Whatever happened to normative drawing?

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Introduction

Some of my favourite books on architecture and the city contain many drawings: Lynch's *The Image of the City*, The Goodman's *Communitas*, Le Corbusier's *The Home of Man*, etc. These drawings are often not simply accompanying illustrations of the arguments being made. Rather, they often represent significant signifying strategies themselves and may be highly rhetorical, pejorative and forceful, driving forward a particular argument or, sometimes, setting up a counter-narrative. However, many commentators simply do not seem to see these drawings as important or worthy of particular attention; they are either disregarded and expelled from analysis, regarded as mere decorations or, their authors ridiculed for the assumed hubris of believing their inclusion as worthy or desirable. Such disregard seems rather odd at a time when architecture is driven more than ever by the visual, both in terms of 'internal' architectural practice and in relation to the public promotion of architecture. For example, the relationship between the image of a building and the building itself has undergone a radical, historical transformation: from Medieval times when a mason's drawing was regarded as a rough approximation of the building to come to now when the building is increasingly seen to be an inaccurate manifestation of its own image, usually a computer generated representation; perhaps evidence of, 'The profession's growing taste for idealized compositions in immaterial space'.[1] Much less common than at any time in the past is the use of rhetorical, poetic or normative drawings within architectural practice or its public dissemination. The focus of this paper is on just such drawings and diagrams. Interestingly, these 'normative' drawings often are composed of few if any explicitly architectural elements and they often rely on indirect signifying techniques including metaphor, simile, allegory, hyperbole, metonymy and so on.

Of course, all signifying strategies, visual, verbal, textual are to some extent or other 'normative', that is they all say more than is at first apparent; there is no objective, neutral or 'arbitrary' signification. Even the most supposedly technical of drawings depend on cultural conventions as to the significance of the image overall, the meaning of its component parts and its relationship to other signifying materials. For example, in Western engineering drawings the use of hatching to indicate cross-sections has been

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[1] Daniel Willis, *The Emerald City and Other Essays on the Architectural Imagination* (New York: Princeton Architectural Press, 1999), pp. 179.

a convention whose interpretative intention is strictly fixed. This limit on meaning is not, however, intimately related to the nature of that which is being represented, rather it is a learnt convention which would be meaningless to those who have not been instructed in its use.[2]

However, we could claim that not all signifying strategies are equally normative, at least in intent, and many, like the example given above, aim towards a neutrality of sorts, albeit one whose foundations, conventions and modes of execution should always remain open to critical scrutiny. For example, in architectural practice, plans would be regarded as technical day-to-day documents rather than ones which seek to advocate normative arguments,[3] likewise models. Photographs, however, have a powerful potential to carry normative ideas. Consider, for example how tower blocks could be potentially represented photographically in order to convey competing ideas. On the one hand, we could use a colour-saturated image of glass towers taken on a sunny day, showing open, green space, children playing, well maintained buildings and communal well-being. On the other hand, we could use an aerial, grainy black and white shot taken late of a winter's afternoon of decrepit concrete tower blocks emphasizing their proliferation, crowding, dereliction and, by throwing in some disaffected looking youths, urban anomie. That neither is an accurate representation of the 'reality' of living with 'modern' architecture is irrelevant. The representational strategies adopted would have suited the rhetorical and normative aims of their advocates very well.

The drawings considered here are just as explicitly rhetorical and normative. They do not aim for objectivity or neutrality, rather, they aim to persuade through explicit and implicit critique, comparison and projection. One brief exemplar and two short case studies will help to develop the argument.

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[2]Clive Ashwin, 'Drawing, Design and Semiotics', in Victor Margolin, ed, *Design Discourse: History, Theory, Criticism.* (The University of Chicago Press, 1989).

[3]Of course, the conception of space underlying such technical documents -rational, Cartesian, fragmented- is itself a highly ideological and normative one. However, the emphasis here is on conscious, normative signifying strategies not on the culture-wide 'unconscious' social reproduction of supposedly 'essential' spatial categories.

Anthony Bertram's rhetorical Modernism

Although more well known as an art historian, during the late 1930s Anthony Bertram was the author of several significant volumes on both architecture and design as well as being a significant voice in the public discussion of 'modern' design and architecture through the vehicle of BBC radio programmes and linked discussions and publications including *Design in Daily Life*, *Design for Everyday Things* and *The House: A Machine for Living In*. Writing for a general public readership his short books often contain many drawings. Rarely, however, do Bertram's drawings merely illustrate his arguments or attempt to depict material form in an objective manner. Instead, he uses drawings to drive home, often without much subtlety, his particular vision of a proposed British modernism thoroughly rooted in his somewhat simplistic appropriation of European modernist themes. One such instance will suffice.
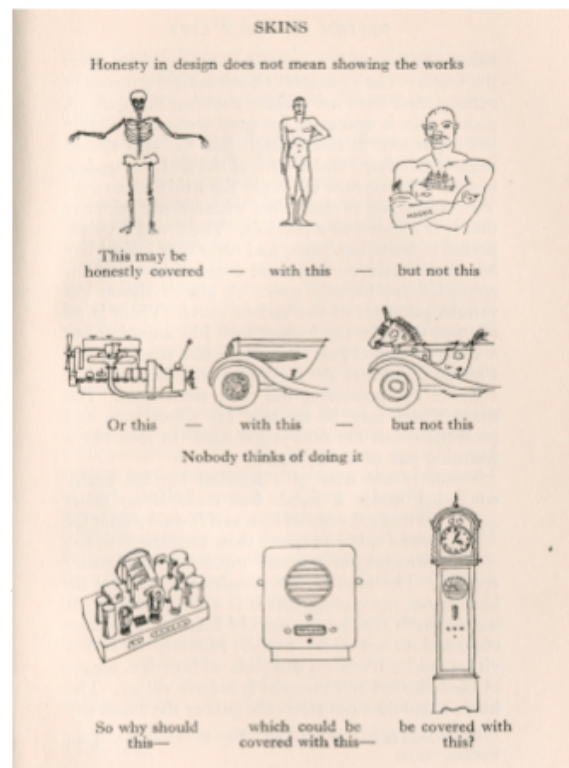

Figure 1: From Bertram's *Design In Daily Life* , 1937.

Such an ingenuous example is not hard to decipher and, ironically, Bertram's defence of honesty in design is itself quite dishonest or at least crafty. Today, we may object to his depiction of a bald, muscular and tattooed man as evidence of the unacceptable as simply offensive while concurrently agreeing with his assertion that in relation to automobile styling nobody has thought of such an inappropriate design 'solution'. However, the momentum is built up and Bertram's third example initially appears both congruous and unobjectionable. It is however, as unlikely as his automobile example. I have not been able to locate any examples of radios in the 1930s being encased in a long case clock cabinet with an Art Deco 'Sunburst' detail. By introducing the absurd Bertram is able to both introduce and hide the unlikely. This strategy is one he used on many occasions throughout his publications, many times unaccompanied by additional textual reinforcement.

Ebenezer Howard's '*Three Magnets*'

One of the most influential diagrams in the history of planning and architecture started out as a pencil sketch in the notebook of Ebenezer Howard as he put together his short book *Tomorrow a Peaceful Path to Real Reform*, better known later as *Garden Cities of To-Morrow* in the late 1890s. It is a diagram which packs a lot of rhetorical punch and one which has attained the status of a visual reduction of the whole of Howard's project itself. Moreover, while the concepts it expresses have been extensively debated, the diagram itself is continually reproduced without specific comment. That the diagram is self-explanatory in relation to the ideas it expresses may be one reason for its frequent reproduction without discussion. This is a measure of its power. However, it is also a somewhat incongruous and even inappropriate visual device in relation to the ideas Howard was attempting to express.

Through the use of its various elements, the 'Three Magnets' diagram represents the almost miraculous reconciliation of simplistically posed opposites. Howard cleverly identifies in the 'Town' and 'Country' magnets a series of advantages and disadvantages representing the magnets' positive and negative poles. However, the third 'Town-Country' magnet has two positive poles at a stroke eliminating the socially and magnetically negative.

This brilliant condensation of Howard's ideas is packed with powerful but questionable rhetorical elements. For Hebbert, 'Howard's three magnets
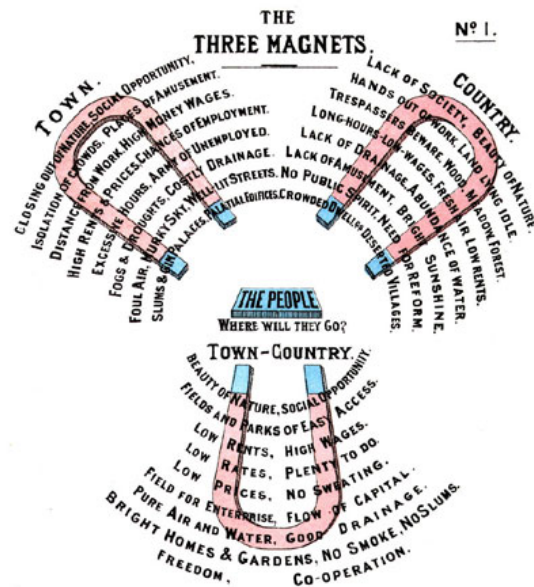
Figure 2: Ebenezer Howard's 'Three Magnets'.

look as red and solid as if he had just picked them up from the ironmongers counter in Stoke Newington High Street,[4] vibrant, solid images help suggest the successful consolidation of vibrant and solid ideas. But, what of a magnet with two positive poles; while this is technically possible it is rare and does not correspond with most people's understanding of magnets as having two opposite poles. It is also not hard to perceive some of the problems that such an arrangement of real magnets would encounter. The placement of positive and negative poles would have to be such that the effects of the different magnetic fields would have to be kept apart to avoid the symmetrical arrangement being skewed. In a similar vein, Fishman observes that depicting 'The People' as iron filings placed between the magnets is problematic,

> This aspect of the metaphor is unfortunate, for Howard's point is
> that people will respond freely and rationally to the environment

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[4]Michael Hebbert 'The Conundrum of the Third Magnet', http://www.allbusiness.com/professional-scientific/architectural-engineering-related/321016-6.html, 2004, accessed June 14th 2007.

which gives them the most advantages.[5]

Howard did not regard himself as an architect at all and was quite disinterested in the specifics of material form. He did not even regard himself as a town planner but, rather, as the 'inventor of the idea of the Garden City idea'. The word inventor gives a clue to the use of magnets as visual metaphor; Howard had been a keen tinkerer and fabricator of gadgets and was familiar with Patent Office applications many of which, at the turn of the 20th century, relied on magnetism for their operation. His familiarity with this scientific domain perhaps led Howard to a visual metaphor whose technical tensions would not, he believed, be so powerful as to overwhelm the force of his accompanying textual rhetoric.

Le Corbusier's '*Modulor*'

At a recent conference, the architectural historian Tim Benton discussed the difference between 'logical' but 'unreasonable' modernism and 'reasonable' modernism.[6] Logical modernism is that which appeared in the 1920s and 1930s to be both philosophically and technically possible, an abstract modernism which itself served perhaps a more rhetorical than practical purpose. Benton contrasted this with a reasonable variant which was more rooted in the reality of practical everyday needs of both building practice and user dwelling. His argument was that both advocates and critics of modernism often failed to spot this distinction and that many of both tended to focus on the abstract, logical variety rather than focus on the more complex, nuanced and conceptually defensible reasonable variety.

Benton explored these ideas specifically in relation to Le Corbuiser which is pertinent as Le Corbusier is undoubtedly the twentieth century master of normative drawing. Most of his texts are replete with numerous drawings, sketches, diagrams, charts, graphs, reproductions of postcards, photographs, photomontages cartoons and so on. Le Corbusier used such non-linguistic signifying techniques for a number of purposes; critique, illustration, speculation and, of course to reinforce the general thrust of the narrative being

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[5] Robert Fishman, *Urban Utopias is the Twentieth Century* (The MIT Press, 1982).

[6] 'Design and Pedagogy Conference', Leeds College of Art and Design, March 16th, 2007.

developed. However, these drawings, and other additions, to his texts are themselves open to competing interpretations. They are certainly not the 'monosemic' diagrams of architectural practice. Rather, they are open, 'polysemic' constructs which for some commentators play a rather interesting role, that of opening up a space of dialogue around Le Corbusier's architectural theory and practice. Crow argues that,

> Through all the strategies he uses to construct and privilege geometry, science and technique against poetry, art and politics, these seemingly 'marginalized' elements not only slip through his grid of arguments but also overpower it.[7]

These 'marginalized' elements are largely manifested in Le Corbusier's drawings. Similarly, for Temple, Le Corbusier's habit of photographing his completed buildings,

... opens up possibilities of dialogue between the largely abstract and 'universal' rationale of proportioned space, ..., and the *perceived* relationships of elements in space revealed and recorded from such vantage points.[8]

This opening up of a space of dialogue, via the inclusion of tension filled visual narratives, is an element of Le Corbusier's practice which has generally been overlooked, ignored or dismissed. This is possibly because one often sees the separation of technical and poetic elements in Le Corbusier's drawings and diagrams which gives both advocates and critics the easy option of separating competing narratives in constructing their approaches to Le Corbusier. However, at other times, the technical and the poetic appear merged which provides rather more complex material for interpretation. The drawings which accompany Le Corbusiers 'Modulor' texts provide an instructive example.

Attuning himself to contemporary discussions, Le Corbusier in 1948 devised the Modulor which represents the drawing together of the image of the Vitruvian human figure with ideas taken from both the Golden Section and Fibonacci series, in order to produce a modular measurement scale for

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[7]Dennis Crow, 'Le Corbusier's Postmodern Plan, in *Theory, Culture & Society*, Vol. 6, (1989), pp. 241-261.

[8]Nicholas Temple, *Disclosing Horizons: Architecture, perspective and redemptive space* (London: Routledge, 2007). pp, 263-264, emphasis in original.

design. The figure used by Le Corbusier to illustrate the ideas of the Modulor is extraordinary, a combination of figurative and abstract elements, some natural others human-made.

Figure 3: Le Corbusier's 'Modulor'.

Le Corbusier's text, in both volumes of writings which comprise his working out of the Modulor, is rational, filled with scientific justifications, facts, tables, empirical validation, mathematical formulae and so on. The accompanying drawings suggest something rather different; the Matisse-like rendering of the Modulor figure is sketchy, hesitant and often linked directly to natural elements such as shells which are argued to display the proportions of the Fibonacci series. Stranger still are those drawings in which Le Corbusier places the figure, both male and female versions, in architectural settings. They clearly are supposed to do more than simply illustrate the application of the Modulor's principles (indeed, the 'Final' drawing of the Modulor in the second volume contains no human figures whatsoever), rather, they suggest

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the possibility of a mode of living which reconciles the natural, poetic and imaginative with the rationally built. They are not a depiction of machine-like people fit for houses as 'machines for living in', but, display an obvious playful, sensuality.

These figures are, in fact, entirely appropriate in that Le Corbusier was trying to justify his 'proportioning grid' in both rational and poetic terms. He believed in the 'naturalness' of the Golden Section, Fibonacci series and the right angle as concepts which had guided the actions of both vernacular builders and architects for thousands of years. He was also aware of the historically changeable nature of such principles and was trying to scientifically update them for the twentieth century.[9] Through his use of such non-textual, open, signifying strategies, Le Corbusier consistently attempted to resist the rationalising tendencies within architectural practice (at the same time as he advocated their development in building practice, or at least within building supply industries). That is, to use Benton's terminology, Le Corbusier's use of normative drawing helped to keep the creative space between logical and reasonable architectural practice open.

Whatever happened to normative drawing?

Few today write the kind of design books that Bertram favoured. They are, to a certain extent quite simplistic and artless by current standards. Design literacy is regarded as having grown and the use of freehand drawings is likely regarded as belonging to a naive mode of argument both in terms of its method of representation and its content - crude drawing. It may also, practically, be the case that digital photographic reproduction is also cheaper and easier than the reproduction of freehand drawings. Long gone are they days of Steen Eiler Rasmussen's *Towns and Buildings*, a book both illustrated and typeset by the author.

Similarly, although Howard's 'Three Magnets' drawing was reworked into a diagram, it too would be seen to be crude by today's standards. The inclusion of magnets places it in a technological time warp and while we could

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[9] The Modulor's approximation to the Golden Section (rather than an unquestioned acceptance of it) was prescient as more recent research has suggested that most cultures throughout history have an affinity to proportions close to, but not matching, the Golden Section, see Ray Crozier, *Manufactured Pleasures: Psychological Responses to Design* (Manchester University Press, 1994).

replace this with a contemporary technological motif, the effect would not be the same. We are far more attuned to the rational and incontestable rhetorical gestures of graph, chart, table and Power Point presentation and far more cynical regarding the persuasiveness of simplistic technological metaphors. Of course, few architects today even offer the prospect of such a scale of social change as that offered by Howard. Unlike the shrewd Howard, many of today's architectural proselytisers seem to believe in the power of architecture alone in affecting social change. Embracing an embarrassing architectural determinism, their loudly touted ideas on 'liveable' cities and the like run scared of engaging with the political and economic levers of social change that Howard squarely faced.

The example of Le Corbusier points toward other cultural hostilities to such rhetorical practices. Critics have pointed out that because the human body has changed in size over the centuries the idea of a transcendental (as they perceive it) system of bodily-derived measurement is misleading at best and authoritarian at worst.[10] Others have argued that its application as a guide for building somehow functions, as with many of Le Corbusier's other ideas, as a constraint on human autonomy. The figure-drawing of the Modulor is surely 'sexist' and reinforces a number of themes relating to the masculine nature of architecture, the naturalising of building as a male activity, and is evidence of Le Corbusier's own shortcomings in relation to gender? While accepting some validity for these criticisms, they are also symptomatic of a common mode of appropriation of Le Corbusier's ideas which seemingly rely on not having actually consulted the texts let alone their accompanying visuals.

The explicitly ideological role of architects has also become diminished and tarnished as a result of a number of factors including the increasingly efficient nature of architectural practice driven by having to compete in a competitive market, the failure of grandiose ideological schemes either through lack of their materialisation or from various failures of materialisation, and so on. The diminution of a consonant form of ideological, normative, rhetorical drawing proceeds accordingly. For some, this may be a good thing, Davies,

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[10]It is ironic given the emphasis that postmodern and cultural studies approaches place on the body as a source of value that these discourses should be so disregarding or hostile to the notion of the body as a source of value in relation to measurement. This may be due to an unwillingness to see any aspects of culture as anything other than socially constructed according to place-bound and variant cultural norms rather than deeply rooted in 'nature'.

for example, is disapproving of the hubris of professional architects in relation to the overstating of their social influence and the 'power' of architecture in shaping society.[11] The expulsion of rhetorically normative devices from architectural practice may be a sign that architects are beginning to recognise their somewhat marginal role in relation to the reality of building practices.

Daniel Willis interprets such changes rather differently. The long history of post-Renaissance architecture, with its drive towards increasingly efficient architectural and building practice, the elimination of techniques of uncertainty from each and the ever-closer tying of architectural practice to the exigencies of capital, has resulted in a situation in which we should expect the most efficient, replicable and certain procedures to dominate, including those of architectural image production and dissemination. The result is a double-bind. Firstly, what many architects seem to have forgotten, despite their objections to the contrary, is that people in the real world dwell, that is, they engage in an active shaping of their material environment in accordance with a complex matrix of inherited, culturally shaped and anticipated imaginative needs and desires; they do not just 'live' passively in and around buildings. Normative drawing attunes itself to just such inefficient and unpredictable human qualities while, of course, seeking to channel them. The representations that now dominate architectural practice are not for 'real' people and their imaginative needs, rather, they are for clients, bankers, policy makers, journalists and other cultural intermediaries and gate-keepers and are articulated in relation to the economics of scarcity and faith in technological progress, that is to physical, not imaginative, needs.

No wonder then that, secondly, computer generated imagery dominates architectural practice and its public dissemination. For Willis, the result is the expulsion of most traditional drawing of all kinds in favour of both computer facsimiles of drawing and computer-driven designing whereby,

> CAD redefines 'design' as an instrumental technique for the efficient production of visually stimulating buildings...What we mean by design today is almost wholly visual, more directed towards making an initial impact, more closely resembling fashion or product design...'.[12]

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[11]Colin Davies, *The Prefabricated Home.* (London: Reaktion Books).
[12]Willis, 1999, pp. 276.

The result is flashy digital renderings of weightless and depthless buildings replete with 'unconvincing images of contrived and unlikely sociality'. Such imagery increasingly influences the whole field of architecture and its reception. Willis again,

> The ability to quickly produce dazzling perspectival views of buildings has...unintentionally increased the importance of visual composistion to those who judge the design of buildings.[13]

Figure 4: '...the efficient production of visually stimulating buildings'.

So, one could argue that normative or ideological signification, if not drawing, has actually triumphed. That is, the meeting of the efficient, Cartesian space-time of capital and commodity flows with the technology of computer rendering has resulted in a mode of architectural representation which signals the victory of a particular view of the relationship between imagining buildings and their construction and use. This is a rather dismal and unwelcome situation. However, there may be a 'space' in which normative drawing may survive and flourish. Not in relation to the various architectural manifestos of 'sustainability' most of which seem thoroughly caught up in the same logic of apparently 'benign' economic scarcity and technological progress as mainstream architectural practice. Rather, there are those advocates of convivial, human-scale, vernacular architectural and building

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[13]Willis, 1999, pp. 279.

practice, oriented towards dwelling and imagination, who seek to recover the value of such 'inefficient' signifying practices. Indeed, for some, 'poetic' variants of such drawing could accompany or even replace the instrumental representations of architectural practice altogether and, thus, not just challenge the nature of the representation of architecture, but, disrupt and disorder for the better the relationships between designer, client, financier, builder, public and dweller.[14]

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[14]See both Marco Frascari, *Monsters of Architecture: Anthropomorphism in Architectural Theory* (London: Rowman & Littlefield, 1991) and, Marco Frascari, Jonathon Hale and Bradley Starkey, eds, *From Models to Drawings: Imagination and Representation in Architecture* (London: Routledge, 2007).