

## Publishing as Architectural Practice

Mike Aling

### Abstract

Appropriating its title from the recent collection of essays *Publishing as Artistic Practice* (ed. Annette Gilbert, Sternberg Press, 2016) - in which publishing is explored as a recently appropriated form of artistic practice *in itself* - this article begins by asserting that, contrary to the art world, the act of publishing has always been an integral aspect of architectural practice, arguably dating back to Vitruvius, at which time the architectural publication was founded as a means of authenticating, distributing and subsequently developing architectural discourse and practice. This article focuses on architectural books – the book being architecture’s longest running, most abundant, and most celebrated form of publishing – and *book design* in particular as a publishing practice. Although there is a considerable existing body of research canonizing the history and development of the architectural book, particularly between the mid-sixteenth and mid-twentieth centuries, the majority of this research has focused on book content rather than book design. The book is still intrinsic to the proliferation of architectural discourse, culture and the profession, but the lack of debate and development around the theories of its form and its futures is limiting the architectural book to become increasingly self-referential as a designed entity. The market-led restrictions imposed by the publishing industry are limiting the architectural book - this is the principal *time crime* outlined here - the design of the architectural book is in stasis due to the publishing industry: it is stuck in time. This article looks to determine how *architectural book designing* can be considered as relational to *architectural practice*, through an exploration of how book design has been theorized as a formal and material interplay and manifestation of spatial ideas – chiefly through the theories of “book usage”,

“intermedia”, “topological” and “ergodic” literatures, “visual language” semiotics, and “metamediality”, originating from studies in literature, design, media and comics. Examples from my own architectural book design research praxis are discussed in relation to these theories, with a more thorough examination of three recent book works that are used as an armature to speculate on the potential futures of architectural book design, making and publishing practice. One hopes that this article will arouse debate and encourage more enthusiasm for book works as designed manifestations of spatial ideas. One might even go so far as declaring architectural book designs to be *architectural projects*.

**Key Words:**

Architectural Books

Architectural Publishing

Book Design

Book Futures

Ergodic Literatures

Metamedia

Visual Language



**Figure 1:** University of Greenwich Department of Architecture and Landscape: *Works 2014* (2014). Book design: Mike Aling.

The checkered graphic from Adobe Photoshop, indicative of transparency, replaces the use of white in this book as signifier of void/neutrality. Pages become conceptually transparent, with images and texts moving through the z-depth of the book.

### **Publishing as Architectural Practice**

The recent collection of essays *Publishing as Artistic Practice* (ed. Annette Gilbert, Sternberg Press, 2016) has invigorated debate in the art world with regards to the role that publishing as a practice can offer, going so far as to declare that acts of publishing can be (and have been) pursued as artistic practice *in itself*. This practice expands upon, and owes a huge debt to, the history and development of the *Artist's Book*, 'books or book-like objects, over the final appearance of which an artist has had a high degree of control; where the book is intended as a work of art in itself' (Bury, 2015, p.15). As artist and theorist Johanna Drucker describes in *The Century of Artists' Books*, the artist's book emerged through the book works of Dieter Roth in the 1950's and came to prominence with Ed Ruscha's seminal 1963 *Twentysix Gasoline Stations*

(Drucker, 2004). *Publishing as Artistic Practice* however discusses works by artists who are not limited to the publishing of their own art, such as the independent online publishing house *La Bibliothèque Fantastique* (2009-2015), managed and theorised by artist Antoine Lefebvre as his art practice. 'Publishing' in this sense is not the production of individual books, but the wider remit of designing, producing and distributing ideas about art through publications. This practice is in no way limited to the form of the bound codex, and allows for an expansion the notion of the 'book' as modality of fine art practice: *La Bibliothèque Fantastique* were an online publisher that encouraged readers to print their own versions of their listed online works.

Although this article appropriates its title from the aforementioned collection, the aim is not to declare that publishing is a new form of architectural practice, or movement within the discipline of architecture. Publishing has perhaps *always* been a facet of architectural production, from Vitruvius' *De Architectura*, the oldest surviving 'published' architectural treatise (originally in scroll form, now as a book) onwards. In his recent book *The Anatomy of the Architectural Book*, a rare exploration into the design of architectural books in relation to their content (not solely a hermeneutic study of content), Andre Tavares declares that to Vitruvius and his peers, the production 'of classical texts in architecture was likely a matter of professional status, raising Roman architecture to the same high theoretical plain as classical authors' (Tavares, 2016, p.112). Publishing therefore validated and authenticated architecture as a valid cultural discipline, with architects being responsible not only for the production of built form, but also for the production of discourse about the production of built form and its influences, with written discourse as its crucial manifestation. In *Architecture in the Age of Printing*, Mario Carpo contends that it was the very reproducibility of images through books in the fifteenth and sixteenth centuries that allowed for reproducible architectural ideas and systems, such as the

orders, to become so widespread (Carpo, 2001, p.7). Publishing played a pivotal role in the birth of the architect as *generator of architectural discourse*, through its ability to continually introduce, circulate, absorb, recirculate and evolve architectural ideas, since the very conception of the architectural publication.

Architectural publishing is a vast subject, and this article will omit discussing many of its forms, from magazines and journals to websites and blogs. This article focuses on the book; architectures longest running, most abundant and most celebrated publishing forms. Although there is a considerable existing body of research canonizing the history and development of the architectural book, particularly between the mid-sixteenth and mid-twentieth centuries, some of which I touch upon in this article (Carpo, Tavares, Powers), the majority of this research has focused on book content rather than book design (with the exception of Tavares). This article looks to determine how *architectural book designing* can be considered as relational to *architectural practice*, through an exploration of how book design has been theorized as a formal and material manifestation of spatial ideas – chiefly through the theories of “book usage”, “intermedia”, “topological” and “ergodic” literatures, “visual language” semiotics, and “metamediality”, originating from studies in literature, design, media and comics. Many of these concepts can be applied to other forms of publishing, although I will leave this largely undiscussed. My intention is not to argue that the book as a bound codex should, or will, dominate future architectural publishing, over digital or online forms. It is simply that the study of books is a far older and broader field to draw reference from than debate regarding digital publishing methods.

Examples from my own architectural book design praxis are discussed throughout this article. It

is hoped that these works may offer inspiration and points of departure for further architectural book designs to emerge that may challenge normative graphic, and largely non-spatial, book design conventions, and offer suggestions of how architectural book designs can develop as increasingly spatial processes and entities. I have been researching the histories and theories of book design and publishing culture, and alongside the practice of book making, see these dual undertakings as a synergetic research praxis. I have spent a number of years exploring this through the design of numerous architectural books as part of my role as co-ordinator of publications at the University of Greenwich Department of Architecture and Landscape, in London UK. Extensive dialogue and collaboration with ambitious and experimental printers has afforded me the opportunity to challenge the conventions of architectural book design and production. I have enjoyed producing books with mutable formal configurations, graphic spaces that challenge conceptions of neutrality and hierarchy, sumptuous and shifting materialities, texts requiring complex reading practices, actual-virtual hybrids, and innovative machining techniques and details. One example of the last point is the recent book *Negative Equity: House Projects by Neil Spiller & Nic Clear* (see figure 2). By adjusting the angle of the folding arm to a non-typical position in paper folding machinery, pages in the book were folded at 92 degrees rather than 90. After binding, pages were left untrimmed, allowing the spreads in the book to alternate in their angle along the top and fore edges. This offsetting offers the reader two independent paths through the space of the book through the simple act of page turning/flicking; if the codex is flicked through with the right thumb, only spreads with Spiller's work are displayed as the pages are offset 1 degree clockwise, however when using the left thumb, only Clear's spreads are shown with pages tilted 1 degree anti-clockwise.



**Figure 2:** *Negative Equity: House Projects* by Neil Spiller and Nic Clear (2016). Book design: Mike Aling.

I am aware that these book works have been developed in the relative security of the institution. This independence has allowed a certain design freedom from market-led design constraints in 2 ways; firstly by sidestepping the design imperatives of publishers that are typically imposed when working in design publishing, such as the imposition of house styles or branding strategies, controlled through contracts that restrict the decision-making jurisdiction of the author/designer over the design of their own books/publications. Secondly, due to the small number of prints being made, I have a great deal of control over the systems put in place to print and distribute these works, again something unusual if operating within the typical parameters of the design publishing industry. These restrictions are the key *time crimes* that I endeavor to work against. The lack of debate and development around the theories of its form, and its futures, is limiting the architectural book to become increasingly self-referential as a

designed entity. The design of the architectural book is in stasis due to publishing industry: it is stuck in time. Although many architects are not interested in designing their own books, and feel it is best left to a book/graphic designer, one hopes that this article will arouse debate and encourage more enthusiasm for book works as designed manifestations of spatial ideas. One might even go as far as declaring these works as *architectural projects*.

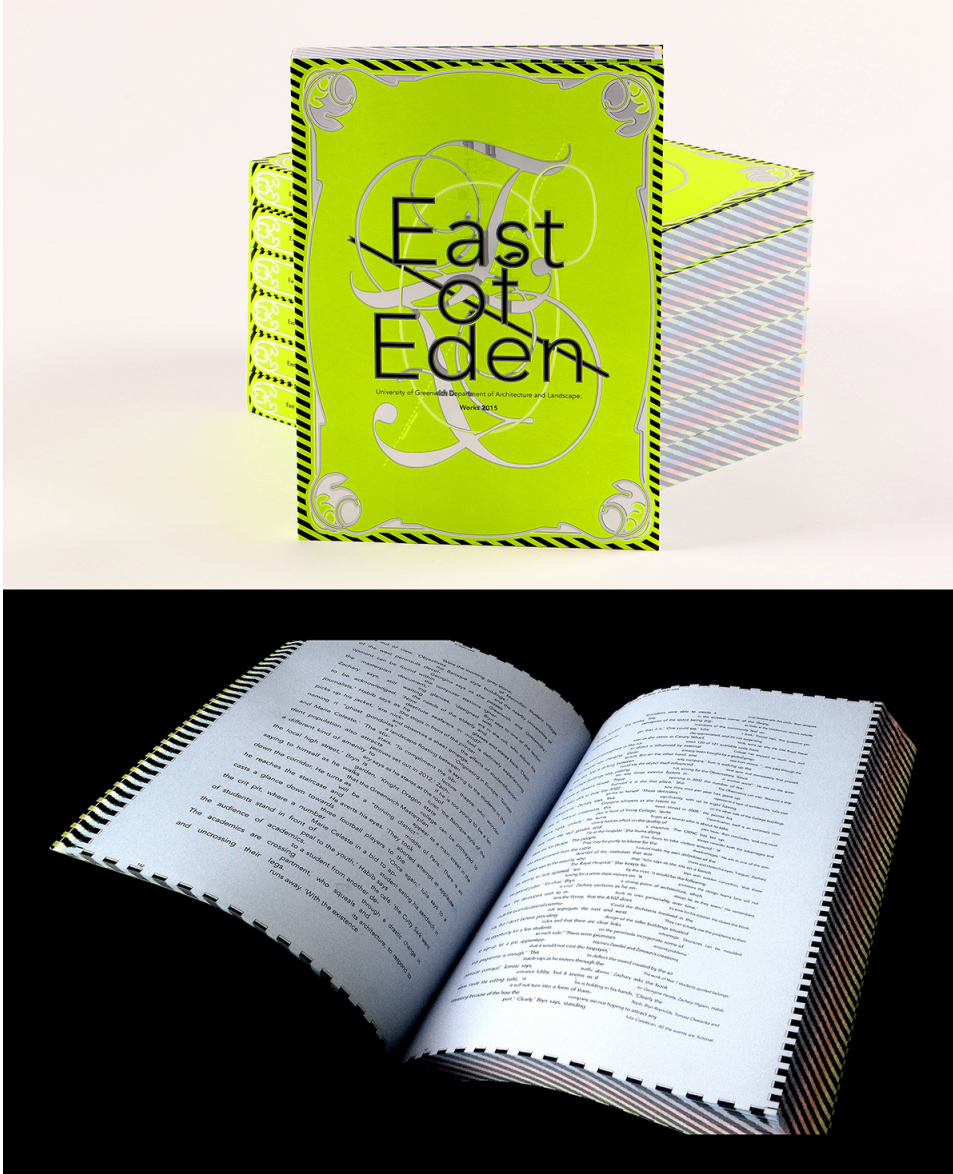


Figure 3: *East of Eden* (2015). Book design: Mike Aling.

Different chapter streams (student, academic or practitioner) are 'interlaced' through the space of the book, with the formal treatment of text and images reinforcing this concept throughout.



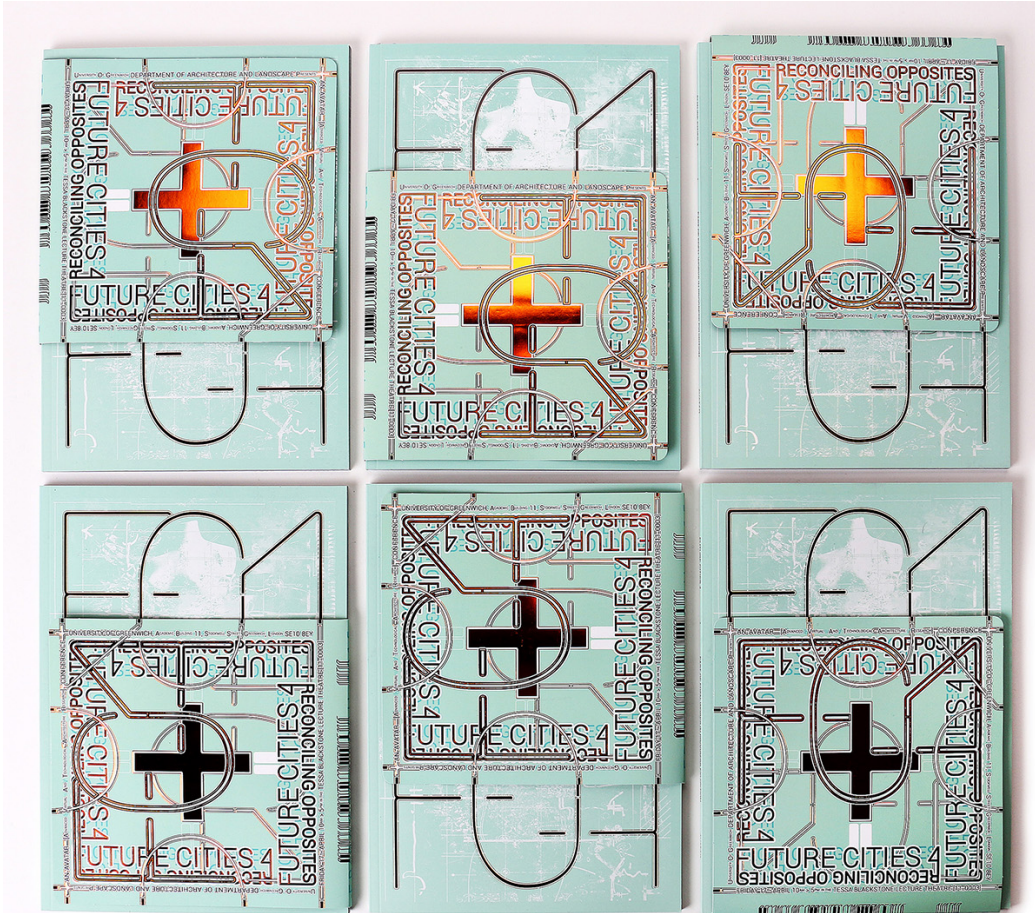


Figure 4: *Future Cities 4: Reconciling Opposites* (2015). Book design: Mike Aling.

The book's cover and magnetic sleeve have a multitude of differing formations. Text and images throughout the book are anamorphically projected on the pages, offering different text-image streams to be read depending on how the verso and recto pages are pressed together/reconciled.

## Architects' Books and Architectural Books

If the 2009 survey of American architects' libraries *Unpacking My Library: Architects and their Books* is anything to go by, the appetite for book consumption amongst architects in recent years has been healthy, fed by a small but steady buffet of works. The release of this publication before its sister publication *Writers and their Books* is telling of how important book publishing is to architectural culture. From a publisher's perspective, the market for architectural publications is no doubt limited to those immediately in or around the profession, which is one reason why the normative graphic tropes deployed in many books on architectural subjects seems to be an unnecessary design constraint, given the lack of need for broader commercial appeal. Interestingly, a huge range of book types and genres are displayed on the shelves of the architects featured in *Unpacking My Library* – Pynchon's *Gravity's Rainbow* and Joyce's *Ulysses* are consistently favourites (Steffens, 2009) – literary texts that have clear spatial qualities and relevance. However the vast proportion of books understood to be part of architecture's *canon* primarily focus on books *by* architects, and occasionally architectural theorists - I would classify these as *Architects' Books* (taking lead from the typology of *Artists' books'*). Refreshingly, *Publishing as Artistic Practice* does not solely concentrate on Artist's Books, but includes discussions on book works from publishers, designers and writers also, a method I will deploy below. I use the term *architectural books* throughout this article, in keeping with Andre Tavares, in order to discuss book works from outside of the immediate discipline that have architectural merit in terms of their content *and* design. The *architectural book* is a site to discuss architectural or spatial arguments or narratives, as well as a book(s) that can be registered as an architectural construct in its own right – both its *physique* as an object/thing (to reference Paul Valery), and the spatial qualities, conditions and implications communicated through the form of its design.

The printed and bound codex is still as vital as ever for the distribution of architectural ideas, debate, research, and the creation of architectural culture. Even transient acts of self-publishing such as blogging, namely by Geoff Manaugh of BLDGBLOG and the late Lebbeus Woods, inevitably became concretized into bound codex form. After the death of the book *did not* happen (*the death of the death of the book?*), perhaps first declared by Robert Coover in his “The End of Books” article in the New York Times Review of Books (June 21, 1992), the landscape of architects’ book publishing has consistently pressed on with a wealth of new titles year upon year, both as physical copies and as digital downloads. In 2005 the poet Kenneth Goldsmith stated that the printed book offered a new terrain for subversion: ‘The New Radicalism is paper. Right. Publish it on a printed page and no one will ever know about it’ (Goldsmith, 2005). This too has failed to come to fruition, although Goldsmith’s statement was not entirely serious. In many ways, the opposite can be seen: publishers have increasingly focused on producing physical books as more luxurious, yet less ‘radical’ objects, both in terms of content and book design, if the rosters of Taschen and Phaidon are to be taken as indicative.

### **Architectural *Liberature***

*Liberature* was a term defined by writers Zenon Fajfer and Katarzyna Bazarnik in 1999 in order to define literature designed in book form, as opposed to the traditional form of *literature-as-disembodied-text*. ‘[Liberature] shifts the emphasis from “litera” (lat.:letter) to “liber” (lat.:book)’ (Gilbert, 2016, p.18). In *Publishing as Artistic Practice*, Gilbert, quoting Bazarnik, defines liberature as the act of producing a ‘material book... [that] ceases to be a neutral container for the text, but becomes an integral component of the literary work’ (Gilbert, 2016, p.18). This notion of book-making over text-making is a core concern across many of the essays

in *Publishing as Artistic Practice*. Again, it can be argued that this notion is not an entirely new concept to architects in relation to publishing their work. In his essay 'The Architectural Book', Alan Powers states that the publication of Claude Nicolas Ledoux's 1804 book *Architecture Consideree sous le rapport de l'Art, des Mouers et de la Legislation* 'signal[s] a substantial move from text to image, of a kind that we have subsequently come fully to accept as natural for architectural books' (Powers, 2002, p.164), and perhaps this is the first modern example of architectural liberature, 'where a theoretical statement is demanded by the visual material' (p.164) alongside the text in a bound codex. With regards to image-dominant books, Giovanni Battista Piranesi's *Carceri* series (originally published in 1750, reworked and republished in 1761) predates Ledoux by almost a century, and it is often overlooked that the *Carceri* plates were intended to be distributed in bound codex form, intentionally fixing the prints in sequence. Predating both of the above is the 1499 *Hypnererotomachia Poliphili*, an early book of architectural fantasies written by the non-architect Dominican Priest Francesco Colonna that predates Serlio's image-rich treatise *I sette libri dell'architettura* from 1537 by 38 years. Whether or not the *Hypnererotomachia* was written as an act of liberature is up for debate, however it is an exquisite, highly decorative weave of woodcut prints and typesetting throughout, richly narrating the journey through the allegorical dream landscape of the protagonist.

In his essay, Powers continually relates how historical developments in print technology paralleled the development of the architectural book, particularly its ability to convincingly replicate architectural representations. This intrinsic relationship between the *book* and its *media technics* is discussed at length by literary critic N. Katherine Hayles in her 2012 work *How We Think*. Her conception of *contemporary technogenesis* asserts that our knowledge and media

technics have not only *always* been complexly interwoven, but will *continue to coevolve* with ever developing media technologies. This leads on from the established notion of technogenesis as the evolution of the human through its tools/technology usage, and vice versa.

Technogenesis holds true of architectural knowledge development, and its advancement through publishing practices, as we have seen from Vitruvius onwards, not only by textual communications but also through its ability to increasingly improve the acuteness of its printed imagery, as outlined by Powers.

If such a thing can exist, the unprecedented master of architectural literature in the early- to mid-twentieth century was Le Corbusier. As Catherine De Smet's exceptional study *Le Corbusier: Architect of Books* shows us, Le Corbusier's book output (including his writings, book designs, photography, and working extremely closely with publishers through the machining and distribution processes) over the course of his life was insatiable. The number of his publications is still not entirely certain, but predicted to be around 56 titles (De Smet, 2007, p.13). Le Corbusier saw books as fundamental to design culture, and writing in 1960, (as quoted by De Smet) declared books as equivalent to 'tapestries, drawings, paintings, sculpture, houses, and city plans... as a manifestation... of the new Machine age' (De Smet, 2007, p.117). Le Corbusier set new benchmarks for both the sheer volume of architectural publications produced, and the architect's ability to have high levels of control over page layouts and cover designs (albeit De Smet makes it clear that his book designs were inspired by the French publishing designs of the time and often not particularly radical). The Le Corbusian book became a significant aesthetic seen emulated time and again in the twentieth century in architectural culture. Conceivably it was Venturi, Scott Brown and Izenour's 1972 *Learning from Las Vegas* that introduced a post-Corbusian, anti-elitist aesthetic for the architect's book, its design clearly inspired by Ed Ruscha's

1966 Artist book *Every Building on the Sunset Strip*. The book's design was core to the fundamental argument being made on the validity of populist forms.

In more recent history, the release of *S,M,L,XL* by Rem Koolhaas/OMA with Bruce Mau in 1995 saw a shift in both the typology (the Big Book) and design ambition of the Architect's Book. *S,M,L,XL*'s marketing declared that 'this book is implacable. It is unlike any other' (Tavares, 2016, p.9), referencing Le Corbusier's declaration about his 1923 *Vers une Architecture*, and it is interesting to note that both Le Corbusier and Koolhaas had aspirations to be writers before embarking on an architectural career. It was *S,M,L,XL*'s formal manifestation of Koolhaas' theory of 'Bigness', as Gabriele Mastrigli argues (Mastrigli, 2006), that factored into the book's widespread impact; the form of the book argued for Bigness alongside the images and texts it contains (an additional third factor to the 'visual material' that would aid earlier architect's writings, such as Ledoux's discussed above). *S,M,L,XL* inspired countless publications by other architects, both big books and in other forms, and architectural publishing through the act of liberature became a rejuvenated aspect of global architectural practice, a period we may still be enjoying today. More recently, OMA's largest book to date was displayed at the 2010 exhibition *OMA Book Machine* at the Architectural Association, cataloguing 35 years of book making by OMA/AMO in a single bound 40,000 page volume. Arguably this collection of existing book works was not designed or originally intended as a single volume, however its vastness was symbolic of how OMA/AMO had markedly developed from makers of individual books, to an architectural publishing empire in the intervening fifteen years – arguably OMA/AMO are a core proponent of publishing as architectural practice.



not limited to seminal works however: a more commonplace example is undoubtedly the traditional student exhibition catalogue at schools of Architecture – a book object designed to project a meta-thematic identity about an institution, whilst providing a robust framework for the display of its student’s efforts, where the book as construct is tantamount to the text it carries. The 2016 catalogue by the University of Greenwich Department of Architecture and Landscape designed by myself is a double volume that measures as wide as it is deep, with graphics continuously wrapping around the cover, to fore edge, to back cover, to spine, as a means of wrapping the object and clarifying its parameters, as well as allowing it to become graphically contiguous when placed next to other versions of itself. As literature, the book as construct reflects the themes of the school it encapsulates; pervasive ideas through the studios in the academic year included adaptations of literary works (the catalogue responded by having a decisively ‘literary’ feel through its use of font, typesetting, overall size and formatting), the utilization of historical references in the development of contemporary responses (traditional book graphic tropes are evident but contemporized), and the meta-theme that we are a small-ish school (/book) with grand ambitions (reflected through an obscenely bloated 1,472 pages).

### **From Inter- to Meta- Media: Theories of the Book and Its Spaces**

‘In buildings as in books, architects set up sequences and logical paths that generate meaning for those using them and thus both formats offer similar strategies by which to physically grasp spatial experiences, from page to page as from room to room’.

(Tavares, 2016, p.9)

Although the above statement is one of the central investigations of Andre Tavares’ aforementioned *The Anatomy of the Architectural Book*, the vast proportion of architectural



books studied in his historical survey often deploy the normative graphic/book design conventions of their day. The following set of theories identified from studies in literature, design, media and comics hope to forge conceptual drivers and relationships between various 'architectural' books, that allow the act of book-making and publishing to be conceived spatially, formally and materially as we move further into the 21<sup>st</sup> century.

## BOOK USAGE

Central to my own book design practice is Cormack and Mazzio's theory of *Book Usage*. Their 2005 publication *Book Use, Book Theory* is a rich exploration of early book culture between 1500-1700. During this period, the book was a close personal item that the owner would bind themselves and frequently re-use:

'Use [...] is positioned as the foundation of practice and experience, [...] of memory and knowledge itself'

(Cormack & Mazzio, 2005, p.2)

The book was a multivalent device for enabling a particular practice (there is a focus on the sciences in *Book Use, Book Theory*, although not architecture per se). In this sense, books were *instrumental* and not deemed precious in regards to their material qualities. Books were treasured for their wealth of content and *usefulness*. Marginalia was a common means of learning from, adapting and extending the original text, and transmitting information, and in this way books were extendable spaces for discourse both conceptually and physically (material additions were often made by the owner).

These long-diminished attitudes towards the book feel alien in the current climate of design publishing, one that increasingly operates at the extreme poles of rarity/luxury (high cost limited edition publications treasured as material constructs) and abundance/inexpensive (blogging, cheap large-run disposable print items etc). It is interesting that in the first two centuries of its existence, the book was not valued for its inherent material worth as an exchangeable commodity (ie. it had limited *exchange value*), but for its *use value*. As a material object, a new book was treated as the first iteration of a highly customisable, ever-shifting entity, again something oddly unthinkable today with regards to the printed bound codex. Ideas of manipulability and customisability are however common concepts when discussing digital interfaces, and with signs showing of an increased number of hybridized digital-material publications each year (both in their production, and their ultimate outcome as book-as-digital-material-hybrid), the book as a customisable construct may again become commonplace.

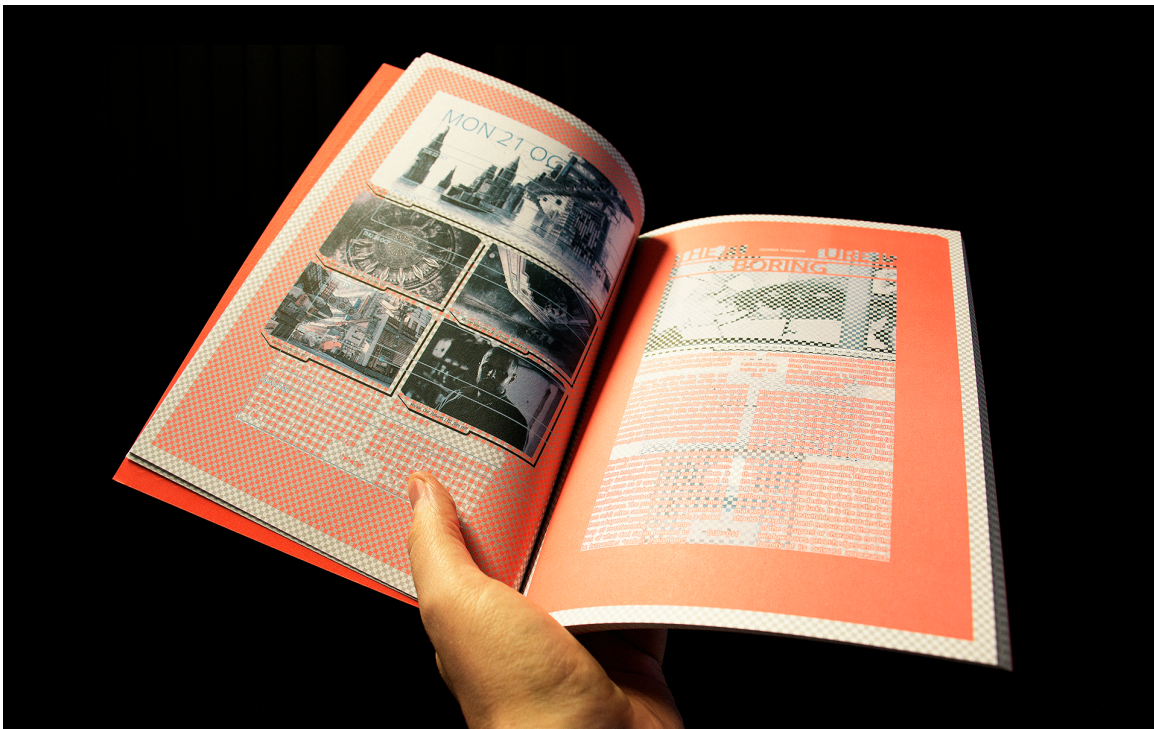


Figure 6: *New Architectures/New Landscapes* (2013). Book design: Mike Aling.

My own printed works have taken on ideas of book usage. The book *New Architectures/New Landscapes (2013)* designed in 2013 was designed in a way where the white space of the book – typically utilized as an indicator of ‘neutrality’ - was replaced with the checkerboard graphic commonly used in software such as Photoshop that indicates ‘nothingness’ or ‘invisibility’, allowing the page a more transparent quality, where printed information was treated as a floating layer, unbound to the page, that was reprinted in reverse *on the reverse* of the page, behind the checkerboard graphic, to suggest the non-materiality of the page. Alterior programmes for practical book usage, such as an academic course guide and a diary, were woven into the spaces between the layers of each page and its checkerboard, to encourage the book to be *used* as layers of information to interact with, not passively consumed as a typical conference proceedings.

## INTERMEDIA

In *The Century of Artists' Books*, Johanna Drucker declares that an integral concept of the book, particularly the *Artists' Book*, is the notion of the book as ‘Intermedia’. Intermedia was a concept coined by the (Fluxus) artist and publisher Dick Higgins, and in a particular version of the ‘Intermedia’ essay in his 1965 self-published *Foew&ombwhnw*, ‘Higgins pointed out that with all the varied modes of representation entering into the artworld, books were the one form which had the capacity to contain drawings, writings, performance and musical scores, photographs, transcriptions, and even material records and documents’ (Drucker, 2004, p.363). Through this lens, the book becomes a nodal space where medias can interchange, overlap and reformat. Interestingly, Higgins was a prolific publisher as the founder of *Something Else Press*, and was perhaps one of the earliest artist-as-publishers (ie. not solely publishing his own work,

but importantly the work of other artists), a practice later developed by the aforementioned Antoine Lefebvre with his *La Bibliothèque Fantastique* publishing house discussed in *Publishing as Artistic Practice*.

Although *The Century of Artists' Books* was first written in 1994, Dickens' concept of 'Intermedia' is still a key concern for Drucker. Twenty years on, in her recent book *Graphesis: Visual Forms of Knowledge Production*, in a short declaration on 'The "book" of the future' Drucker still posits intermedia as core to the idea of the book, and not only of those by artists:

'...[The Book] will combine reading and writing, annotation and social media, text processing and analysis, data mining and mind-mapping, searching and linking, indexing and display, image parsing and distant reading, in a multi-modal, cross-platform, inter-media environment.'

(Drucker, 2014, p.63)

In this same text, Drucker also picks up on the spatial possibilities of the new screen-based (expanded) book that she envisages, as well as the communal and collaborative opportunities that future books will afford authors/non-authors/liberature-makers:

'The display will take advantage of the n-dimensional space of the screen in ways that combine multiple design visions'

(Drucker, 2014, p.63)

## THE TOPOLOGICAL

Although *Intermedia* offers an overall conceptual justification for the utilization of book form by artists and designers, it is perhaps the notion of *Topological Fictions* that allows for a more focused understanding of the book's potential as a spatial, and spatially structured, entity.

*Topological fictions* is a term that author A.S. Byatt defines in her essay 'Old Tales, New Forms' to describe fictional texts that demonstrate 'both mathematical game-playing, and narratives constructed with spatial rather than temporal images' (Byatt, 2001, p.139). Byatt derives the term from Italo Calvino in his essay 'Ovid and Universal Contiguity', where he discusses the poet Hans Magnus Enzensberger and his use of 'combinatorial games' (Byatt, 2001, p.139). An example of a Byattian Topological Fiction is George Perec's 1978 novel *Life: A User's Manual*. A complex interweaving of stories, the novel describes the various activities of occupants in a fictional Parisian housing block, 11 Rue Simon-Crubbellier (Perec, 2008). Of particular interest to us is the structural logic of this novel, the journey of the 'Knight's tour' through the apartment block. A Knight's tour is a sequence from Chess-playing and Mathematics that sees the Knight piece visit every square once on a 10x10 square chess board, consequently 100 moves in total – a favourite structural device of the Oulipo group that Perec was a famously a member of. Core to our interest in this structure is the spatial experience that the narrative affords the reader. The novel not only describes its building-as-setting and its spaces, but consciously uses its structure (the block is 10 apartments wide and 10 floors high) as a device for navigating the multiple narrative streams set within itself. Perec's novel is particularly well suited to the definition of a topological fiction as the story is also frozen in time, its multiple stories take place just before 8pm on June 23<sup>th</sup> 1975, allowing the spatial journey of the text to exist independently from the movement of time. This is of course an act of determining a dominance of space over time, rather than the more typical inverse, which seems to be simply a switching

of dimensional constraints (although from a Oulipian perspective, writing with constraints was entirely the point: particularly atypical constraints). Although Byatt concentrates on fiction writing to illustrate how a text may be topological, there is no real necessity for the concept to remain within any particular sphere of literature, or indeed literature itself. The topological can be taken as a means of understanding how *topos* can structure narrative, or argument, through whichever media is appropriate. Both OMA's *S,M,L,XL* and *Content* used a topological structure as a means to organize works produced by the office in book form. As its title suggests, *S,M,L,XL* is ordered by project size and/or scope, in relation to one another, a unique device upon publication for an architect's book. Projects/works in the later *Content* were structured along a loose global trajectory from West to East, with projects driving eastwards towards Asia. These are not entirely neutral structures (unlike the Knight's Tale), and their ordering is strongly suggestive that *XL* and *East* are the conscious direction for OMA.

## THE ERGODIC

If we are to look at how the topological qualities of a text may manifest in the design (formal, material or graphic output) of the carrier medium (be it in book form or otherwise), the term 'ergodic' by literary theorist (and now ludologist) Espen Aarseth allows us a conceptual framework. This neologism was coined by Aarseth in his book *Cybertext: Perspectives on Ergodic Literature* in order to classify literatures that are unique in the way that they require the reader to become a navigator; for ergodic literature, 'Non-trivial effort is required to allow the reader to traverse the text' (Aarseth, 1997, p.1). If an ergodic text requires the reader's active engagement, ie. to make critical decisions about how to negotiate the journey presented in the narrative, then this is determined to be a 'cybertext' (a cybernetic text). The level of agency involved on the part of the reader is more involved in a cybertext than it is in a more

conventional 'hypertext', where although the text still requires an element of navigation and is therefore still ergodic, it is not a cybertext as the reader has a more passive role and is not required to think critically about the consequences to the overall narrative.

The Ancient Chinese *I-Ching* was arguably the first ergodic text. Through the invention of the hexagram system, a vast number of possible configurations allowed the reader to embark upon a vast number of possible divination text pathways. Stéphane Mallarmé's 1897 poem '*Un Coup de Dés / A throw of the dice never will abolish chance*' and Guillaume Apollinaire's 1913-16 *Calligrammes* (although the calligrammes were often more pictorial than navigational or spatial) are early ergodic poems, experimental in their graphic structure in order to emphasize the meaning of the poetry (and spaces evoked), and inspiring the later Brazilian concrete poets of the 1950's. Recent literary works that can be termed ergodic include perhaps Mark Z. Danielewski's output, as they require the active role of the reader to navigate the graphically complex text arrangements, although he has announced that he is critical of the term.

In comparison to the *topological* - where the spatial structure of the text is only revealed to the reader upon the act of reading, and the graphic or material design is not vital to its operation – the *cybertext*, and by extension the *ergodic*, offer an opportunity to the publication designer. How the design of the text allows it to be routed becomes a primary factor in the communication of its content:

'Cybertext focuses on the mechanical organization of the text, by positing the intricacies of the medium as an integral part of the literary exchange' (Aarseth, 1997, p.1).

The term 'ergodic' is constructed from the latin 'Ergon' and 'hodos' – 'work' and 'path' (p.1). Aarseth explores the varying forms of the labyrinth, perhaps the most complex of ways in which a pathway might be designed or navigated, it becoming a key metaphor to describe the different journeys possible through an ergodic text – the uni-cursal (ie. a single route through), the multi-cursal (multiple routes) and the net (multitudinous journeys in all directions and dimensions) (pp.5-9). Negotiating an ergodic literature as a reader is fundamentally a spatial act, and can consequently afford the architect or spatial designer the theoretical framework for transmitting a spatial experience, perhaps akin to the experience of moving through an architecture, through books or other publishing forms. Ergodic literature is not medium-specific – books are only one of many possible forms, and it is important to note that when Aarseth uses the term 'literature' he is also encompassing a wider than typical range of (new) media such as websites or computer games. For Aarseth, when negotiating a text, a reader becomes a player. The ergodic therefore could be utilized in architectural publishing as a spatially ludic exercise.



**Figure 7:** *Silver Linings* (2015). Book design: Mike Aling.

Ergodic entrance passage.



The 2010 book-object *Tree of Codes* by Jonathan Safran Foer is an interesting case in that it does not require navigation from the reader as such: as a reader the assigned role is conventional. The novel however was formed by Foer by *practicing* ergodicism, as well as a kind of subverted liberature (book-deconstructing). The book is made up by die-cutting words out from a reproduction of Bruno Schulz's story collection *The Street of Crocodiles*, thereby forging a narrative pathway through the script with the remaining words, and creating a matrix of void spaces of lost letters, words and sentences in its wake. This method of carving out from an existing book is not dissimilar from the Artist Tom Phillips' *A Humument*, the longest ongoing artists' book project ever (now in its fiftieth year of production), in which Phillips augments the Victorian novel 'A Human Document' beyond recognisability through the playful reinterpretation of the original text: words are redacted in manifold ways and a new text is constructed from the remnants that create new relationships between words, characters and ideas from the original work. The notion of the ergodic opens up ways to conceptualize the practice of writing, or bookmaking, or publishing even, as a designed spatial act, as well as a consumed navigational experience on the part of the reader. In *Writing Machines*, N. Katherine Hayles discusses the complexities of *A Humument* as a media document, and posits the concept of the 'technotext' in relation to it. Hayles extends the complexities afforded to texts where materiality is of core concern, by describing a technotext as a text that can 'interrogate the inscription technology that produces it... mobiliz[ing] reflexive loops between its imaginative world and the material apparatus embodying that creation' (Hayles, 2002, p.25). Although Hayles does not focus on the spatial pathways forged by the text-images through *A Humument* as such, she does introduce many spatial relationships that the bound codex offers the designer and the reader, principally between the imagined world narrated in a work, the text itself as

object/thing, it's design and form, it's relation to the reader in the actual world, and, importantly, the technology utilized in its production, how it is made apparent and how it enriches the content of the work.

## VISUAL LANGUAGE

With the exception of 'intermedia', the concepts outlined above all emerge from the world of literary studies. A healthy amount of imagery has been naturalized as a central dynamic of architectural publishing, as discussed above as a trait established by Ledoux; media as hybridized word-and-image constructs today are the norm. Given this, the field of comics theory is a rich territory in the study of image-and-word narratives to learn from, and may shed light on how the construct of symbiotic word-image publications may be developed as a spatial practice. Although comics artist and theorist Scott McCloud famously defined comics as 'Juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer' (McCloud, 1993, p.9) - an update of the term 'Sequential Art' coined by comics artist Will Eisner - this dictum omits the vital role that words play in comics. Appropriately, all of McCloud's comic theory works are produced in comic form as a means of evidencing the arguments being made, and text is clearly vital to their communication. Comic form has often been adopted as a visual style by architects over the last twenty years, as Melanie van der Hoorn's 2012 *Bricks & Balloons: Architecture in Comic-Strip Form* charted, largely utilized as competition entry panels or single page drawings made to promote ideas to a client. This appropriation was extended further when Architect Jiminez Lai's 2012 *Citizens of No Place* was released as the first architecture design/theory book produced as a full-length drawn graphic novel. As Bjarke Ingels/BIG demonstrated with their 2010 Archi-comic *Yes Is More*, the comic form as a device to communicate architectural ideas, although not

necessarily drawn (*Yes Is More* is predominantly photography and computer renders overlaid with text boxes and speech bubbles as per a 'photonovel', or 'Fumetti'), is a potent means of communicating architectural project narratives in a way that offers that reader a dual understanding of a sequential, linear narrative: simultaneously image- and text-driven.

Along with this narrative opportunity, spatial relationships are inherently bound up in comics construction and in their reading. Comics scholar Nick Sousanis' 2015 *Unflattening*, a graphic novel that argues for the utilization of comic form as a device not only to expand the communicative limitations of word-only publications (or by the same logic, image-only), but as a method by which theories can be spatialized ('unflattened') in the medium of the bound codex, through the representation (drawn work perhaps, but not necessarily) of three-dimensional spaces into experimental textual-visual arrangements. Another notable investigation into the spatial qualities of comics that explores their inherent virtues rather than their potential application, is the ongoing work of semiotician Neil Cohn with his concept of *visual language*. Cohn sees comics as a subset of a wider 'visual language', and argues that we can understand visual sequencing as a language, albeit not in the same way as verbal language. Cohn argues that word-and-image narratives are spatial constructs, in that they cognitively trigger a readers understanding of spatial relationships between characters/actors and their environs upon reading. The implication of this for architects is that a readers implicit understanding of spatial configurations is central to an understanding of the comic form narrative – the mind interprets spatial relationships in relation to temporality in order to make sense of the totality of message/narrative/argument being conveyed by a sequence of panels:

'[Comics are] manipulations of a *spatial structure*, which combines geometric

information with our abstract knowledge of concepts... we retain these spatial relationships in our minds through a higher level of spatial structure. This is the unseen spatial environment that we create mentally. Panels can thus be thought of as “attention units” that graphically provide a “window” on parts of a mental environment.’

(Cohn, 2013, p.10-11)

Architecture has often been a focus of comic works. Chris Ware’s impressive 2012 compendium *Building Stories* is often cited as an exemplar in exploring an architecture in comics form, through its intricate depiction of the occupants of a single Chicago apartment block: overlapping tales of its human inhabitants, a bee, and the building itself as a sentient, albeit rather solemn, storytelling character. Ware’s diagramming of spatial and temporal relationships between characters in this and many of his other works are exquisite constructs in themselves and have much architectural merit. I would however like to draw attention to the graphic novel *Here* by Richard McGuire, known to have inspired Ware from a young age, as a remarkable comics study of space and time. Whereas *Building Stories* operates on the building scale, *Here* is a relentless study of a single room. 25 years in the making, McGuire’s seminal work portrays the corner of the same room, aligned with the gutter of the codex so that one wall is on the verso and the other wall on the recto on (almost) every spread of the book. As the reader turns these pages the initially empty space becomes increasingly filled with vignettes of activity through comics panels, illustrating various inhabitants of the room in different positions across the space of the room/spread, each relating to a different period of the room’s past, present or future. At times, the corner of the room disappears, as it is either yet to have been built, or has long been demolished – the viewing position ever static - and we are immersed in a time-travelling multi-

panel multi-narrative. The events played out in the room are not ordered chronologically, and the reader jumps tens or even hundreds of years in time by turning the page, and often these different periods occur simultaneously occur on the same page thanks to the positioning of multiple comics panels. The almost Oulipian spatial constraints that McGuire sets himself (*Here* is not entirely dissimilar in intent to Perec's *An Attempt at Exhausting a Place in Paris*), allow for a vast imagined study to take place of an extremely concentrated territory, taking the reader back to the room's construction, further back to the distant past, before projecting us into the deep future. The corner is interrogated until its initial banality is long refuted. Because its spatial parameters are made explicit, *Here* allows for a shift in the principles argued by Cohn from the spatial to temporal: the 'mental environment' is not an imagined spatial arena for characters to inhabit, but a slippery spectrum of time that the reader knits together in order to chronologically make sense of the rooms meta-narrative. The book is image-heavy, very few words are used throughout the book, although this is not to say that they are unnecessary: the year dates written into the corner of the comics panels floating across the spreads are key in the readers understanding of the overall scope and weave of the space's time spectrum.

It is the spatial nature of *Here* that I believe makes the book of extreme interest to the architect. This is both because a *space* (and its form, and its changing materiality) is the central concern of the work, and because this space can be viewed as an instigator of the events it contains, contrary to more typical character-driven narratives seen in comics where the environs are often inconsequential. When the construction/birth of the room is shown, the reader almost emphasizes with the room as one would a protagonist: the room becomes a sympathetic character. The way in which *Here* utilizes the bound codex is also of particular interest to spatial designers. Unopened, *Here* shares the dimensions of a typically unobtrusive hardback novel

(perhaps indicating its intent to be included in a literary canon), the image of a window on the cover offering an indistinct view inside the book/room. Once opened however, the relevance of the bound codex becomes evident as an integral factor in the communication of *Here's* narrative: when opening the book, the reader is opening, or unfolding, the corner of the room, one that is seemingly miniaturized to an-almost dolls-house scale. The medium becomes fundamental to the space of the narrative, the materiality of the book standing in for the materiality of the wall.

## METAMEDIA

The last contemporary theory of the book that I would like to discuss here briefly is literary theorist Alexander Starre's conception of 'Metamedia'. A recent addition to studies into the materiality and design of texts in book form, Starre describes metamedia as 'literary texts [that] bind themselves to a specific media format' (Starre, 2016, p.82). Although the term metamedia was first coined by Marshall McLuhan in the mid 1960's (around the same time that Higgins introduced 'intermedia'), McLuhan's definition saw metamedia as the *effect* that the mass volume of old and new media forms had as a totality. Starre's stance however is more focused on the medium of the book can *be* metamedial, particularly contemporary literary works from America, through their absorption of other media forms and languages into their own, as well as knowingly interrogating their own medium: '[using] specific devices to reflexively engage with the specific material medium to which it is affixed or in which it is displayed' (Starre, 2015, p.8). Starre, like Hayles before him in relation to the technotext, explores the writings of Mark Z. Danielewski when articulating the metamedial:

'Works such as Danielewski's *House of Leaves* (2000) and Foer's *Extremely Loud and*

*Incredibly Close* (2005) are book fictions in a material sense: they extend the aesthetic illusion outward across the entire bound codex and ask readers to suspend their disbelief about the ontological status of the book.' (Starre, 2016, p.82).

This is an interesting development in the understanding of the layered spaces a book may have, in this instance as a self-referential object within itself its own imagined space, although this condition has been explored since Laurence Sterne's 1759- 1767 *The Life and Opinions of Tristram Shandy, Gentleman*, a book Starre declares as the 'locus classicus of literary Metamediality' (Starre, 2015, p.8).

Whereas Starre's interest in Danielewski is in the mediality of his books, my own interest has long been the architectural qualities of Danielewski's output, both in the tales he tells, and the books he designs to tell them. Whereas his more recent 2012 novel *The Fifty Year Sword* could be described as a study of landscape in book form - through its depiction of imagined landscapes using (reproductions of) intricate thread images stitched through the pages of the codex - his debut bestselling novel *House of Leaves* is a rich *architectural book*. At its core, nested within the Matryoshka-like narratives of *House of Leaves* is the tale of the Navidson family house (or more exactly, the unreliable description of the house through the lens of the Johnny Truant's reading of Zampano's academic study of *The Navidson Report* documentary film about the house). Put simply, the house is larger on the inside than it is on the outside. This conceit is represented in the form of the book-object by its cover being folded short of the pages it contains: the book too is bigger on the inside than the outside, mimicking its content.

The story describes how members of the Navidson family trek into the ever-shifting labyrinth of

dark spaces behind the walls of their home, sending back reports as they become increasingly lost in these fissures. It is interesting to see that a labyrinth is a central space in the book (suggested in gloss print (in plan) on its cover), it being a key motif in the understanding the tenets of ergodic literature, something that *House of Leaves* is often categorized as due to its use of experimental typography and the way in which the reader must traverse the text. There are large sections of complex type arrangements in the novel that communicate the spatial experiences being undertaken by characters inside the text, spreads that vary hugely in their design. Pages 119-145 display incredibly dense orthographic arrangements of the novels nested narratives, that travel through the book across the x, y and z axes. When members of the family take a trip into the labyrinth inside/behind/within their house, type setting on the page becomes increasingly sparse as the characters find themselves increasingly lost and isolated (page 238 is blank except for the words 'saturated in silence' spaced generously across). The labyrinthine journeys taken by the characters in the text are also represented in how the novel-as-book is navigated, its unconventional sequencing of the pages requires the reader to skip large sections before doubling back and so on. The reader becomes lost in the labyrinth as they follow the protagonists. This is another demonstration of how Danielewski designs the form of his book as having a symbiotic relationship with its content, to suggest spatial conditions through the materiality and mediality of the book. It is indeed a metamedia, but it is a particularly architectural example of metamedia. It is this practice of materializing spatial ideas, specifically in book form, that make *House of Leaves* a masterful example of book architecture.



## Architectural Publishing Futures

In this last section I would like to discuss three recent collaborative architectural 'book' projects that I have worked on. Through this, I will reflect on how the above theories have influenced my own book making practice, as well as providing a loose armature in which to speculate on how the design of architectural books and other published architectural products may evolve in the coming years.

### SILVER LININGS



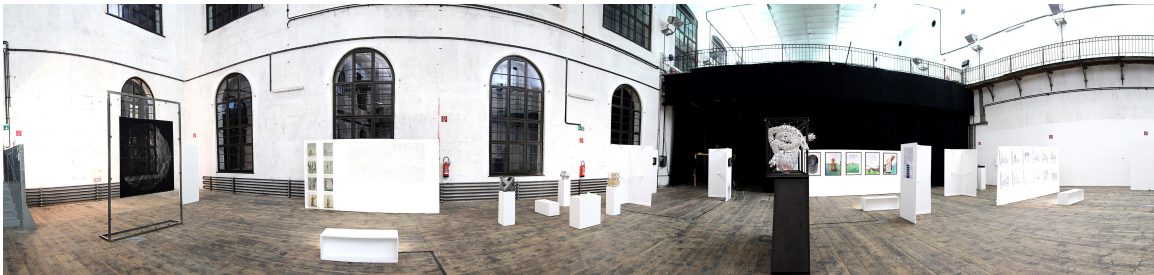
**Figure 8:** *Silver Linings* (2015). Book design: Mike Aling.

Cover detail. The cover of the *Silver Linings* book has pushable flaps on the reverse that allows the user to self-emboss the edges of the words *Silver* and *Linings*. The words are independently viewable when the book is turned 180 degrees.



**Figure 9:** *Silver Linings* (2015). Book design: Mike Aling.

*Silver Linings* is a book that I edited and designed for an exhibition of the same name held at the Academy of Fine Arts Vienna, Austria in 2015. The exhibition was curated by Eva Sommeregger and Florian Schafschetzy of the Austrian practice EyeTry, who were also co-editors of the book. The exhibition showcased a number of young European architects with highly experimental takes on what contemporary architectural practice may be, each seemingly very different from one another, and speculative architectural design work produced by myself in collaboration with Nic Clear as *unitfifteen-Research* was also shown in the exhibition. Through its arrangement, the exhibition and accompanying symposium sought to forge connections between the work of the practitioners by exploring shared themes and interests.



**Figure 10:** *Silver Linings*. Exhibition panorama. Exhibition in Academy of Fine Arts Vienna, October 2015. Photo courtesy of Eva Sommeregger.

The *Silver Linings* book is designed as a navigational device for visitors to experience the exhibition in a particular order *whilst* they are viewing the work in the venue, complicating the archetypal relationship between an exhibition and its book/catalogue where the book typically functions as an artefact to be read afterwards, i.e. a record of the past. The book is intended to be *practiced* in relation to actual space, as per the discussion above regarding *book usage*. Upon opening the book, ergodic texts lead the reader up to the second floor of the host building (see figure 7), quite literally directing the reader/visitor simultaneously through the entrance passage

of the exhibition venue, and the entrance passage of the book. Upstairs, the exhibition is configured to allow an unobstructed visual connection between the exhibits in an alphabetical order: although exhibits are positioned in the venue in loose thematic groupings, the arbitrary alphabetical journey through them was intended to encourage new unforeseen associations between the works. This movement through the exhibition is ordered in a way where the second exhibit can be viewed from the first, the third from the second, and so on, and on this route the other exhibits are positioned so they are *not* visually accessible, by being either out of visual range, or hidden behind another exhibit. This journey through the space is displayed in the book through full bleed perspectival computer renders that make up the background image of each spread, emulating the view of the visitor at any given exhibit, and guiding them through to the next accordingly. The framing of these views is constrained by the limits of the book format (whose proportions were representative of the exhibition venue) and therefore these frames, the correlations between exhibits, and ultimately the configuration of the exhibition, were as prescribed by the book design as was the books design prescribed by the exhibition: a symbiotic endeavor. The paper stock used throughout the book is extremely thin and therefore semi-transparent, allowing connections between the exhibits both *on* and *through* the pages, with their relevant texts and supporting imagery moving through the z-depth of the book in tandem. The overall book design consistently adheres to a 'thinness' (through its thin paper, its lightweight serif fonts, the slender dimensions of the codex), in keeping with the imagery suggested by the exhibition/book title.



Figure 11: *Silver Linings* (2015). Book design: Mike Aling.

The book structure is topological, in that its overall narrative structure is determined by a spatial journey. It also uses ergodic principles throughout and can be termed a cybertext of sorts, as the articulation of this journey is made evident through the design of the 'text' (by this I mean a hybrid of images and words). Although the book is still read by turning its pages in the usual order, through the text's interplay with its carrier medium (thin paper stock), the reader begins to understand spatial relationships between the exhibits in the space of the book, and begins to chart this knowingly as part of the reading experience. Sometimes the route is obscurely signposted and requires the reader actively negotiate the spatial puzzle in order to make sense of why one page comes after another. If the reader was at the exhibition and chose to utilize the book as its navigational device, the book took on a very particular ergodic quality, much like a

map, in which they would negotiate the text as a simultaneous traversal of both the spaces *inside* and *outside* of itself.

*Silver Linings* is not strictly metamedial, in that the book neither acknowledges other media forms or reflexively references itself. However the logic of metamedia is applicable if the term 'media' is replaced with 'space' in this instance: the entire premise of the book is based around its absorption and reinterpretation of a space outside of itself, this being something I believe the book offers that other metamedial texts do not: the book changes the way that a reader/visitors navigates in the actual world, not solely its own imagined internalized version.

*Silver Linings* is one of many books that can be termed *post-lexial*. Lexia are traditional rectangular blocks of type found in publications, a form of which was historically driven by the proportions of the rectangular manuscript, then bound codex, then manual typesetting processes from the age of mechanical print: essentially this orthogonal typographic design trope has long endured although its structural rationale has become obsolete. Since Mallarmé's *Un Coup de Dés*, Lexia has been challenged as a given in printed texts, a lineage that *Silver Linings* is inspired by. Although digital publishing technologies today allow book layout to move well beyond traditional graphic constraints - this being particularly evident in more expressive exercises of ergodic cybertexts – this is surprisingly unexplored in architectural publishing at large.

With an eye to the future, one hopes that *Silver Linings* may show early signs of the book becoming an increasingly *toposensitive* entity. By this, I am suggesting that books may develop to become ever more sensitive to their surrounding spatial conditions. Although *Silver Linings* is

an old media form (a codex) spatially intertwined with a static exhibition space, it is this reflexive relationship that is relatively unique. Of course there have been examples where artists book have acted as physical instruments in actual space, such as Maurizio Nannucci's 1978 *Art as Social Environment* that encourages the reader to tear its pages out and litter the city, although the relationship between book and actual space in this instance is uni-directional. One imagines how developments in digital technologies will allow for books – digital, physical and hybrid - to reconfigure themselves in relation to their shifting environmental, social and political contexts, as well as numerous other external factors feeding in to their augmentation. This is something that *publishing* already does by its very nature, in that we publish to discuss the changing world we inhabit. This is however a relatively slow operation, and does not operate at the scale of the individual work. What I am implying is that many of the qualities of the early book as discussed by Cormack and Mazzi in their *Book Use, Book Theory* - as an updateable, extendable text - can be revisited by hybridizing the book with new media technologies. A newsfeed on a digital device is in some ways toposensitive, in that it has the ability to autoupdate: no doubt the digital book will follow suit. However the design of the newsfeed app, or even the device itself, remains unaltered, and I believe that there is an opportunity for shifting content to produce shifting forms. The logic of the toposensitive can also be applied to a book's temporal qualities: publishing may also involve an emergence of *chronosensitivity*. The relationship between real time and the timescales within book narratives has the potential to become further enmeshed and interactive, given the ways that digital media has the ability to augment the time scales needed for the acts of reading words and processing images (put simply, 'texts' can be slowed down by restricting their access, or sped up by orating them for the reader). New media technologies will allow the timespace of the book, and many other forms of publishing, to forge a hugely variable and playfully reflexive relationship with the actual world.

The emergence of the Internet of Things will no doubt make these relationships an increasing likelihood, and geotagged books-as-objects will have the potential to enter a global network of readers, other books, objects, things, entities, companies, technologies, biologies, chemistries etc etc, in both the physical world and a global digital environment. And how will these *networked book works* manifest in physical form? The opportunities for architects and spatial designers to develop publications as spatial and material works, and even as *architectural projects* in themselves, will never have been greater.

## THE LABYRINTH



**Figure 12:** *Where Is My Mind? The Work of Vaughan Oliver and the Pixies*, exhibition (2016). Curated by Nic Clear. Graphic Space by Mike Aling. The Labyrinth, Graphic Space.

The second project that I would like to briefly touch upon is a recent work by myself and Nic Clear operating as unitfifteen-research. As part of the 2016 exhibition *Where Is My Mind? The*

*Work of Vaughan Oliver and the Pixies* curated by Nic Clear, I designed the 'graphic space' of the labyrinth section of the exhibition held at the University of Greenwich, London UK. Inside this space, graphic designer Vaughan Oliver's *Minotaur* boxset (a collection of books) (2009), a celebration of his many graphics works for the US band Pixies, was expanded up to the scale of the exhibition, roughly 10m x 5m x 3m. The design of the labyrinth by Clear was a metaphorical house to the minotaur of the books title, and its graphic space was designed in a way that re-interrogated the relationships within the original boxset between the minotaur as central figure, Oliver's graphic arrangement of the book, his experiments in typography and those of his students, and the books internal photography by Simon Larbalestier, and by doing so offering an immersive and physiological experience of the book-as-exhibition. Graphic content from the boxset was scaled up into large format 2d prints that stretched across partition walls, and the exhibition also displayed Oliver's personal collection of obscure artefacts from his studio, and 3-dimensional facsimiles of Oliver's typography, displayed as typographic-objects. The varying formats of books in the *Minotaur* boxset inspired the varying proportions of partitions and spaces in the exhibition, and the *Minotaur* boxset itself was encased within a widened partition in the exhibition, viewable through peepholes, the books positioned in a way to suggest it being a miniature/model of the full scale exhibition. Where *Silver Linings* translated an exhibition into book form, the labyrinth does the inverse, although for both projects the space of the book and the space of the exhibition are concurrently nested in one another.



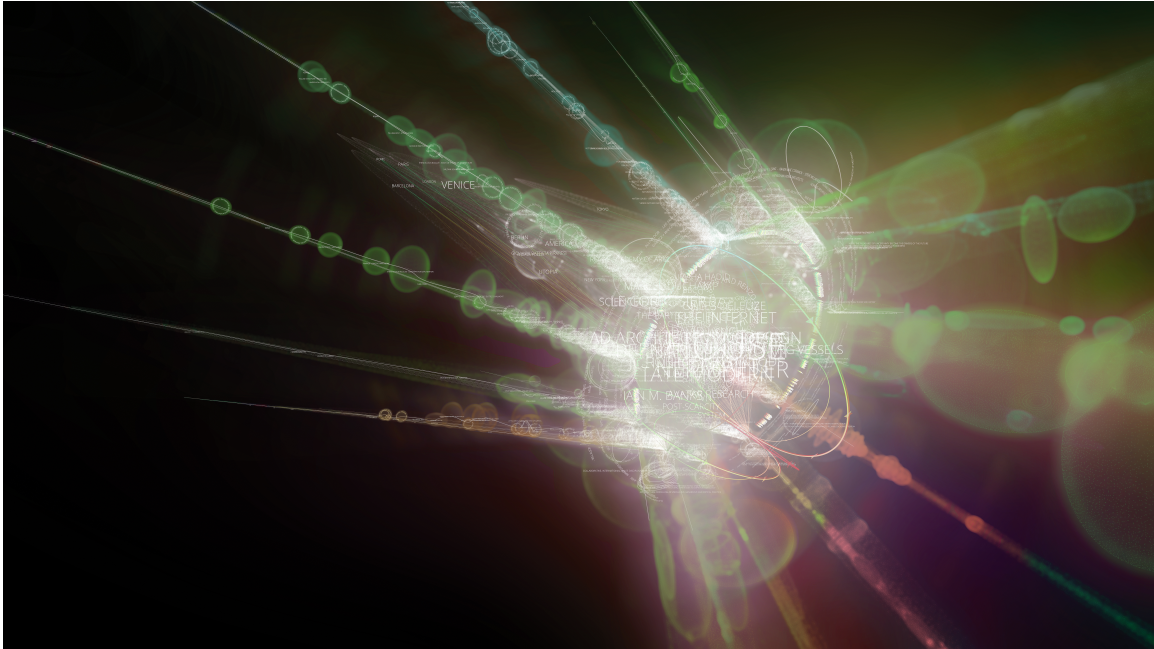


Figure 13: The Labyrinth, Graphic Space.

This scaling up and unpacking of the codex into an installation has long been practiced by the Fluxus artist Alison Knowles, notably her book sculptures *The Big Book* (1967), *The Book of Bean* (1982) and *The Boat Book* (2014). As with Knowles' work, the labyrinth takes the *idea of the book*, ie. its form and bibliographic qualities, as drivers in the design of the installation. The carefully juxtaposed diptychs in Oliver's *Minotaur* in turn were re-explored through their spatial positioning in the exhibition. If we treat this exhibition as a type of large book, then the project allowed *Minotaur* to literally become a public space, given its location in the publicly accessible ground floor of the University of Greenwich. This leads on from the wider conception of publishing as a public space, an argument made by Matthew Stadler of Publication Studio, discussed by Gilbert in *Publishing as Artistic Practice*: 'From a media history perspective, the concept of the modern public sphere is in fact strongly related to the practice of publishing since it was print that led to the "invention" of the modern public sphere. A new "media

constellation” resulted from the printing press’ (Gilbert, 2016, p.24).

## THE MEGAGRAM



**Figure 14:** *Megagram* (2013-). By Mike Aling and Mark Garcia.

The last project that I would like to discuss is the *Megagram*, a 4-dimensional digital diagram developed by myself and Mark Garcia as a space to articulate the works, inspirations and research, amongst many other things, of the staff at the University of Greenwich Department of Architecture and Landscape. Semi-jokingly titled as a way to convey its vastness, the megagram is a database that stretches back over a z-axis of 30,000 years of architecture and landscape history, abundant with references that are core to individual members of staff (architects, artists, writers, companies, buildings, landscapes, projects, books, other works etc), as well as mapping ongoing and future research projects that (aspire to) reach deep into the future. Through the sheer volume of inputs, well over 7,000, the megagram has evolved beyond its original ambition as a tool to forge new relationships, connections and research projects

between staff members in a single school, and has become a diagrammed library of large swathes of architecture and landscape history.



Figure 15: *Megagram* (2013-). By Mike Aling and Mark Garcia.

Given that it is largely a typographical construct, and one that involves a great deal of active navigation and interaction from the viewer, I have come to think of the megagram as a type of ergodic text, or more particularly a cybertext in the Aarsethian sense. The megagram mutates (due to its parametric construction) as data is inputted or extracted from the 4d computer model ('4d' as data is assigned with a temporal path in relation camera positioning, as well as x,y,z co-ordinates), its form shifting as new content is added: *form expressing content* being a key operation of the ergodic. If the virtual camera/viewer pulls back far enough, the totality of the diagram is made evident, floating in a digital ether. Arguably, this amorphous, dematerialized textual network is not dissimilar in concept from the increasingly prominent notion of the *expanded book*. Since as early as 1923, in his 'Topography of Typography' essay, El Lissitzky was calling for texts to evolve beyond the limitations of the printed codex: 'the printed

sheet, the infinity of the book, must be transcended. THE ELECTRO-LIBRARY' (El Lissitzky, 1992, p.359). In the last ten years, Bob Stein's Future of the Book Institute at the University of Southern California has been studying book futures from this particular angle: the future book as being a screen-based, digital device, expanded across the web. As discussed previously, the screen-based book is also a future posited by Johanna Drucker, in her declaration on the future book as 'a multi-modal, cross-platform, inter-media environment' (Drucker, 2014, p.63).

Technologist Hugh McGuire goes as far to declare the complete conflation of books and the internet in the very near future, seeing the way in which ebooks are built up from HTML code as an indicator, allowing for the imminent transfer of content (McGuire, 2012, p.115). Whereas this presumes the book to be a largely textual construct, the internet will also offer huge opportunities to image-text hybrid narratives: comics theorist Scott McCloud postulates that web-based comics will offer the artist and reader an 'infinite canvas' (McCloud, 2000, p.200) to develop a potentially endless narrative devoid of spatial or temporal limits: a condition shared by the megagram. Through many of these discussions, there is little indication as to how this digital content might be formally structured. This I believe is where *diagramming* will become instrumental, and is another reason that I see the megagram as being suggestive of a type of future book or publishing form. The diagram as an abstract machine will offer the ability to *connect* various elements of the expanded, but potentially disparate, book, this connectivity allowing it to be understood as a 'object' or 'thing', rather than a sprawling, unstructured hypertext. The design of this diagramming will be a spatial act, spanning virtual and actual spaces, inevitably linking to The Internet of Things and merging material with immaterial publishing forms.



Katherine Hayles' theory of *Contemporary Technogenesis*, and extend the role between the human and media technologies to include the design of the media also, then it can be suggested that the development of architectural publishing will be bound to the innovations of its media technics, and that they will coevolve, ever expanding the opportunities for architectural book space, in turn for architectural practice at large, and more specifically the *architectural practice of designing and making architectural 'books'-as-architectural projects*.

We have explored how the *idea of the book*, ie. its form and bibliographic qualities, can be expanded beyond the printed bound codex, and how the spatial logic of book reading (and making) can inform other spaces, such as the space of the exhibition or installation. It is however by following the logic of the online *expanded book* - that the book will increasingly hybridise with online and other related media technologies – that manifold rich futures for the architectural book offer themselves up. New media technologies will allow the timespace of the book to develop, allowing for a more complexly shifting and reflexive relationship with the actual world. Publications may become toposensitive and chronosensitive, in that they develop the ability to read, react and feedback into the space and time of the actual world, and their own internalized ones. The emergence of the Internet of Things will aid these developments, and provide an opportunity for publications to network into a spatial system perhaps at a global scale, as well as connect to a world of other systems. The construct of the diagram can be utilized for its ability to operate as connective tissue, as a means to connect these ever-expanding nebulous collections, and/or databases, of objects, things and publications.

In order to reach these technogenetic futures for architectural publishing however, current theories of the book as a formal and material manifestation of spatial and architectural ideas (as

well as other relevant discourse: the urban, landscape, social, economic, political, cultural etc) will forge the way, by offering up a framework for *thinking about* the designing of the future architectural book (and publishing) *as a form of* architectural practice, and a type of architectural project. It is hoped that the examination of “book usage”, “intermedia”, “topological” and “ergodic” literatures, “visual language” semiotics, and “metamediality” - originating from studies in literature, design, media and comics - offer the theoretical apparatus.

## References

Aarseth, E. (1997) *Cybertext: Perspectives on Ergodic Literature*. Baltimore, MD: Johns Hopkins University Press.

BIG Bjarke Ingels Group (2010) *Yes Is More. An Archicomic on Architectural Evolution*. Koln: Taschen.

Bury, S. (2015) *Artists' Books: The Book As a Work of Art, 1963-2000*. London: Quaritch.

Byatt, A.S. (2001) Old Tales, New Forms. In Byatt, A.S. *On Histories and Stories*. London: Vintage, p.123-150.

Carmo, M. (2001) *Architecture in the Age of Printing: Orality, Writing, Typography, and Printed Images in the History of Architectural Theory*. Cambridge, MA: MIT Press.

Cohn, N. (2013) *The Visual Language of Comics: Introduction to the Structure and Cognition of Sequential Images*. London: Bloomsbury Academic.

Cormack, B., Mazzio, C. (2005) *Book Use, Book Theory, 1500-1700*. Chicago: University of Chicago Library.

Danielewski, M. Z. (2012) *The Fifty Year Sword*. New York: Pantheon.

Danielewski, M. Z. (2006) *House of Leaves. The Remastered Full-Color Edition*. New York: Pantheon.

De Smet, C. (2007) *Le Corbusier: Architect of Books*. Baden: Lars Muller Publishers.

Drucker, J. (2004) *The Century of Artists' Books*. 2<sup>nd</sup> Edition. New York City: Granary Books.

Drucker, J. (2014) *Graphesis: Visual Forms of Knowledge Production*. Cambridge, MA: Harvard University Press.

El Lissitzky (1992) Topography of Typography. In Lissitzky-Kuppers, S. *El Lissitzky: Life, Letters, Texts*, London: Thames and Hudson, p.359.

Foer, J. S. (2010) *Tree of Codes*. London: Visual Editions.



Gilbert, A. (2016) Publishing as Artistic Practice. In Gilbert, A. ed. (2016), *Publishing as Artistic Practice*. Berlin: Sternberg Press, pp. 6-39.

Goldsmith, K. (2005) *If it Doesn't Exist on the Internet, It Doesn't Exist*. Available from: [http://epc.buffalo.edu/authors/goldsmith/if\\_it\\_doesnt\\_exist.html](http://epc.buffalo.edu/authors/goldsmith/if_it_doesnt_exist.html) [accessed Friday 22nd July 2016].

Hayles, N.K. (2002) *Writing Machines*. Cambridge, MA: MIT Press.

Hayles, N.K. (2012) *How We Think: Digital Media and Contemporary Technogenesis*. Chicago: University of Chicago Press.

Lai, J. (2012) *Citizens of No Place: An Architectural Graphic Novel*. New York: Princeton Architectural Press.

Mastrigli, G. (2006) 'The Last Bastion of Architecture'. *Log 7* (Winter/Spring 2006), pp. 33–41.

McCloud, S. (1993) *Understanding Comics: The Invisible Art*. New York: HarperCollins.

McCloud, S. (2000) *Reinventing Comics*. New York: HarperCollins.

McGuire, R. (2014) *Here*. London: Hamish Hamilton.

McGuire, H. (2012) Why the Book and the Internet Will Merge. In McGuire, H. and O'Leary, B. eds. *Book: A Futurist's Manifesto*, Sebastopol, CA: O'Reilly, pp.109-118.

Perec, G. (2008) *Life: A User's Manual*. London: Vintage.

Phillips, T. (2005) *A Humument. A Treated Victorian Novel*. 4<sup>th</sup> Edition. London: Thames & Hudson.

Powers, A. (2002) The Architectural Book: Image and Accident. In Rattenbury, K. ed. *This is Not Architecture: Media Constructions*, London and New York: Routledge, pp. 157–173.

Sousanis, N. (2015) *Unflattening*. Cambridge, MA: Harvard University Press.

Starre, A. (2015) *Metamedia: American Book Fictions and Literary Print Culture after Digitization*. Iowa City: University of Iowa Press.

Starre, A. (2016) Organic Book Design from Dwiggin to Danielewski: The Metamedial Aesthetics of Embodied Literature in American Trade Publishing. In Gilbert, A. ed. (2016), *Publishing as Artistic Practice*. Berlin: Sternberg Press, pp. 74-87.

Steffens, J. Ed. (2009) *Unpacking My Library: Architects and Their Books*. New Haven and London: Yale University Press.

Tavares, A. (2016) *The Anatomy of the Architectural Book*. Zurich: Lars Muller Publishers.

van der Hoorn, M. (2012) *Bricks & Balloons: Architecture in Comic-Strip Form*. Rotterdam: 010 Publishers.

Ware, C. (2012) *Building Stories*. New York: Pantheon.

**Contributors Details:**

Mike Aling is a senior lecturer at the University of Greenwich Department of Architecture and Landscape in London, where he is the Design Co-ordinator of the MArch Architecture programme. Mike is a researcher and publications co-ordinator of the AVATAR (Advanced Virtual and Technological Architectural Research) group at Greenwich, and a founding member of the speculative architectural research group *unitfifteen-Research* with Nic Clear. Mike's research explores the future of the architectural book, printed media design anatomies, architectural publishing, new media and the utilisation of 4-dimensional modelling systems in architectural education and practice. Mike has been published and exhibited internationally.

**Contact:**

Mike Aling

Room 3010

Department of Architecture and Landscape

University of Greenwich

11 Stockwell Street

Greenwich, London SE10 9BD