift both experience and subsequent interpretation of phenomenologically charged works. It will examine the extent to which such a phenomenological art experience is driven by the contextual parameters of temporal, artistic, and physical space.

The New York City performance of *Street Cleaning Event* took place as part of the 1966 Fluxfest. The first Fluxfest had taken place four years earlier, in 1962. The Fluxfests were initiated by George Maciunas, an artist often perceived as the leader of the Fluxus group and featured performances by artists associated with the Fluxus movement and typically involved event score-formats in which the artists and often the audience were given a set of instructions by Maciunas to carry out and create a shared experience. The inclusion of the Hi-Red Center group in the 1966 festival may perhaps be seen as a branching out of the Fluxus group's already somewhat loose boundaries and their aim to include international artists with shared interests in art interventions which would exist beyond the institutional framework of the art gallery. The participation of Hi-Red Center at this point in the development of the Fluxus group is particularly interesting as it might be interpreted as part of a general movement towards placing Fluxus within a wider context of avant-garde activism.¹ Furthermore, the Hi-Red Center's emphasis upon the urban infrastructure as a potential habitat for artworks ties closely to the Fluxus group's interest in the city itself as a context for art. By 1966, Maciunas had become increasingly

¹ Maciunas had in fact published a history of the avant-garde in 1964 as George Maciunas, ed. *Fluxus 1* (1964).

involved in urban development and architecture and was instrumental in the campaign to prevent Robert Moses' planned Lower Manhattan Expressway. He had furthermore created a series of Fluxus co-operatives – loft spaces converted to provide living and working spaces for the local artist community.²

The primary source for my discussion will be the photographs produced by George Maciunas to document Street Cleaning Event and a text titled *Fluxus Experience* which emphasises the phenomenological and experiential facets of the work. It was written by Hannah Higgins, a Fluxus scholar and the daughter of artists closely associated with the movement: Dick Higgins and Alison Knowles. This focus on secondary material is necessitated by the writing of this paper in 2017, fifty-one years after the work was performed in Manhattan. However, rather than debilitating a close examination of the work's context, this approach might provide an interesting discussion of how art-historical reception alters phenomenological works. Consequently, the question of how this phenomenological work is altered by its re-constitution in a variety of contexts will be considered, asking whether the work exists in its initial performance and all that follows is representation, or, if perhaps, the work exists beyond its first iteration.

Situated Frames

As the performance of the event discussed in this paper took place over fifty years ago, today our interaction with it takes place via the documentation of the work in photographs or in literature examining the performance. Each medium presents the work in contrasting ways and informs understandings of one another. Distilled from its sensorial aspects of smell, sound, and touch, in photography the work is translated into a solely optic medium. Maciunas' photographs show groups of men, crouched in white coats (Fig. 1). In the background stand a number of pairs of legs, clad in trousers and jeans, shod in smart shoes, sandals and trainers. Only the faces of the crouching men are shown, the bodies of the audience are cropped at the waist by the frame of the photograph, drawing focus onto the activity of cleaning rather than the context by which it is surrounded. The majority of the image is given over to the pavement itself, wetted, apparently, by the activities of the crouching figures who appear to be holding bottles of white spirits and scrubbing

² George Maciunas Foundation Inc., "Fluxhouse Cooperatives," accessed 28 October, 2017, <https://georgemaciunas.com>.

cloths. This specifically framed interaction places emphasis on the pavement itself and the use of white spirit reminiscent of the removal of layers of paint in the conservation of traditional painted artworks – the detritus of the city becoming tantamount to scumble being stripped back and thinned to reveal previous layers hidden beneath. Whilst public observers present at the original performance could see the towering buildings, which acted as a backdrop to the performance, those confronted with Maciunas' photographs see only a very tight and specific window onto the performance.

By contrast, a verbally conveyed frame onto the work emerges in Hannah Higgins' discussion in her *Fluxus Experience*, published in 2002.³ Higgins' explicit focus is on the formal qualities of experience and ephemerality. A particularly adroit tour de force, it explores how the event and the Fluxkit – two of the primary formats used by Fluxus – were, or, are experiential works.⁴ In this way, Higgins presents the experience of the work, not the art itself, as that which harbours its artistic essence. Thus, the specifics of the experience become pivotal in determining the piece. Consequently, any minute shift in the exact time, location, crowd, sounds and sensations would result in an entirely different piece of art.⁵ This stance marks her interaction with *Street Cleaning Event*. As such, for Higgins, any subsequent performance of the work is a reincarnation, where only an umbilical link remains while the specificities are re-constituted. Indeed, Higgins argues that “[e]xperience is neither ahistorical nor without context, rather, experience is simultaneously embedded in human consciousness and the situation that makes a specific experience possible.”⁶ However, despite this declaration of the embedded nature of context, her examination of *Street Cleaning Event* is distanced from the specifics of the work's performance. She writes:

The pattern of the public's interacting with Fluxus materials and adapting them to their own circumstances suggests the essential fluidity of Fluxus. And my own experience confirms it. In 1966 the Japanese Fluxus artist Hi-Red Center performed *Street Cleaning Event*, meticulously cleaning a patch of sidewalk in New York City with solvents. I grew up knowing this work. When I took on a job in college as a cleaning woman, I recalled it, and it became for me a means of connecting profoundly with my environment.⁷

³ Hannah Higgins, *Fluxus Experience* (London: University of California Press, 2002), 63.

⁴ *Ibid.*, 34.

⁵ *Ibid.*, xiv.

⁶ *Ibid.*

⁷ *Ibid.*, 63.

Read as an artistic critique of *Street Cleaning Event*, this description is somewhat lacking as the passage speaks not of the work's location (temporally or geographically), nor of the sensations experienced when observing the piece. Higgins' writing and discussion of the work initially appears distanced as she writes of her own experience cleaning to earn money as a student. In this way, it might be thought that Higgins is not engaging with the work itself. However, this moment of connection and remembrance is borne from a series of acts, which, however loosely, re-perform the work, creating a new iteration. Akin to a postliminary editioning of prints by an artist's technician, in lieu of the original artist, each member of the public that observed the original event becomes an amateur performer, revisiting new versions of the work in their daily lives. As such, Higgins' focus upon her own performance rather than her experience of the original, is an attempt to highlight this process. The Event is a paradox, both contextually unique and limited, yet with the scope for infinite iterations. In an earlier essay, Higgins states that "[i]n all cases, however, the work relies critically on its surroundings: whether mass cultural, art critical, political or institutional."⁸ While this is true, it is true in a complex way with caveats. Higgins' own interpretation is as reliant upon its context as the original work is. Oddly, for a term expressed in the singular, the specificity of the event is perhaps best explored as a multiplicity of individuated performances.

However, an emphasis on the genealogical link to earlier performances is at risk of neglecting the importance of shifting variables. *Street Cleaning Event* was initially performed on a street in 1966, surrounded by pedestrians. Higgins' cleaning experience was performed as a student many years later, cleaning professionally indoors, and importantly, it is an act of reminiscence. Even disregarding the hierarchy that surrounds the original within the art world, the two iterations cannot be entirely equated. In earlier discussions of the nature of experiential artworks, Higgins herself actually states that "[i]nterpretations may be subsequently attached to an experience, thus deepening or augmenting the interpretive capacities of later experiences and reports on them."⁹ This acts as a statement on the nature of her own performance as it pertains to the original, generationally-linked to its antecedent work, yet contextually altered. It is a new entity of its own.

⁸ "Naming Change and Changing Names: Fluxus as a Proper Noun," in *Fluxus Virus 1962-1992* (Köln: Galerie Schüppenhauer, 1992), 117.

⁹ Higgins, *Fluxus Experience*, 1.

<https://www.takaishigallery.com/en/archives/12436/>

Figure 2:
‘Hi-Red Center:
The Documents of
“Direct Action”’¹⁰

Relocation

The 1966 version of *Street Cleaning Event* bears a striking similarity to a work performed by the Hi-Red Centre group in 1964, which saw them cleaning a pavement in Japan. Wryly entitled *Cleaning Event (Be Clean! Campaign to Promote Cleanliness and Order in the Metropolitan Area)*, it took place in Ginza, Tokyo (Fig. 2).¹⁰ Although in a number of ways the presentation was incredibly similar – the artists cleaned on a pavement, wearing white coats – its location on a street in Ginza rather than Manhattan shifted interpretations of the work. *Cleaning Event* has been perceived as a highly contextually-charged event. Performed amidst governmental appeals for urban cleanliness during the on-going 1964 Olympic Games held in Tokyo, it has frequently been described as an ironic response.¹¹ These appeals arose amidst Tokyo’s ambitious half-billion dollar pledge to improve the city in order to host the event, a move which was undoubtedly an attempt to increase tourism to an overpopulated and economically struggling Tokyo.¹² This ironic reading is strengthened by the performance of the work on the seventh day of the Olympic games¹³ and the Hi-Red Center group’s history of authority-challenging interventions in Tokyo.¹⁴ A few key differences to the New York City event occurred in the Tokyo work which emphasise such anti-authoritarian undertones. Specifically, an a-frame sign was placed a few meters from the cleaners with the words ‘Be Clean’ in English and ‘Sōji-Chū’ in Japanese (which roughly

¹⁰ Jeff Michael Hammond, “Hi-Red Center’s Quiet Actions Still Reverberate Today,” *The Japan Times* (26 February 2014), <http://www.japantimes.co.jp/culture/2014/02/26/arts/hi-red-centers-quiet-actions-still-reverberate-today/#.WVQjlbGZNE4>.

¹¹ See Saeko Kimura, “Uncanny Anxiety: Literature after Fukushima,” in *Fukushima and the Arts: Negotiating Nuclear Disaster*, ed. Barbara Geilhorm and Kristina Iwata-Weickgennant (New York: Routledge, 2017), 77; Reiko Tomii, “Geijustu on Their Minds: Memorable Words on Anti-Art,” in *Art, Anti-Art, Non-Art: Experimentations in the Public Sphere in Post-War Japan*, ed. Charles Merewether and Rika Iezumi Hiro (Los Angeles: Getty Research Institute, 2007), 55; Hammond, “Hi-Red Center’s Quiet Actions Still Reverberate Today.”

¹² Robert Whiting, “Olympic Construction Transformed Tokyo,” *The Japan Times* (10 October 2017), <https://www.japantimes.co.jp/sports/2014/10/10/olympics/olympic-construction-transformed-tokyo/#.XhesDkX7TOQ>.

¹³ Tomii, “Geijustu on Their Minds,” 55.

¹⁴ Tate, “Art Term: Hi-Red Center,” accessed 28 October, 2017, <http://www.tate.org.uk/art/art-terms/h/hi-red-center>.

translates to *Cleaning Now*) and unwitting passers-by were asked to take part in the work.¹⁵ The former a nod to governmental pleas for the local population to clean the city ahead of the games, and the latter a direct hint at the collective responsibility which the government were trying to instil in such appeals. Consequently, in performing these two similar works in different temporal and geographical locations, a shift in interpretation was inevitable.

Although *Hi-Red Center* were already associated conceptually and socially via Yoko Ono with the contemporaneous group known as Fluxus, the performance of *Street Cleaning Event* in Sixties New York allowed it to be understood as a Fluxus work. Geographically re-located, the work was no longer a satellite to the movement, re-conceptualised, by academia at least, as a constituent part of the Fluxus events programme.¹⁶ This becomes evident in the inclusion of a number of notable exhibitions such as *A New Avant-Garde* at the MoMA, New York which explore the work of Fluxus.¹⁷ Indeed, part of the reason the work was re-performed two years later as a showcase of *Hi-Red Center's* work during Fluxfest, was to formally present the group to New York City's Fluxus community. The event itself was documented in photographs by George Maciunas (Fig. 1). In much of the scholarship surrounding Fluxus Maciunas was historicised as almost synonymous with the movement, even becoming nicknamed 'Mr. Fluxus.'¹⁸ Thus, in the work's conversion to a subject of Maciunas' photography, it became memorialised as a Fluxus work. As such, the work's contextual shift was confirmed, the dislocation from its politicised origins complete and it was relocated within the narratives surrounding the emergent artistic construct that was known as Fluxus.

The association of *Hi-Red Center's Street Cleaning Event* with Fluxus emphasises certain nuances of the performance. For example, the use of the word 'Event' within the work's title in the context of the 1960's New York City art scene means something highly specific. *The Event Score* is a contribution of George Brecht to the Fluxus movement, and is arguably one of the most regularly recurring mediums of the movement.¹⁹ In her text *Fluxus Experience*, Higgins defines the event as a situation in which "everyday actions are framed as minimalistic performances, or, occasionally, as imaginary and impossible experiments

¹⁵ Tomii, "Geijustu on Their Minds," 55.

¹⁶ See Higgins, *Fluxus Experience*, 63; John Carter, "Exhibiting Fluxus: Mapping Hi Red Center in Tokyo 1955-1970: A New Avant-Garde," MoMA, accessed 30 January 2017, https://www.moma.org/explore/inside_out/2013/01/30/exhibiting-fluxus-mapping-hi-redcenter-in-tokyo-1955-1970-a-new-avant-garde-2/.

¹⁷ Carter, "Exhibiting Fluxus," accessed.

¹⁸ Ann Noël and Emmett Williams, eds., *Mr. Fluxus: A Collective Portrait of George Maciunas 1931-1978* (London: Thames and Hudson Ltd., 1997).

¹⁹ Higgins, *Fluxus Experience*, 2.

with everyday situations.”²⁰ Such understandings of the Fluxus event bear convincing parallels to *Street Cleaning Event* as the act of civic street cleaning certainly qualifies as an ‘everyday action,’ which, when performed as an artwork, is quietly reframed, initially imperceptible as art.²¹ As such, the former of Higgins’ paired definitions is satisfyingly achieved and, at least by Higgins’ measure, thus falls into the category of an event. This places the work as a specific kind of spatial interruption, easily comparable to other events sited within the urban fabric as this was hardly the first time that Fluxus Events punctured the daily lives of city dwellers through kerbside interruptions.²² One particularly relevant work titled *Travelling Wall* was created in Roskilde, Denmark by Danish artist Eric Anderson in 1985. In this work members of the public were asked to disassemble and reassemble a pile of bricks into new formations on the pavement.²³ In this way the urban fabric was subtly reconstituted to disrupt the urban terrain and make it anew. Similarly, in its own small way, *Street Cleaning Event* moved the matter of the pavement around, a facet of the work that might otherwise be overlooked which enables the work to be considered a form of transient architectural intervention. Consequently, although these two works were created nearly twenty years apart their qualification as Fluxus Events and their similarity in regards to their location in urban space allows enriching comparisons between the two to emerge. Once again for *Street Cleaning Event*, the work’s location determines the precise interpretations which it might inspire.

Indeed, the very act of contextual shift as is displayed between *Cleaning Event (Be Clean! Campaign to Promote Cleanliness and Order in the Metropolitan Area)* and *Street Cleaning Event* has a precedent within the Fluxus movement in the form of the Fluxkit. The Fluxkit is best described as an experiential toolkit in minutiae. The Fluxkit encloses transitional objects, generally a collection of multiples, created by Fluxus artists.²⁴ These objects provide differing experiences. Examples of such multiples include noisemakers produced by Joe Jones, sets of nested cubes by Mieko Shiomi, objects to touch and stroke and performance score cards with instructions to facilitate the performance of specific works.²⁵ Each object offers subtly different approaches to experience, allowing individuals microcosms of artistic experience beyond the gallery within their own daily lives. The experience

²⁰ Ibid.

²¹ Ibid.

²² Ibid., 63.

²³ Ibid.

²⁴ MoMa, “Thing/Thought: Fluxus Editions/ 1962-1978,” MoMa, accessed 28 June 2017, www.moma.org/interactives/exhibitions/2011/fluxus_editions/category_works/fluxkit/.

²⁵ Ibid.

produced is mobile and transferrable into any location the art-consumer chooses, each time altered by the situation in which it occurs. Thus, the re-siting of *Street Cleaning Event* within New York City's primary physical trope (the street itself) mimics the Fluxus tradition of creating enclaves of artistic experience within daily reality, questioning whether art must only exist in the devoted spaces of museums and galleries.

Temporal and representational space

As *Street Cleaning Event* was historicised it became reliant upon its representation in writing and photography to determine its legacy as the number of people with direct experience of its 1966 iteration constantly decreases. This is a facet of all ephemeral work, traditionally defined by its limitedness; as to move between a first-order phenomenon and second order representation drastically alters a work, thus traditionally confirming the end of the work's evolution. However, the nomenclature of the Fluxus movement, with which the work has become associated, is derived from the status of 'flux,' a term which is, by definition, non-static.²⁶ Furthermore, the movement's works were often produced as editions and events which were shifted and developed as they were experienced and performed in new locations. Indeed, artist Dick Higgins once declared that "Fluxus is not a moment in history or an art movement. Fluxus is a way of doing things, a tradition, and a way of life and death."²⁷ Writing in the 1960s, Higgins naturally described Fluxus in the present tense. Nevertheless, his declaration begins to define a temporal space which is anything but limited.²⁸ Although, Fluxus itself wishes to exist continually within the present tense, the narrative that explores it now speaks with a historical tone. Unless, as is the case in this discussion, academics are specifically considering the temporal locus of a work, it is simply understood as an event that took place in the 1960s. As such, when a work exists through its subsequent narratives, and these narratives are past tense, the work itself is no longer in 'flux,' but instead a past event. There is no past tense for the word 'flux,' and yet, the placing of the work in an art historical narrative falsely presents it as having one, as having fluxed, or, even more incorrectly, as having become extraneous to the nature of flux, marginalised from the very nature of its own movement. Dick Higgins' description of Fluxus as a 'tradition' is particularly telling as traditions are

²⁶ Higgins, *Fluxus Experience*, 1.

²⁷ Dick Higgins, quoted in Justin Remes, *Motion(Less) Pictures: The Cinema of Stasis* (New York: Columbia University Press, 2015), 61.

²⁸ Ibid.

continually redefined by those that come into contact with them.²⁹ For Higgins, Fluxus, akin with historical folklore, is an evolving concept through which the origin of the tradition may continue to speak in the present tense. Thus, *Street Cleaning Event's* visual and verbal documentation is shifted from stasis, instead becoming an active participant in the movement's continually shifting narrative. Consequently, the status of these representational forms solely as documentation of the original becomes questionable.

In light of this consideration, further parallels emerge between *Street Cleaning Event* and the Fluxkit. Indeed, Hannah Higgins introduces the multiples of Fluxus as the published format of the event, stating: "Events like these were typeset and published as Fluxus editions in 1963," rather than describing them as having been documented in the form of Fluxus editions.³⁰ A linguistic difference so subtle it might easily be overlooked, but pivotal to unpick Higgins' stance as it confers event status onto the process of using the Fluxus edition. This characteristic shifting is noted in the writing of Owen F. Smith exploring the Fluxkit. Smith discusses the "meandering evident through Fluxus events and objects" as it pertains to their actuation "by the situations in which they are viewed and enacted."³¹ Yet, he does not go so far as to explore the event and the object as different forms through which the same experience may be achieved. Higgins' stance appears a natural conclusion of Smith's statement, yet her subtle conferment of the Fluxkit as an event itself determines a seamless shifting and reconstituting of the boundaries of artistic production, which neglects the importance of form in a work. After all, to assert similarities between the very physical spaces produced in events like *Street Cleaning Event* and the cognitive artistic landscapes produced by the Fluxkit largely ignores the contrasting qualities of these two landscapes, which are of course, numerous.

It is perhaps in the terminology surrounding the Fluxkit where we might begin to encroach upon a resolution of this apparent oversight in Higgins' critique. The objects' identification as multiples suggests a plural number of items. But of what specifically? Of course, there is more than one object in each kit – however, as there are a number of *different* items the term multiple itself seems unfitting, generally indicative of a number of the same type of object. As such, it is

²⁹ Ibid.

³⁰ Higgins, *Fluxus Experience*, 2 (emphasis mine).

³¹ Owen F. Smith, "Playing with Difference: Fluxus as a World View," in *Fluxus Virus 1962-1992* (Köln: Galerie Schüppenhauer, 1992), 117.

not the physicality of the objects that groups them. Instead, one might propose it is the role of the objects as producers of experience that is their shared quality. In this manner, the contrasting physical set-ups of the different items – be they within a Fluxkit multiple or as part of an event – determines the varied qualities of each experience. A set of multiplicities, each is linked by their creation of experience but distinct in what that experience may be and consequently in how it may be contextually formed. As such, rather than negating the importance of context, the role of form and location in forming experience is emphasised, elevated to the role of the determining factor for any experiential difference.

Physical Loss

Nevertheless, a formal shift occurred between the 1966 performance of *Street Cleaning Event* and its subsequent incarnations. The work, once embedded within the civic fabric now exists primarily within academic discourse. The loss of its architecture is a heavy one, altering the experience of the work dramatically. This has two paramount ramifications. Firstly, the work is now within the artistic canon, where it was previously physically located outside of art as institution, and, secondly, the aleatoric role of the public is lost, as the accidental performer is swapped for that of the deliberate reader. This seismic reconstitution of the public's role is, of course, not without effect. Contemporary attempts to understand *Street Cleaning Event* read the work in relation to its context. As such the role of context is, on some levels exaggerated despite its physical loss. Elements that have become historically important to the art world become exaggerated and undocumented contextual realities lost from the work's legacy. The exact effects of this remain unknowable, exaggerating their ramifications.

Furthermore, whilst being continually re-considered in academic discourse, the reconstruction of the work is also active in a different manner. Previously the viewer's engagement with the work was broadly aleatoric. The viewer did not necessarily choose to engage with it, nor seek out the location of the performance with observation in mind. Instead, it appeared on their doorstep, mid-path, demanding their attention. Given the Fluxus movements' close association with the composer John Cage, the loss of

chance encounter is particularly important. The roots of Fluxus are often traced back to a series of classes in Experimental Composition given by Cage between 1957 and 1959 at the New School in New York City, where a number of the group's members first met and were introduced to musical composition.³² He later qualified his involvement in the class as not dictatorial, stating that "I wasn't concerned with a teaching situation that involved a body of material to be transmitted by me to them."³³ However, the compositional experiments enacted by the class bear close similarities to Cage's own praxis; centred upon notions of the aleatoric. Cage is most famous for his composition 4'33", which highlighted environmental noise, created by chance, qualifying each situation of rendition as entirely unique. The same can be said of the observers of *Street Cleaning Event*, who came to the work by chance yet each defined its physicality as their bodies enter the performance space thus altering the rendition for others around them. By contrast, the critic is removed from the process unable to reconstitute the physical reality of that which has already occurred, shifting solely interpretation not performance.

Furthermore, the emphasis given in the title to the work's physical location should not be missed. It is *street* cleaning the artists are concerning themselves with. Both the New York City and Tokyo performances of the work were situated on a street pavement, a context loaded with meaning which may inflect interpretations of the work. However, before we begin to delve into what the pavement context is, we must consider what it is not. After all, it is not the expected location of an artwork, it is not an art gallery or exhibition. The work was performed outside of the institutional art context which has long been acknowledged for its role in shifting the relationship between object and viewer. The hotly debated importance of context in the appropriation of day-to-day objects into readymades has become a trope of the art industry, where merely the placement of an object within an art gallery by an artist determines its reception as an artwork. For example, Duchamp's readymades place everyday objects into the gallery condition, imploring the gallery-goer to understand them as artworks. So, what happens when this dichotomy is reversed, when an ordinary activity is placed in an ordinary location but is still perceived as an artistic act? Evidently, the socially constructed parameters of the art institution begin to dissolve, as

³² Higgins, *Fluxus Experience*, 1.

³³ John Cage, "Interview with Michael Kirby and Richard Schechner," *Tulane Drama Review* 10, no. 2 (Winter 1965): 54.

any location may be the harbinger of artistic merit. Art itself is no longer entirely extraneous to reality. Despite existing in a street not a gallery *Street Cleaning Event* was nonetheless subsequently perceived as an artwork in the critical reception that has followed. In this way, art might begin to effect change upon the civic reality as an integrated part of it, no longer confined to specific and distinct institutions.

Pavement Boundaries

At this point in our discussion, the nature of *Street Cleaning Event* as a physical act that not only takes place within space but actually alters and re-constitutes space is vital. The work begins to shift from installation or interruption to something approaching architecture – a shorthand here to describe that which directly alters the built environment. The civic experience that the street itself determines extends beyond merely the concrete form of the pavement. Instead, it is constituted by the dirt which sits upon it, the texture of the terrain under foot, the smells that emerge from it, and the interactions which may take place there – each substantially reconstructed by the act of meticulously cleaning. Thus, although the soap suds themselves will disappear, the civic reality is altered by the work in a permanent manner, now a location in which art may not only take place but which was, in part, formed by an artistic act.

The pavement itself is located somewhere between private and public territories. It sits at the threshold between the two and has its own academic, civic and personal histories each of which merged with the equally rich artistic spatial narrative of *Street Cleaning Event*. The merging of these territories was for the Hi-Red Centre something of a leitmotif within their work. Typically using the Tokyo pavement, and indeed the airspace above it for a number of interruptions within the urban fabric, the group's oeuvre included works such as *Dropping Event* (10 October 1964) which saw the group throw “books, pants, shirts, shoes, full trunk, etc.”³⁴ onto the street and protest-like happenings including *Kyushu Faction Street Happening at the Tenjin Intersection of Fukuoka*, (26 February 1970).³⁵ Evidently, the pavement was interesting to the group as a spatial field, which they returned to again and again as the location of their works.

³⁴ George Maciunas, text on the reverse of *Hi-Red Center map*, quoted in Carter, “Exhibiting Fluxus,” accessed.

³⁵ Minoru Hirata, “Kyushu Faction Street Happening at the Tenjin Intersection of Fukuoka, 26 February 1970,” Tate, accessed 8 January, 2020, <https://www.tate.org.uk/art/artworks/hirata-kyushu-faction-street-happening-at-the-tenjin-intersection-of-fukuoka-26-february-p80112>.

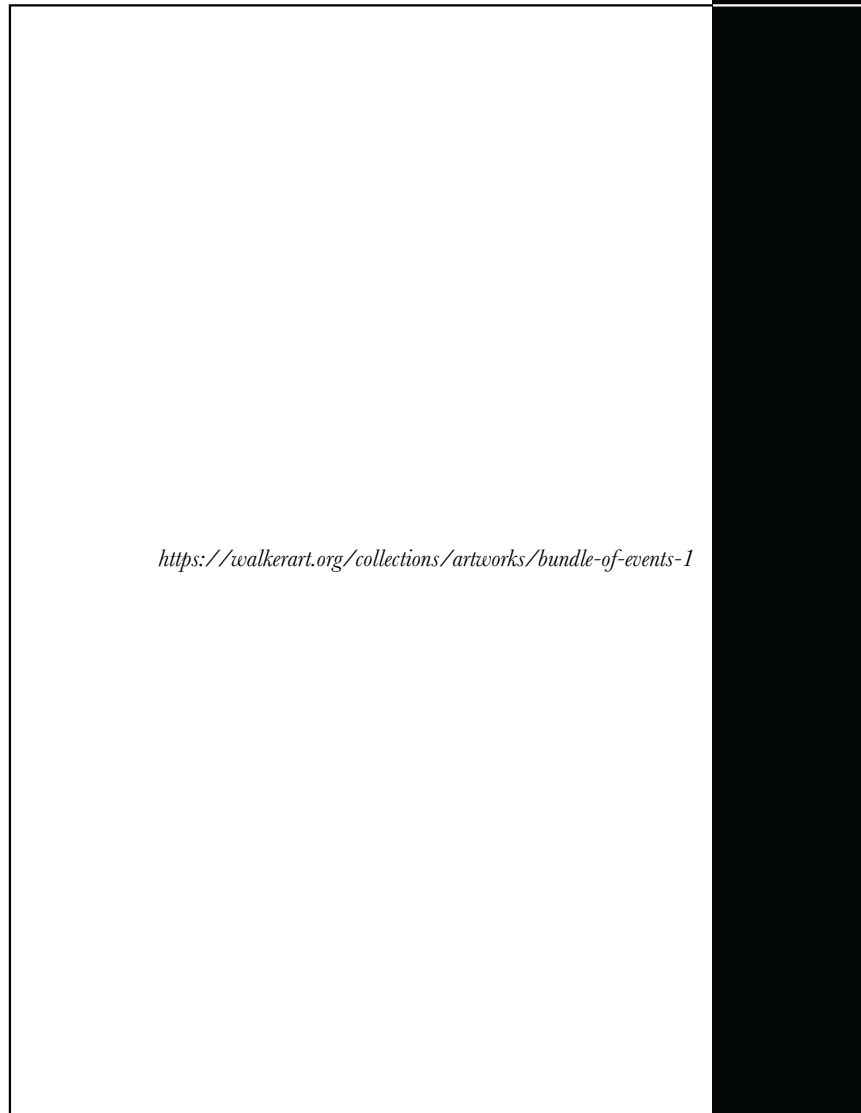


Figure 3:
Bundle of Events

A map produced in 1965 documents activities by the group in Tokyo in 1963 and 1964 (Fig. 3).³⁶ Designed by George Maciunas and edited by Shigeko Kubota it is a Fluxus edition, confirming the group's status within the Fluxus mythology.³⁷ The graphic language of the map literally places the movement's acts within an abstraction of the city.³⁸ Collapsing the timeline of the group it conveys works which would never have taken place at the same time within a singular map. As such the works exist in flux, crystallised in an eternal location beyond the parameters of time. Consequently, the city is represented as permanently marked by the spectre of the group's once ephemeral acts, each presented as equally vital to an understanding of the city as the urban infrastructure itself. In fact, it could be argued that in this illustration the group's works

³⁶ Carter, "Exhibiting Fluxus," accessed.

³⁷ Ibid.

³⁸ Ibid.

are prioritised over the physical city grid, as where the two exist within the same space, visual priority is given to text describing the event. As such, the group's activities are placed as infrastructure, denoting the map-user's experience of the city.³⁹ Each represented in abstraction, the capacity for both terrains – of art installation and streets – to represent not only physical space but to signify experiences beyond spatial reality becomes evident. As if to highlight this, the text 'Hi-Red Center' is shaped as a balloon, floating above the infrastructure in a space beyond, yet represented by the civic realities the group left behind.

Each formal interruption and alteration to this ever-evolving work redefines and alters it. Borrowing an act from an earlier Hi-Red Center work and re-siting it within the streets of New York City dislocated it from the politicised context of Tokyo and instead situated it within the Fluxus narrative. This act places the work within a tradition of civic events and the production of counter-spaces which, in juxtaposition, determine the boundaries of the dominant reality. Within Fluxus, temporal space is infinite and experienced as a multiplicity. As such, if these two factors extend across iterations, it is the contextual and formal shifts that determine the unique character of each work, a reality which elevates the significance of these factors. As the work is historicised it loses its integral physicality, the effects of which (both known and unknown) are turbulent – what was once disparate might be fused, what was once connected now separated in rifts and fissures. The process of historicisation itself undermining some of the most determined qualities of a Fluxus work – its focus on experience, its presentness, its flux. As such this new context qualifies the importance of its prior architecture, which defined the work as a counter space, challenging previous assumptions about the institution and its ability to determine the parameters of art. This location – sitting between public and private experience – is an interstitial territory permanently altered by the work. It is reconstituted as a territory formed by the act of artistic creation. Both its physicality and its conceptual reality are altered by the work. A series of lenses exist to observe this terrain. Tightly framed and specifically curated they encourage observation and limit its parameters, exploring mere moments of this art object in flux. With no fixed performer or location, the boundaries between lens and performance are near-imperceptible, as the work's shifting physical

³⁹ Ibid.

context alters it beyond recognition. In this way, *Street Cleaning Event*, as an intervention within the civic is an experiential work driven by the contextual and formal parameters of its production. In becoming architecture, it altered the role and possibilities of the site, and subtly shifted the reality of the urban environment in which it existed.

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Reformatting
T h e
M o n o g r a p h :
T h e
B o o k
F o r m
A s A
S i t e
O f
P l u r a l i t y

DENİZ

B A L I K
L Ö K Ç E

D E N I Z
B A L I K
L Ö K Ç E

DOKUZ EYLÜL
UNIVERSITY

Reformatting the Monograph: The Book Form as a Site of Plurality

Introduction

Today, mass media is expanding worldwide with the prevalence of images in the areas of publishing, advertising, and accumulating information. The print culture of architecture, including magazines, books, and exhibition catalogues, contributes to the production of the architectural canon, expresses personal statements and design approaches, causing the public to encounter architectural culture. From a historical perspective, the mechanisation of the Industrial Revolution paved the way for new printing techniques and the production of new book genres, whereas the twentieth-century modernists embraced production and reproduction technology to convey their ideas.¹ Today, the monograph is an essential print form in the worldwide circulation of the products of architectural offices for self-promotion, self-display, criticism, and archiving. Accordingly, as this paper argues, in the production of monographs, architects intentionally embrace the tools of the culture industry. As display and design objects, monographs engage with production and marketing instruments to exist within the system of our image-driven society. Challenging its conventional understanding, this article aims to uncover the contemporary monograph as a site of plurality, heterogeneity, divergence, and fragmentation.

The paper forms a critical reading of two books in particular: *Content* (2004) by the Office for Metropolitan Architecture (OMA), led by the Dutch architect Rem Koolhaas, and *Yes is More: An Archicomic on Architectural Evolution* (2009) by the Danish practice Bjarke Ingels Group (BIG).² *Content*, with its book/magazine hybrid format, was produced simultaneously with OMA's *Content* Exhibition in Berlin and was promoted as a sequel of the 1344 page seminal work, *S,M,L,XL* (1995) by OMA, Koolhaas, and the graphic designer Bruce Mau (Fig. 1).³ *Content*'s book/magazine hybrid format makes it under-theorised and overlooked in comparison to the well-received and widely appreciated *S,M,L,XL*.⁴ Yet five years after the publication of *Content*, Koolhaas's former employee Ingels utilised the comic book form for BIG's *Yes is More* Exhibition in Copenhagen and its supplementary catalogue/monograph, produced by the same

¹ André Tavares, *The Anatomy of the Architectural Book* (Baden: Lars Müller Publishers, 2016), 14–15.

² Bjarke Ingels, the founder of BIG worked at OMA in Rotterdam between 1998 and 2001. Afterwards, he established PLOT with Julien de Smedt, whom he met at OMA. In 2006, they split up to found their own offices.

³ For research on OMA's exhibitions, see Christophe van Gerwey, "Outreach Extensions: OMA/Rem Koolhaas Exhibitions as Self-Critical Environments," *Architectural Theory Review* 23, no. 1 (2019): 90–113; Kayoko Ota, "Curating as Architectural Practice," *Log* 20 (2010): 141–49.

⁴ For the comment, see Christophe van Gerwey, "Introduction: Suspended Meaning," in *OMA/Rem Koolhaas: A Critical Reader*, ed. Christophe van Gerwey (Basel: Birkhäuser, 2019), 16.

publisher (Fig. 2).⁵ Both books were published after the exhibitions and achieved huge success independently, rather than remaining as appendages to, and archives of, the exhibitions. They exceed the genre of exhibition guide as the architects/editors did not produce them to accompany the exhibition visitors whilst orienting themselves among the bulk of models and cardboards. The printed pages of the books are edited as intricately as the curated spaces of the exhibitions.

Amalgamating “Millions of Traces”

Etymologically, ‘monograph’ refers to “a treatise on a single subject,” stemming from the Ancient Greek words *mono* – meaning one, single – and *graph* – meaning something written.⁶ In its current form, a monograph contains orthographic sets, sketches, and a number of large sized or full-page photographs and renders, which show the buildings as finished and high-end products. The dominance of images points to the emphasis of consuming the built environment primarily as a visual entity in our screen-saturated public sphere. Within this context, the task of the book user is to look at images rather than reading and interpreting texts.⁷

Pioneered by *S,M,L,XL*, *Content* and *Yes is More* contribute to rethinking the format of the architectural monograph. In accordance with their respective renowned publisher’s objective of producing art and design books loaded with high quality glossy images, they blend divergent media from their front covers to the back: cartoon figures, speech balloons, computer games graphics, banal images, advertisements, architectural drawings, renders, photographs, screen shots, satellite views, paintings, maps, diagrams, ideograms, magazine pages, newspaper headlines, catchphrases, official reports, cut out texts, short essays, and interviews (Fig. 1). The exploitation of graphic materials, however, stems from the cultural, artistic, and architectural climate of 1960s, which affected Koolhaas’s and subsequently Ingels’s printed works.

⁵ S,M,L,XL was massively influential in terms of graphics for Ingels, equally Koolhaas, with his phrase “More is more” in his seminal essay “Junkspace”, had a key role in shaping Ingels’s perspective. See Bjarke Ingels, “Interview with Terri Peters: Unleashing New Universes,” *Mark* 36 (2012): 199; *Yes Is More: An Archicomic on Architectural Evolution* (Cologne: Taschen, 2009), 8–9.

⁶ Ernest Klein, *A Comprehensive Etymological Dictionary of the English Language* (Amsterdam: Elsevier, 1966), 675, 997, 98.

⁷ Deniz Balık Lökçe, “Contemporary Architecture Monographs as Design Objects,” *SDU Art-E* 12 no. 23 (2019): 93.

Figure 1:
OMA &
Rem Koolhaas,
*Content: Triumph
of Realization*
(Cologne:
Taschen, 2004).

<https://oma.eu/publications/content>

Figure 2:
Bjarke Ingels,
*Yes is More:
An Archicomic on
Architectural
Evolution*
(Cologne:
Taschen, 2009).

<https://big.dk/#projects-yim>

The amalgamation of comic strips, poetic essays, and manifesto-like texts was widely adopted by Archigram, who illustrated the coalescence of Pop culture, everyday life, and science fiction in their cutting-edge projects.⁸ Their adoption of the collage method, particularly seen in Archigram's magazine produced between 1961 and 1974, was at the service of narrating simultaneous events and expressing a play between flatness and depth that created illusions.⁹ In one of the issues of the magazine, the Archigram member Warren Chalk underlined the juxtaposition of comic imagery, architectural concepts, and urban projections as an expression of the intersecting worlds of reality and fantasy, paying homage to the Pop Artist Roy Lichtenstein.¹⁰ The communicable environment created by Archigram that presents architecture as a consumable product, rather than a representation of high culture, was in alignment with Lichtenstein's embrace of formalist aesthetics, through which low culture is raised and high culture is brought low.¹¹ Lichtenstein adapts printed subject matter, particularly cheap and stereotypical comics, into the canvas as a tool of visual communication within our everyday life.¹² As he speculates, the distinctive borders of composition and effect in a work of art, a comic, and an advertisement have become blurry.¹³ Among many art critics of the period, Clement Greenberg in particular sees the comic format, along with advertisements, magazine covers, and Hollywood movies, as kitsch, a commercial cultural phenomenon born simultaneously with avant-garde art.¹⁴ Yet Lichtenstein and Archigram's application of clichéd and banal graphic materials expresses a creative and productive attitude.

Koolhaas began developing his critical narrative in his early projects, owing to his education at the Architectural Association with an Archigram-based curriculum and from influential tutors such as Cedric Price and Charles Jencks. His publications emerged out of a combination of polemical terminology, metaphors, fiction, historical observation, and theoretical reflection, expressed by the amalgamation of divergent materials.¹⁵ Ingels, akin to Archigram, finds inspiration from science fiction genre, since they are packed with potentials of technological, cultural, social, or political innovation, as well as the narrative and mixed media technique of graphic novels.¹⁶ The montage-like layout of *S,M,L,XL* and *Content*, which combine different formats, stands in-between the cinematic character, as

⁸ Bernd Evers and Christof Thoenes, *Architectural Theory from the Renaissance to the Present* (Cologne: Taschen, 2011), 770.

⁹ Simon Sadler, *Archigram: Architecture without Architecture* (London: MIT Press, 2005), 148.

¹⁰ Warren Chalk, "Zoom," *Archigram* 4 (1964), <http://archigram.westminster.ac.uk/magazine.php?id=99>.

¹¹ Bradford R. Collins, *Pop Art: The Independent Group to Neo Pop, 1952-90* (London: Phaidon, 2012), 96, 106.

¹² Janis Hendrickson, *Roy Lichtenstein 1923-1997: The Irony of the Banal* (Cologne: Taschen, 2018), 18-38; Mark Francis and Hal Foster, *Pop* (London: Phaidon, 2005), 27; Nathan Dunne and Roy Lichtenstein, *Roy Lichtenstein* (London: Tate Publishing, 2012), 11-15.

¹³ Francis and Foster, *Pop*, 25.

¹⁴ Clement Greenberg, "Avant-Garde and Kitsch," in *Art and Culture: Critical Essays* (Boston: Beacon Press, 1989), 9.

¹⁵ Nigel Coates, *Narrative Architecture* (West Sussex: John Wiley & Sons, 2012), 41-42; Evers and Thoenes, *Architectural Theory from the Renaissance to the Present*, 814-15; Emmanuel Petit, *Irony, or, the Self-Critical Opacity of Postmodern Architecture* (London: Yale University Press, 2013), 181; Todd Gannon, "Return of the Living Dead: Archigram and Architecture's Monstrous Media," *Log* 13/14 (2008): 178; Julia Walker, "Islands-in-the-City: Berlin's Urban Fragments," *The Journal of Architecture* 20, no. 4 (2015): 705.

¹⁶ Bjarke Ingels, "Unpacking My Library: Interview with Gianluigi Ricuperati," *Domus* 953 (2011), <https://www.domusweb.it/en/reviews/2011/12/16/unpacking-my-library-bjarke-ingels.html>; Ingels, "Interview with Terri Peters: Unleashing New Universes," 197-98.

the dominant media of the twentieth-century, and the newly-developing digital techniques of transforming specific media into one another in architecture culture. For Koolhaas, montage is the common ground of architecture, text, and film, as it allows different media to overlap whilst maintaining their individual representational features.¹⁷ In a similar vein, Archigram expressed the need to establish a hybrid network of divergent media, such as film, colour, and text, in order to clearly illustrate current ideas and situations.¹⁸

In the 1930s Walter Benjamin argued that written forms were in transformation: as strict borders of genres disappeared, the relevance of specific categories had to be reassessed.¹⁹ In the 1970s, Michel Foucault discussed the exclusion of anonymous texts and alternative genres from the conventional literary domain of an author. Consequently, unconventional materials, such as invoices, addresses, appointments, and notes of names were not counted in the body of mainstream literary and scholarly works: “How can one define a work amid the millions of traces left by someone?”²⁰ One can say that the mixed media techniques in *Content* and *Yes is More* indicate the dissolution and recreation of format, content, genre, and medium, already diagnosed by Benjamin, in contemporary architectural media. Expanding its framework, the architects introduce the monograph as a manifesto and an exhibition guide, as well as a design journal, which merges “millions of traces;” notes on building regulations, office dialogues, public comments, and clients’ photographs, documents which, as argued by Foucault, are commonly disregarded.

Along with combining genres, *Yes is More* provides multimedia features through its digital format, consisting of video broadcasts and interactive panoramas. Given that the printed format of a magazine or a newspaper is the archetype of the digital, the electronic media of magazines or books can be seen as an extension of the printed version.²¹ At 1.6 GB in size, the e-book of *Yes is More* allows the book to develop after its publication, unlike its 400-page hard copy version. Indeed, three recent projects were added in the digital edition, which illustrate updated explanations of the 8-House and the Shanghai Expo Pavilion (Fig. 3). 360-degree high-resolution panoramic images allow the reader to embark on an interactive virtual tour and explore the atmosphere of the building site. The digital

¹⁷ Koolhaas’ emphasis on the coalescence of film, text, and architecture, and his way of seeing architecture as a narrative, a scenario, a scripted experience, and a series of spatial episodes, derives from his earlier works as a journalist (for *De Haagse Post* on literature, cinema, art, architecture, and politics), a screenwriter and an actor before studying architecture. See Donald McNeill, “Content and the Architect’s Book,” in *The Global Architect: Firms, Fame and Urban Form* (London: Routledge, 2009), 99.

¹⁸ Archigram, “Introducing the Archigram Network,” *Archigram 7* (1966), <http://archigram.westminster.ac.uk/magazine.php?id=102>.

¹⁹ Walter Benjamin, “Author as Producer,” in *Understanding Brecht* (London: Verso, 1998), 89.

²⁰ Michel Foucault, “What Is an Author?,” in *Language, Counter-Memory, Practice: Selected Essays and Interviews*, ed. Donald F. Bouchard (New York: Cornell University Press, 1977), 118, 24.

²¹ Alessandro Ludovico, *Post-Digital Print: The Mutation of Publishing since 1894* (Eindhoven: Onomatopée, 2012), 92.

edition also includes twenty-five high-resolution videos with subtitles and behind-the-scenes commentaries of specific projects. The reader can open the videos in a small window, watch them at full screen or navigate through pages using the small bar at the bottom of the screen. The multimedia features include zoom, pan, bookmark, list, and search options. Allowing dynamic, responsive, and simultaneous data accumulation by a seamless interface, the digital medium of *Yes is More* introduces the book as a generative format, which is unattainable through conventional printed media.

<https://apps.apple.com/us/app/yes-is-more-an-archicomic/id410789021#ls=1>

Figure 3:
Bjarke
Ingels, *Yes
is More: An
Archicomic on
Architectural
Evolution* (e-book
app developed
by Taschen,
2011).

The substances of *Content* and *Yes is More* are assembled according to a thematic narrative, rather than a chronological order. The fragmental but articulate structures of the monographs cause the page layouts to differ in each page. In *Content*, topics are assembled in a geographic sequence, moving from the west to the east.²² The book does not only present OMA's architectural designs but also their global research and analysis. Like a magazine, it features a wide variety of authors, ranging from Michael Hardt to Martha Stewart. The foreword begins on page 16,

²² Brendan McGetrick, "Editor's Letter," in Rem Koolhaas, *Content: Triumph of Realization* (Köln: Taschen, 2004), 16.

following several pages filled with advertisements. Throughout the book, pages are frequently designed as double page spreads, which can be skimmed in a short time period. The 540-page colourful book is printed on thin and cheap glossy paper to deliberately allude to its magazine format. Its production as a hybrid genre is in contrast with the dense, scholarly, and expensive features of *S,M,L,XL*, as *Content* is suitable for quick consumption of information in our spectacle-laden world-in-flux.²³ While *S,M,L,XL* is regarded as a significant contribution to architectural discourse and print culture, *Content* looks disposable and recyclable. Koolhaas considers it as a pamphlet, whereas it is also seen as a quickly consumed magazine, an advertisement catalogue that is already out-of-date, a flow of newly created terminology and an abundance of images and graphics.²⁴

The accumulation and amalgamation of an abundance of visual and textual materials align with the concept of Junkspace, which Koolhaas introduced in a journal article with the same name, and later published in the *Harvard Design School Guide to Shopping* in 2001 and republished in *Content*. He defines Junkspace in the statement, “[m]ore and more, more is more,” as a space that “replaces hierarchy with accumulation, composition with addition.”²⁵ It exists as profusion of information in a world of signs, neon lights, and emblems of franchises. *Content* becomes a product of Junkspace, a throwaway material occupied by brands, slogans, and iconic figures. With a proliferation of data and images, its content fuses articles on critical architectural and urban issues with polemical essays on popular culture, much like Junkspace, which “fuses high and low, public and private.”²⁶ For Koolhaas, every verb that starts with ‘re-’ turns into the domain of Junkspace, as the prefix stretches the original concepts of the terms; therefore, even the act of reformatting the monograph belongs to Junkspace.²⁷

The Monograph as a Tool of Branding for the Architect

In the case of *Content* and *Yes is More*, the combination of the genres of monograph, manifesto, exhibition catalogue, and magazine sets them principally apart from conventional monographs and situates them in a heterogeneous public sphere. Ingels’s intention was to reach a wider audience and initiate a dialogue with them: “The aim of *Yes is More* is to communicate

²³ Ibid.

²⁴ “In Conversation with Beatriz Colomina,” *El Croquis* 134/135 (2007): 367.

²⁵ “Junkspace,” *October* 100 (2002): 176.

²⁶ Ibid.

²⁷ Ibid., 183.

outside the profession, to engage people who would traditionally not be interested in architecture.”²⁸ On the other hand, Koolhaas claimed that *S,M,L,XL* was sold 140,000 copies because it had granted an access to the world beyond architecture, merging the genres of diary, novel, dictionary, monograph, and historical record.²⁹ It placed architecture as a true cultural discipline as it was covered on divergent magazines, newspapers, and journals, be it popular or academic.³⁰ Due to its exploitation of abbreviations, keywords, references, and summaries, it can also be compared to the recent technique of hypertext, which has made a significant impact on the transformation of digital media.³¹ Being an enabling device in this sense, both *Content* and *Yes is More* eliminate architectural drawings of orthographic sets and revolve around visual materials, making the architectural monograph accessible to the public.

The layouts and distinctive typographies of *Content* and *Yes is More* derive from the architects’ intention to critically challenge established codes and phrases in the architectural domain, as well as their search for a new form of artistic expression. In the case of *Content*, Koolhaas’s discussion of various subjects and manipulation of mixed media reflect his definition of architecture as “a way of thinking about anything,” or as an ambiguous amalgamation.³² In *Yes is More*, Ingels’s design approach is dominated by an extensive use of caricature, sarcasm, irony, and parody, beginning with his design vocabulary: ‘kissing a lot of frogs,’ ‘random opportunities,’ ‘architectural schizophrenia,’ ‘karma,’ ‘luck,’ ‘chance,’ ‘surprise,’ and ‘fun.’³³ Similarly, Koolhaas argues that languages evolve and grow like all complex systems.³⁴ Dictionaries were thus destined to become insufficient to capture current ideas and terminologies, prompting him to propose an ‘antiglossary’ in *Content*.³⁵

As the art critic Hal Foster argues, a critical term for the media, which is relevant today, can become a catch phrase tomorrow, and a cliché or a brand the next day.³⁶ Koolhaas has indeed copyrighted various words and catchphrases in the Harvard Design School’s *Great Leap Forward* and in his article “Junkspace,” with an intention to make connections with commercial concepts, which are devoid of meaning now, but have once belonged to the domain of criticism. Maintaining this approach, Koolhaas uses *Content* also to publicise his new terminology, concepts, and evaluations. By

²⁸ Bjarke Ingels, “Responses,” *Clog 1* (2011): 105.

²⁹ Koolhaas, “In Conversation with Beatriz Colomina,” 364, 67.

³⁰ van Gerrewey, “S,M,L,XL & ‘Generic City’ (1994-1998): No End to Revision,” in van Gerrewey, “Outreach Extensions: OMA/Rem Koolhaas Exhibitions as Self-Critical Environments,” 333.

³¹ Christoph Lueder, “Proximity: The Unfolding of a Koolhaasian Hypothesis in Book Space and Architectural Space,” *Journal of Architectural Education* 69, no. 20 (2015): 188.

³² Koolhaas, *Content*, 20.

³³ *Ibid.*, 339–41.

³⁴ *Ibid.*, 88.

³⁵ *Ibid.*, 89–91.

³⁶ Hal Foster, “Design and Crime,” in *Design and Crime: and other Diatribes*, ed. Hal Foster (London: Verso, 2002), 24.

³⁷ McNeill, "Content and the Architect's Book," 103.

³⁸ *Ibid.*, 91.

³⁹ For a critical examination of BIG's *Yes is More* and Ingels's ironic approach, see Deniz Balık and Açılya Allmer, "A 'Big' Yes to Superficiality: Arlanda Hotel by Bjarke Ingels Group," *METU JFA* 32, no. 1 (2015): 185–202.

⁴⁰ In the first pages of the book, Ingels unveils that his expression "Yes is more" is developed through an evolution of prominent statements of various figures from Mies van der Rohe's dictum "Less is more" to Barack Obama's motto "Yes we can!" Ingels's approach embraces the coalescence of social, economic, and environmental aspects in an affirmative manner, handling diversities with the keywords "both – and."

⁴¹ Similarly, as van Gerrewey shows, OMA's *S, M, L, XL* and its accompanying exhibition were promoted by photographs of OMA's works as much as slogans including "OMA at MoMA," "generic city," and "beautiful architecture" on billboards and posters in the streets and subway stations. See van Gerrewey, "Outreach Extensions: OMA/Rem Koolhaas Exhibitions as Self-Critical Environments," 105.

⁴² Theodor W. Adorno and Max Horkheimer, *Dialectics of Enlightenment: Philosophical Fragments*, trans. Edmund Jephcott (Stanford: Stanford University Press, 2002 [1947]), 131–33.

⁴³ *Ibid.*, 131–32.

⁴⁴ The relationship of the architecture book and the advertisement is not a new issue, as Colomina points to Le Corbusier's use of illustrations of commercial products as advertisements in his publication *L'Esprit Nouveau*. See Beatriz Colomina, "L'Esprit Nouveau: Architecture and Publicité," in *Architectureproduction*, ed. Beatriz Colomina and Joan Ockman (New York:

doing so, the book becomes a provocation on visual, textual, and verbal communication.³⁷

The inventive vocabulary leads to the impression that neither *Content* nor *Yes is More* is merely the medium of publicising projects and marketing for the architects. As reflected in the titles of these monographs, vocabulary primarily becomes an instrument used to attract attention in order to present evaluations and statements that would contribute to current debates in architecture. The term 'content,' in this case, relates to being a container, close to nothing, defined by its empty capacity like an impressive atrium.³⁸ The expression 'yes is more,' on the other hand, is designated as an appealing and memorable title, and a similar play on words as BIG, the abbreviated version of Bjarke Ingels Group.³⁹ Ingels's frequent use of the motto 'yes is more' can be seen as his endeavour of situating himself in the architectural canon, or his attempt to establish a slogan for his brand.⁴⁰

The ubiquity of OMA's and BIG's book covers on websites and exhibition posters in the streets recalls the argument against advertising in the culture industry, articulated by the Frankfurt School theoreticians Theodor W. Adorno and Max Horkheimer.⁴¹ Like political slogans or advertisements, they argue, the culture industry continuously reproduces very similar images on different surfaces and repeats the same words in every speech.⁴² From Ingels' recurring motto 'yes is more' and appropriation of comic book form to Koolhaas' fusion of urban issues and popular culture, the architects have embraced the tools of the culture industry in the representation and dissemination of their works. Referring to two American magazines, in which at first glance, the editorial and advertising pages are hardly distinguishable from one another, Adorno and Horkheimer argue that the system of the culture industry merges culture with the technique of advertisement.⁴³ In the case of *Content*, architectural evaluations, conceptual analysis, and urban issues are placed in-between advertisements, thus creating the impression that advertisements are supplementary to articles and images, pointing to Adorno and Horkheimer's criticism of commercials and magazines.⁴⁴ Resonating with their critique, it is indeed difficult to differentiate advertisement pages from article pages in *Content* since both refer to the same presentation formats, slogans, clichéd words, popular terms, and large

images. Intensifying this aspect, *Content* is promoted as “a product of the moment ... It is not timeless; it’s almost out of date already,” thus resonating with the definition of Junkspace.⁴⁵

Architectural media becomes a tool of branding the architect, whose image acquires as important a role as the physical building. As Foster critically puts forward, “design is all about desire,” which has no argument or message but only a strong impulse towards possessing images.⁴⁶ Bruce Mau speculates that, in the context of the monograph, what is actually sold is culture and intelligence, rather than the book itself.⁴⁷ As a design object, the monograph thus has entered the domain of image as commodity, as it promises intellectual awareness, style, inspiration, and fantasy. By advertising the books through exhibitions, interviews, web sites, and billboards, architects are able to produce and sell their visions. The audience, who interacts with these divergent architectural media in their daily lives, directly takes part in the processes of the culture industry.⁴⁸ Integrating daily language and popular images with media terminology, Koolhaas and Ingels appropriate the effect of everyday culture to the present as a familiar urban experience.

The emphasis placed on temporality and visuality assigns OMA’s and BIG’s monographs a commodity value and engages them in consumer capitalism. They are a part of image construction at the service of our spectacle-laden public sphere, which constantly demands stimulation, pushing the architectural domain to engage a diversity of novel tactics, strategies, and media. Koolhaas, for example, argues that architectural debates revolve around events that have already been reduced to cliché, and suggests, by means of alternatives, new forms of debate organised as flash mobs, jam sessions, free running, talk shows, or happenings.⁴⁹ In accordance with the ideology of consumerism, the architects’ close contact with the media shows their endeavour to achieve worldwide recognition and enter the system of the ‘starchitect.’⁵⁰ As a study by Leslie Sklair and Laura Gherardi suggests, the concept of the starchitect is defined in terms of the significance of architectural works, geographical reach, and fame.⁵¹ A staple criterion to understand if an architect is a global starchitect is the international media coverage of their work.⁵² Therefore, the economy of the monograph becomes a

Princeton Architectural Press, 1988), 56–99.

⁴⁵ McGetrick, “Editor’s Letter,” 16.

⁴⁶ Foster, “Design and Crime,” 19–21, 25.

⁴⁷ *Ibid.*, 23.

⁴⁸ A partner of OMA notes that the Content Exhibition derived from the image of a flea market, encouraging the team to search for everyday objects such as metal fences, fluorescent lightings, and signboards in the streets to be included in the exhibition, as if they are making an effort to create Junkspace. See Ota, “Curating as Architectural Practice,” 143–44.

⁴⁹ Koolhaas, *Content*, 30–35.

⁵⁰ For example, elsewhere, it is argued that Koolhaas’s close contact with the technology-focused American magazine *Wired*, particularly his guest editorial in June 2003 issue, OMA’s contribution in November 2001 issue, and an interview with Koolhaas in July 1996 issue, is a proof of his recognition in the industries of new economy, such as fashion, entertainment, technology, and culture. See McNeill, “Content and the Architect’s Book,” 102.

⁵¹ Leslie Sklair and Laura Gherardi, “Iconic Architecture as a Hegemonic Project of the Transnational Capitalist Class” *City* 16, no. 1–2 (2012): 67.

⁵² *Ibid.*

significant issue. In the case of *Yes is More*, pages at the back of the publication provide a list of companies who donated funds to support the exhibition and the monograph. In *Content*, luxury brand advertisements cover the production costs. Powered by mass media, these monographs situate the architectural office in a disciplinary spotlight on a global scale. They act as agencies that circulate iconic works and the architect's name. As Koolhaas also claims, the architect stands still by means of his name as a brand among today's swiftly changing trends.⁵³ The monographs thus are instrumental in marketing and branding of the architects, who need publicity to take part in today's visual culture.

Conclusion

The architectural monograph as a powerful tool of representing a distinctive graphical style, textual narrative, and design approach, embodies the architect as a contributor to the construction, dissemination, and operation of knowledge and discourse. Contemporary monographs such as *Content* and *Yes is More* are not merely seen as analytic archives of the practice, but more as plural forms that elaborate architectural works in public sphere. They perform as social and cultural catalysts, which initiate novel approaches to interact with the urban fabric, generate new architectural terminologies, and reformat the monograph.

By blurring the boundaries of the genre of monograph, *Content* and *Yes is More* are situated in a heterogeneous context in terms of layout, subject matters, and readership. *Content* reflects divergent voices by presenting an abundance of research on globalisation, migration, war, politics, economy, fashion, and other current issues. To do so, the book overlaps various media and encourages its readers to dwell on and discuss architecture culture. *Yes is More* is an amalgamation of sequential diagrams and graphics, which illustrate design processes of buildings to communicate easily with the readers.

Monographs embrace the tools of the culture industry, as they become designerly instruments of public attention. While simplicity and clarity are considered as the dominant notions of the twentieth-century modernism and architectural book making, image-flow and data accumulation can be seen as

⁵³ Koolhaas, "Junkspace," 184.

valid paradigms of our time, which are transmitted by books like *Content* and *Yes is More*. They embody architecture as a popular production, an exhibition guide, a discursive manifesto, a research platform, an analytical mechanism, an experimental object, and a narrative device. As display objects, they also contribute to the starchitect system by promoting the architects as brands. Various modes of architectural media publicise the monographs in order to maximise sales; by branding the architect, *Content* and *Yes is More* are conducive to image-making, marketing, and commercial success. Monographs are produced as design objects of consumption, astonishment, and attention, as much as they become critical sites of rethinking established canons, activating emergent discourses, projecting perspectives, and experimenting with the print culture of architecture.

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Experimenting
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I O A N N O U

Experimenting with the Design Studio Format by Devising Encounters in Multiple Learning Environments: A Case Study

Introduction

This study investigates the proliferation of learning environments in a hybrid educational format as applied to an undergraduate urban planning design studio course in collaboration with Professor Nelly Marda at the National Technical University of Athens' School of Architecture. The educational setting involved interaction in-class, online and in-situ. The objective was to increase the number and the quality of encounters between all the agents involved in the process: learners with teachers; learners with learners; learners with content; learners with *topos*.

This particular setup sought to bring together the face-to-face and the online components as complementary to one another in a symbiotic relationship.¹ Hence, online features were integrated as tools to the knowledge formation process within the existing framework of the design studio. At the same time, the course redesign accommodated activities that occurred within the site with the aim to relate the students with one another and with the place by performing a series of acts of sensory and bodily cognition.

Through the diverse ways of entanglement students were invited in a continuous dialogue between tacit and explicit knowledge, while the hybrid educational setting that was created combined the physical and the digital in an interchanging relationship.² Each component stimulated the knowledge creation process from a different perspective, but it also helped to establish multiple channels for communicating and amplifying this knowledge among teachers and students.

Principles of format redesign

The focus of the format redesign follows the evolution of educational technologies and the shifts in pedagogical approaches for urban design studios in terms of knowledge construction and the social character of learning. Social learning is the core of any

¹ Martijn Stellingwerff, "The Mooc-Ability of Design Education," in *Proceedings of the 33rd Ecaade Conference* (Vienna, Austria: Vienna University of Technology, September 2015), 58.

² Ikujiro Nonaka, "A Dynamic Theory of Organizational Knowledge Creation," *Organization Science* 5, no. 1 (February 1994): 14.

contemporary discourse on education either in the form of interdisciplinary or trans-disciplinary collaborations or through the integration of the web both as a source of knowledge and as a means of sharing. In this framework, the digital medium offers a continuous feed of information by virtually connecting the student designers with a web of social actors and new top down perspectives, while the bottom-up experiences from within the place through active learning and in-filed collaboration with social actors form a semantic web for the interpretation of the urban landscape.³

• Interdisciplinary thinking & active experiential scenarios

Contemporary theories of learning focus on the social character of learning originally advocated by Albert Bandura, Lev Vygotsky and Jean Piaget and the individuals' ability to create learning communities among people who share common interests.⁴ The basic principle that new patterns of behaviour can be acquired through direct experience or by observing the behaviour of others in the quest of identity and meaning has informed both Etienne Wenger's theory on the communities of practice and D. Randy Garrison's variation on the communities of inquiry (CoI) respectively.⁵ Students working in groups, even only once a week, were found to be more engaged in their studies, better prepared, while learning significantly more.⁶

Rich social dynamic and socialised learning in an educational setting form a central plank of the studio-based pedagogy for architectural and urban design, while peer collaboration has the potential to even alleviate the detrimental effects of power that manifest in tutor-student relationships.⁷ Despite the fact that the social dimensions of the studio, and the opportunity for collaboration and sharing, act as stimulants to learning⁸, the design studio today still resists the integration of peer to peer collaboration and feedback in a structured manner. Creating a constructive dialogue, however, is essential to architectural curricula as a means for internalising the social processes of evaluation and for integrating the norms of community in the framework of individual identity.⁹ It is also an essential key to directing the educational process from learning *about* to learning *to be*.¹⁰

³ Chris Speed, "Introduction to Field/Work and Site," in *Architecture and Field/Work*, ed. Susan Ewing, et al. (London: Routledge, 2011), 61.

⁴ See Albert Bandura, *Social Learning Theory* (New York: General Learning Press, 1971); Vygotsky Lev, "Interaction between Learning and Development," in *Readings on the Development of Children*, ed. Mary Gauvain and Michael Cole (New York: Scientific American Books, 1978); J Piaget, *The Equilibration of Cognitive Structures: The Central Problem of Intellectual Development* (Chicago: University of Chicago Press, 1985).

⁵ See Wenger Etienne, "Communities of Practice and Social Learning Systems: The Career of a Concept," in *Social Learning Systems and Communities of Practice*, ed. Chris Blackmore (London: Springer, 2010); D. Randy Garrison, Terry Anderson, and Walter Archer, "The First Decade of the Community of Inquiry Framework: A Retrospective," *The Internet and Higher Education* 13 (2010): 5–9.

⁶ See John Brown and Richard Adler, "Minds on Fire: Open Education, the Long Tail, and Learning 2.0," *Educause Review* 43, no. 1 (2008).

⁷ David McClean and Neasa Hourigan, "Critical Dialogue in Architecture Studio: Peer Interaction and Feedback," *Journal for Education in the Built Environment (JEBE)* 8, no. 1 (2013): 37.

⁸ Rosie Parnell, "It's Good to Talk: Managing Disjunction through Peer Discussion," in *Architectural Education Exchange (AEE) Conference* (Cardiff University, Cardiff September 2001).

⁹ David W. Shaffer, "Portrait of the Oxford Design Studio: An Ethnography of Design Pedagogy," *Wisconsin Center for Education Research (WCER) Working Paper* no.

The more recent theories for architectural and especially urban design education advocate a systemic pedagogy of explicit collaborative experiential learning.¹¹ This educational approach, Ashraf Salama argues, adopts interdisciplinary thinking and introduces appreciative inquiry and active experiential scenarios, placing emphasis on learning by experience.¹² In both cases, social learning is at the core of the pedagogy either by direct social interaction as in the explicit case of making students work with experts or by implicitly encouraging them to engage in research and critical reflection about the social system within which they operate. In fact, knowledge in this framework is constituted through their interaction with the community they address. “Higher quality cognitive strategies are needed,” claims Rosie Parnell, “if a student is to turn disjunction into a positive learning experience; it is through reflection and exposure to other views and experience, a student might begin to tackle confusion and understand that there can be no ‘right’ answer.”¹³ Or as Adapt-r, a training network aiming to develop new knowledge and understanding of Creative Practice Research, claim:

[B]y thinking about knowledge as socially constructed, something that operates in networks, in relationships between actors, it becomes clear that there is no singular thing that amounts to knowing, instead, there are multiple knowledges.¹⁴

Adriana Allen and Rita Lambert’s educational approach in ‘Learning Lima,’ a ‘co-learning alliance’ established by the Bartlett Development Planning Unit with various institutions and collectives of the urban poor in Lima, challenged the individualist epistemic notion of knowledge as ‘justified-true belief’ by activating ‘trans-local learning’ as the pedagogical model for urban planning characterised by a plurality of partners and knowledges.¹⁵ To achieve this, they brought together individuals from different backgrounds and organisations who participated in in-field transect walks, mappings, workshops and discussions. The documentation of these activities through the production of related artefacts in turn created new incentives for critical reflection and new framings of ‘how we learn the city.’¹⁶

Interdisciplinary work offers the possibility of correlating the architectural and urban discourse

2003–11 (September 2003): 6.

¹⁰ Brown and Adler, “Minds on Fire: Open Education, the Long Tail, and Learning 2.0.”

¹¹ Ashraf Salama, *Spatial Design Education: Toward a Theory of Transformative and Critical Pedagogies* (Burlington: Ashgate, 2015), 316.

¹² *Ibid.*, 317.

¹³ Parnell, “It’s Good to Talk: Managing Disjunction through Peer Discussion,” 4.

¹⁴ Eli Hatleskog, “Public Behaviours: Why Behave?,” in *Relational Knowledge and Creative Practice*, ed. Tadeja Zupancic and Claus Peder Pedersen (Brussels: KU Leuven, 2017), 122.

¹⁵ Adriana E Allen, Rita Lambert, and Christopher Yap, “Co-Learning the City: Towards a Pedagogy of Poly-Learning and Planning Praxis,” in *The Routledge Companion to Planning in the Global South*, ed. Gautam Bhan, Smita Srinivas, and Vanessa Watson (Abingdon: Routledge, 2017), 355.

¹⁶ *Ibid.*, 358, 65.

with the knowledge base of other domains giving the students the tools necessary to read and manage city complexity. But engaging in active learning and working with artists in particular, the experience of being in the place can be further amplified:

[T]o describe a city means to find the very roots of the self; we are the place (or places) to which we belong. By analogy, the place that we inhabit (in reality or even in dreams) becomes an extended, three dimensional page: by moving across it we make marks, invent new codes and find new keys to reading it. Any description of a city is necessarily a description of our presence in it –therefore, it is a conversation between ourselves and the place.¹⁷

Performing activities such as silent walks or sound recordings triggers the knowing in action, while it enables students to acquire a deeper understanding of the area's intrinsic qualities. The students are confronted with its hidden landscapes, people's behaviours or the more clandestine activities that run in more informal settings. By immersing students in the place, the studio turns into a contextual field of indefinite potential, as deciphering these conflicts, the cultural values and the social dynamics of a place requires a counterintuitive thinking and the creation of new knowledge.¹⁸

• The integration of the web

As the web technology advances, social learning has dissipated into the web or, as Betsy Sparrow et al. say, “we are becoming symbiotic with our computer tools, growing into interconnected systems.”¹⁹ Online learning, however, is grounded in social presence despite the apparent isolation among sharing individuals. In the Canadian Fully Online Learning Community (FOLC) model (an example of the digital evolution of the Communities of Inquiry (CoI) model which originally provided a conceptual framework for studying the potential of computer conferencing based on social, cognitive and teaching Presence²⁰), social presence has become so important that the teaching presence is considered obsolete.²¹

In fact, the plurality of web resources and online learning communities induces the learners to take over their learning paths. Online nomad learners are constantly moving in “amorphous, informal spaces

¹⁷ Simoneta Moro, “Peripatetic Box and Personal Mapping: From Studio, to Classroom to City,” in *Mapping Cultures: Place, Practice, Performance*, ed. Les Roberts (New York: Palgrave MacMillan, 2012), 263.

¹⁸ Rob Roggema, “Research by Design: Proposition for a Methodological Approach,” *Urban Science* 1, no. 2 (September 2016): 1.

¹⁹ Betsy Sparrow, Jenny Liu, and Daniel M. Wegner, “Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips,” *Science* 333(2011): 776.

²⁰ Garrison, Anderson, and Archer, “The First Decade of the Community of Inquiry Framework: A Retrospective,” 6.

²¹ Roland Van Oostveen et al., “Transforming Online Learning: The Fully Online Learning Community (Folc) Model,” accessed 25 June, 2017, <http://eilab.ca/fully-online-learning-community-folc-model>.

and nonlinear structures where knowledge is a flexible element to be alchemically interacted with.”²² This personal approach to learning is strongly advocated by connectivism – the theory supporting the thesis that knowledge is distributed across a network of connections²³ – or the more radical theories of heutagogy²⁴ and navigationism²⁵ where the inquiring individual is considered to be in constant flux, tackling and managing online resources. As a result of that, Jane Gilbert quoting Jean-Francois Lyotard argues that “traditional disciplinary boundaries will dissolve, traditional methods of representing knowledge (books, articles and so on) and expert individuals will be far less important, and new conceptions of learning will develop.”²⁶

It is exactly this shift in the learners’ behaviour in the quest for knowledge creation that calls for the reconsideration of custom practices in architectural education as well as in any other disciplines. The ever-changing nature of research in the web paradigm and the proliferation of individuals that share information online can now support a more open pedagogical model where in the knowledge creation process web resources are considered equal of the architectural studio. These resources can be integrated in the curriculum as complementary to it. Hence, the design studio seen in this context is dilated into the web to allow students’ access to more information relevant to their research.

During the past decade, a series of attempts have been made toward the reconfiguration of studio practices with regards to web 2.0 technologies. The new formats thereby produced are referred to either as blended or hybrid learning. Although for most people the two terms are synonymous, Bates makes an interesting distinction between the two by claiming that the term blended learning indicates a range of learning situations using technological features along with class presence, while hybrid learning is mostly used to describe situations where the adopted system is completely redesigned to create optimum synergy between the in-person sessions and learning online.²⁷

In architectural education changes in format in relation to web technologies mostly involve the introduction of an e-learning platform that is centrally managed and used to support in-class learning.

²² Aras Bozkurt et al., “Community Tracking in a Cmooc and Nomadic Learner Behavior Identification on a Connectivist Rhizomatic Learning Network,” *Turkish Online Journal of Distance Education – TOJDE* 17, no. 4 (October 2016): 8.

²³ See Stephen Downes, “Connectivism and Connected Knowledge: Essays on Meaning and Learning Networks,” (National Research Council Canada, 19 May 2012).

²⁴ Anderson Terry, “Theories for Learning with Emerging Technologies,” in *Emergence and Innovation in Digital Learning: Foundations and Applications*, ed. George Veletsianos (Edmonton: AU Press, 2016), 42.

²⁵ Tom Brown, “Beyond Constructivism: Navigationism in the Knowledge Era,” in *On the Horizon* (Bradford: Emerald Group Publishing, 2006), 187.

²⁶ Tony Bates, *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning* (Vancouver BC: Tony Bates Associates, 2015), 60. Accessed 25 June 2017, <https://www.edcan.ca/wp-content/uploads/EdCan-2007-v47-n3-Gilbert.pdf>.

²⁷ *Ibid.*, 311.

In most of these cases, the platform assumes a repository character where all student and teacher material is collected and hosted on a server accessible to all participants of the studio. A fine example of this approach is Mirjana Devetaković's experimental studio at the Faculty of Architecture of the University of Belgrade. Devetaković developed an urban design studio in 2010, along with Professor Petar Arsić, with the aim to enhance communication between participating students but to also benefit from the significant amount of collected documents that are usually produced in a design studio.²⁸ To do this, they used the e-learning platform MOODLE where all content was organised both thematically and chronologically in a directory display. One of this format's most important implications was the permanent accessibility to the studio materials not only for the duration of the semester but also for any other future studio use.²⁹

Influenced by web 2.0 technologies and their potential to create "authentic learning experiences," Burak Pak and Johan Verbeke introduced in 2012 the concept of the Design Studio 2.0, a format that supports multiple communication modes and styles.³⁰ Their original research revolved around learning platforms that were used either for educational collaborative projects or for purposes of wide social communication and exchange of knowledge. In both cases, the two studio organisers noticed the development of an increased understanding and wider knowledge base.³¹ They ran a design studio using the 'Social Geographic Web Platform,' which allowed the students to interact by overlaying information in order to create collective maps. The platform was also used to gather related data and visual representations of the data retrieved by the students. The character of their endeavour was oriented toward the use of combined communication modes to extend the physical world to a shared virtual one while it also supported novel representations of design information. In their own words their scope was "to augment the urban design learning by remediating and extending the reflective conversation in the design studio and collectively construct a shared memory on urban space."³²

Blogging is another Web 2.0 affordance that is thought to provide "a space for reflection, a forum for discussions, a portfolio of completed assignments and for opening up courses for a wider group of

²⁸ Mirjana Devetaković et al., "Integration of E-Learning Concepts in Urban Design Studio: The Case of a Virtual Learning Environment Supporting a Specific Educational Role" (paper presented at the YU Info 2011 Conference, Kopaonik, Serbia, 2011), 29–30.

²⁹ Ibid., 31.

³⁰ Burak Pak and Johan Verbeke, "Design Studio 2.0: Augmenting Reflective Architectural Design Learning," *Journal of Information Technology in Construction (ITcon)* 17(2012): 505.

³¹ Burak Pak and Johan Verbeke, "Redesigning the Urban Design Studio: Two Learning Experiments," *Journal of Learning Design (JLD)* 6, no. 3 (2013): 46.

³² Ibid., 48.

participants.”³³ Most blogs used in the design studio context are informative, centrally managed and destined to serve classes with very large cohorts where communication by e-mail becomes very difficult to manage.³⁴ Blog creation however, can be much more creative once assigned to students individually. Asking each student or student group to design and manage a blog helps them establish an online identity and a sense of pride for the work they produce.³⁵ “What makes weblogs different,” say Lilia Efimova et al., “is not the publication per se, but the personalities behind them and they are increasingly becoming the online identities of their authors.”³⁶ In addition, the fact that students are confronted with having to manage the plurality of online resources, argues Richard Coyne, acts as “a stimulus to the interpretative capabilities of the design researcher” in a manner where “reading converges with design. Reading becomes active, synthetic, shared and creative.”³⁷

Setting up a hybrid format for an urban design studio

In the light of this research, an attempt was made to experiment with the 9th semester urban planning design studio taught in collaboration with Professor Nelly Marda to develop it into a more holistic pedagogical hybrid format. This is the last studio of the undergraduate program where students are confronted with design issues of increased complexity in urban scale. The cohort usually consists of approximately 50 students that work in groups of two or three. They are responsible for determining the site(s) of intervention. The new layout was eventually replicated across three separate learning presences, each complementing the effect of the other two.

Online presence—In the new format, both educators and students were required to have an online presence throughout the duration of the course that would allow the permanent accessibility to all studio content as in the Devetaković studio. The teaching team however, made use of a MOOC-like digital platform, hosted on versal.com, while all student groups used free blogging hosting platforms. Blogging was preferred compared to the use of a central e-learning platform for its ability to distribute the responsibility of communication and exchange to all participants. This way, the teachers’ presence served as a reference point for content transmission

³³ Hans Poldoja, Erik Duval, and Teemu Leinonen, “Design and Evaluation of an Online Tool for Open Learning with Blogs,” *Australasian Journal of Educational Technology* 32, no. 2 (2016): 64.

³⁴ Maja Baldea, Alexandra Maier, and Oana A. Simionescu, “Using Blogs As communication Tools for the Architecture Design Studio,” *Procedia-Social and Behavioral Sciences* 191 (2015): 2765.

³⁵ Victoria Farrow and Stephanie Garrison, “A Series of Happy Accidents,” in *Proceedings of Aae 2016 International Peer-Reviewed Conference on ‘Research Based Education,’* (London: The Bartlett School of Architecture, UCL, 2016), 51–52.

³⁶ Lilia Efimova, Stephanie Hendrick, and Anjo Anjewierden, “Finding ‘the Life between Buildings’: An Approach for Defining a Weblog Community,” *Internet Research 6.0: Internet Generations (AOIR)* (2005).

³⁷ Richard Coyne, “Even More Than Architecture,” in *Design Research in Architecture: An Overview*, ed. Murray Fraser (Farnham: Ashgate, 2013), 187–88.

but did not monopolise it. Online interconnectedness was further enhanced by the use of web digital tools in relevance to the in-situ workshops. The results of these workshops were communicated in online platforms such as echoes.xyz and open street map respectively. These offered the students the opportunity to collect similar kinds of information in one place so that further to an individual understanding of the data assimilated, a collective one would become possible. This scheme was very close to Pak and Verbeke's aspiration to create a "collectively shared memory" of the place, only it regarded certain aspects of the student readings and particularly the cases where massive assimilation of data collected through multiple players could produce further readings.³⁸ In fact, these two online platforms were the only two cases where student research was all put in one place. While echoes.xyz gathered all recorded sounds in relation to the area map, allowing the formation of its soundscape, open street map was used in the second workshop to facilitate the collection of student impressions of the place in the form of words on a map, creating a semantic web for the area that was used for interpreting it.

In-class presence_The discussions that occur in tutorials and in reviews tend to be primarily concerned with the details of specific projects. Thus, there is little opportunity for discussion of learning processes and personal experiences in the context of wider issues and objectives.³⁹ In contrast, in-class time for this course included regular group discussions through live or online encounters with people from other disciplines or institutions related to the studio's objectives or with the area under examination. A series of experts and colleagues from various universities joined the cohort for a series of personal or Skype encounters where they offered their insight on a variety of matters according to their expertise or experience. These systematic approaches created the basis for an intense exchange of information and views on urban design.

In-field presence_The students were asked to work in the de-industrialised derelict area of Elaionas. This is an urban environment of extreme controversy, related to multiple stakeholders and contradicting interests. Informal processes of urbanisation and social practices of adaptation are constantly challenging the area's spatial and social character. Despite its proximity to the city centre, Elaionas is unfamiliar to students;

³⁸ Pak and Verbeke, "Redesigning the Urban Design Studio: Two Learning Experiments," 46.
³⁹ Parnell, "It's Good to Talk: Managing Disjunction through Peer Discussion," 5.

but even for locals or regular visitors there exist a lot of uncharted areas, an impression that is further intensified by blurred boundaries between private and public ownership. The students were invited to engage in in-field activities such as interviewing locals and visiting the place on different days and times of day to monitor changes of the area's daily routines. Just like in 'Learning Lima' co-learning alliance project they too had to engage in mapping the boundaries and the qualities of the landscape while it remained up to them to determine the nature of their interventions and thus the direction of their inquiries. The students also participated in two workshops that were realised on separate occasions in collaboration with artists; one organised by an actor, the second by a sound artist. The aim was to draw attention to the unnoticeable and uncountable entities of the landscape and decipher the area's hidden landscapes.

At the intersection of the physical and the digital: evaluating the synergy between the three learning environments in terms of...

• **...knowledge construction**

In the case study presented here, there was not a prescribed site or a specific theme to pursue. The students had to recover information about the area, using the web or their in-field experiences to eventually focus on a theme of their own choice. The teachers simply facilitated this process by bringing in experts or artists to expand this network and the variety of reading methodologies. The students took on the role of researchers and the curriculum was largely centred on inquiry-based activities as they mapped the area's uncharted territories and the informal activities currently happening within the area that shape the social and the spatial character of Elaionas.⁴⁰ The need to digitise information in order to exchange it triggered the students' creativity toward the visualisation of their research findings. The students' individual approaches were systematically channelled into visual communicable entities among peers. Digital blogging features (i.e. the creation of gifs or the insertion of sound and video to 2D graphics) were used along with diagrams, collages or photographed physical models and scanned sketches as a means to visually express student observations.

The embodied experiences and the sensory maps of the in-field work further enhanced their creativity by

⁴⁰ Andrew Roberts, "The Link between Research and Teaching in Architecture," *Journal for Education in the Built Environment* 2, no. 2 (October 2007): 6.

requiring them to express graphically their thoughts and emotions. Many students experimented with ways of communicating rather intimate information. Invaluable information was collected in regard to the area's physical characteristics like the effect of its scale, its materiality, its noise levels (see Fig.1), the human and the traffic flows, as well as the area's material and immaterial boundaries. Through the students' physically engagement with the area, information was also retrieved in regard to their feelings about being in Elaionas, their sense of time, their comfort/discomfort zones, their perception of the natural elements of the landscape or the historicity of the area.

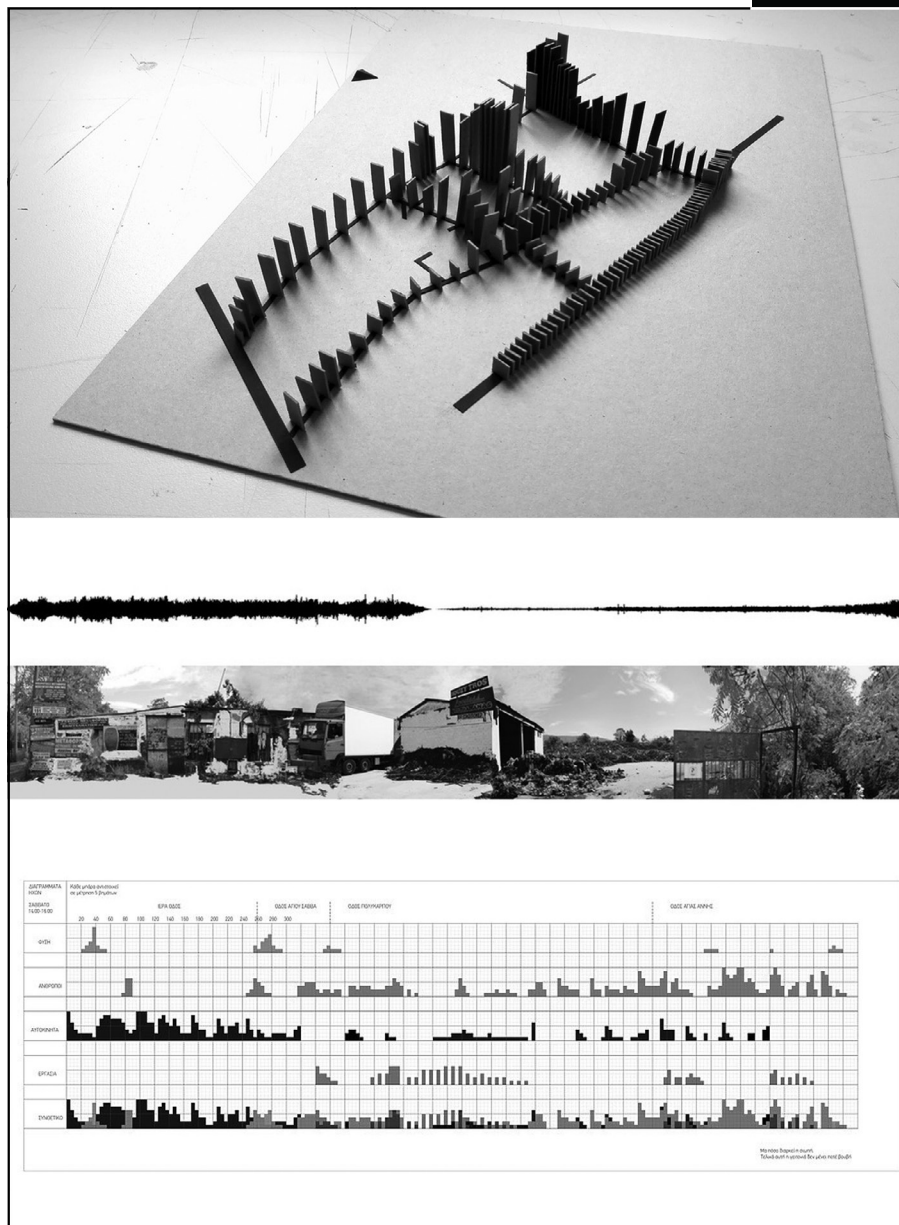


Figure 1:
Sound recordings:
A model representing anxiety levels according to sound levels (Design Team 'Binyless': Anna Syrianou, Filio Christou), a collage that connects the sound to the place (Design Team 'Binyless': Anna Syrianou, Filio Christou) and a diagram that isolates the sounds and sound levels according to their kind (Design Team 'MAMA': Andreas Anagnostopoulos, Marina Mersiadou, Giorgos Michailidis).

The multiple online resources and their features also helped students improve their digital skills. Many of them acknowledged their content in learning how to tackle the software they were required to use. “Now we have other ways to record and transmit knowledge,” says Bates, “that can be studied and reflected upon, such as video, audio, animations, and graphics, and the Internet does expand enormously the speed and range by which these representations of knowledge can be transmitted.”⁴¹

As the online co-presence of the design studio comprised mostly of observing the work of others, this provoked a need for students to also verbally explain their work so that the rest of the class who would visit their blog would eventually comprehend the group’s intentions and the methodology of their research. In this framework, some of the groups used their blogs as logs where they systematically registered their intimate experiences of the place and their personal encounters with the people who reside or work in the area. Overall, this verbal anchoring of their project helped the individual groups to create a consistent narration of their generative design process while it helped the students keep track of their research activities and the impact that these activities had onto their research objectives.

Knowledge construction for the students consisted of choosing what reading methodologies they would pursue, apply them in the field and then elaborate on the results of this investigation. Meanwhile, during this process they could share their views, discuss their findings and reflect upon their implications. It was this research that would later lead each group to decide upon the course of action and choose the most suitable strategy for intervention.

While everybody recognised the importance of collecting data the students also realised how differently this informed their design decisions. “Learning is conditioned by the individuals’ existing knowledge and understanding, against which new information is aligned creating either a deepening of knowledge or leading to previous knowledge being revised.”⁴² The students pursued a line of inquiry analogous to their personal motivation and priorities. Knowledge construction resulted from contextualising the information to their goals, a model that is concurrent to the contemporary

⁴¹ Bates, *Teaching in a Digital Age*, 60.

⁴² McClean and Hourigan, “Critical Dialogue in Architecture Studio: Peer Interaction and Feedback,” 37.

connectivist theory where learning “isn’t learning new content but rather being able to ‘plug into sources’ of knowledge and information to acquire the relevant information that is needed.”⁴³

The mapping of the existing greenery and vegetation for example, was a theme that appeared regularly in student readings. There were at least four groups where this information was presented with the intention of reversing soil pollution in the brownfields. Depending on the additional information these groups had gathered, which included sound levels, the hydrographic network of the area, the ancient street network, the adjacent uses and their personal impressions from the place, the four resulting projects differed in their nuanced interpretations of that data. One group proposed to revive the former olive orchard and street network, another suggested to expand the vines of the Agricultural University that is situated in Elaionas, a third wanted to promote urban farming while the fourth group intended to designate the area as a park for recreational purposes. Each of these decisions influenced the spatial organisation accordingly and their physical manifestations varied dramatically (Fig. 2).

⁴³ George Siemens, “Connectivism: A Learning Theory for the Digital Age,” Elearnspace, accessed 25 June, 2017, <http://www.elearnspace.org/Articles/connectivism.htm>.



Figure 2:
Four student projects related to restoring the quality of soil in the brownfields (From left to right: Design Team ‘Secret Olive Garden’: Nektaria Lainaki, Maria Perikleous, Rena Malakou Design Team ‘EM-AIL’: Athina Ioannidou-Lemonidou, Ioanna-Eleni Bata; Design Team ‘KPC-Studio 9’: Pavlos Andrianos, Christos Zinelis, Kyprianos Fragkiadakis; Design Team ‘3 Moires’: Lambrina Lyrou, Chrysa-Leda Scordili, Constantina Chamatzoglou).

Furthermore, these proposals were not elaborated simply as spatial organisations, but they were also related to the area’s social activity and its relation to the city. Having already identified the social groups that reside in Elaionas during their research, the students were able to designate the interventions to future users: the expansion of the university’s vines would mostly benefit the educational pursuits of the faculty and its students, the restoration of the olive orchard and urban

farming would be a potential profitable activity for the refugees that are currently accommodated in the area while the recreational park would respond to the lack of green spaces in the centre of Athens at a hyper local scale.

- **...the social character of learning**

The integration of the web and the group activities in-field or in-class challenged the students' design routines. Some students initially expressed reluctance toward open sharing practices, claiming that it could eventually affect the originality of their projects. Many also admitted to having experienced awkwardness during the in-field workshops as well, not always knowing what they were looking for, sometimes just being overwhelmed by the landscape's diversity. Furthermore, Elaionas was not perceived as a very welcoming place – at least during their first visits – making it almost impossible for them to feel safe enough to wander around for long. Awkwardness accompanied encounters with artists as well, as most students had never participated before in exercises that required them to execute a dictated body movement or to consciously try to regulate their movement in relation to others. Acknowledging the physical presence of other individuals and trying to coordinate their mode of being in the place in relation to them was initially a frustrating experience for many.

Despite their initial reluctance, the new design studio layout helped create a shared pool of relevant data and information regarding the area. Online interaction in particular worked well at this stage as a means of directly communicating research findings. Soon, all student groups became active participants in a discourse that ran parallel to the in-class sessions and was complementary to them. This conversation was further enhanced by the visiting guests offering their insights about either the area's particular characteristics or ways of managing urban phenomena more generally. The fact that information was visualised and/or described enabled the teaching team to compare and use it in class for further discussion and analysis while all students, individually or as a group, contributed to the general discussion and participated in the creation of meaning for the area. This created both an atmosphere of reciprocity and helped form the semantic web that in turn helped the students determine their priorities.

As the studio work progressed, social learning shifted from transmitting and exchanging information and knowledge to monitoring others. By this point, the groups had already decided upon a course of action and their mode of engagement with Elaionas. Therefore, they monitored their peers mostly to check up on how they dealt with their design decisions and perhaps inquire on the means of their representations. The blog activity that was registered during the last two months of the studio, however, was intense. Although in-class revisions gradually became individualised towards the end of the semester, the students' interest in their peers' work never receded.

Conclusion

While there is still a lot to determine, the experimental design studio model presented in this paper implies that there is more than one approach to educational technology or design pedagogy for how to run an architectural or an urban design studio. The weight falls on the instructors to determine what tools they will be using or how they are going to integrate them into their curriculum. In this case, a culture of collaboration was pursued and eventually distilled that permeated all three learning environments: the in-class, the online and the in-situ. The specific format of the design studio channelled the need for continuous research and experimentation, in both the physical and the virtual space, and determined a framework for creating synergies between them. The research that was performed in the field determined the quality and kind of student inquiries. Meanwhile, online presences compelled the students to represent all information in communicable visual or verbal units. The ability to monitor this process through online presences subsequently turned in-class encounters into group discussions or revisions rather than individual crits where the students – having already seen their peers' work online – took on the role of active participants. The collective discourse also transcended the restrictive character of project formation and grew to include a wider range of people – experts and collaborators – and their respective views on urban and social issues. This contributed to a better understanding of urban complexity while many of the issues raised in this context later informed the students' projects.

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