



ROUTLEDGE RESEARCH IN ARCHITECTURE



DRAWING THE UNBUILDABLE

Seriality and reproduction in architecture

NERMA PRNJAVORAC CRIDGE

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Nerma Prnjavorac Cridge

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Anyone who has completed a PhD thesis and then was fortunate to publish it as a book will know how far from straightforward this process is. In my case, a particular difficulty was that the thesis dealt primarily with the visual, and included over 160 drawings, paintings, and photographs. In contrast, this book contains only 20 black-and-white images. Rather than hindering, I hope that this small selection helps to reinforce my main arguments. Since being created, the representations of the unbuildable have often been difficult to verify, were commonly forged, stolen, or simply deteriorated beyond recognition. Even now, most of the time, such material is only accessible through small black-and-white photocopies, making verification of the original size, location, or numbers of items, extremely difficult, perhaps impossible. I hope that, similar to the unbuildable itself, this absence of basic information enables the reader to imagine how truly glorious their full scale and colours must have been, as well as to speculate on other real and fictional possibilities.

My background informed both my approach to the subject and my access to it. I grew up in Sarajevo, ex-Yugoslavia. At least in part, this book is written for that young girl, who could see and appreciate the kind of country and political system there was, as well as having to flee for her life when the Bosnian War unfolded. However, this is not about nostalgia for what has been lost, but about acknowledging an important role that these lesser known histories have within an architectural discourse.

Accessing Russian archives was extremely difficult, riddled with suspicion, bureaucracy, and many misunderstandings. Some of my experiences in Moscow would not be out of place in a Kafka novel. However, since this book is about perceptions in the West, most of the research comes from Western sources. I aimed to emphasise throughout how ideology and even so-called propaganda are not as clear-cut as they often tend to be perceived. As a consequence, our interpretations of any historical events should not and, in fact, must not be absolutist. Rather than neatly labelling every architect/designer/artist or a movement as such, every individual project, perhaps even a single drawing, ought to be looked at and judged on its own terms.

I would also like to show my thanks to Yuri Avvakumov for being so generous and inspirational, and to Liudmila and Vlad Kirpichev for making me so welcome in Moscow. I sincerely appreciate the help of Chris Cross for sharing his experience of building Tatlin's Tower in London in the 1980s, and Bob Harbison for discussing the notion of the unbuildable with me. I am grateful to Brian Hatton for his continuous invaluable advice, and to St Petersburg contacts Misha and Arsenii Borissov for all their help. Ed Frith, Katie Lloyd-Thomas, and Jonathan Hill deserve special mention for instilling curiosity early on in my architectural education. I am sincerely grateful to Graham Brooker for his contacts and encouragement, as well as to my publishers for their patience and support.

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I would like to dedicate this book to my family: my father who frequently traveled to the Soviet Union during my early childhood, my mother who instilled in me a love of poetry, and my brother, whose unequivocal support helped in a much more direct way than anyone could possibly imagine.

I have to extend this dedication to my husband, Mark, for all his love and support, and to my daughter Marlena, whose fierce intelligence, drawing ability, and sense of humor literally keep me alive. This book is for you. Thank you for everything.

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Introduction

Category of the unbuildable

Architecture is conventionally perceived to be synonymous with building. In contrast, this book introduces and defines a new category – the unbuildable – involving projects that are not just unbuilt but also independent or autonomous from material realisation. I will argue that this distinct type of architectural production bears an important and often surprising role in architectural discourse, working not in opposition to the buildable, but frequently working towards complementing it.

As reflected in the first portion of the title, the drawings and physical artefacts are provided as primary evidence. I scrutinise the visual, i.e. the drawings, photographs, and paintings, and I study their physical qualities, e.g. the size, colour, line, and actual content. This process includes architectural drawings, as well as other media, such as photography, film, and digital representations. The drawings offer additional and more precise evidence, whereas writing can be subjected to mistranslation or can become divorced from the actual architectural production altogether. Drawing can offer insights beyond the architects' intended or attributed 'meaning'. Using simple issues, such as size, colour, sky, position, and quantity, the general traits of the unbuildable are derived from the visual work itself.

Strangely, the product of the activity of drawing, in which most architects at least occasionally engage, frequently gives rise to a strong aversion that amounts to a 'hatred', instigated by none other than the architects themselves. The qualms against drawings tend to be particularly strongly directed at those drawings with pictorial quality and even more so towards architectural projects that operate purely within the visual sphere.

Many prominent modernists have raised strong objections towards drawings in general. For example, Adolf Loos¹ believed that drawing and building were not only separate, but at opposite ends of the production of architecture. By famously burning all of his designs before

2 Introduction

his death, Loos demonstrated that he wished to be remembered by the buildings he had realised and not by his drawings. In fact, this final act of destruction clearly indicates that he did not think drawings have any right to exist outside of the building.

Similarly, perhaps the most famous architect of all time, Le Corbusier, expressed nothing less than a 'hatred of drawing'. As shown in his hand-written note in preparation for the lecture proclaiming 'la haine du dessin' in *Précisions*,² he summarises a rhetoric that came to be entrenched and canonised within the modern movement:

Now that I have appealed to your spirit of truth, I would like to give you architectural students the hatred of drawings ... Architecture is created in the head ... Everything is in the plan and section.... Architecture is organization. You are an organizer, not a draftsman.³

Here, we come across positive terms, such as sense of truth, precision, exactness, accuracy, associated with architecture, immediately followed by the negative, expressed strongly as 'the hatred of drawings'. From this statement, one could further expand Le Corbusier's hatred of the seduction, speculation, and openness of interpretation inherent within a drawing. In contrast, we find adulation to the point of fetishising orthogonal drawings, such as plan and section. Finally, Le Corbusier supports the idea of architectural drawing as a means to an end, to convey an organisation of a building, created in the mind of the master architect/engineer. It seems no accident that in the English translation of Le Corbusier's statement, the word 'drawing', as seen in Figure I.1 in Le Corbusier's hand-written note, is replaced by a more innocuous term.⁴ In a paragraph titled 'Language and Drawing' in *Words and Buildings: A Vocabulary of Modern Architecture*, Adrian Forty uses the English translation to perpetuate the myth of Le Corbusier as not hating all drawings but only a particular kind – renderings, or shaded drawings.⁵ Drawing is replaced by a particular type of drawing, i.e. rendering, or shaded drawing, as though the translator could possibly have been too 'scared' to imply that an architect as influential as Le Corbusier might hate architectural drawings in general.

In 1978, Reyner Banham expressed comments, more specifically directed towards the drawings of the unbildable, that testify to how unrelenting this loathing can be. Banham wrote the following:

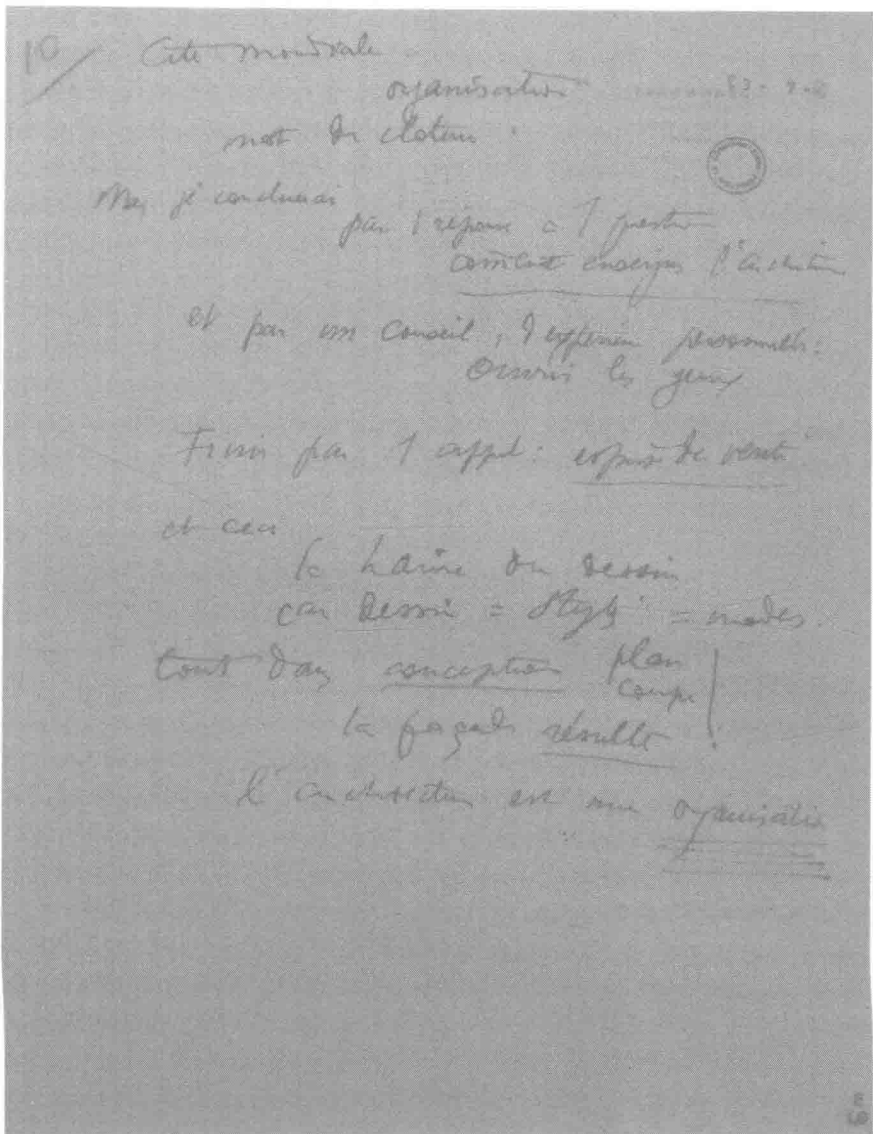


Figure I.1 Hand-written note by Le Corbusier in preparation for the lecture proclaiming 'hatred of drawing' (la haine du dessin) to architectural students at the Faculty of Exact Sciences, 21 December 1929, Buenos Aires.

The worship of drawing is a peculiar kind of professional atavism, architecture withdrawing from a hostile world to comfort itself in a security blanket that no one can take away from it.... Doing drawings is a way of continuing to make an architect without serving the

architect's social function of creating buildings. Yes, if you insist, masturbation. This is hard saying, but needs to be said. As soon as we regard drawing as an end product of design, we have architectural *interruptions*; we have the creative process cut short at the point where it could become creative in "the world beyond the drawing board." The true power of architectural draftsmanship (of all design draftsmanship, indeed) derives from its being a means, not an end.⁶

Clearly, Banham equates the social role of architects with designing buildings. You could argue that many socially irresponsible buildings are designed by architects. Indeed, in some contexts, building may be the worst possible outcome for a society. Equally, it is possible to assert a socially beneficial agenda by architectural means that do not involve building.

This persistently hostile view against drawings without a building as their purpose is echoed in the following passage by Diane Ghirardo:

Conversely, when building opportunities dwindled in the United States in the 1970s, architects turned to drawings – not even designs of a different and better world, but instead a set of increasingly abstract, pretty (and marketable) renderings of their own or of antique works and recycled postclassical picturesque sites. Like much building of the decades just preceding, these aesthetic indulgences simply masquerade as architecture. They reveal architects in full retreat from any involvement with the actual world of buildings.⁷

Again, Ghirardo does not allow for architectural drawing to exist as an end in itself. Indeed, it seems as though she considers such drawings as the opposite of building, as anti-building. Agreeing with that premise would mean dismissing the influence that such drawings might have, not just on students and theoreticians but also on the design of buildings themselves. I will argue that such production must be considered as a necessary and important part of architectural discourse, with particular relevance to architectural education.

Similar to those who oppose autonomous architectural drawing, there have always been arguments for the primacy of practices relying almost entirely on teaching and theoretical projects, i.e. the production of drawings. Elevating such practices above that of designing buildings

is not my position. Everything said so far seems to point towards an enduring conflict between those who observe and limit architecture purely to the building, solidity, underlying structure, and implied truth, and those who allow, and at times privilege, practices that do not involve building. Although there is little point in denying that this division exists, I propose a different reasoning. The unbuildable and the buildable are different, but not necessarily opposite; and certainly one should not be perceived as more valuable than the other. Instead, they each have a distinct contribution and a role to fulfil within an architectural discourse. They are not opposed to one another, and one does not preclude the other. On occasion, they can even work together in a complementary way. The opposition between the two has been and is likely to continue to be persistent. My intention is to resist valuing the unbuildable more highly than the buildable; instead, I aim to establish several distinct ways in which the unbuildable operates.

Separate from the necessity of the construction of an architectural object, the unbuildable has no need for the building to be the cause and an end product. Yet, such drawings will be argued to be just as 'architectural' as their more conventional counterparts. In many respects, the decision to focus on the unbuildable was related to their visual excess. Representations of the unbuildable can appear to be richer and some are more influential than many that result in the construction of buildings. The unbuildable is thus going to be discussed as a practice outside the norm, which by challenging conventions helps us to re-examine and redefine the very notion of the 'architectural'. Most importantly, it will be demonstrated how the unbuildable also influences the design of buildings. Drawings of the unbuildable must be differentiated from conventional architectural production, particularly the so-called 'working drawings', which are produced as a means to an end and in adherence to a strict professional code. It is also important not to confuse the unbuildable with projects that simply remain unbuilt. 'Unbuilt' is inadequate because it implies a lack of or a failing of some sort, instead of suggesting a generative potential that I believe exists. Many projects have been near completion, but, for trivial reasons, these projects did not succeed in being built and remain unbuilt. I chose the unbuildable as a stronger, more definite term, which is distinct from designs that are buildable, to pursue an enquiry for which the actual materialised building is simply deemed irrelevant. However, such projects rightly insist on

retaining their architectural status. Although many titles contain words such as 'building' or 'unbuilt', few titles include the word 'unbuildable'.⁸ This view could likely be due to the word 'unbuildable', being associated with land that cannot be used for building either because of its natural disposition or due to prohibition by law. The adjective 'unbuildable' renders such land useless and thus valueless. This could be why, for example, the prominent architect Raimund Abraham chose to name his book *The [Un]built*,⁹ although he actually discussed the autonomous function of architectural drawing without any direct relationship to the construction of buildings. Apart from confirming that the unbuildable has more negative connotations than simply 'unbuilt', this interpretation likely means that the buildings by and large tend to be privileged and valued more highly than other possible types of architectural enquiry.

Similar issues have often been explored under various headings, including 'conceptual', 'paper', or 'theoretical' architecture, and more recently 'critical' and 'allegorical'¹⁰ architecture. In my view, none of these terms have exactly the same function as the unbuildable. Paper architecture still has an object, a building, as part of its aspirations. 'Theoretical' is too general as it seems self-evident that some buildings are theoretical. Similarly, the term conceptual is not sufficiently specific because certain buildings are and should be considered 'conceptual'. Critical architecture suggests a critique, negativity, and opposition that could easily be misconstrued as being directly opposed to the buildable, and buildings often possess a critical function. Allegory involves an element of deception, which can be, but is not necessarily part of, the unbuildable's objectives, which is why it would be inadequate to use here. A number of Russian sources used a term 'disembodied architecture', which seems to be appropriate here because the case is for architecture that is every bit as architectural as any other but without the presence of a physical body. Different issues often get confused, making the entire discussion more problematic when, for example, Sean Griffiths in his essay 'The Unbuildable'¹¹ used this term almost interchangeably with the unbuilt. Nonetheless, Griffiths poses several relevant questions here, 'such as nostalgia and fear of the future, the future we long for; but also have to consign towards never being capable of actually reaching'.¹²

It seems to me that, on the one hand, we are discussing architectural ideas that can only be visualised or drawn but that cannot be made. On

the other hand, I wish to emphasise that the unbuildable ought not to be viewed as competing or being opposed to the buildable. In fact, they often work in a complementary way. The autonomous function of this type of architectural project, through which architects have often critically thought and experimented, is precisely what will be discussed and argued here, with the unbuildable not observed as an alternative to the unbuilt or the built, but as a distinct and even complementary form of architectural knowledge.

In one book with the unbuildable in its title, *The Built, the Unbuilt and the Unbuildable*,¹³ Robert Harbison only started to address the unbuildable in the final chapter, 'Unbuildable Buildings'. This coupling of the words 'unbuildable' with 'buildings' appears to be a contradiction in terms; something can either be unbuildable or buildable, and buildings are always buildable. Even if we take 'unbuildable buildings' not to be a paradox, it still betrays the prevalent tendency to conflate an architectural project with building. Harbison writes about the uneasiness in defining the unbuildable:

Defining the unbuildable turns out to be harder than one could have foreseen. Certain things which exist are more farfetched than many which don't. And actual buildings can be fictional, which is to say uninhabitable and thus unrealizable, in certain specifiable ways.¹⁴

By seeing the unbuildable as the final step before the inconceivable, Harbison describes it as so far away from the norm that it becomes difficult to even think about or create an imaginary construct representing it. Interestingly, Harbison realises that at times the existing, or perhaps we should say the physical, can seem more 'fictional' than the purely imaginary. In that sense, certain drawings could be considered as 'realized' once the designs they represent make themselves so present in our consciousness to appear at least as equally or even more real than many actual works of architecture. Harbison 'confessed' that the title of the chapter, 'Unbuildable Buildings', preceded the title of the book. In this sense, the book's title may be misleading.

Several examples in this book will show drawings that enter our architectural imaginary and become present and real, although they remain purely visual and immaterial. I hypothesise that the unbuildable, without the attachment of the noun 'building', not only does exist but

also performs an important function within an architectural discourse, and it often influences the design of buildings themselves. I should emphasise that drawings are not opposed to building and that this issue is not related to the availability of appropriate building techniques. The unbuildable remains external to the construction of the physical object and operates within the purely visual realm, but, importantly, it can and does remain architectural. In fact, the case studies presented in this book aim to demonstrate that the unbuildable, at times, should be considered to be more architectural than many buildings. Additionally, I would contest an almost automatic conflation between the building and architecture; the suggestion that a building is always 'architectural' seems equally absurd.

The unbuildable has a tendency to position itself within the boundary of two or more areas, thus to remain in between, neither in the 'architectural' field nor outside it, inhabiting the border itself. The unbuildable and its forms of representation have the propensity to get 'caught up' between architecture and art, and more specifically, between architectural drawings and pictorial images. By operating less conspicuously than many other types of architectural projects, the unbuildable affects, shapes, and expands architecture and other fields. The possible origins of this specific form of architectural enquiry, in my opinion, are linked to the multiple points of rediscovery of perspective in the Renaissance. Various narratives of Brunelleschi's experiment had a dual influence: they inspired a continuous increase in orthogonal drawings, including banning and actively discouraging the use of perspective, as well as the opposite – experimentations and the proliferation of perspectival drawings. The notion of the multiple is important for the category of the unbuildable in terms of points of origin, its traits, and modes of operation.

It must be noted, however, that this present study is not by any means an attempt to write a history of the unbuildable. Instead, through the main case studies, I tried to identify its characteristic ways of working and its traits. One such trait that I have identified shows a perspective to dominate graphic and visual expressions of the unbuildable. A perspective is considered to be the least architectural of all drawings, often used in addition to 'proper' architectural drawings, i.e. plan and section. An important consequence of the predominance of perspectives and the many 'pictorial detours' is the visual excess. The excessive use of visual

effects often triggered architects to defy laws and conventions of architectural modes of representation, thus expanding the boundary of what could be strictly defined as 'architectural'. Acting against the convention, through negation, is an important characteristic of the working manner for the unbuildable. However, although such practices may affirm the rules, they do not conform to them.

One such rule is related to the rediscovery of perspective and Brunelleschi. In an established account, Brunelleschi was said to have drawn the building as the sky was reflected in the mirror. This drawing designated him as an architect because architects draw architectural objects, which can be precisely measured, and the sky is the background, in the domain of the artists, outside the architectural. This is why there is an underlying narrative of a sky or a cloud in this book. A sky or a cloud becomes another reference that breaks the rules and can register the shift in architectural thought. By acting in this way, discreetly, indirectly, and subconsciously, the unbuildable influences not only the architectural discourse but also the building. Ernst Gombrich's¹⁵ writing on 'pictorial' shows how this inconspicuous mode of working has been utilised by artists throughout history. However, conventionally the focus in architecture has and continues to be on the architectural object. It seems appropriate, therefore, for a study that looks beyond the architectural object per se to also critically look at the elements ordinarily confined to the background, such as the depictions of the sky. Thus, a particular drawing element, e.g. a sky or a cloud, which if present in the architectural representation usually remains confined to the background, is important here.

The purpose of this is to reframe the idea of architectural drawing, and the speculations on sky in drawings form yet another set of possibilities. In this sense, they function in a similar way as other traits of the category of the unbuildable, instigating duplications, multiplications, and variations. Initiated by a curious central placement in Piranesi's series of etchings, *Carceri*, the 'sky' will be used as a recurring reference, as another index of change, which may otherwise become imperceptible. This change may at times be as significant as scale or location or transformation from the singular towards the multiple. It must be perceived as a sign of the difference (and not opposition) between the 'architectural' and the 'visual', operating on a number of different levels. Instead of being a mere backdrop, as Figure I.2 shows, the 'sky' was used

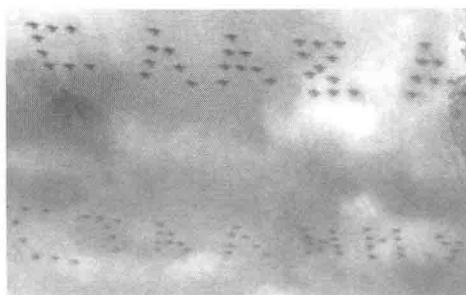


Figure 1.2 ‘Slava Stalinu!’ (Glory to Stalin!). A ‘drawing’ in the sky made by airplanes to celebrate Stalin’s birthday. This particular photograph was later corrected, manipulated (with added audience, perfected words, and pilots), and used in many images and posters.

literally for augmenting ideological messages, making the size of such ‘drawings’ gigantic.

The unbuildable, at least in part, should be considered simply as pictures. It is often met with hostility and denied an acceptance as ‘architectural’, because it does precisely what Walter Benjamin’s notion of ‘pictorial detour’ prescribes architectural drawing must not do. In this way, pictorial is not just an argument to work against; it becomes much stronger, and acts as a trigger. For Benjamin, architecture is linked to objective structure and opposed to painting; it is associated with visual appearance and the pictorial:

What is crucial in the consideration of architecture is not seeing but the apprehension of structures. The objective effect of the buildings on the imaginative being of the viewer is more important than their “being seen.” In short, the most essential characteristic of the architectural drawing is that it does not take a pictorial detour.¹⁶

For Benjamin, the absence of pictorial quality distinguishes architectural drawing from a painting or a photograph, as pictorial quality negates ‘an objective effect’. If a drawing is to be architectural, it must not create a picture but delineate the structure instead. Far from obvious, this structure tends to be hidden and is only visible to an expert architectural eye. Here, again, architects are defined by what they should not draw,