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MAKING PLANS: “ARCHITECTURE BEGINS AND ENDS IN PICTURES”

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ABSTRACT

This paper was prepared for the Interrogating Theories and Methodologies strand. It explores, briefly, the practical aspects of the production and keeping of architectural drawings as historical evidence of built spaces and their use in the publication of architectural research. It looks at the role that drawings have played in the constructions of histories of architecture in the field of residential design, through a series of published examples the 20th Century ‘picture books’. For architects, the case study - a written appraisal of recent building work, illustrated with drawings and photographs, - has long been the staple of professional magazines and journals.

Published studies of new buildings fuel contemporary discourse and in time form the basis of much architectural history. During the last few decades case studies have changed, in particular the carefully drawn black and white plans and sections appear far less frequently. In journals they are often replaced with the more lavish, glossy colour photographs and online, drawings are reduced to low resolution pdfs. We might have expected that the change in production from hand drawings to computers, would have made drawings much more readily available however, this is not the case and the ongoing development of digital technology poses more questions for publishers and for collectors and archivists without software skills and uncertain of the value of a ‘virtual artefact’.

Robin Evans, in his essay, *Translations from drawing to building*, published in 1985 suggests that a plan drawing could be seen as “*merely a set of geometric operations*” that “*can be repeated on a flat piece of ground.*”¹ As the main tool of the builder most architectural drawings are just that – the embodiment of a set of instructions for the construction of a particular building. But whilst drawings play a vital role in the realisation of a building, they are also the medium through which architectural thoughts and ideas are recorded, developed, and presented to clients. The way in which architects work differs from that of other artists; they don’t work directly with

the result of their labour, but work through this secondary medium, of drawings. The drawings that often become the enduring record of their past work.

In 1985, the status of architectural drawings had been through a period of significant change. During the fifteen years from 1970 to 1985 as Robin Evans says later in his essay, drawings “*became more easily consumable*”². They moved out of the architect’s office, to have an existence of their own, especially the conceptual designs and drawings of buildings that were never intended to be built and that came to be considered as artworks or valuable artefacts in their own right. Such drawings became ‘aestheticized’ as artworks in their own right.

The following 15 years, arguably saw a far more dramatic change, in architects’ drawing this time in their creation – with the shift from pen and paper on drawing boards to computers. This change to digital drawing, which is still ongoing, has been problematic. For architects and other originators of drawings there are practical problems of production - Firstly there are differences between PC or Mac platforms compounded by problems of incompatibility both between different drawing programmes and between different versions or upgrades. For libraries and archives collecting and keeping drawings, at the end of the production cycle, digitisation has also presented an enormous challenge having to deal with both paper and ‘born-digital’ drawings, struggling to understand the ‘virtual artefact’ and uncertain of its status. A first conference on this subject entitled *Architecture and digital archives* was held in Paris, France in 2007. Although most of the published papers deal with various practical aspects of archive management within architectural practice or on preservation in archiving institutions some grouped in a section entitled *Use, research and dissemination*³ raise questions about appropriate formats for accessibility for the intended users of the archives. Some of these questions are explored further here.

In my own recent work, on housing design, I set out to produce a series of drawn case studies for a 20th century history. (Figs 1, 2, 3) The drawings we made were all based on existing drawings that came from a variety of sources; the more recent ones came from the architects themselves but for earlier projects we relied on archives or library material. The process of sourcing and gathering the information and producing digital drawings raised a number of questions about the changing status of an architectural drawing, about their archiving and accessibility and about their potential as the factual evidence of historical research. Many of the practical problems we encountered were related to more recent projects – with born-digital drawings that we didn't have the software to read, or that were too complicated and we didn't have the software to translate so were unable to condense or switch off complex layers and large scale detail.

In my field in the history of housing design accurate and detailed scaled drawings would seem to be of particular importance. Perhaps because of the nature of the architecture of housing, the quantities, dealing with prototypes and typologies, and with plans that are repeated, standardised and designed to be varied. This project which involved sourcing and reproducing approximately 500 drawings, led me to ask whether if drawings as historical sources are to continue to be available how might we develop archival systems, better drawing systems or better record and retrieval systems that would assist reproduction?

LOOKING TO THE PAST

My work builds on a whole series of 'picture books' of housing design curated in different ways. The earliest is Yorke and Gibberd's *The Modern Flat*⁴(1937) a key publication because of its advocacy not just of modernism and the introduction of modern architects, such as

Mies, Gropius, and Le Corbusier but because of its promotion of the idea of living in flats – which was a new building typology in England at the time. The introduction gives us quite detailed and lengthy explanation of the key features of designing flats. The authors use simple graphic devices to make comparisons of plan layouts. For example three London buildings from 1935 - Dorset House, Marylebone by TP Bennet, Arlington House St. James, by Michael Rosenaur – alongside Highpoint I to demonstrate the advantages of modern planning i.e. as the block plan opens up there is no need for contortionist layouts and projecting windows to achieve better daylighting. The drawing of the double cruciform block plan of Highpoint I reveals graphically the key qualities afforded; cross ventilation, sun on both sides for most flats, a high degree of daylighting and isolation from noisy neighbours. The book continues with a series of drawn case studies described generally with plans and photographs which are grouped by country.

Twenty years later, in 1958, the same architects Yorke and Gibberd published a second volume called *Modern Flats*⁵. This time there is no introduction and they make no attempt to ‘sell’ the idea of modern apartment living. In a short preface they go only so far as to note what they refer to as ‘*interesting general trends*’. This is, in their own words, “*just a picture book*”. The style, presentation and format of both volumes is almost identical – despite the twenty year gap. Buildings are grouped by country, described with black and white photographic images, and generally drawings in plan. The text is simple quantitative data, such as the numbers of floors and flats, the dimensions and the social class of the intended occupants. Beyond this very brief description of each case study their claim is that no critique or analysis is necessary; the images speak for themselves. The confident tone suggests that the subject, that of modern apartment building, has matured to the extent that they no longer feel the need to advocate the new style or

typology. The buildings selected for comparison are however, still clearly recognisable as rigorously modernist. They include three of Le Corbusier's Unites d'habitation; Marseilles (1952), Nantes Reze (1955) and Charlottenburg Berlin (1957) which are clearly considered of major significance. Together with a few photographs the drawings provide the key information about the new typology, with detailed description of the form, layout, structure and construction. The text is reduced to an absolute minimum with a single remarkably efficient sentence "*One block with 18 floors including roof deck raised on reinforced concrete columns to give free circulation over the whole site.*"⁶

Another twenty years later, in 1978, a drawing of the same typology, the Unite d'Habitation at Marseilles, appeared on the front cover of *Modern Housing Prototypes* published by Roger Sherwood. This book, which is in many ways like the earlier 1937 *The Modern Flat*, advocates the importance of modernism's housing project. It presents a series of **drawn** case studies claiming that "*a re-examination of some of the great housing projects of this century (the 20th) is appropriate at a time when the design of housing commands the attention of architects the world around*".⁷ Rather than the geographical categorisations of the earlier 'picture books', Sherwood classifies his exemplars by formal typologies: individual houses, rowhousing, party wall housing, slab blocks and tower blocks. This book still has black and white photos, and most of the drawings are the architects' originals or publication versions reproduced without being re-drawn. However to emphasize the formal approach the author has produced original axonometric projections which enable us to see plan and volume, in a single drawing that both describes and analyses the whole project. He uses a unified drawing style, colour coded to facilitate legibility and comparison. In the Chapter on row housing, for those designed by Andre Lurcat for the Vienna Werkbund (1934), drawing enables Sherwood to go beyond what was actually built. Only

four houses were constructed but using his own axonometric drawing as a speculative tool he imagines the scheme as a much longer terrace.

There are two other significant recent ‘picture books’ of housing design, that use drawings as a critical tool. The first, *Floor Plan Manual*⁸, published in 1994, is an extremely ambitious large-format publication that aims to provide a complete picture of selected housing schemes mostly from Germany and Northern Europe. It features 150 housing schemes built during a 50 year period starting with the Unite at Marseilles (1952) and concluding in the late 1990s. Written in both English and German it provides a chronology, a classification by formal typology, and includes a photographic image of each scheme and in addition it reproduces standardised drawings to scale of individual dwellings and urban plans. The second, *Formats for Living* (2000) takes a very different approach. It presents around 100 floor plans as a “*a concise picture of contemporary living in Amsterdam*”.⁹ Several experts in the housing design field were invited to contribute, each making their own selection of buildings - limited to one city Amsterdam and one decade the 1990s. The geographical limitation is extended. There are no drawings of site, nor any building context. It presents, for comparative purposes, only the individual dwelling plan described with a uniform standardised scale drawing.

LOOKING TO THE FUTURE

What the ‘picture books’ of housing design have in common, to a greater or lesser extent, is a desire to recount an objective history – through drawings, which are consistently presented – anonymous maybe - to enable comparison. Like the case studies in professional journals that have become rarer, they are consumed mainly by architects or by students of architecture. The advent of digital drawings has not made the compilation of such works easier as might have been

expected. On the contrary it seems to have made the task more difficult. I am not advocating a return to pen and paper although I am not entirely supportive of those optimists writing about 'paper-less offices' or who would have us believe that buying anything on paper will soon be like buying music on vinyl, only for "connoisseurs, aficionados and ageing Luddites". Architects will continue to use computers to make digital drawings but they will also continue to want to be able to see a correctly scaled print; large enough to see all of the particular scheme at one time and, probably, to be able to draw on it and add notes to it.

The difficulties of working with all the different drawing formats should not be a reason for publishers, historians, and other critics and writers on architecture, to avoid drawings. However it seems that the new world of digital technologies may require that we take a different approach to the collection, and dissemination of architectural drawings for historical or design research. A return to a more objective approach to history that includes drawings as secondary documentary evidence would seem one inevitable result of the quantity of digital data available and the ease of acquiring it. The L.E.A.P.¹⁰ project in Canada, is digitising competition drawings and other documents for a searchable online database and including not a selection but all the entries and related documents, giving equal space to losers and winners. There is no editing or curatorial process; digital technology means that everything is made available. Another approach proposed by Irena Murray, Director of the British Architectural Library, in her paper for the Paris conference, is that we encourage archivists to establish a relationship with architects right from the outset of a building drawings programme. And perhaps this could be taken even further – thinking from the other perspective maybe the archivist's team should include draughtsmen and women who would make the record drawings?

Finally, maybe, -- we could think of drawings – at least those of buildings that exist – in the same way that we think of books. Like books, perhaps not every drawing has an aesthetic value? Not every drawing is precious? Not every one has to be treated with the same care? Digital holdings in architectural software could mean that drawings become much more available and could mean giving researchers a print-out or an ordinary paper photocopy, something to measure or draw on or even a copy to take home?

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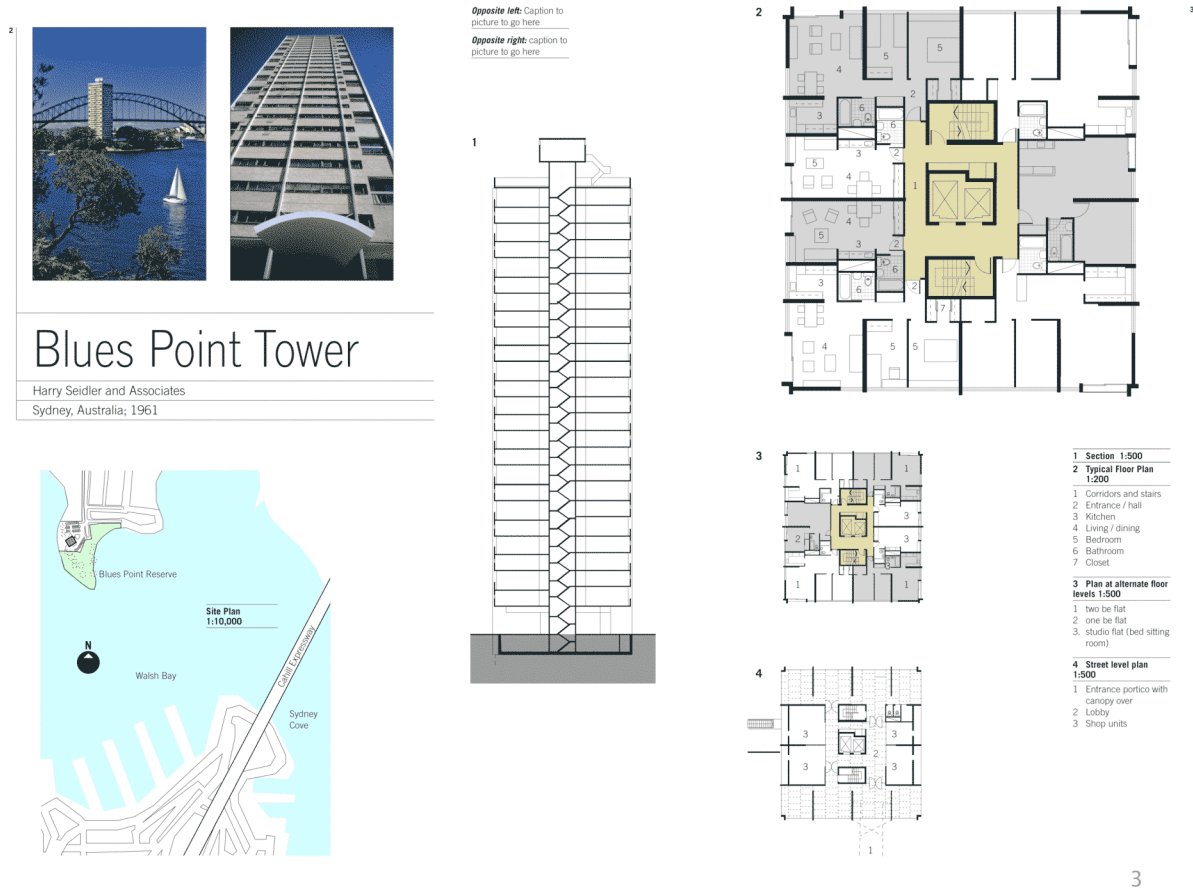


Fig 1. Extract from Key Urban Housing of the Twentieth Century: Plans sections and elevations Laurence King (UK) Norton (USA) 2009. Chapter 4 Alternatives, page 128.

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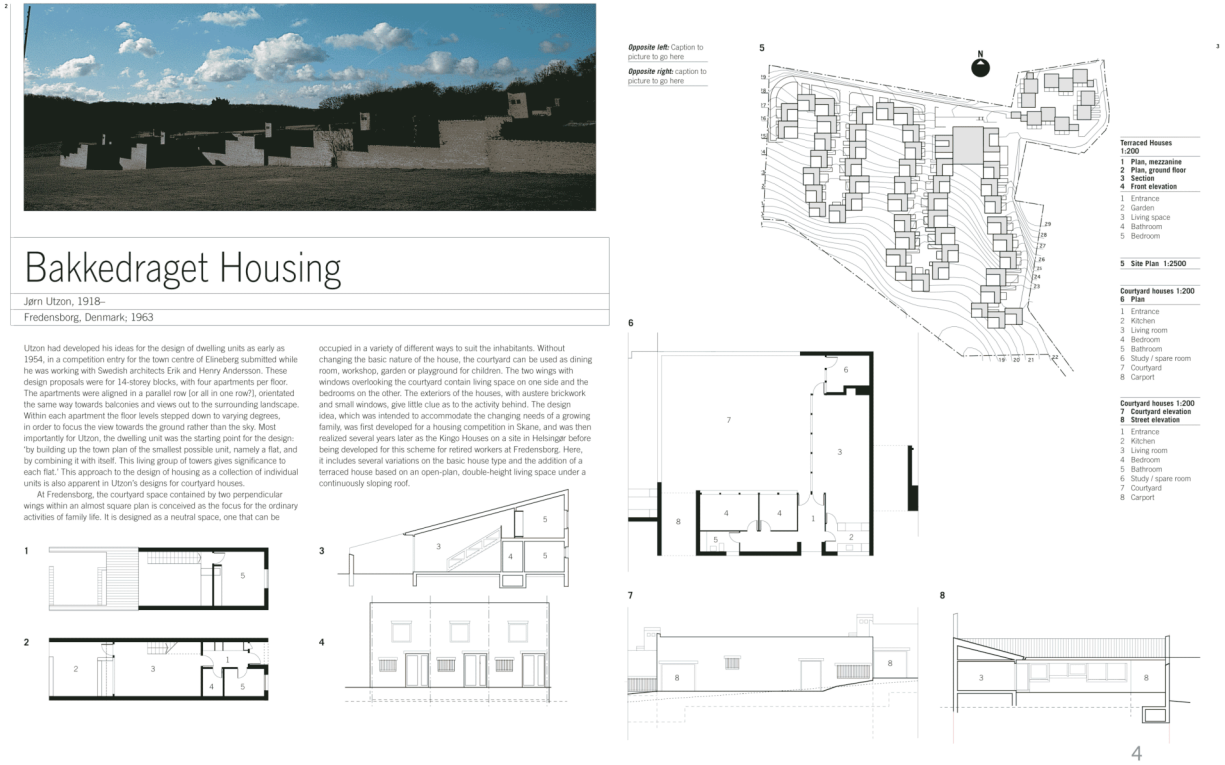


Fig 2. Extract from Key Urban Housing of the Twentieth Century: Plans sections and elevations Laurence King (UK) Norton (USA) 2009. Chapter 4 Alternatives, page 130.

French: Making Plans



Fig 3. Extract from Key Urban Housing of the Twentieth Century: Plans sections and elevations Laurence King (UK) Norton (USA) 2009. Chapter 4 Alternatives, page 134.

NOTES AND REFERENCES

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