

Chapter One

Regulation, Rule, and Architecture: Introductory Comments

Every parcel is almost predetermined by what you can build upon it, in a way of planning code and building code issues. There are very strict envelopes about height, bulk, massing, separation, aspect to light that produce the form of the city. It's all been pre-sculptured.

(Testimony from an architect, 2008)

1.1 Introduction

As this testimony suggests, the practices of architecture are influenced and shaped by building regulations, codes, and rules that are devised to guide and influence all aspects of architectural production, from conceptual design to urban form. Such regulations and codes are not necessarily enshrined in law but are, as Hume (2004) has intimated, systematic sets of rules characterised and differentiated by authorship, context, and implementation.¹ In all instances, rules and regulations are constitutive of the practices of architecture, yet little is known about their impacts on, and implications for, the design and production of the built environment (although see Ben-Joseph, 2005a, 2005b, Ben-Joseph and Szold, 2005, Bentley, 1999, Carmona et al., 2006, Davis, 2008, Dennis, 2008, Harris, 1991, Hume, 2004, Imrie, 2007). The book seeks to address this lacuna in knowledge by exploring the interrelationships between regulation and the design and production of urban space, with a focus on the practices of architecture.

This task is important because a feature of modern life is the increase in forms of governance and (re-)regulation, influencing everything from food production and its distribution, to the protection of personal health and safety. For some, we are living in an over-regulated world

characterised by, in the urban context, a plethora of rules about conduct in public spaces, the emergence of privatised redevelopment sites that restrict, through formal regulations, rights of access, and an increase in surveillance as part of policy to regularise and normalise citizens' behaviour (see, for instance, Blumenberg and Ehrenfeucht, 2008, Miller, 2007). Such regularisation of behaviour was highlighted by the leader of the British Conservative Party, David Cameron (2009), who, in a speech about government powers in the UK, referred to 'Control State Britain'. Here, Cameron acknowledged the well-documented trend, observed worldwide, towards an expansion of the regulatory capacities of the state, albeit often through the context of decentred fragmented forms, including hybrid cross-cutting organisations (Mackenzie and Martinez Lucio, 2005).

These wider, societal, trends are evident in relation to the design and construction of the built environment, in which state-centred legal forms of regulation have proliferated. For instance, in the UK, the government has said that planning regulation and building control will be important in delivering an urban design-led renaissance of the British cities (DETR, 2000, ODPM, 2005a). Here, the government is widening the scope and scale of building control activities, to incorporate 'non-traditional' spheres of regulation (Hawkesworth and Imrie, 2009). These include, on the one hand, responding to the creation of 'resilient cities' that incorporate building design sensitised to threats to health and safety posed by terrorism and climate change, while, on the other hand, seeking to use the building control system to respond to socio-psychological and cultural issues related to place making and sustainable urban living. This is a marked departure from the traditional, physical or design, focus of building control, and one where there is little knowledge of how the system is responding and adapting to the new challenges.

For architects, and other development professionals, such systems of state rule and regulation are, we argue, one of the critical contexts that influence the form and content of the design and construction process. There is no part of the design and development of the built environment that is untouched by the plethora of rules, regulations, standards, and governance practices, relating to building form and performance. From the earliest urban settlements, the practices of architects have been entwined with, and conditioned by, directives about street layouts, building widths, the control of pollution, and fire precautions. Kirk (1978), for instance, refers to the control of spatial development of ancient cities in India, through rulers' application of the treatise, the *Arthashastra*, published between the 4th and 2nd centuries BC. The *Arthashastra* outlined the conditions for statecraft and, according to Kirk (1978: 74), it contained a 'whole series of bye-laws aimed at achieving

an orderly, urbane existence'. Like similar documents in ancient Greece and Rome, it was a forerunner of modern systems of discipline, propagating encoded ideals of what makes good urban form (see chapter 2).

These ideals were often overlain with architects' use of building types, or the (self-)development of principles of aesthetics that served to guide the crafting of urban form. Such crafting has, however, been influenced by increasing layers of state intervention in, and control of, urban design that, while evident in ancient city cultures, escalated throughout medieval times and became part of the rise of regulation in the late 18th and 19th centuries. This featured the well-documented intervention of governments in health and safety, including prevention of fire risk in buildings, and the development of systems of planning and building control. By the mid to end of the 20th century, the omnipresence of spatial regulation was such that some commentators were suggesting that architects no longer needed to design anything. Rather, it was felt that this was being done for them through the context of the application of the rules, regulations, and standards relating to the form and performance of buildings and the built environment (Gummer, 2007, Saint, 2001).

State-centred, regulatory, formations are only a part of the broad-cloth of rules and regulations that shape urban design and the spatial development of cities. In recent times, non-state institutions or decentred organisational formations appear to be as influential as, if not more so than, their state counterparts in shaping the design and development, or the production, of urban space (Miller et al., 2008). Of significance are the actuarial activities of insurance companies that seek to identify and prevent risk in relation to human behaviour (O'Malley, 2004). The formative building codes of the late 19th century were influenced by the regulatory requirements of insurers, who set conditions relating to most aspects of building form and performance. If anything, their role has been heightened and it is indicative of what O'Malley (2004: 191) suggests is a post-disciplinary order, whereby the coercive, even punitive, actions of the state are being supplanted, in part by the preventative and risk-spreading (i.e. insurance) activities of organisations that 'appear to act technically rather than morally'.

What this suggests is that the actions of architects and other agents involved in the production of the built environment are entwined in complex ways with a panoply of state, non-state, and civil organisations, associations, and relations. These relations extend to the entanglement of architects' creative practices with the pragmatics of the design process, and in particular the regulation of design activity through the application of multidisciplines, and the disciplinary

behaviour, of diverse project professionals (Baer, 1997, Habraken, 2005). This reflects what Sarfatti-Larson (1993: 23), refers to as the 'heteronomous conditions' of the design process, in which the making of buildings is the co-production of different actors involved in a 'creative synthesis and an eminently political activity'.² This activity draws attention to the networks that are part of the dispersal, or decentring, of the actions of architects in ways whereby architects are increasingly engaged in complex inter-disciplinary teams of professionals in the negotiation of design outcomes.

These observations provide a steer to theory building and development, and part of this is the current concern, in the social sciences, with understanding phenomena as relational and influenced by processes of co-production through the context of complex networks. Such notions are helpful for steering analysis away from a conception of architecture as an autonomous sphere, and useful in (re-)centring social scientific ideas into the study of urban design. However, we feel that there is much to be done to develop such concepts to ensure that research based upon them does not reproduce reductive frames of analysis. For instance, co-production implies, helpfully, a sense of negotiation or the search for consensus. It directs attention to the importance of networks and interactions, and implies a sharing – even an equalisation – of power between co-producers. This has analytical benefits, but dangers too, in that it may deflect analysis from power inequalities or structural differences more likely to be captured by other concepts that emphasise, much more, structural inequalities and organisational differences.

Despite the rule-based and bounded nature of architecture, there is limited knowledge or understanding of how development professionals, such as architects, interact with and understand the rules and regulations relating to the construction of the built environment, and how such interactions shape different elements of the design process. A key focus of the book is to develop particular lines of argument or ways of thinking about the relationships between rules, regulations, and the practices of architects. These include the following.

1. Regulation is core to the practices of architecture and, in turn, such practices (re)define, in part, the scope and possibilities of regulation. If one accepts this proposition, it seems incumbent on research to (re-)centre the understanding of the practices of architecture within the broadcloth of the rules and regulations that, in turn, are part of the broader contexts within which architecture unfolds.
2. Rules and regulations are part of a matrix of relations that influence the practices of architecture and they are embodied in different

forms, including language, text (construction), materials, drawings, and, of course, buildings. The shape of rules and their shaping of the practices of architecture is part of a relational mixture of discursive practices and social and political processes.

3. While conceptions of design may preclude explicit incorporation of regulations and building standards, such standards do influence aesthetic and design outcomes in variable ways. Regulations ought to be conceived of as much more than technical instruments or part of a non-creative process somehow removed from architects' practices (or the practices of architecture).
4. It follows from this that rules about, and the regulation of, the form of the built environment are constitutive elements in the (re)production of urban space. This suggests that the regulation of building form and performance is part of relational socio-political formations, a conceptualisation that requires a rethinking of the alleged centrality of architects in the shaping of the built environment.

In developing these, and related, insights into the interrelationships between rules, regulations, and the practices of architects, we divide the rest of the chapter into two main parts. First, we outline the discourse about the autonomy of architects and architectural practice (Cuthbert, 2006, Knox, 1987, Sarfatti-Larson, 1993, Till, 2009). We develop the argument that the insistence on a separation between architecture as the pursuit of aesthetic endeavour from building as the crafting and construction of the built environment is related in part to the understanding of regulation, propagated by some within the architectural profession, as exterior to the legitimate concerns and practices of the architect. One implication is that regulation, whether it is through the context of planning standards, building regulations, or design codes, is often understood as part of a separate sphere of expertise and experience to the practices of architects and, as such, it is rarely conceptualised as intrinsic to, and implicated in, the creative actions and activities of the architect.

Second, in seeking to move beyond the notion of the 'autonomy of architecture', we briefly discuss the importance of rules and regulations in relation to the governance of urban form and process, and outline why the study of regulation ought to be (re-)centred within the broadcloth of the analysis and understanding of architecture and urban design. We relate such discussion to an overview of the book's content. In doing so, we discuss broader debates about what regulation is, and how it ought to be thought about or regarded in relation to the activities and actions of architects.

1.2 The autonomy of architecture and the design process

One of the objectives of the book is to contribute to the understanding of the social context of architecture by discussing the role of rules and regulations relating to building form and performance in influencing the content and conduct of the design process. The actions of architects are influenced by a complexity of socio-institutional and political processes and relations in which, as Frampton (1980: 17) notes, of all the forms of cultural production 'it may be claimed that architecture is, in fact, the least autonomous, compelling us to admit to the contingent nature of architecture as a practice' (also, see Hill, 2003, Knesl, 1984, Knox, 1987, Sarfatti-Larson, 1993). This observation contrasts with the dominant traditions of research about design that, as Markus (1993: 27) suggests, are bifurcated between social historians or critics who conceive of close connections between art and society but rarely mention architecture, and architectural historians who 'treat buildings as art objects' but do not say much about social and political context.

This orientation, in the study of architecture, tends to conceive of the architectural process as 'autonomous', in which the architect is what Bentley (1999: 28) suggests – the 'heroic form giver' – deploying their creative talents to design and produce the built environment.³ It is assumed that architecture is a form of artistic expression and endeavour, and, in Ghirardo's (1991: 9) terms, 'that art has a high moral purpose in the formation and transmission of culture . . . of the design of aesthetically pleasing forms of poetic spaces' (also, see Frampton, 1980, Porphyrios, 1985). However, for Bentley (1999) and Sarfatti-Larson (1993), such discourses (of architecture) are problematical because they tend to side line certain subject matter from scholarly consideration, by emphasising, first and foremost, the importance of study of artistic or creative behaviour, and/or the technical or investment attributes of buildings and the design process (also, see McGlynn and Murrain, 1994, Knox, 1987, Prak, 1984).

This is part of a perennial theme emphasising the schism between architecture and building and between the architect and builder. This schism is one whereby the work of the architect is conceived as a separate act from the actions of building or the construction of the built environment. This disjuncture, between architecture as the creation and conception of the aesthetic components of the built environment, and the realisation of building as a product or tangible, material, physical form, was brought to the fore in a range of writings, including the publications of Leon Battista Alberti in the 15th century who, for Habraken (2005: 41) 'introduces the persona of the architect'. For

Alberti (1988), the architect operated over and beyond the rules or conventions of building and, instead, exercised autonomy of thought and action. As Alberti (1988: 3) suggested, 'I consider the architect, who by sure and wonderful reason and method, knows both how to devise through his own mind and energy, and to realise by construction, whatever can be most beautifully fitted out for the noble needs of man'.⁴

This viewpoint was an echo of sentiments expressed in earlier periods of history that extended the understanding of the architect as the purveyor of beauty and truth through the context of their focus on what Vitruvius (1960: 37) coined as 'eurythmy', or the beautiful rhythms of a perfectly composed building. While Vitruvius (1960) had a broad conception of the architect as someone who conjoined the technical with the artistic, and whose practices could not occur in abstraction from an understanding of building and construction, later influential architects, such as Mauro Codussi (1440–1504), Sebastiano Serlio (1475–1554), and Andrea Palladio (1508–1580), emphasised much more the visual, artistic, and stylistic components of buildings (Figure 1.1). For Habraken (2005: 10), architects, such as Palladio, were in

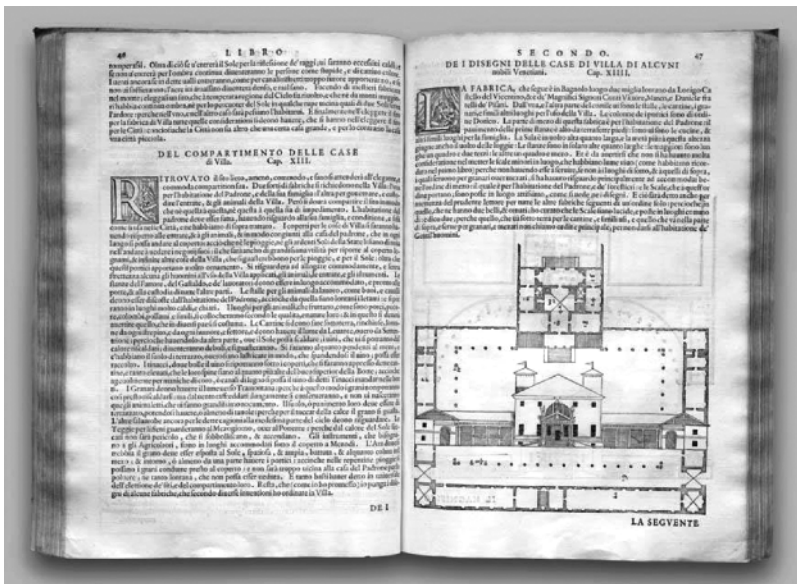


Figure 1.1 The Palladian representation – Villa Pisani. The figure depicts a typical representation of buildings by Palladio in his book *I Quattro Libri dell'Architettura* (*The Four Books of Architecture*). This drawing was published in 1540, and based on a house named the Villa Pisani designed by Palladio in the 1540s.

Source: Villa Pisani a Bagnolo di Lonigo (Vicenza), from *I Quattro Libri dell'Architettura* by Andrea Palladio (2002).

the vanguard of an emerging tradition that came to represent buildings 'as abstract models divorced from site or context'.

Habraken (2005: 9) characterises the legacy of this as contemporary architects being 'Palladio's children', or those involved in the (re)production of a persona of the architect that, during the lifetime of Palladio, became 'increasingly self-referential'. This was characterised by an outpouring of writings and published works by architects, as part of their oeuvre. This often comprised visual and graphical representations of proposed and completed buildings, with the intent to display them as art-objects and as powerful signifiers of the creative prowess and powers of the architect. Palladio's output was more voluminous than most, and was significant for the use of a picture-book format characterised by drawings of the geometrical compositions of buildings (Bentley, 1999, Habraken, 2005). For Habraken, these representations, while beautiful artistic creations, were symptomatic of architects' increasingly distanced relationships to the broader fields, or contexts, of building production, construction, and outcomes (Figure 1.2).

This distancing was apparent in Palladio's work in which the character of the architect, the so-called eponymous hero, was paramount, and in which discussion of buildings and form occurred with limited

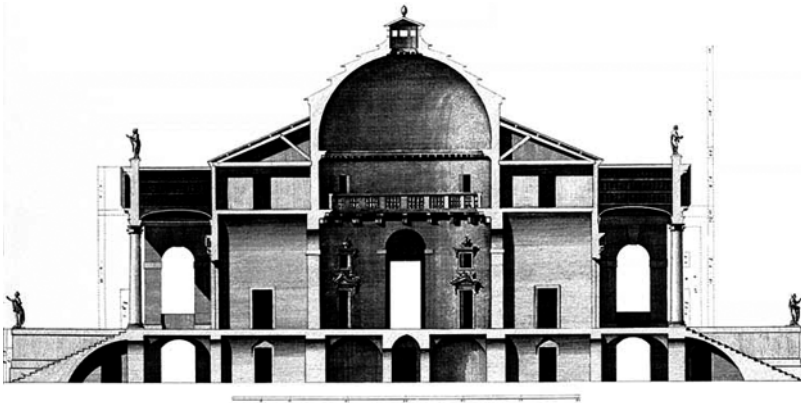


Figure 1.2 Villa Rotonda. The Villa Rotonda was commissioned in 1566 and designed and inhabited by 1569. It is located on a hilltop near to Venice, and commentators claim it to be the most influential of all the buildings designed by Palladio. It is wholly symmetrical and inspired others around the world to copy its style. Palladio (cited in Wundram et al., 1993: 186) describes the building in the following terms: 'The place is nicely situated and one of the loveliest and most charming that one could hope to find; for it lies on the slopes of a hill, which is very easy to reach. The loveliest hills are arranged around it, which afford a view into an immense theatre; because one takes pleasure in the beautiful view on all four sides, loggias were built on all four facades.'

Source: Illa Capra, Vicenza, Palladio – Seccion de 'i quattro libri' – 1570 – Publicacion de Scamozzi, 1778, copyright expired.

reference to the social, institutional, and political contexts of the design and construction process (Bentley, 1999, Knox, 1987). For Palladio, the building was (re-)presented primarily as an object, a thing in and of itself, rather than as an element in a broader series of social relationships. Habraken's (2005: 13) description of one of Palladio's buildings, the Villa Rotonda, conveys the sense of its abstraction from the materiality of the design and construction process: 'the building remains self contained . . . it dominates the land while not being rooted in it . . . it is set like a stone upon the hill'. The outcome, for Habraken (2005: 11), is the objectification of 'the building, to distinguish it from the landscape'. The object does no more than inform the observer of the building's line, height, and width, and conveys proportions between these components.

This style of representation of buildings is an undercurrent of much contemporary architectural practice, in which the Palladian discourse encourages site and context to be subsumed by emphasis on form, and where an objective of the architect is to demonstrate their artistic and creative skills by the projection of architecture as the production of *objets d'art*. Like Palladio, subsequent generations of architects came to represent their buildings as 'stand-alone' objects, to illustrate and emphasise form and style or the aesthetics of the design (Figure 1.3). One of the key instruments of representing architecture, the drawing, often became an end in itself, characterised by representation of

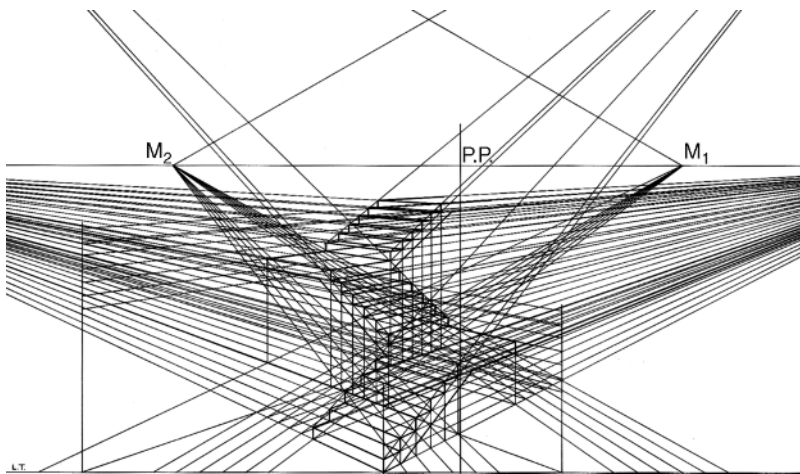


Figure 1.3 The architect's representation. The figure is an illustration of the one- and two-dimensional representation of buildings commonly used by architects to show scale and proportion of built form. It is devoid of a three-dimensionality in relation to the projection of the building's form. It is unable to show performance in relation to its use. Source: Imrie, 2003.

scale measures, of plan, elevation, and section (Imrie, 2003, Bloomer and Moore, 1977). These emphasised the metric properties of form, and reproduced a representation of architecture reduced to Cartesian coordinates, or geometrical points between different parts of a building. There was no conveyance of the performance of buildings or how they might operate once occupied and in use (Hill, 2003).

These abstractions of form from aspects of site and locational context are not dissimilar to the Palladian ideal's foreclosure of other matters of building deemed to be marginal, even irrelevant, to the architects' pursuit of aesthetic and artistic expression. This is particularly so in relation to the rules and regulations relating to the design and development of the built environment. No building is designed and constructed outside of perceptual and practical, or material, schema about rules relating to proportions, performance, and form, nor outside of socio-political controls relating to the safety of structures. Yet these aspects of the practices of architects are rarely revealed in, or acknowledged by, architects' representations of, and scholarly writings about, the design and construction process. The buildings of architects like Palladio appear to emerge as free floating from laws and rules about form. Where regulation is referred to, it is usually counterpoised to architecture as purveyor of visual representation and artful masterpiece. Regulation is part of the external world of building with the potential to render the design process no more than a technical exercise.

A legacy of such perspectives about architecture is that a fuller study of the socio-institutional contexts underpinning the shaping of design is not always evident, especially in relation to subject matter such as the interrelationships between architects and the rules and regulations that codify and regulate their practices. However, from Alberti's (1988) conception of buildings as a form of living body, which led him to construct rational rules of architectural form determined by mind and matter, to the structuring of space around the four cardinal points, codes and/or rules have always been core to architects' conceptual schema and practices. Indeed, they reflect, in part, the imposition of a moral order on spatial representation and practice (Figure 1.4, over page; also, see chapter 2). For Bentley (1999: 27), rules enable architects to 'get to grips with the otherwise implausibly complex flux of the world' and, since the late 19th century, rules relating to design and building structure have been increasingly institutionalised through formal, usually legal, regulation and conduct by government.

This is indicative less of the autonomy of architecture from the rule-based contexts of design and construction, and more its entwinement with(in) a complexity of socio-institutional regulatory processes. This recognition of entanglement with(in) the rules and regulations relating

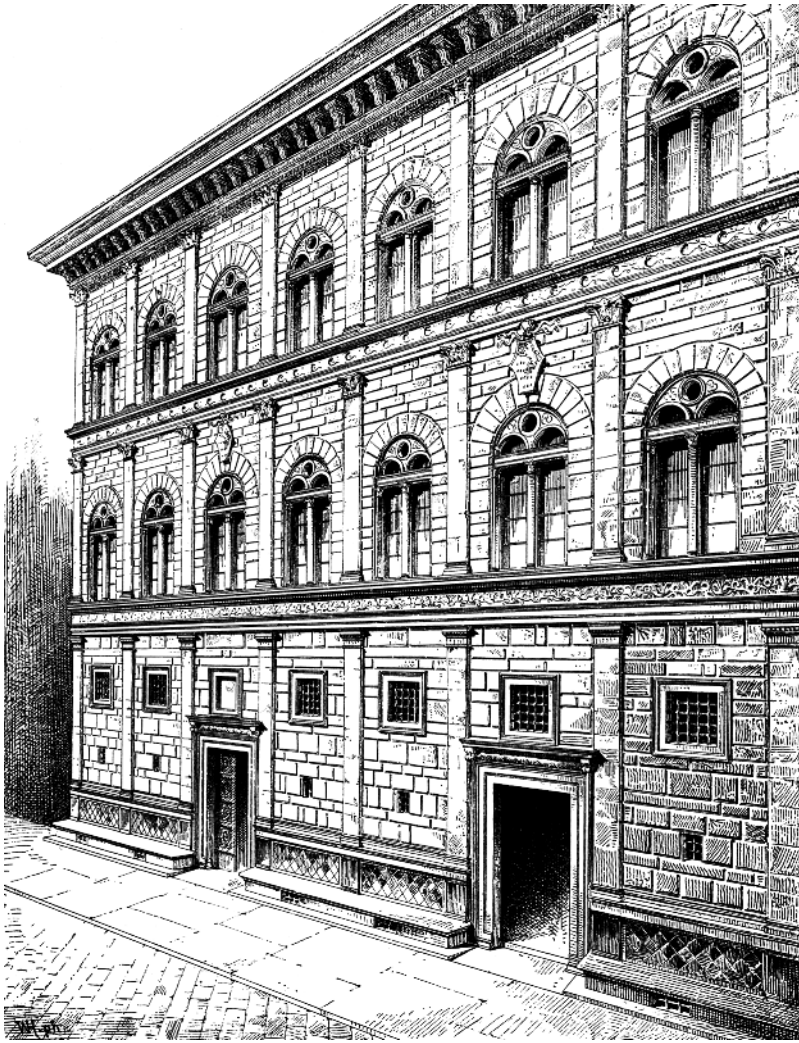


Figure 1.4 Piazza de' Rucellai. The Palazzo Rucellai is a 15th-century palace in the Piazza de' Rucellai, Florence, Italy, designed by Leon Battista Alberti between 1446 and 1451. The Institute at Palazzo Rucellai describes it in the following terms: 'this splendid work was the first to fully express the spirit of fifteenth century Humanism in residential architecture. The structural elements of ancient Rome are replicated in the arches, pilasters and entablatures, and in the larger blocks on the ground floor which heighten the impression of strength and solidity. The pilasters of the three stories embody different classical orders creating an effect reminiscent of the Coliseum' (text cited at: [http://www.palazzorucellai.org/\(S\(uxtzemzkolxoe2nfhsh55\)\)/StandardPage.aspx?id=8](http://www.palazzorucellai.org/(S(uxtzemzkolxoe2nfhsh55))/StandardPage.aspx?id=8)) Source: Wilhelm Lübke, Max Semrau: Grundriß der Kunstgeschichte. Paul Neff Verlag, Esslingen, 14. Auflage 1908, copyright expired.

to design is one whereby the architect is being confronted with the contradiction between, on the one hand, seeking to propagate the Palladian discourse or the essence of architecture as art and, on the other hand, the understanding that its realisation is dependent on others, or what Sarfatti-Larson (1993: 5) refers to as 'rival professionals or humbler executants'. The recognition of such dependence confronts architects with the realisation of their less than autonomous capacities. It sets up the architectural profession, potentially, in opposition to, or at least in tension with, other professions and disciplines, such as building regulation, that, through their operations, have the capacity to transform architects' conceptual or aesthetic schemas.

It is not surprising then that a commonly held view of regulation by architects, particularly in relation to planning and building control systems, is one whereby it is seen as anathema to, and likely to diminish, architects' *raison d'être*, that is, the pursuit of beauty (chapter 5; also, Saint, 2001). The opposition between architecture and building thus situates regulation as part of bureaucratic rule that, through its application, is likely to diminish the quality of design. This feeling was also at the forefront of Alberti's (1988: 140) observations in 1452, on regulatory differences between country and city: 'a large number of men and things cannot be accommodated as freely in the city as they can in the country. Why is this? In urban building there are restrictions such as party walls, dripping gutters, public ground, rights of way . . . to prevent one's achieving a satisfactory result. In the countryside this does not happen; here everything is more open, whereas the city is restrictive.'

Alberti (1988) was hinting at a discourse that was yet to be developed in the mid 15th century, but has since become part of a popular, often caricatured, understanding of the interrelationships between architecture and regulation (chapter 3). Such understanding views regulation as one more restriction on the autonomy of architects, and something that is imposed rather than part of a negotiated, even democratic, process. It is the antithesis of design, and a threat to what Habraken (2005) regards as architects' visualisations of buildings in abstract terms, and regarding them as, first and foremost, proportional objects designed around orderly principles. Regulation disrupts, potentially, the rhythm, methods, and forms of architects' practices, and it is a challenge to the idea, even ideology, of design as a discrete skill. Typical of this view is Ventre (1997: 17) noting that planning and building control regulations are 'culturally conservative' and anathema to the 'romantic heritage of architecture'. For Ventre (1997: 17), this meant an inevitable clash between architecture and regulation or, as he suggests, 'obdurate approaches to, or, at best, ambivalence towards the aspect of regulation'.

Such views have a more extreme version, and authors such as Knesl (1984: 9) go as far as to suggest that 'architecture has seldom been more than a recipient of the laws affecting the built environment', so suggesting that architects are passive and compliant in the face of regulatory control and practice (also, see Bentley, 1999, Knox, 1987, Saint, 2001). As Knesl (1984: 9) suggests, 'architecture is predetermined by political and economic power, including laws, statutes, codes...'. This narrative is, potentially, problematical for conceiving spatial regulations as a) external to what architects think and do; and b) determinate of architectural processes and outcomes (also, see Baer, 1997, Imrie and Hall, 2001, Imrie, 2007). Thus, if architecture is 'predetermined' by political power, as Knesl (1984) suggests, it renders architecture, and its practitioners, as somehow inert or without substance, inactive and not able to influence, in any significant ways, the actions of regulators and the outcomes of regulatory activities.

Neither this conception of the design process, nor that of the 'autonomy of architects', is particularly tenable. The former is based on an understanding of process in which the 'self actions' of politicians and/or regulators are responsible, largely, for shaping architects' practices. The latter conceives of what Till (2009: 37) describes as architects 'ridding the world of contingency', and propagating a view of their work as operating with little constraint or control on their design activities. In both instances, actions and outcomes become reduced to a singular point or determinant when, as some of the empirical substance of the book will show, the relationships between architects, regulators, and others are recursive or relational. In Lefebvre's (1991: 15) terms, they are 'part of a practical relationship, part of a dialectic' in which regulations and architects' practices are conjoined through the context of specific social, political, and institutional processes.

Sarfatti-Larson (1993: 5) refers to this as 'heteronomy' or 'the architect's dependence on clients and the other specialists of building'. She suggests that the design of buildings is not just 'architects' autonomous application of knowledge and talent alone' (Sarfatti-Larson, 1993: 5). Rather, they reflect Bentley's (1999) understanding that architects' actions are inextricably connected to a project's contexts. Such contexts reflect the complexity of the conjoined elements of design and construction, including the instruments and techniques of design and building that influence and discipline architects. The techniques range from the client's brief, the project manager's use and application of risk assessment, cost estimation, forecasting and economic evaluation, to the rules and regulations relating to the different dimensions of the design and construction process. What is important to study is not, as Saint (2001) suggests, the issue of whether the

regulations 'matter more' but, rather, how they matter and function in relation to the design and production of the built environment.

This, then, is to recognise and document that the daily activities of architects take place in contexts of negotiation, disputation, and debate about different aspects of the development and design process. The notion that there is a simple linear relationship between design and buildings is, as Hill (1999) suggests, problematical (also, Bentley, 1999, Knox, 1987, Scott, 1999). Of significance, and a focus of this book, is the role and *raison d'être* of rules and regulations relating to architectural form, and how and where in the process they are absorbed into the design of buildings. In particular, rules and regulations about design and building form often stress the importance of vernacular, localism, and tradition. For Huger (2004), the specificity of authorship (i.e. who wrote the rules), context (i.e. their interpretation and where, and under what conditions, they are applied), and implementation (i.e. how they are applied) are paramount to an understanding of the interrelationships between architects' practices, regulation, and design.

1.3 The study of regulation and the practices of architects

A perennial image of the architect is conveyed by Frank Lloyd-Wright (1992a: 29) who, in a speech to the University Guild of Evanston, Illinois, in 1896 observed that 'art ... is to be revered and fostered as the creative power ... to feel ennobling enthusiasm for and to work for.' Later in the same presentation Lloyd-Wright suggested that art and aesthetics are constrained by the 'ultra commercial', an observation lamenting the loss of architects' control over the production of the built environment, and one that anticipated the rise of what Lloyd-Wright (1992b) called the 'plan factories': 'architecture today is the great orchestration of materials, methods, men' (also, see Le Corbusier, 1925). Here, Frank Lloyd-Wright (1992b) was referring to the development of multi-agent project teams, and a 'new' architecture characterised by a fragmentation of tasks and the multiplicity of seemingly disparate and uncoordinated actors and agencies. For Frank Lloyd-Wright (1992b), the aesthetic foci of architects were being supplanted by the bureaucratic rise of management as part of a rationale to assure project development and delivery.

Frank Lloyd Wright's observations anticipated much of what architecture has become, in which a core activity of contemporary architects is to ensure the delivery of buildings to budget and time, within prescribed health and safety standards, and sensitised to a multiplicity

of rules and regulations relating to building form and performance. This multiplicity is indicative, so some allege, of a regulatory society that, in the 21st century, is characterised by what Levi-Faur and Gilad (2004: 106) refer to as 'the proliferation of new mechanisms and techniques of regulation' (also, see Black, 2002, Crawford, 2006, Morgan and Engwall, 1999). In the spatial development context, architects appear to be entwined in a greater range of legal regulatory obligations, partly as a product of the expansion of the scope of both planning and building control, and also the management of project risk through the context of an explosion in contractual, rule-based, relationships between different parties involved in the design and development process.

It is this regulatory complexity that forms the backdrop for the rest of the book, in which we explore architects' entanglement with the rules and regulations that govern much of the conduct of the design and development process (also, see Fischer and Guy, 2009). The research underpinning Part II of this book was preceded by a range of projects conducted by the authors, that had their origins in the exploration of the interrelationships between the mobility and movement of disabled people and the building regulations (Imrie, 1996, 2003, 2006, 2007, Imrie and Hall, 2001). The findings of these projects suggested a complexity of architects' feelings about, and interactions with, the regulations relating to their activities. Far from the Palladian schism between architecture and building and design and construction, the research identified deeply embedded, often positive, relationships between architects' actions and the (building) regulations, to the point whereby they were revealed as neither ephemeral nor insignificant to the design process, but as an integral and constitutive part of it.

This understanding informed the shaping of subsequent, follow-up projects, including the research that is the basis of this book (see the appendix for further details). In particular, given that previous research had specifically focused on the interrelationships between disability and the building regulations our point of departure was to broaden the documentation of the building regulatory systems, with the focus on the UK. The justification for this focus is primarily because we feel that the building regulations are an under-explored and under-emphasised part of spatial development. As previously alluded to, the building regulations have rarely been an attractive subject of study, for either practising architects or art historians, or for academics working within the social sciences where studies of spatial regulation have focused primarily on planning. This lacuna seems untenable, given that building regulations, we contend, are much more integral to the work of architects than has been acknowledged in previous research and writings.

In the course of conducting the research our focus on the building regulations – and our views of rules and regulation – shifted, primarily

due to the ways in which architects were defining regulatory type and process as not necessarily legally based or bounded, or reducible, solely, to state-centred legal fiat or form. In interviews, it was commonplace for respondents to talk about the 'tacit and hidden rules' embedded in the complex relationships between different actors and agents, often with competing and different value systems (also, see Lawrence, 1987). This began to highlight the implicit informal, often unwritten, rules that define principles of interaction between actors, that do not necessarily have a basis in law. Part of the basis of such rules is moral and ethical, a rootedness to obligated relationships, even to habituated systems of interaction, or what Moore (2008) describes as codification that is closely interlinked with custom, practice, and traditions of local communities (also, see Bourdieu, 1998, Moore and Wilson, 2009).

This chimes with an understanding of regulation that we seek to develop in the book, referred to by Black (2002) as 'decentred'. A decentred definition of regulation is one that does not exclusively relate regulatory form, behaviour, and process to the activities and actions of the state, such as the building regulations. Rather, decentred regulation is characterised as dispersed across social, institutional, and political contexts, and not confined to any specific organisational form or process. Regulation is, as Black (2002: 4) suggests, 'in many rooms' (also, see Nader and Nader, 1985). This observation corresponds with the views of those who claim that state-centred government and regulation is fragmenting, characterised by shifts towards self-activated actors, and new forms of governance based upon self-regulation and the rise of systems of audit and control (Black, 2002, Levi-Faur, 2008). In these emerging contexts, the practices of architects may be thought of as relational webs of decentred regulation in which scope for action is dependent, in part, on institutional rules, governance processes and practices, and the values of actors relating to different stages of the design process.

We develop these ideas in more detail in subsequent chapters, particularly in chapter 2, where we outline the significance of rules and regulations in relation to the practices of architecture. We suggest that architecture, from the earliest stages of human habitation, has revolved around, and been constituted by, rules of building form and style, many tacit and part of tradition and learnt through practice, others related to laws about building height, strength, and performance. They are part of socio-cultural formations that Davis (2006: 202) defines as a 'system of social constraints that guarantee that a certain set of knowledge and rules will be followed by the building culture'. Since the late 18th century, such codes and/or rules of building form and performance have become increasingly entwined with formal, legal, systems, or government and private sector interventions in the

regulation of building form and performance. Of paramount concern has been the regulation of health and safety in the built environment, rule setting by insurance companies, and state regulation to ensure minimum standards of building design.

We seek to understand changes in the practices of architecture as part of the emergence of disciplinary and state policing powers that, as O'Malley (2004) suggests, operate on and permeate the individual, and seek to develop the individual as an object of knowledge. The architect was becoming not only the object of regulation but one of the means through which regulatory practices were being (re)constituted and put into practice. We extend this understanding of regulation to discuss the rise of a risk and regulatory society, that, since the mid to end of the 20th century, has become characterised by new forms of managerial control, conduct, and a challenge to the professional ethic of architects. It has centred on the Palladio ideal of architecture as the pursuit of truth and beauty through creative action. As we outline, this challenge is one whereby the fragmentation of work tasks, and the emergence of a plethora of 'new professional' actors in project design and delivery, is – so some allege – decentering architects and potentially rendering them less significant to the production of the built environment.

In chapter 3, we evaluate the broader attitudes and values of architects, and other professionals, towards the regulation of design and development activities, with a focus on the building regulations. We suggest that architects' attitudes are part of a deeply rooted discourse about the regulation of design and development activity that, at its core, is premised upon the understanding that regulatory controls are anathema to the delivery of a modern urban infrastructure and environment. Indeed, there are many in the development industry who expound the sentiment that the practices of architects, and other development professionals, are over regulated and subject to rules and regulations that have the capacity to diminish the quality of design, while increasing the costs of building and construction activities. Perennial observations suggest that regulations often encourage conservative behaviour by design professionals, who are less likely to innovate or experiment, with the consequence of the (re)production of bland architecture and the perpetuation of sterile urban spaces.

Part II of the book, on 'the practices of regulation', is a series of empirical investigations into different aspects of architects' engagement with, and understanding of, rules and regulations relating to building form and performance. The chapters are interlinked by two main concerns. The first is to advance, through evaluation, our understanding that the style, appearance, or aesthetics of the built environment are not just the products of taste, but of a much wider set of social, cultural, and political programmes and practices. Paramount, we

suggest, are the rules and regulations relating to the conduct of architects. The second is to provide in-depth evaluation of the interrelationships between different forms of regulation and the design process, with reference to the self-testimonials of architects and other development professionals. In doing so, we seek to challenge some of the cruder, reductive, characterisations of rule and regulation that dismiss them as nothing more than anathema to the production of a well-designed environment.

We begin our empirical explorations in chapter 4 by focusing on the role of pedagogic processes in influencing architects' understanding of the contexts of design, including regulation. We discuss the significance of the education and training of architects in relation to the formation of their values and attitudes towards design, and evaluate how far, and in what ways, this perpetuates the view of the autonomous architect, and with what implications for dealing with the manifest realities of rule and regulation. As we suggest, architects' education continues to be dominated by the studio culture, or a form of instruction premised on the understanding that architects are central to the design process. In this view, the design process is, in Habraken's (2005: 153) terms, about architects' 'total control of a discrete and self contained building'. Such mentalities, or discourses of design, are, we contend, the key bases for the (re)production of attitudes and values that reinforce the divide between architecture and building. In turn, this may contribute to the sidelining of regulation as a subject of study or frame of reference for the (self-)understanding of the practices of architects.

Chapter 5 is a discussion of one specific part of the regulatory environment of architecture: the building regulations. As we argue, it is commonly assumed that building regulation and control is a technical activity, and part of a bureaucratic machine external to the design process. For many architects, building regulations are no more than a set of rules to be adhered to, and are usually seen as ephemeral, even incidental, to the creative process of design. However, the main argument of this chapter takes forward the underlying thesis of the book, that the building regulations are entwined with, and are constitutive of, architects' practices. Such rules and regulations are, we contend, one of the critical elements of the 'ordinary built field' that shape architects' actions (Habraken, 2005). Far from being an insignificant part of the design process, as some commentators suggest, we develop the argument that the building regulations influence aspects of creative practice and process in architecture and, as such, ought to be given greater attention by scholars of urban design.

We shift the focus of investigation in chapter 6 to a discussion of the interrelationships between risk and its regulation in the design process.

We suggest that a new focus for the understanding of architecture – and urban design more generally – ought to be consideration of the interrelationships between creativity, risk, and regulation. There is a plethora of regulation relating to building form and performance, and seemingly much more emphasis on risk identification and its management, particularly in relation to the processes underpinning the development and delivery of building projects. It appears that the practices of architects, like other urban design professionals, are implicated in the construction of risky objects and their mitigation by recourse to systems of managerial governance (Hood et al., 2001). These risks are diverse and complex, but include budget and programme overruns, failure to deliver on design components or work packages, and non-compliance with health and safety legislation (Beck, 1992, Power, 2004, 2007).

The chapter is built around the proposition that risk and its regulation is entwined with organisational changes in the nature of project development and delivery, and linked with the emergence of what we might regard as diffused or dispersed organisational forms that, in and of themselves, become harbingers of risk, while also being one of the means to create new forms of risk governance. In turn, much of architects' responses to risk revolve around procedures to secure reputation in contexts where loss of standing and repute is perceived to be a significant threat (Power et al., 2009). As our data indicate, much of the daily work routines of architects, and other development professionals, revolve around the development of new management systems, to the detriment, so many suggest, of their involvement in creative design work. Such (risk averse) systems are designed to apportion, and thereby reduce, the risks facing design and construction professions as part of the building process and, as we discuss, appear to be part of a change in architects' work with increasing proportions of time being directed towards administrative functions related to risk and its management.

In chapter 7, we develop the understanding of what regulation is by connecting it to organisational changes in the design process, and to the discourses and conduct of different professionals involved in project development and delivery. As we suggest, while regulation can be conceived as state centred, and defined as the exercise of legal rules and modes of conduct, it can also be thought of as non-state derived or located, and characterised by a complexity of socio-institutional forms and relations. This complexity includes not only the codified regulations, such as the building regulations, but also what Faulconbridge (2009: 2551) refers to as 'other forms of socio-technical regulation (i.e. the multiple parties involved in the design process, social practices, and their influence on the use and identity of built

forms)'. This points towards the analysis of how the practices of architects may be influenced by the disciplines, rules, and values of other project professionals, such as project managers, structural engineers, and chartered surveyors, in a context whereby, as some allege, the architect is increasingly a marginal part of the process that underpins the design and delivery of the built environment.

The arguments of chapter 7 seek to develop the understanding that architects' interrelationships with other professionals are constitutive of a form of *regulatory influence* over design outcomes. In particular, we suggest that such regulatory influences may be understood as a process of 'co-production' through the context of a series of relational networks or socio-institutional and political interdependencies (also, see Baer, 1997, Bentley, 1999, Hawkesworth and Imrie, 2009, Mackenzie and Martinez Lucio, 2005). In the chapter, we develop, in part, Offe's (1984) observation that the fragmented nature of social and political life is characterised by complexity of institutional interdependencies and interactions that render regulation messy and indeterminate. No single actor or institution can dominate social life, and agents such as architects are influenced by the knowledge, rules, resources, and actions of those that they interact with (Bentley, 1999). It is in and through such interactions that the actions of architects may be conceived as part of a process of co-produced activities.

In chapter 8, we turn to a discussion of design codes and what appears to be their increasing importance in influencing the activities of architects. While there is nothing new about design codes, they have gained ascendancy in the past 20 years in a context whereby there has been increasing dissatisfaction with the quality of urban design (Carmona et al., 2006, Carmona, 2009). We develop the proposition that codes are related to crosscutting, even contradictory, discourses about the interrelationships between regulation and urban form and process. Design coding is part of a discourse of urban crisis in relation to the sustainability of the form and performance of the built environment. Here, the design code may be understood as an instrument or technique of government that seeks to discipline design professionals to respond in appropriate ways to broader social and environmental concerns about the sustainability of the urban form. We develop the understanding that the design code is entwined with political and moral struggles to shape the good city, in which what are defined or understood as 'appropriate' approaches to spatial development are part of a contested and politicised field.

Chapter 9 concludes the book and seeks to reflect on some of the implications of (re-)centring the study of rule and regulation as part of the understanding of the practices of architects. We summarise the main messages of the book about the importance of rules and

regulations in relation to the governance of urban form and process. We seek to reinforce the understanding that the regulation of the practices of architects ought not to be conceived, as some have done, as necessarily inhibiting creative design actions and outcomes. Rather, they may also be thought of as generative, by facilitating as well as constraining actions. The chapter also discusses the theoretical and empirical implications of seeking to understand regulation, and its entwinement with architects, as part of relational socio-political formations. That is, regulation and the practices of architects are conjoined, and not necessarily part of separate spheres or domains of knowledge, expertise, and practice. We conclude by sketching out what a future research agenda is, or ought to be, in relation to enhancing the understanding of the role of regulatory activities in shaping the spatial form of cities.

1.4 Conclusions

There are few substantial writings about the regulation of architecture and its practices, and little by way of a systematic evaluation of the rule-bound nature of the design and development process (although, see Ben-Joseph, 2005a, Davis, 2008). While the scope of such a task is beyond this particular book, our ambition is to draw attention to some of the ways in which the practices of architects are entwined with, and influenced by, rules and regulations that seek to specify the form and performance of buildings. From the formative stages of human habitation, including the design and occupation of shelter, rules and regulations relating to the systematisation of building form and performance have been evident and documented by a range of writers. As suggested in this chapter, such rules range from tacit or informal understandings of what good building is or ought to be, often influenced by religious and cultural beliefs, to the perennial concerns about health and safety, and the need to safeguard human life from the possibilities of building defects and structural failures.

The underlying message of the chapter, and one that is an undercurrent of the book, relates to the continuing tension between architecture and building, and the split, or disjuncture, between the creative activities of thinking about design and its translation into the fabric of the built environment through the practices of construction. This observation draws attention to what Duffy and Dutton (1998) regard as a professional structure that has led to architects' failing to develop an appropriate understanding of management relating to building processes (also see Davies and Knell, 2003). This estrangement is linked, in part, to the ideological or value bases of architectural

production that, as we have discussed in the chapter, seek to perpetuate the discourse of an autonomous architecture, or what Habraken (2005: 136) refers to as the 'Palladian role model'. This model serves to emphasise the importance of architects' control of the design process, and the primacy of their ingenuity to craft and construct the built environment (Bentley, 1999, Sarfatti-Larson, 1993).

Such perspectives have, however, the potential to perpetuate representations of the design process based on what Tafuri (1976: 182) describes as 'impotent and ineffectual myths, which so often serve as illusions that permit the survival of anachronistic "hopes in design"'. The outcome is 'the death of the architect' whereby the architect is, according to Tafuri (1976), implicated in the (re)production of the ideological basis of architecture, or design as the pursuit of pure form. For Tafuri (1976), this basis, for the practices of architecture, is illusory, and it flies in the face of the manifold realities of a process shaped, increasingly, not by the architect, but by the actions of a multitude of actors and agents that operate outside of the architectural profession. In seeking to understand the actions of architects, this observation directs analytical attention to the broadcloth of socio-institutional forms and relations, including legal and quasi-legal rules and regulations that, in combination, are at the fulcrum of the production of the built environment.