Architectural Regeneration **(ISBN: 9781119340331)**

Chapter 1

Architectural regeneration and its theoretical context

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INTRODUCTION

Cycles of decline and rejuvenation, and the adaptation and re-use of buildings, have been common constants of the built environment throughout the history of human settlement. The more formalised practices of building conservation and regeneration on the other hand are an outcome of movements that emerged in the nineteenth century, which were informed by theoretical standpoints that were products of the post-Enlightenment positivist, rational and romantic outlooks (Gelernter 1995). Some of these theories and standpoints continue to inform interventions in the built environment, while others have been eclipsed by alternative worldviews and environmental realities. Architectural regeneration as a notion and as a distinct discipline emerges from a number of those concurrent, symbiotic, complementary and sometimes conflicting theories. The purpose of this chapter is to position architectural regeneration into its theoretical context and to demonstrate how it continues to be informed by a range of contemporary philosophies.

Worldwide, laws, policy and guidance concerning the protection and conservation of historic buildings have come to be based on a set of principles that have emerged from an international conservation movement that can be traced back to Eurocentric philosophies of the nineteenth century (Jokilehto 1999). The design of the urban realm, buildings and interiors meanwhile are regularly discussed and critiqued in the context of prevalent design theories which in the latter half of the twentieth century were deliberately separated from theories pertaining to the conservation of historic buildings. The processes of adaptive re-use, which architectural regeneration encompasses, can be seen simultaneously as part of the collective theoretical frameworks of conservation and design, and also outside of them. Although 'architects have led the conservation world in matters of principles and philosophy' (Muñoz Viñas 2011: 71), they have also been instrumental in de-coupling conservation from design. Architectural regeneration has emerged in this middle ground between conservation and architectural design.

At the same time, the broader realm of regeneration is often positioned in the domain of policy, spatial planning and economic development. Growing environmental concerns and climate change awareness are driving innovation in multiple arenas, including urban planning and building design. The current environmental crisis has become one of the key drivers for making better use of existing resources as well as for buildings to adapt to respond to new realities (Leatherbarrow and Wesley 2018).

Starting from the latter part of the twentieth century there have been an increasing number of publications on the subject of adaptive re-use. Nonetheless, a shared and accepted vocabulary and definition of what adaptive reuse is, and what it involves, remains ambiguous, with various terminologies and definitions prevailing (Plevoets and Van Cleempoel 2013: 13). The same ambiguity applies to regeneration more generally. One of the earliest books on the subject of re-use is Sherban Cantacuzino's *New Uses for Old Buildings*, published in 1975. The content, as that of many others that have been published since, is prescriptive and focuses on potential new uses linked to building typologies. Many of the volumes that have followed have remained technical (Eley and Worthington 1984; Highfield 1987) and heavily depend on case studies that are used to exemplify the processes, practicalities and design potential of re-use (Austin *et al.* 1988; Larkham 2000; Morrison and Waterson 2019). A new perspective was introduced by Stewart Brand in his book *How Buildings Learn*, published in 1997, where the value of built-in flexibility is upheld as a characteristic conducive to easy adaptability and a long use-span for buildings. There remains, however, a theoretical vacuum framing the subject, which this chapter intends to redress.

The chapter consists of two sections. In the first section we examine the various theories within which architectural regeneration is contextualised, and the second proposes a number of key principles that inform the processes of architectural regeneration.

THEORETICAL CONTEXT

Processes of transformation

Buildings are the subject of adaptation from the minute they are completed, the processes of transformation being both conscious and unconscious in intent and execution. Some elements are altered on a regular basis, some cyclically and others through major change and intervention projects. These are linked to cycles of use and redundancy, under-use or changing needs. In fact, buildings are never completed and are continuously altered and changed (Maudlin and Vellinga

2014). Adaptive re-use or regeneration projects are also not conclusive and merely form part of an ongoing narrative of change. The practices of building re-use and adaptation and recycling building materials are as old as buildings themselves. In eras when access to raw materials has been difficult, practices of re-use and recycling have been even more important and economically essential (Figure 1.1).

On an urban scale change may be slower, but this evolutionary process results in centuries-old structures continuing to shape the form and character of places. In the case of Rome in Italy a former stadium is now the urban square of Piazza Navonna, whilst the Roman period Diocletian's Palace has over time been transformed into the urban fabric of the city of Split in Croatia (Scott 2008). In the Syrian town of Aleppo the classically laid out Roman agora gradually morphed into a tightly knit complex of *souqs*, maintaining the commercial function whilst the architectural and social character evolved (Bianca 2000).

[INSERT FIGURE 1.1 ST ALBANS CATHEDRAL HERE]

The processes of transformation are natural and evolutionary on the one hand, or planned and directed on the other. The concept of 'adaptive re-use' indicates a conscious and planned alteration of a building to accommodate the changing needs of its function or for use in a new function. The process of regeneration, meanwhile, is a planned activity of renewal with intended economic and social benefits. Buildings are inherently linked to their surroundings. As buildings are transformed so are the places around them and changes to an area (new infrastructure, natural disasters, closing down of an industry) ultimately impact on individual buildings, their usefulness or desirability, the capacity to maintain them or the economic value of the land they sit on.

Architecture as a dynamic process

It is commonly understood that architecture is a process. Although architectural discourse is generally dominated by static representations of buildings in a state of completeness (often at the point of completion) architecture is rarely, if ever, finished (Maudlin and Vellinga 2014). The process of architecture is normally a long one, ranging from initial ideas and conceptions of needs, to the design of a building, a process of construction, and an often prolonged period of use, the latter sometimes spanning many generations. Architectural representations tend to emphasise short

phases of this process (the design stage, the construction phase, or the period of initial use); commonly those periods where the architect is most heavily involved.

In the case of conservation, the focus shifts to later stages in the process. This emphasis on distinct stages in the lifecycle of a building sometimes gives the impression that buildings are static objects that do not, or even should not, change; indeed, in some cases, the transformation of architecture over time is distinctly identified as a process of decline that needs to be stopped, as it results in a loss of authenticity, meaning or quality (Hugh Casson, quoted in Rybczynski 2011: 155). Such impressions are misleading, however, as they deny the processual nature of architecture and result in static, fragmented and incomplete representations.

Like other forms of material culture (Appadurai 1986; Gosden and Marshall 1999), architecture has a lifecycle that develops in relation to the social, cultural and environmental context it forms part of. As architectural discourse shows, buildings are commonly imagined, commissioned, designed and built. This process of production of architecture may sometimes take a long time and involves a range of actors and stakeholders: owners, investors, financiers, architects, planners, insurance agents, contractors and builders. The complex interactions of those stakeholders during the process of production takes place in equally intricate economic, political, environmental and cultural contexts, the peculiarities of which will differ from time to time and from place to place. There are as many different building cultures as there are cultures (Davis 1999; Oliver 2003).

But architecture is not just produced. Once a building is built, it is also consumed (Maudlin and Vellinga 2014). Depending on its function, it will be used by a variety of people at different times. These people may sometimes or partly be the same ones as those involved in its production, but often they will be different; even though they will commonly, albeit not always, form part of the same culture or social group. The period of use of a building is not a static phase, however, but will commonly include many changes and transformations over time. Buildings may change their function or use for a variety of reasons and at different times, depending once more on the economic, political, environmental and cultural context, as well as on their age and material condition. Buildings may be occupied, re-arranged, abandoned, re-occupied, extended, renovated, scaled-down, vandalised or conserved; sometimes indeed, one building may experience most or all of these stages during its lifetime. Ultimately, except in a few extraordinary cases, all buildings will deteriorate, fall into ruin or be demolished. Although less frequently the focus of attention in

mainstream architectural discourse, this process of the consumption of architecture is equally fundamental to the meaning of a building as that of its production; and normally lasts a lot longer.

Just as architecture is a process, it is also a cultural artefact. Architecture is produced and consumed by people who form part of social and cultural groups and who are guided during the process of design construction and use by a complex array of needs, ideas, values, wishes, beliefs, expectations, experiences and practices. Architecture therefore does not exist in a vacuum, but is intricately related to the social and cultural context of its users (Oliver 2003). Current cultural theory has shown how this relationship is a not a unilateral, but dialectical one. Architecture is not just an expression or reflection of pre-existing social and cultural relationships or identities, but plays a constitutive part in the creation and maintenance (or disruption) of such relationships and identities (Miller 2005; Vellinga 2007). At the same time, as already noted, the relationship between architecture and its social and cultural context is not a static but a dynamic one: buildings and their contexts transform over time, in a continuous dialectical process, the one influencing the other. The process of production or making of architecture; the materials, design and size of buildings; and the consumption of architecture by means of processes of use, appropriation and interpretation all play a part in the definition and constitution of not just buildings, but the social and cultural relationships and identities that they are intricately related to.

Buildings are continuously transformed, both physically but also indirectly in how they are interpreted and explained (Lowenthal 1985). Within the course of even a decade, societal views or interpretations of a type of architecture or specific buildings or places can change.

Conservation theory

Conservation principles that have become entrenched in conservation practice and policy today originated in post-Enlightenment theories of the nineteenth century and a renewed interest in and relationship with history (Jokilehto 1999). Many historians of conservation have pointed out how out of a shared philosophical background, two schools of thought emerged at this time: one advocating the return of a building to an 'original' state and thus period character and the other recognising that a building has layers of accumulation up to the present time (Jokilehto 1999; Glendinning 2013). The former claims authenticity in the original design and intent of the building, while the latter locates it in its 'as-found' condition. Nonetheless each position proposes a suspension in time, the point to or at which a building is preserved (Orbaşlı 2017). In this early period, the rationalist perspective further emphasised the quest for the 'truth' in buildings (John Ruskin in 1849), and 'honesty' in repairs and

alterations to ensure that the past and the later additions were simultaneously legible (William Morris in the SPAB Manifesto of 1877). The visual differentiation of new and old has been a common trait of new design in the historic environment, and is discussed in more detail in the chapter by Gaskin in this volume.

Up until the Second World War, the focus of conservation constituted major monuments and historic or ancient sites, and as such aligned with a desire for maintaining buildings for the function they were intended and designed for, and advocating the principles of minimum intervention (Orbaşlı 2017). As the conservation field grew and expanded in the second half of the twentieth century to include a multitude of building types from industrial to vernacular and to encompass group values and entire neighbourhoods, conservation policy and practice has continued to rely on extrapolated or scaled up versions of these early principles. Planning decisions often rely on these established conservation principles as a tool of development control, possibly because they largely relate to the physical fabric and can therefore be assessed with relative ease.

Conservation theory continues to evolve in the face of new challenges and shifting world views (Orbaşlı 2017). The combination of a growing plethora of building types, and with twentieth century buildings also materials and technologies, and a postmodern worldview has led to a marked shift to a values-based approach to conservation. A values-based approach recognises that the significance of a building or place is related through values that go beyond the historical and physical attributions of the architecture to embrace associative values of meaning. A broader value set, including intangible values, can play an important part in the decision to retain and reuse a building, the proposed new or adapted function and the way in which the adaptation is designed. The typical value sets that are currently being advocated by the Getty Conservation Institute (de la Torre 2002), the Burra Charter (Australia ICOMOS 2013) or the Historic England Principles (2008), however, fall short of broader and more integrated value sets that influence buildings and places as human habitats.

Although the consideration of a plurality of values creates a good foundation for conservation and architectural regeneration, there is still a need for more holistic approaches to value designations and evaluations. Values are not inherent to a building or a place, they are always ascribed, and as such will be influenced by prevalent social conditions (de la Torre 2002). Furthermore, the values ascribed to a building are often a small subset of a broader set of values that are linked to a wider area. Often overlooked are larger value sets, such as environmental and sustainability values, or

value sets of global concern, for example those embodied in the UN Sustainable Development Goals. Leatherbarrow and Wesley (2018) argue that physical sets of information, such as those connected to the environment, can also be presented as values. In the architectural design process, and in architectural regeneration, proposals will also need to align with the values and priorities established at the start of the process (Plowright 2014).

Defining a continuum: re-merging conservation and design in architecture

The distinct role and position of the 'conservation architect' is a twentieth century phenomena. As a defined conservation movement was emerging across Europe in the nineteenth century, conservation was considered the work of architects, and many saw it as a seamless continuum of their design practice. The English architect Giles Gilbert Scott, for example, was simultaneously designing Gothic style buildings and restoring ancient churches and cathedrals. More critically, the theoretical standpoints of honesty and truthfulness seamlessly spanned architecture and conservation practice. By the middle of the twentieth century, however, the growth of modernism and its 'anti-history' stance, as well as a populist conservation movement focusing on protecting treasured historic areas from being raised by developers, created a schism between 'design' architecture and 'conservation' architecture (Orbaşlı 2017).

Historic buildings don't necessarily fall into exact administrative categories, but in their historical and cultural significance reside within a broad spectrum, from highly valued artistic accomplishments, such as a major place of worship, through to less exemplary buildings that sometimes make up the character of conservation areas, as well as the vast majority of buildings that constitute the existing building stock and that have been around for the past 50-100 years. In the conservation approach, interventions in the existing built environment follow a similar spectrum of permissibility based on an assessment of the cultural value and significance of the building. An assessment of values determines significance and informs the levels of permissible change based on this understanding. On one end of this spectrum will be minimal interventions, carefully considered and meticulously administered by a professional and specialist team well versed in conservation practice. On the other end will be developer-led approaches to refurbishing a standard quality office building, and in the design realm, new extensions and additions to existing buildings and new buildings in a historic context.

This positioning of conservation and design at opposite ends of a spectrum (rather than on a seamless continuum) creates the duality of the conservation architect and the design architect. In

projects that might be termed 'pure' conservation, the primary object is the historic building and the professional/architect involved is more likely to be one trained in the theory and practice of conservation; whereas the extension and adaptation of existing buildings is in practice often perceived to be the realm of 'design' and of architects who see their major function as 'designing', with little regard to conservation principles that advocate understanding and value analysis of the existing/historic building. These approaches, however, ignore the fact that the understanding of values and significance are part of an architect's toolkit and that design is integral at all stages and types of intervention to a building or place.

Positioning conservation and design within a continuum with shared domains of knowledge enables us to place architectural regeneration within this continuum without the need to draw absolute boundaries of disciplinary discourse and practice.

Architecture as a transformative tool

The understanding that architecture is a dynamic process that is dialectically related to the constitution and maintenance of social and cultural relationships and identities, draws attention to the transformative potential of architecture and is of crucial importance in the context of a theory of architectural regeneration. Because architecture does not simply express or represent existing social or economic realities, but is directly involved in their constitution, it means that the design, construction and use of buildings, as well as their regeneration, have the ability, in principle, to transform such realities. Architecture is not simply a passive expression, but an active tool (Vellinga 2007). Through the creation, manipulation and use of space, form, function or material, those involved in the production and consumption of architecture (owners, architects, users, or investors) have the potential to influence and change relationships and identities. This transformative potential is not restricted to one stage of the lifecycle of a building (its original design, say, or its construction), but present at all stages of a building's existence; its occupation, for example, as well as its conservation or regeneration. Social or cultural changes may impact the design of architecture but, similarly, the change of architectural conditions, for example as part of a regeneration programme, may influence and transform social, economic or cultural relationships or identities.

The nature and extent of such transformations will of course vary. In some cases, the new design and construction of one or more buildings is the major factor in constituting social, political or economic realities. In other cases, it is the re-use or rehabilitation of already existing built environments that has such an effect. In either case, architectural interventions may be small,

focused on one or a small number of buildings, and may result in only minor (yet meaningful) modifications of social relationships, perhaps at a family or community level. Other interventions may involve more or larger buildings, or public spaces, sometimes of a more symbolically loaded nature, and have larger implications related to regional or national identities and movements. Some may involve changes of use or spatial arrangement; others may entail the use of different materials or technologies; yet others the application of specific decorations or forms. In some cases, the transformations will be mainly of a social nature; in others, political or economic changes, or a combination of all of those, may be the main result. The appreciation of the resultant social, economic or political relationships may differ as well. Architectural transformations may result in better housing conditions or improved environmental standards; they may also cause unwanted effects, such as population displacement, gentrification or social unrest.

The processual and dialectical nature of architecture and its social and cultural context, and the transformative potential of architectural design that it entails, is a major component of a theory of architectural regeneration. It provides a foundation for an approach that recognises the ever-changing nature of the built environment (embodied in a diversity and layering of building types, forms, materials and meanings) as the result of human agency and intentions that are themselves influenced by and of influence on environmental, social and cultural contexts. This recognition makes it possible to see interventions undertaken in the process of architectural regeneration as part of continuous, creative processes of transformation, rather than as singular events that result in a loss of the value, character or authenticity of places or buildings. Any intervention will change the way a space is perceived and is likely to interrupt the original architectural concept, such as through the re-ordering of spatial hierarchies. Such interruptions are creative and authentic in themselves, however, and form part of a natural cycle of decline and rejuvenation. Intervention is an art form that generates a dynamic between the timelessness of a building and the temporality of uses (Scott 2008).

Architectural (design) theory

Design theory 'encompasses a wide variety of subjects, from describing the essence of beauty to asserting the social and political consequences of building layouts' (Gelernter 1995: 1). Most design theories consider buildings as individual entities defined by form, style and function and conceived through creative, political and social processes. This was also the viewpoint taken by early conservationists, whether they were assessing a past form and style as the 'truth' or whether they

were suspending the building in time at the moment of conservation rather than seeing interventions as part of an ongoing process of use and adaptation.

Within the design theory field, architectural regeneration particularly intersects with theories of functionality and redundancy. Functionalist theories link form with function, and assert that a building becomes redundant when its assigned function is removed. Yet functions and the functionality of buildings can evolve (Scott 2008) and, more importantly, the creative process can also include finding a new functionality. Nor is form always an expression of the intended function. 'Functionality does not have any ideal stable state. Fitness for purpose is questionable. All buildings eventually become dysfunctional' (Verebes 2014: 62). In the process of architectural regeneration, form is to an extent pre-determined, but can be altered and disrupted as it takes on the new persona of form serving a new function. Functional changes will also have an impact on the surrounding environment and functional change at a larger scale may influence the socio-economic make up of a neighbourhood or influence wider societal change (Scott 2008).

Plowright (2014) argues that architectural design theories are more often used for analysing architecture than informing its production: 'In professional practice, the role of theory can be problematic and obscured, many times removed from visibility in normative design practice.' (Plowright 2014: 7). Traditionally architectural theorists have been prescriptive in their output, whether it was Vitruvius in the first century BC promoting classical architecture or Le Corbusier in the twentieth century AD promoting modernism. It is only in more recent years and after a 'societal shift to Postmodern thought' that architecture is theorised beyond prescriptive and method-driven approaches (Plowright 2014: 58); a shift that is also evident in conservation theory in its promotion of values-based approaches that emphasise a multi-dimensional understanding of places (Orbaşlı 2017). At the same time, work in disciplines such as design anthropology is beginning to redefine the relationship between the processes of design and processes of making, arguing that design does not stop once a building is built, but continues throughout its use by means of the everyday activities of its owners and inhabitants (Gunn and Donovan 2012; Ingold 2012). It is therefore not surprising that architectural regeneration and its inherent fluidity and multiplicity emerged in this post-modern era. Architectural regeneration finds itself in a period where disciplinary boundaries are blurring, multiplicity is celebrated and inter- and cross-disciplinary approaches to design are acknowledged.

Amongst various design theories, the spirit theory advocates that 'spirit of the time' is a decisive element in the production of the built environment (Gelernter 1995). In the same way that

architectural design will evoke the spirit of its time, including prevailing social and economic conditions, so too will architectural regeneration. Whilst values seen to be inherent to historic places shape if and how they are maintained and regenerated, other values such as those linked to greater environmental consciousness inform the adaptation process (the reasons/ objectives of adaptation), materials and design.

Regeneration theories

Regeneration is driven by political will with a desire to achieve economic development and improve wellbeing. It has been variously defined as a holistic process that is deliberately undertaken to resolve problems, where this cannot be achieved by market forces alone (Roberts and Sykes 2000: 17; Pattison *et al.* 2016: 2).

Tallon (2013: 5) maintains that the discipline of urban regeneration is rooted in practice and thus revolves around pragmatism and experimentation, and claims that theory and practice are therefore largely similar. Leary and McCarthy (2013: 7) on the other hand point to two theoretical underpinnings of regeneration that appear to be paradoxical but often function in parallel. The first comprises European Enlightenment concepts of universalism and a citizen's right to welfare and a healthy environment, later reflected in post-Second World War Keynesian arguments for the welfare state and most recently in the United Nations Sustainable Development Goals. The second theoretical point they emphasise is neo-liberalism and its promotion of the entrepreneurial rather than the municipal model for urban management. In the practice of regeneration these can support shared but also opposing goals. Both these positions clearly imply that there are more dimensions to regeneration than the built form, including the position of improvement for the wellbeing of a community and their rights in this respect. However, the entrepreneurial dynamic suggested here critically moves the key players' position from being reactionary and regulatory to positions of realising regeneration objectives. Both theoretical underpinnings recognise that architecture and space have a transformative potential and can be used to change socio-economic conditions.

Area based-conservation with its particular focus on historic and 'traditional' settlements and neighbourhoods has developed as an extension of building conservation theories and principles as much as it has from the practical field of regeneration through an acknowledgement of the political, social and economic context. The urban conservation discourse and practice has largely focused on defining and maintaining the visual and aesthetic qualities of places over other meanings and pluralities (Punter and Camona 1997:73). The more social dimension of area-based conservation

developed through the advocacy of participatory approaches by urban theorists such as Patsy Healey (Ballantyne 2005). Healey (2002) identifies place as a societal concern, which necessitates a more ethical approach to planning practice that gives voice to multiple stakeholders.

In the urban planning and land use context, theories of urban ecology establish the complexity of relationships amongst human beings and their environments. Writing on the factors that influence land use change in 1954, William Form identified the importance of social structures to decision making and argued for analytical models that adapt ecological approaches to the analysis of urban change alongside sociological and economic ones (Form 1954). The notion of urban places as ecologies was popularised by Jane Jacobs in the 1960s. The recognition that the built environment is more than a sum of its parts, but an interconnected and continuously evolving system has come to be accepted in the context of regeneration and the UNESCO backed Historic Urban Landscape (HUL) approach launched in 2009, which deliberately uses the term 'landscape' to describe the patterns of change in the urban context, and which also recognises the need to emphasise the interconnectivity of the natural and urban environment (Bandarin and van Oers 2012). Dealing with the environment is also a cultural issue as ecological problems are linked to and often originate from social problems (Leatherbarrow and Wesley 2018).

Theories of place identity and authenticity

The notion of place identity, together with related concepts such as sense or spirit of place, place attachment, and place making, has been extensively used since the second half of the twentieth century in a range of disciplines, including architectural design, conservation and regeneration, to capture the significance and meaning that specific localities or buildings may have to their inhabitants (Altman and Low 1992; Cresswell 2004; Manzo and Devine-Wright 2014). Applicable to urban, rural and suburban places alike, it refers to the ways in which a physical, emotional or spiritual connection to a place can foster a sense of community and belonging among its users, similar to the ways that kinship or a shared language or culture can also do. An underlying assumption is that a place, as a particular location with specific attributes, can be distinguished from other places and possesses its own unique history and identity that is expressed through its climate, natural landscape and built environment, is intricately connected to the identity of the community, and gives rise to a particular style of architecture.

In relation to the theory of regeneration, the notion of place identity is relevant because its maintenance, strengthening or rejuvenation is often an explicit aim of all involved stakeholders,

especially local communities and their representatives. Regeneration projects are often expected to be sympathetic to the local sense of place, as embodied in, for example, street patterns, building forms and materials, or social and economic practices. In part this is because of a wish, often promulgated through community activism groups, to save places that are locally valued and the social networks that are historically seen to belong to them. In many instances, the economic benefits that can come from a good 'fit' with locally distinctive place characteristics, through processes of commodification and architectural branding, play an important role too (Gold and Ward 1994).

The notion of place identity as employed in architectural regeneration projects sometimes implies an understanding of place and identity as stable categories that imply that both places and the communities that live in them are fixed and rooted. From this perspective, certain groups of people (often identified as 'locals' who have lived in a place for a long time or who are engaged in specific social or economic activities) claim rights to a place to the exclusion of other communities, for instance immigrants or other social classes. In some such instances, the connection between communities and places is even seen to be spiritual or primordial. The impacts of processes of modernisation and globalisation, however, have shown that such a perspective can be challenged. Not only is it difficult to define the boundaries of places, localities and identities, especially in a period of increased 'flows' of peoples, goods and ideas (Castells 2000); it has also become clear that places have always changed over time, and will continue to do so, and that the identities associated with them are never given, but always in a state of becoming (Jackson 1994; Appadurai 1996).

The realisation that place identity is difficult to delineate, dynamic, ascribed and often exclusive raises questions of authenticity. Although authenticity is often associated with notions of truth and honesty, it is in fact difficult to define. Not only have definitions of authenticity, and the importance that is attached to the notion, changed over time; they are also differently judged by different cultures, or even members of the same society (NARA 1994). Authenticity is often seen to be associated with an original process of design and making. Those values and meanings imbued by the maker (in the case of a building the architect) are seen to be the authentic ones (Upton 2001). From this perspective, any adjustment to a building, for instance during a process of adaptive re-use or regeneration, results in a loss of authenticity. However, more recent discourse has shown how notions of authenticity, like those of place and identity, are not fixed but dynamic. The changes of architectural function, material or dimension, the addition of extensions, or the insertion of new buildings in historic contexts that come with the process of architectural regeneration do not

necessarily result in a loss of authenticity; instead they can be seen as authentic acts in their own right, adding to the layers of meanings commonly associated with a place or building, and contributing to the active reconstitution of identity (Upton 2001). This is explored in more detail by Aleixo in the case study of Portuguese school buildings.

Speeding up and time theories

Thomas Hylland Eriksen, a Norwegian anthropologist, identifies a condition of accelerated change in a number of interrelated domains and in particular globalised economic systems triggered by modernism that impact on the environment, mobility and collective identities (Eriksen 2016: 470). The conditions of accelerated change are conceptualised by Eriksen (2016) as 'overheating', and the start date for the acceleration of change placed at 1991, the end of the Cold War.

References to speeding up of phenomena are being discussed in a number of domains that concern architectural regeneration. Zeiderman *et al.* (2017) discuss the rapid speed of urban growth and transformation that is taking place across the globe in the context of the New Urban Agenda, and draw attention to the conditions of uncertainty this has generated. They argue that although uncertainty has always been part of city life and planning, it has never experienced the urgency it does today. Baumann (2000) has similarly argued that contemporary, late twentieth and early twenty-first century economic, social and political conditions resulting from a shift from what he calls 'heavy' or 'solid' modernity (in which the economy, and consequently social and political life, was dominated by fixed 'hardware', such as manufacturing plants and national governments) to a 'light' or 'liquid' modernity (in which flexibility, small software and an increasingly absent state have become the determining factors) are characterised by increasing speed, fluidity and social insecurity. Bandarin and van Oers (2012) note that where it is in the dynamic nature of cities to experience cycles of change, growth, decline and regeneration, the pace of the change is increasing. As Loncar and Vellinga (this volume) note, such rapid changes and the social, economic and political uncertainties they entail are not restricted to urban settings, but also can be found in many rural parts of the world. Similar experiences of regeneration and concepts of super- or hyper-gentrification are not only about scale, but also about the speed at which gentrification occurs (see chapter on urban conservation by Orbaşlı in this volume).

In combination, the global economic, social and political shifts that characterise the beginning of the twenty-first century, together with increasing environmental changes and uncertainties, have resulted in a world that is at once more connected, dynamic and fluid, as well as less predictable,

more temporary and less secure. In such a fluid environment, in which everything (social relationships, political alliances and economic models; buildings, spaces and places; ideas, values and aspirations; even materials and resources) may be said to be in a continuous state of becoming (Ingold 2011), the cycles of decline and rejuvenation, and the adaptation and re-use of buildings that have characterised built environments throughout human history are likely to happen more regularly, quickly and unexpectedly. Because of its positioning between new design and historic conservation, architectural regeneration can offer the flexibility and adaptive capacity that places and buildings will need to remain meaningful to increasingly dynamic, diverse and heterogeneous communities (see chapter by Orbaşlı and Karmowska in this volume).

THE PRINCIPLES THAT SHAPE ARCHITECTURAL REGENERATION

Architecture is a cultural process

Although representations that present architecture as fixed buildings or objects, independent from their cultural context, remain commonplace, it is generally recognised that architecture is a cultural process. Any place or building, be they urban or rural, monumental or everyday, historic or contemporary, is intricately linked to the people that design, build, inhabit or are in any other way connected to it (visitors, neighbours, passers-by), as well as to its environment. As the communities that those people form part of, and the cultures that they represent, inevitably change over time, often in correlation with the environment, so do the places and buildings alter in a mutually constitutive way. Any change in social, economic or political relationships, be they at personal, family, neighbourhood or national level, as well as in environmental conditions, will inevitably be accompanied by changes in architecture: sometimes gradually, small and almost imperceptible; sometimes instantly, large and very obviously. The other way around, any changes made to places and buildings, be they spatial, material or functional, will be attended by minor or major social, economic, political and often environmental transformations.

A recognition of this processual nature of architecture and its relation to culture, society and environment lies at the heart of the field of architectural regeneration. Regeneration, aimed at the improvement of architectural and socio-economic conditions so as to realise a more vibrant future environment, attempts to strike a balance between the past and present, between tradition and modernity, and between conservation and design. Such a balance appears ever more important in an increasingly fluid, fast-changing and unpredictable world.

Context/environment matters

Conservation theory and the principles derived from it often consider buildings as single entities within a 'setting', rather than as part of a complex system of environmental, economic, physical, historic and social networks. Within the remit of architectural regeneration lies a myriad of building types, small and large, ranging from the conversion of a public toilet into a house to the transformation of an entire historic dockyard into a mixed use urban quarter. All such building types are intricately and dialectically related to their historic, social and environmental contexts, be they urban, suburban or rural. Because of this contextualisation, architectural regeneration involves more than adapting buildings to new or improved uses. Any intervention or adaptation will have an impact on the context of buildings too. Architectural regeneration is underpinned by the principles of environmental and social sustainability, and recognises the position of buildings in the broader regeneration context of the urban or rural environment. Moreover, it acknowledges that decisions concerning the choice of new or evolved uses and the financial capacity to achieve goals, directly impact on regeneration, social well-being and the environmental context.

Architectural regeneration is a complex process that is not only informed and influenced by the past legacy and present condition of a building and place, or the future aspirations for it, but also by the wider social, cultural and environmental context that they form part of. It does not occur in a vacuum but takes place within the economic and political conditions of its time.

Adaptive capacity and robustness

The capacity of a building to adapt to changing uses and needs is its adaptive capacity, and is defined as: 'the potential of a space to accommodate different uses without any significant modifications to its physical attributes' (Fernando 2007: 55). Brooker and Stone (2004) describe it as a capacity to withstand change. Brand (1994: 23) notes that 'age plus adaptivity is what makes a building come to be loved'. While flexibility 'refers to a space that accommodates different uses by being easily changed' (Fernando 2007:55), adaptive capacity is also closely linked to the values of a building. It might be argued that the higher the architectural and historic values and significance of a place, the less will be its capacity to adapt.

Adaptive capacity is also linked to robustness. While adaptive capacity is the capacity of a building or place to be changed, while still upholding its architectural, historical and cultural values, robustness comprises the characteristics of the building that heighten its adaptive capacity. Robustness is physically determined by construction method, materials, architectural character

elements and layouts. An example of a robust building might be an industrial warehouse, where even through a series of significant adaptations such as piercing in an atrium, dividing the floor space into apartments and inserting glazing and balconies into the exterior façade, the ultimate character of the warehouse, expressed through its volume, brick elevations, and rhythm of openings, is maintained. Within the context of adaptive capacity, robustness is an important determinant of the levels of change that are possible and desirable (Figure 1.2). A structurally robust building will also be a financially more viable option when it comes to adaptation.

[INSERT FIGURE 1.2 MANCHESTER LIBRARY HERE]

Verebes (2014) identifies a paradox between fixity and adaptability in contemporary planning. However, existing buildings can encompass both a fixed framework, character defining in the urban realm and related to a sense of permanence; as well as provide a base for repeated adaptations, including temporary fixtures. The processes of architectural regeneration are based on understanding the values of a building, which also informs the capacity for change, including the building as a whole, various components of the building (elements), functional change (linked to economics) and implications for the wider surroundings, neighbourhood and social context of a place.

The art of adding and subtracting

Any form of change creates disruption to an existing system. Architectural regeneration is thus a process of larger and smaller disruptions to an existing building or place. Removal and demolition is part of the process of architectural regeneration and the removal of entire buildings, parts of buildings or components are actions taken to improve the value of the whole. Interventions, whether they are large or small, impact on the physical form, spatial layout and movement patterns, the meaning and environment: in a single space, in a building as a whole, to the location and neighbourhood of the building.

These processes of disruption can be multi-scalar, permanent or reversible. On one level it could involve the reorganisation of an interior space or the addition of new layers that alter the appearance and spatial characteristics of a building layout to support new functionalities. On another level it can involve a complex re-shaping of a building or group of buildings through processes of removal and addition, including the creation of new connections amongst various components. In all cases the result is perceived as a new space with its own architectural expression,

but one that also absorbs and communicates the character and values of previous chapters in a building's existence. On some occasions interventions are specifically conceived to be reversible, especially in projects of a temporary nature (Figures 1.3 and 1.4). However, in most cases of architectural regeneration, the disruption is a permanent feature and as such remains contrary to the conservation theories of reversibility (Feilden 2003).

Ultimately, architectural regeneration is about optimisation of a building or place for a new function, for new user requirements, for reduced environmental impact and for economic return. From this perspective, disruption becomes part of the creative process and the source of innovation (Figure 1.5).

[INSERT FIGURES 1.3, 1.4 MILAN, DELFT]

[INSERT FIGURE 1.5 CAMDEN ROUNDHOUSE - addition]

Contextual complexity and interconnectedness

Any form of architectural production involves 'linking practicality with artistic judgment' and 'linking many disparate elements because buildings are such large, complex and value laden objects' (Duffy and Hutton 1998: xv). Architectural regeneration therefore has to be taken as a multi-disciplinary pursuit that not only recognises the multiple value sets associated with a place, but also seeks to make adaptations that are functional to the building, improve its environment and its adaptive capacity, with each element of change impacting on a broader context. Using the analogy of a coral reef, Goodwin (2014) sees the transformations that shape and change buildings within the urban context as akin to the complexity of reef systems. The urban environment, or indeed any built environment, is therefore more system than a rigid plan with the continued transformation of the buildings within it.

Writing on the Historic Urban Landscapes (HUL) approach and positioning the discussion in the postmodernist context, Bandarin and van Oers (2012) emphasise the complex nature of urban transformations as they are influenced by a multiplicity of factors and players. As urbanism has clearly shifted from the totalitarian modernist vision to a more post-modern worldview, the city is no longer considered a totality, but more a composition of fragmented realities and perspectives (Boyer 1996). As Loncar and Vellinga (this volume) show, the same can be said for many rural places.

Plevoets and Van Cleempoel (2013: 13) note that adaptive reuse has become an intellectual and practice field that spans the scales of interiors, architecture and planning, coupled with 'economic, ecologic, cultural, social and political concerns'. In regeneration, adaptations happen at various interlinked scales that impact on one another. These could be considered as concentric circles starting from the interior of a building through stages to building, block or cluster of buildings, the neighbourhood, town/city, region and territorial scales. A change in any of the scales is likely to impact on the scales either side of it, and the greater the magnitude of change, the greater the impact and ripple effect across several various scales. Each scale in this diagram is considered as an interconnected natural and social environment ecology (see Figure 1.6).

[INSERT FIGURE 1.6 SCALES HERE]

Design adds value

Architectural regeneration at both building and urban realm scales can create new and exciting places (Latham 2000). Although design is not fully the resolver of a so called 'problem', as in any design process, in architectural regeneration there is also a point at which technical method gives way to creative expression. As a design discipline, just as in architecture, architectural regeneration also has 'multi stakeholders and non-discreet layers of content' and is 'context dependent rather than product-focused' (Plowright 2014: 27). When viewed as a socio-cultural concern, architecture becomes a tool for negotiating rather than solving problems (Plowright 2014).

Architectural regeneration presents new creative opportunities for architects and broadens their role from designer to think creatively about how a building could be re-used, recommending functions, proposing imaginative approaches to meanwhile interim uses, and phasing projects to maximise income flows that enable a project to be realised. Architectural regeneration is also a field where the architect as entrepreneur emerges more prominently, especially on pop-up style temporary projects (see the chapter by Orbaşlı and Karmowska in this volume). The role of the architect as a creative professional spans a larger part of the process; masterplanning an existing area, for example, also requires a creative approach, as does building local agency to articulate aspirations and develop options. Notably, the architectural regeneration practitioner is not simply a historic building 'specialist' brought in to advise on a very specific aspect of a project.

Creative strategies in architectural regeneration can support the increasing necessity to improve resilience, which has to be built in at different levels in both urban and rural areas, City authorities

recognise the value of innovation as a driver of urban growth (Bandarin and van Oers 2012). Sustainability also demands imagination, innovation and invention (Osborne 2013). Alongside creativity, innovation has become a favoured buzz word in decision-making, investment and brand management circles. In times of rapid change, innovation can be a game changer at every scale (from urban transportation systems to servicing buildings) and must be recognised as an important part of architectural regeneration.

CONCLUSION

Architectural regeneration is the collective activities of reusing, adapting and evolving existing buildings within an urban or rural context in ways that recognise the impacts these decisions and interventions have on the regeneration of a place, and that are underpinned by the principles of environmental, social and cultural sustainability.

Through the discussion above we have illustrated how adaptive re-use can be situated within theories of architecture, design, conservation, regeneration, cultural and environmental studies. Architectural regeneration is influenced by these theories, it borrows and adjusts, and ultimately contributes to their evolution. Most importantly, we have demonstrated that the practice of architectural regeneration is dynamic and complex, in that it not only negotiates variables of a physical and empirical nature, but also has an impact on social, cultural and environmental contexts.

The processes of architectural regeneration are thus informed by a number of principles that overlap with principles that inform design, conservation, environmental and social practices, but also position architectural regeneration in its own unique sphere. The re-use and regeneration of the existing built environment is simultaneously shaped by architectural, spatial, environmental, economic and social contexts, while itself being part of a continuous cultural process. The tangible and intangible adaptive capacity of a building or place informs its capacity to change and to be altered, whilst maintaining architectural and social values and meanings through the physical processes of addition and subtraction. Architectural regeneration is inter-scalar and not only does it take place at different scales ranging from the interior of buildings to city regions, but in ways that mean that change at one scale inevitably impacts on other scales. Ultimately, the success of architectural regeneration is driven by innovation and creative approaches to design, functionality and finance.

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Captions

Figure 1.1 St Cathedral and Abbey Church of St Alban in England whilst maintaining its functionality as a place of worship for most of the time since it was built up until the present day, has been regularly restored, altered, adapted and extended including in the twenty-first century. Each change visibly evident in the fabric of the Cathedral, while also becoming part of a whole. The structure also exemplifies numerous examples of recycling, most notably Roman era bricks that form the tower (Photograph by Aylin Orbaşlı, 2015)

Figure 1.2 A new underground extension to Manchester Central Library includes a subtle link with the Library's domed reading room, which as one of the most significant interior features of the library retains its integrity (Photograph by Aylin Orbaşlı, 2014)

Figure 1.3 New canopies generate a link between a historic building and a more contemporary one in Milan. By touching neither building they can be removed, replaced or altered at any time (Photograph by Aylin Orbaşlı, 2016)

Figure 1.4 At Delft University of Technology in the Netherlands, an orange coloured 'tribune' designed by MVRDV provides both lecture and research space, as well as being an actively used communal hub for students placed in the midst of a historic courtyard which has been covered over. The structure is both a disruption and a celebration of the historic building and its courtyard. (Photograph by Aylin Orbaşlı, 2018)

Figure 1.5 The Camden Roundhouse is an example where a side addition provides the necessary service spaces that makes the roundhouse a viable concert venue while maintaining the distinct round form externally and internally (Photograph by Aylin Orbaşlı, 2007)

Figure 1.6 Architectural regeneration spans many scales, where a disruption (change) at any one scale impacts on scales either side of it, and potentially several scales depending on the magnitude of an intervention.