THE FARRELL REVIEW
of Architecture + the Built Environment

"OUR FUTURE IN PLACE"

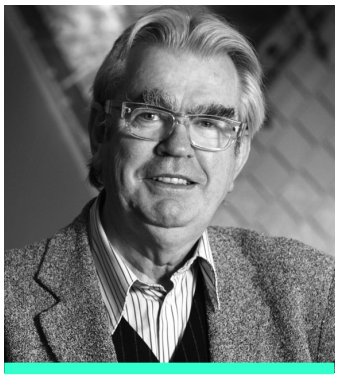
AN INTRODUCTION

BY SIR TERRY FARRELL CBE

Contents

Introduction

In January 2013 Ed Vaizey, Minister for Culture, Communications and the Creative Industries, asked me to undertake a national review of architecture and the built environment. I have undertaken this Review independently with my team at Farrells and advised by a panel of 11 industry leaders with a breadth of experience that covers education, outreach, urbanism, architecture, property and philosophy.



Sir Terry Farrell CBE
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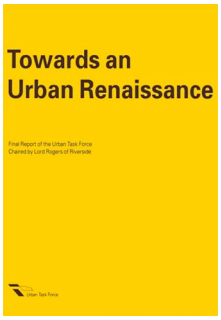
What I mean by "independent" is that it is a review which, although it is intended to help and inform government, is independent of party politics and has been funded independently. We have engaged with different political parties, but it is not just for the benefit of the government and politicians. Everybody is involved in shaping our built environment in one way or another, a trend that is increasing with information and communications technology, and this Review has been as far-reaching and inclusive as possible. It is just as much for schoolchildren as it is for adults, from all walks of life, and all those professionally involved in town planning, landscape, urban design, architecture, heritage, surveying, engineering, construction and property development.

The Review is intentionally broad in its scope and addresses overarching themes as well as more detailed issues. I am conscious that it is kind of stocktaking that hasn't happened before, which is surprising, given the critical role that the built environment plays in our social, economic, environmental and cultural wellbeing. The closest was the Urban Task Force report, *Towards an Urban Renaissance*, in 1999. But the remit for this report was focused more specifically on town centres and urban regeneration. It also differed in that its primary role was to help the policy formulation of a government taking office which would be in power for two consecutive terms.

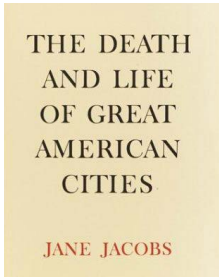
This Review is intended to be non-partisan and shaped and owned by everyone involved.

In terms of the bigger picture, a lot has changed in the last 15 years. We have seen major shifts in the world economy, with the accelerated growth of emerging economies in the East and a rate of urbanisation globally whereby an amount of development equivalent to a city the size of Birmingham will need to be built every week for at least the next twenty years and beyond. At the same time, digital technology has transformed virtually every aspect of our personal and professional lives and it is expected to continue to do so ever increasingly. Whilst there have been considerable changes happening, many aspects of our institutions and the education of our professionals have stood still. There is increasingly wide realisation that there is real need for change and that now is a good time to square up to it.

The nature, scale and scope of built environment design have changed beyond all recognition during my professional lifetime, and we are now at a fascinating transition point where new trajectories are beginning. There have been fifty years of powerful currents eroding and modifying the way we think about the built environment and challenging what once seemed to be solid ground. These old certainties were often based on illusions, and it is helpful to describe how these currents have developed, as the future is in so many respects the child of the past.



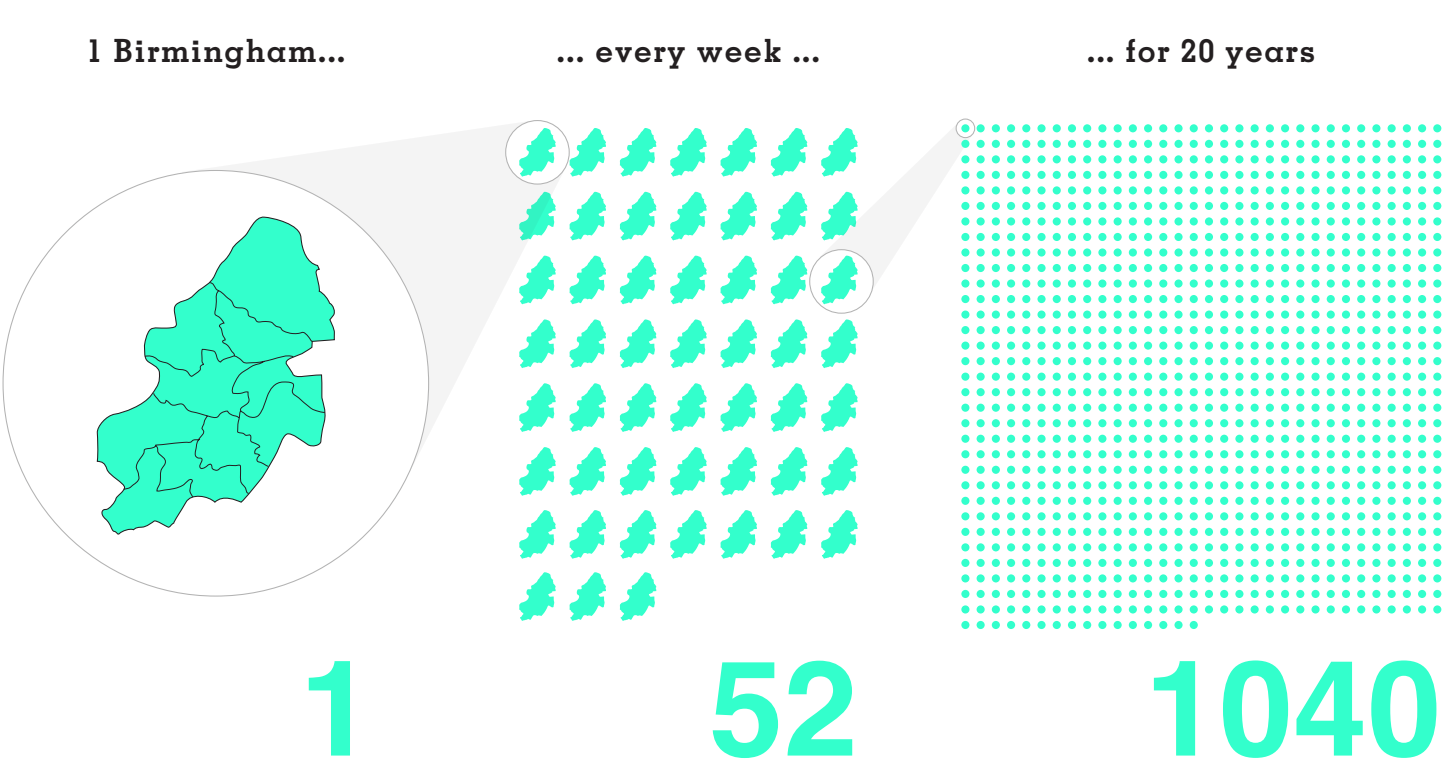
Urban Task Force,
***Towards an Urban Renaissance* (1999)**



Jane Jacobs, *The Death and Life of Great American Cities* (1961)

Today there is a much better understanding of the way in which the built environment is altered, defended, attacked, valued and made extraordinary. And it is important to say at the outset that the general standard of architectural design has improved and improved over the decades, and indeed so has public awareness of environmental issues. The former is a great credit to the architectural schools, our institutions and the fellow professionals, clients and public who all play a part in making the standard as high as it is. But the frustration of all parties is that these achievements make such a small dent in the wider picture of our built environment – whether due to introversion on the part of the architects and supporters who, in spite of the quality of their architecture and a merry-go-round of awards and publicity, actually contribute so little in quantitative terms to the total of the buildings around us; or whether it is a lack of public awareness of the possibilities of how much better things could be, and indeed are, when proper thought in planning and design wins through.

It was fifty years ago that Jane Jacobs first used the phrase "organised complexity", which was adopted much more readily by the scientific community, although recent generations of built environment professionals have become much more interested in aspects of the built environment that are not necessarily "built". People make places, and the way we use our built environment to interact, work, live, play and relax is crucial to good urbanism and to this Review.



We need to build the equivalent of one Birmingham a week around the globe for the next 20 years if we are to house the growing urban populations.

The themes of the Review

There are four key themes which were set out in the terms of reference for the Review, with an additional theme of built environment policy which addresses the legacy and proposed way forward.

There are also some very important themes which are cross-cutting and run throughout all of these themes like sustainability, digital technology and the need to integrate a growing number of specialisms within education, professional life and government.

1. EDUCATION, OUTREACH & SKILLS

Education from primary through to professional education; engaging with the public and skilling up decision makers

2. DESIGN QUALITY

Changing the culture of planning and improving the everyday environment by making the ordinary better

3. CULTURAL HERITAGE

Our built environment past, present and future

4. ECONOMIC BENEFITS

Global exchange and the value of good design

5. BUILT ENVIRONMENT POLICY

Leadership and place-based policies inside and outside of government

The structure of the Review

This Review is in four parts:

1.
Executive Summary
– a short, summary document with the conclusions of the Review.

2.
Introduction
– with observations from Sir Terry Farrell about his experience and views over 50 years as a practising architect and planner.

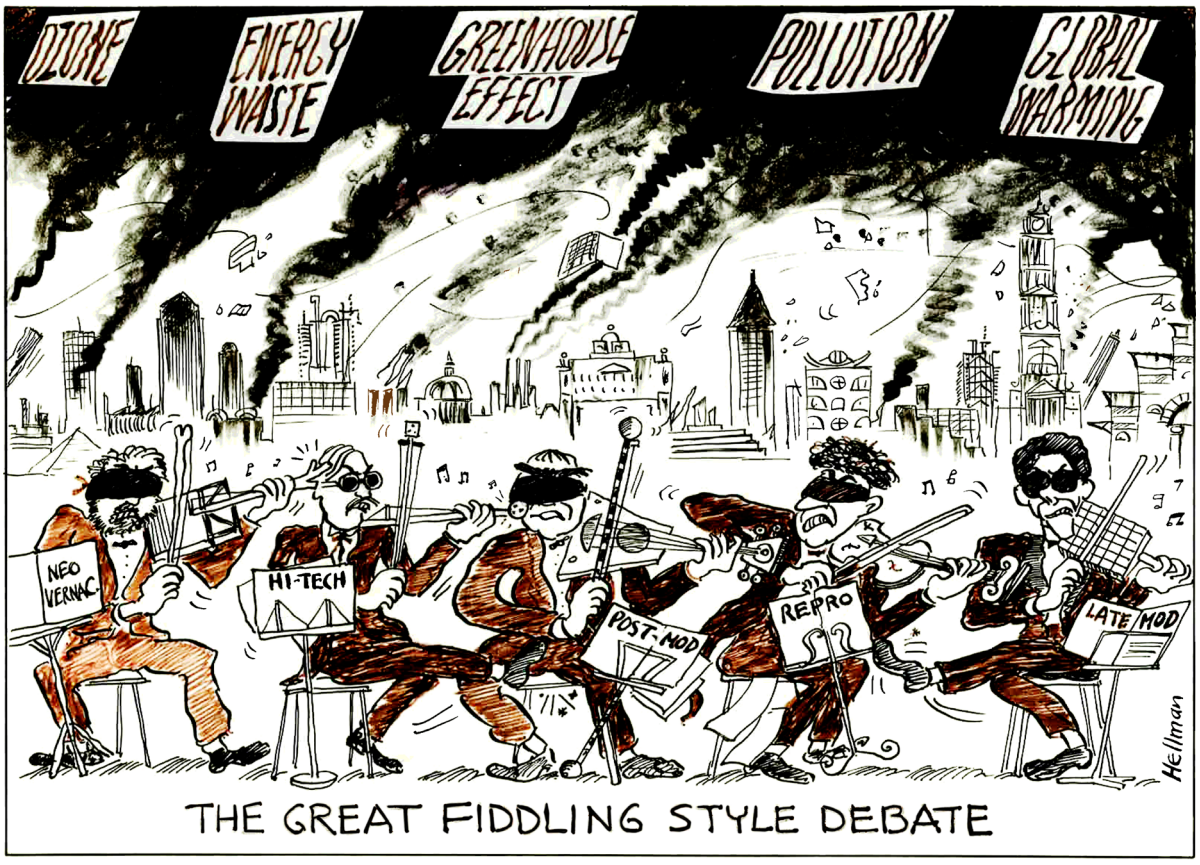
3.
Report on consultation
– which documents the inclusive nature of our consultation and workshops throughout the country; sessions on particular themes like sustainability and landscape; discussions with industry leaders and political figures; meetings with current and previous government review writers and hundreds of professionals involved in the broad endeavour of placemaking.

4.
Conclusions and Recommendations
– the conclusions that have emerged from the consultation process, together with 60 detailed recommendations proposed as ways forward for government, institutions, built environment professionals and other agents of change.

News and updates as well as the full set of documents can be found on our website:
www.farrellreview.co.uk

Fifty Years On

My experience and the themes of this Review are part of the same narrative. Everything begins with education, and my formal training as an architect in the 1950s and 1960s is revealing when considering the big issues facing education today. Reflecting on the beginning of my career, issues of design quality emerged in the 1970s and 1980s relating to the public and private sectors, taste, community activism, landscape and so-called "starchitects". My involvement with heritage issues and the confrontation of old and new came about in the middle of my career with incredibly heated "style wars" and conservation battles like that over London's Covent Garden. In the 1990s, I set up an office in Hong Kong and began a journey which led to a fascination and respect for Eastern culture and a further office in Shanghai. The most radical issue we face today is one of globalisation, the world's dramatically changing economic landscape and humankind becoming a predominantly urban creature, which has happened during my lifetime. In the following sections of this Introduction, I discuss each aspect of this narrative in more detail, to give an idea of how my own experience over the past half century has shaped my reflections on the Review's remit and of lessons that might be learnt for the future.



The "style wars" and the confrontation of old and new.
© Hellman

Preparing the next generation of city makers

We have a fundamental problem. Our built environment is increasingly recognised as critical to all the big issues of the 21st century, yet it is still not being sufficiently taught about in our schools. This is the first of many issues which this Review will address.

- **How can the school curriculum better prepare all children to understand how the built environment is created and managed?**

This is a long-standing and systemic problem. Architecture, the built environment and indeed most forms of professional life did not feature when I was at school in the 1950s. Yet in our system there is a requirement for an early choice of career path in order to take up architecture. The course and exam options gradually eliminate and pre-select a very prescriptive path which is challenging for a "career-training" profession like architecture.

The compression of time to choose a career in such a relatively unknown subject is for most schoolchildren compounded by different opinions and advice from teachers, careers advisers and the professional institutions. I was quite misled on what A-levels I needed and what the appropriate school subjects were, and forty years on my own children were advised by some that it was a science-based course requiring maths and physics, while others completely contradicted this and said that it was an arts-based course where evidence of creativity should come first.

- **How can those considering a career in architecture and the built environment be better informed over a longer period of time?**

Historically there was a view that the architect was the master of everything, exemplified by this bold statement from the Reconstruction Committee set up by the Royal Institute of British Architects (RIBA) following the London Blitz:

> **"The training and practical experience of the qualified architect bring him into contact not only with the design of buildings, but with major and ancillary problems connected with it. Town planning, transport, planning for industry, housing, finance, legal questions, organisation and administration of projects of construction are all matters which become daily familiar to architects with extensive practices. For the practice of architecture to-day is not confined solely to plan and elevation …"**
>
> *Journal of the Royal Institute of British Architects*, 1941, p.74

The role of the architect has changed and there are now many different professions involved in shaping the built environment. There is no such a thing as a "one size fits all" architect or built environment professional any more.

- **How can our education system teach children about the full range of possibilities for a career in the built environment like architecture, planning, landscape, conservation, project management and sustainability?**

Professional education

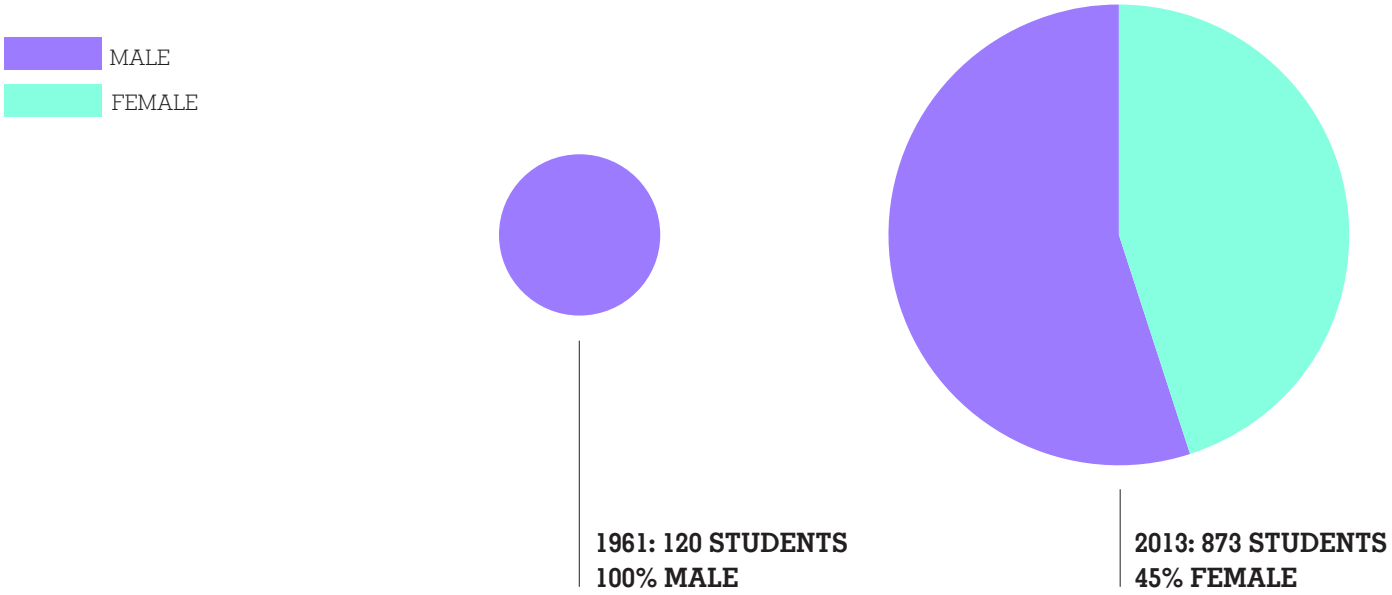
My own fifty years of professional life began in 1961, the year I finished my degree at the School of Architecture in Newcastle upon Tyne. There were no female students out of a total of about 120 students. Today, just over fifty years later, there are 873 students in the same architecture school at Newcastle and 45% of them are women, which is extraordinary progress in terms of both total numbers and greater gender equality within the profession. However, the length of the course is unchanged since the 1960s, with a three-year undergraduate degree, a year out in practice and a two-year postgraduate degree or diploma. This three-part structure is based on decisions made at a national conference about architectural education in 1958, and the RIBA has recognised over the course of this Review process that, more than half a century on, it is time for change.

When I studied in 1961 there were no charges for tuition fees and, like most other students, I received a grant to live on. Today average fees are £9,000 per year for a particularly long course that can end up costing £100,000 and modest salaries by professional standards. We risk creating a situation where only the independently wealthy can afford to become architects, and we desperately need greater accessibility so that the future designers of our homes, schools, hospitals and public realm include those who have grown up with the everyday built environment as their backdrop. Myself and others like Norman Foster, brought up in modest circumstances in the North of England, could possibly not have afforded to become architects today, under the present system.

At the same time, we risk losing the next generation of a profession we are internationally renowned for and making architectural education primarily an export, helping the rest of the world overtake us in the world rankings where we are arguably number one today.

- **How can we make a career in architecture more accessible when fee levels prohibit so many from entering, particularly those from more modest backgrounds?**

INCREASE IN NUMBER OF FEMALE STUDENTS AT NEWCASTLE UNIVERSITY



Source: Sir Terry Farrell & Newcastle University

What are we teaching?

In 1962 I attended a postgraduate course in City Planning at the University of Pennsylvania USA, on a Harkness Fellowship. This course immersed me in multidisciplinary teamwork and lectures with students from a diverse range of courses from planning to landscape and politics to ecology. For me it moulded a much broader view which has stood me in very good stead all my career. It was deliberately non-vocational and genuinely educational rather than "professional training". I left feeling that everyone involved in placemaking needed to have a better grounding in all of these issues. Today, with the ever-changing and diversifying professions, this need for breadth is dramatically increasing.

A degree in Architecture now has much wider appeal than it did in the past, with two thirds going on to pursue other careers and not registering as architects, yet so much of the course is laid out and controlled as though it still was essentially a professional training course. The growth of other built environment professions has sat uneasily with many architects who are still trained to believe they are the natural leaders of design and construction teams. More often than not, in reality, they are now seen as team members rather than leaders, alongside the many parallel professions like project management, planning and cost consultancy, surveying and landscape design. Town Planning alone has grown from 530 full members of the Royal Town Planning Institute (RTPI) in 1965 to 14,825 chartered members in this, its centenary year. So how does all of this get held together, who does the joining up and how are other professionals trained?

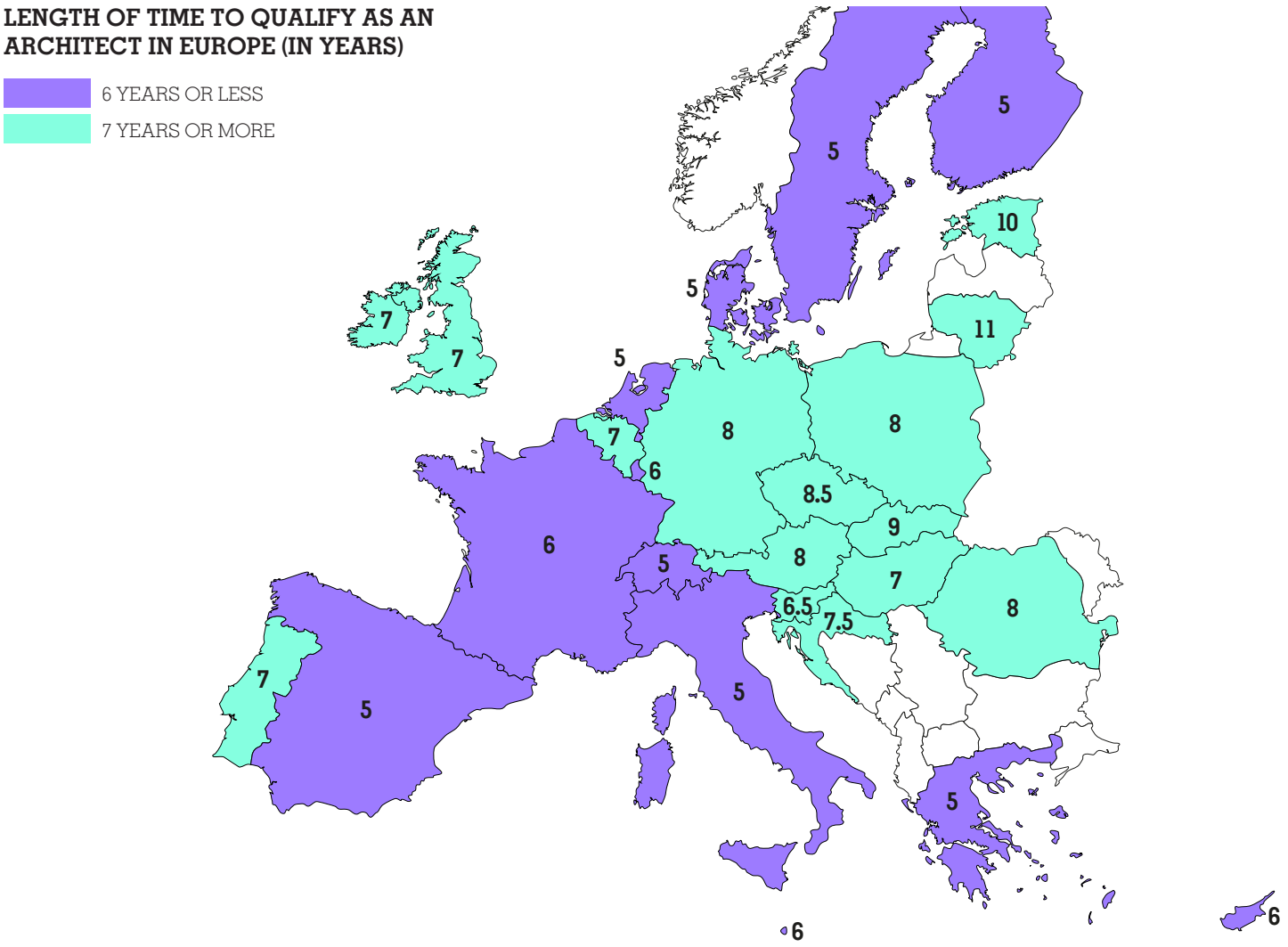
- **Should university education be primarily regarded as preparation for becoming an architect, and how can we prepare built environment professionals for genuine leadership and broader decision making?**

Similarly, we are now in a world of business with predominantly private-sector clients, yet so little of our professional training includes preparation for this world. Many mindsets in the profession and in teaching, in my experience, lean towards the earlier era of state predominance, and there is a growing need to operate and succeed in the market-driven world of today. Similarly, architecture needs to become much more closely connected to engineering and construction, and this should begin within the education system.

- **How can architecture be taught as a business and better connected to the marketplace, engineering and construction?**

In my lifetime, this country has moved from a dominant global empire and leader in a world of primarily poorer nations to a member of the EU and then to a world that is better connected and interrelated and where wealth and opportunity are no longer the preserves of the West. After the greater integration of EU countries and global standards converging, the profession is increasingly uneasy about the way architects are educated according to a formula devised for another age. Europe-wide harmonisation has been deemed necessary because qualification can take four years in countries like Greece and Denmark and up to nine years in Hungary and Lithuania. This state of flux will need resolving, but can only be done in step with changes in society and global trends. To find the answers, we need to start with simplifying and harmonising what we have and looking at best practice in all other countries.

LENGTH OF TIME TO QUALIFY AS AN ARCHITECT IN EUROPE (IN YEARS)



Note the lack of correlation between countries with perceived design quality and length of training.

Source: Architects' Council of Europe

- **How does globalisation affect professional education, training and qualifications in architecture?**

The organisation which represents architects and serves as architects' learned society is the Royal Institute of British Architects (RIBA). There are parallel institutes in Scotland (RIAS), Northern Ireland (RSUA) and Wales (RSAW). Over the years, the often uncomfortable relationship between the RIBA, the practical and moral force for the profession and the Architects Registration Board (ARB), the government's regulatory body, has led to calls for either the abolition of the ARB or the merging of its functions with the RIBA.

The title "architect" is protected differently in different countries. Here in the UK, under 1931 legislation, the Architects Registration Act (now the 1997 Architects Act) prohibits people who have not registered with the ARB from describing themselves as architects. It has no sanctions against people calling themselves "architectural designer" or "interior designer" or "landscape designer" nor does it protect the activity of architecture. Other built environment professions like engineering and surveying regulate themselves without statutory protection. So which is best, and do we need to revisit our rules of professional practice and adapt to global forces which are changing things beyond our control, whether we like it or not?

- **What is the value of statutory protection of title for architects, and does it reflect the realities of the world today? What role should our institutions play?**

Engaging communities and decision makers

Today, movements such as urban agriculture, social entrepreneurs and local community groups do much to engage and champion positive change for cities. Vital Regeneration is an example of a social enterprise engaging in both the built environment and the education sector, running programmes with architects and schoolchildren to learn why sustainable design matters. As a practitioner, I and my practice have been actively involved in this work in our local area, running workshops with local schools which have been extremely rewarding for all involved.

Architecture and built environment centres (ABECs) play a vitally important role, and we should do everything we can to ensure they have a sustainable future whilst actively trying to spread their benefits to other towns and cities.

- **How do we make it easier for professionals in the built environment fields to actively contribute to the future of our towns and cities?**

Neil Bennett, Farrells Partner, hosting "Sustainable Design Matters", a workshop with 15 children from two local schools in partnership with Vital Regeneration. The ten week pilot introduces the importance of sustainable design in the built environment to secondary school education.

The 1947 Town and Country Planning Act meant people had to gain permission from the government before they could build on land they owned. The Act was originally urged on the government by the architectural profession, which saw itself as the natural guardian of the environment working from the "top down". Within a few decades, architects found themselves being seen as the villains who made mistakes, and their influence on planning decisions has diminished. Few architects actually became planning officers, and an unintended consequence of community empowerment was that professional planners, without significant aesthetic or design education, were increasingly engaged to make aesthetic judgments. This was brought to a head with frequent conflicts between architects, who were taught to be loyal to "Modernism", and a public that had more sympathy with traditional architecture.

So who educates the increasingly empowered public, the planning professionals and the committee members who are answerable to them about the ways forward on the bigger picture, and how can opposing views be reconciled? There is no doubt that highway engineers, for example, who make crucial decisions about the built environment would benefit from a better understanding of design and placemaking principles.

- **How can decision makers like planning committee members, highway engineers and an increasingly empowered public become better informed about design and placemaking?**

2. DESIGN QUALITY

From public to private

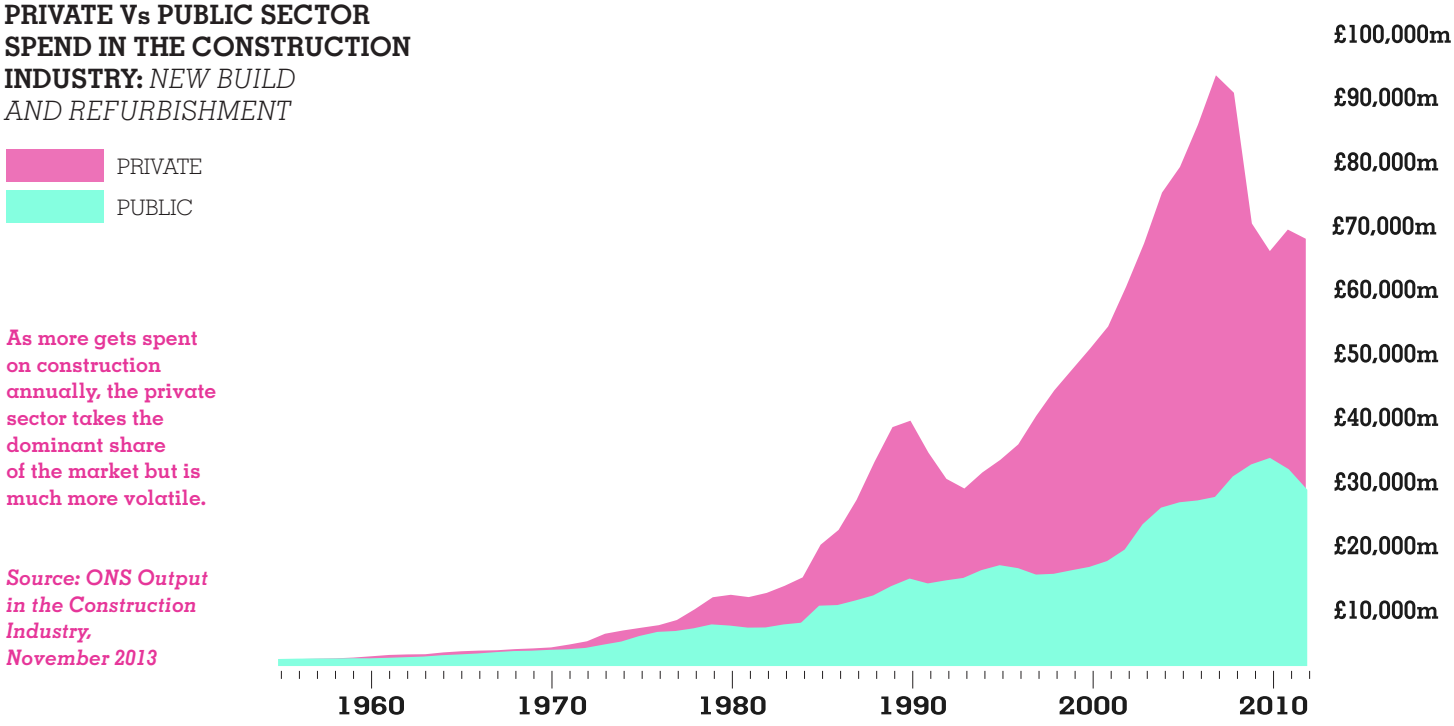
Fifty years ago, about half of all architects were in State employment within government or local councils. After leaving University, I worked at the London County Council which was the largest local authority architects' department in Western Europe, with more than 2,000 staff. Even when I subsequently worked for a private architectural practice, its work on social housing, schools and universities was almost entirely for the State. Today there are no state or local authority architectural offices. The public sector accounts for less than 15% of the smallest practices' fees and only 20–25% of those of larger practices. An overwhelming percentage of fees, over 60%, are derived from private corporate clients and contractors. What a shift, what an extraordinary change.

The decline of public offices coincided with the emergence of major public scepticism about grand "top-down" solutions like the extraordinarily invasive motorways which threatened cities such as Manchester, Birmingham, Liverpool and London, some of which were built and are now being undone. These post-war utopian and car-based solutions followed contemporary planning ideologies which often produced giant housing estates bereft of design, care and humanity and ended in various building construction and material failures. Some of the new towns developed a reputation for decanting city dwellers, often without creating promised new places or new communities.

The outcome was a growing belief that professionals and politicians did not know best after all, and the reputations of architects and planners were severely damaged in the eyes of the public, a legacy which in part lasts to this day. It is very often the publicly owned built environment like road junctions, railway buildings, schools and hospitals where good planning, design and stewardship of the built environment is lacking in this country, and I would argue that built environment professionals should do everything they can to rectify the mistakes of the past and help restore their reputations at the same time.

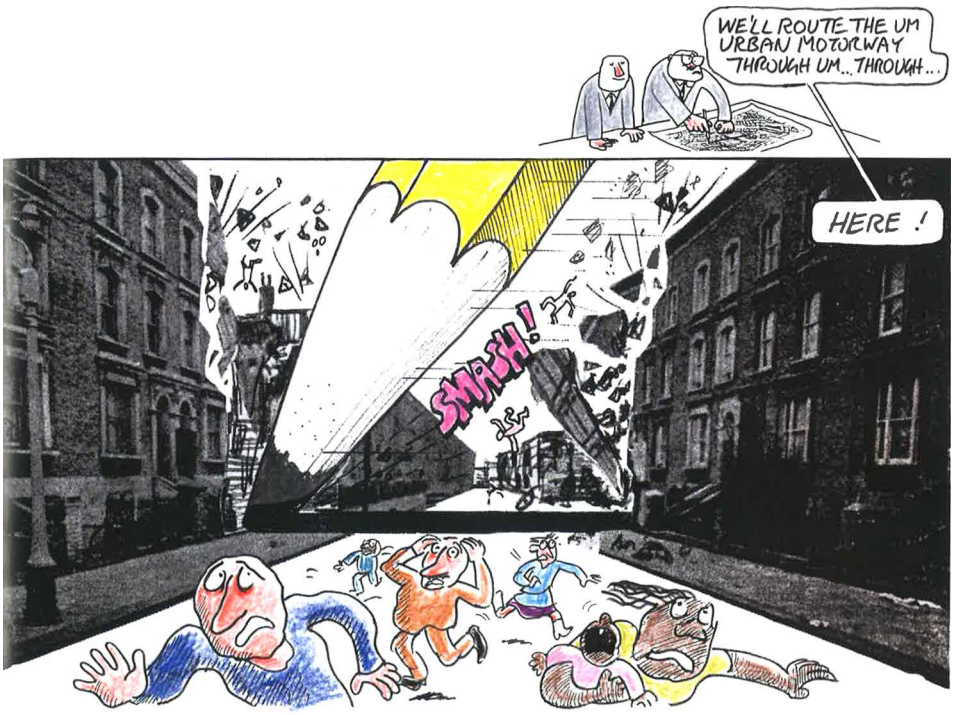
- **How do we regain trust in planning and design professionals and the political leadership of the built environment that we all eventually rely on?**

PRIVATE Vs PUBLIC SECTOR SPEND IN THE CONSTRUCTION INDUSTRY: *NEW BUILD AND REFURBISHMENT*



As more gets spent on construction annually, the private sector takes the dominant share of the market but is much more volatile.

Source: ONS Output in the Construction Industry, November 2013



A Louis Hellman cartoon showing the heavy hand of top-down highway "improvements".

Today the consequences of these shifts from the dominance of the State to the investment of the private sector are often a paralysis of big thinking and a jumbled plethora of consultations and public engagement. Architects and built environment professionals have become advocates as much as planners and designers, and most of our planning in this country is essentially reactive. The pendulum, in view of the big issues we have to face like climate change, sustainability and population growth, has swung too far. There is a desperate need for more proactive planning, particularly of our existing everyday places, as 80% of our buildings will still be with us in the year 2050. The current housing shortage and flooding crises for example can only be resolved, in my opinion, if we face up to this fact.

The best outcomes, I have learnt, are invariably produced by a positive working relationship between the public and private sectors. The old state-dominated system on its own did not deliver, and the private sector has grown and proved itself, but we are clearly missing something. So what is the right balance, and what role is there for professional institutions, charitable bodies and community groups to fill the ever-growing gap between private and public sectors – namely the voluntary and "third sector"?

- **What is the role of public-sector planning, in view of the dramatic decline of public offices; what is its relationship to the private sector and third sector; and how can we develop a planning system that is more fit for purpose?**

There have always been taste makers – from the early 19th-century Committee of Taste to the 1924 Royal Fine Art Commission, succeeded in 1999 by the Commission for Architecture and the Built Environment (CABE) which was one of the many good things to come out of the Urban Task Force. Originally to be called the Commission for Architecture, I lobbied successfully to add the "BE" as I passionately believed it had to be about more than just architecture. The same applies for this Review, although I would go further by saying it needs to be more than just the built environment and must look at the totality of what makes great places.

After sterling work from its inception 15 years ago, CABE has been cut

down in size and funding and become a part of the charity Design Council. CABE was a pioneer and there is undeniably an important role for it to play moving forwards as we attempt to bring about further revolutionary change, albeit from the "bottom up". As well as producing important research and helping to skill up local authorities, one of the principal contributions of CABE has been the introduction of Design Review. This is a process whereby professional peers give up their time for free to help advise clients and planning authorities on the suitability of schemes. The procedure is quickly being taken up by other countries as the successful CABE model is exported.

My own and most practices have been on Design Review Panels and also presented to them, and the process is one that architects are very familiar with. Architects are largely trained using the "crit" system where designs are subjected to detailed criticism by tutors and fellow students. It is a validation process which gives credibility to judgements which otherwise might appear to be capricious, but is it the most constructive way to end up with better outcomes, which must surely be the objective?

I would argue that it is not enough for Design Review to focus on the design of buildings alone, and that the issue of placemaking needs to be much higher up the agenda. Built environment professionals and local communities are increasingly thinking about how well built environment projects work in practice: the liveability of our villages, towns and cities; safe public spaces; cycle-friendly road layouts; appropriately scaled buildings; and so on. Design Reviews, though, are generally limited to private-sector schemes which are well advanced and about to seek planning permission. As a result, vast swathes of our towns and cities do not benefit from this collective and powerful way of engaging professionals in better outcomes for the everyday built environment.

- **What is the future for Design Review and how can we achieve the greatest good for the greatest number?**

In my early years in practice there were vicious, even incestuous battles within the architectural profession over what buildings should look like. The internecine verbal and print warfare over style was conducted in architecture schools, the architectural press, offices, pubs and, increasingly, the national newspapers whose broadsheets today have architecture critics alongside film, food, art and theatre critics. With the public determinedly engaged and empowered, the big question is – whose taste is it? How do the public better inform themselves, and how do architects and review panels, the traditional taste makers, fit into a world of an empowered public in an age of social media?

- **How do we better engage the public in planning and designing the built environment, which is ultimately owned by everyone?**

Landscape and the public domain

Having worked on major landscape projects like the Royal Parks and the Thames Gateway, it has become clear to me that the design and stewardship of landscape is valued as much as, if not more than, buildings. In towns and cities throughout the country, it is the streets and pavements that are most highly valued and the ground floors of buildings that are most important to the majority of people. These priorities are often completely the reverse for the development community and built environment professionals, and in almost every Design Review Panel I have come across it is aspects like the heights of buildings and their style and appearance that have become the big issues. I can count on one hand the number of panels where landscape and the ground plane became the passionate focus for debate.

Quite often it is unclear who is commissioning and investing in the public domain. Landscape architecture and urban design are often the most valued by the public yet contradictorily the least valued in terms of fees and are frequently where the first savings are made on any given project. Something has to be done about this, and we as an industry must make landscape and urban design much bigger priorities.

- **How do we face up to the cultural and investment shift that's needed to produce better-quality public realm?**

Recently, I was able to radically influence government national planning for the Thames Gateway and for the High-Speed Rail "super-hub" at Old Oak Common. The international big infrastructure experience of the likes of Foster + Partners, Grimshaw, Make, Farrells and others has been applied to the UK airport debate very effectively and will hopefully be a sign of things to come.

- **How do we ensure the added value of planning and architectural thinking is applied to infrastructure at all scales, from local improvements to nationally significant projects?**

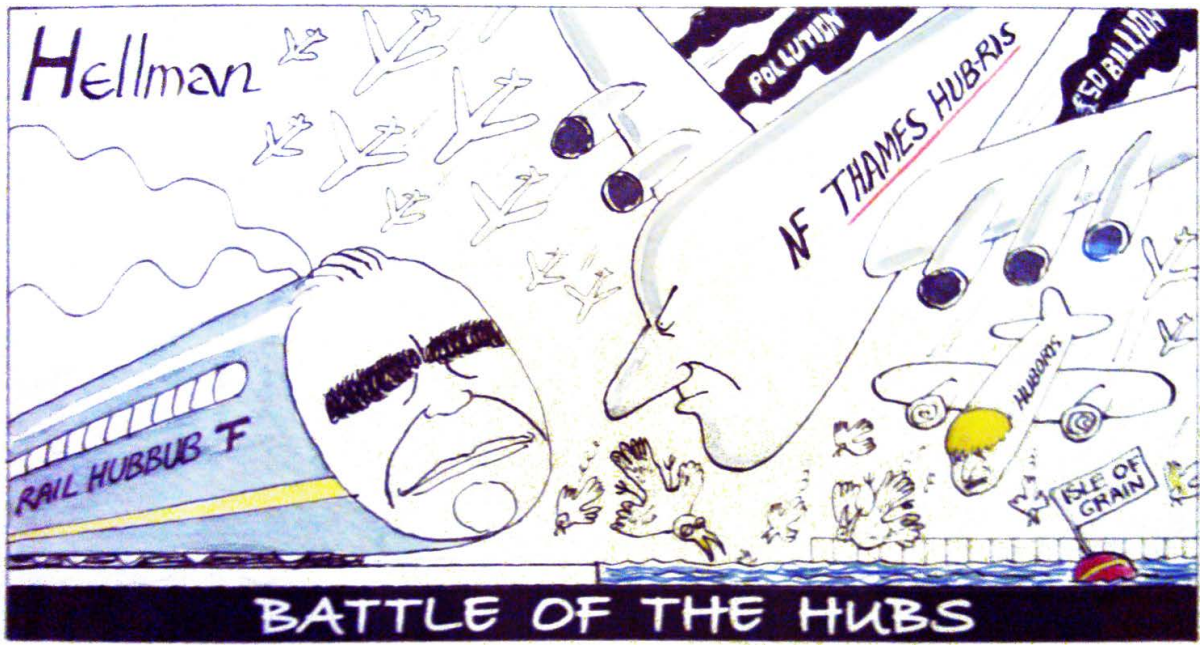
Farrells' Thames Gateway Parklands Vision

Leading architects earn more acclaim today, more fame and riches than earlier generations could have dreamt of. It is the same elsewhere: football players were low-paid part-timers just a few decades ago, and architects of the 20th century with great achievements to their name like Louis Kahn, Jim Stirling, Antoni Gaudí and Charles Rennie Macintosh all in their time received a fraction of the acclaim or material rewards earned by leading architects today. There are ever-increasing awards they now share – Pritzker, Royal Gold Medal, Stirling and other prizes – and they increasingly do prestige and elite projects like museums, company headquarters and opera houses. Yet the reality of the built environment in our towns and cities is very different and far from world class.

The extraordinary growth in the fame of signature architects who have become celebrity stars has happened almost in parallel with the perception that architects and planners have failed to rehabilitate themselves and are still, according to recent surveys, held responsible for shortcomings in our built environment. In one such survey, architects were nominated by a clear majority of voters as the chief reason their town was ugly.[1]

For me, this paradox is epitomised by the multi-award-winning and excellently designed but tiny "Maggie Centres" which invariably sit next to sometimes woeful mega-hospitals. These mega-hospitals, like many other everyday places including high streets and social housing estates, are often devoid of good design thinking as well as ongoing investment in maintenance and stewardship. They can be significantly unloved places mainly because of their size, complexity and overall lack of care or attention. Concentrating on one-off masterpieces is not the best advert for architecture and built environment professionals in this context.

- **Whilst celebrating and recognising their achievements on the one hand, how we can encourage leading architects to help the broader, more unsuccessful and unloved parts of our built environment?**



Architects can and should influence debates like national infrastructure planning. © Hellman

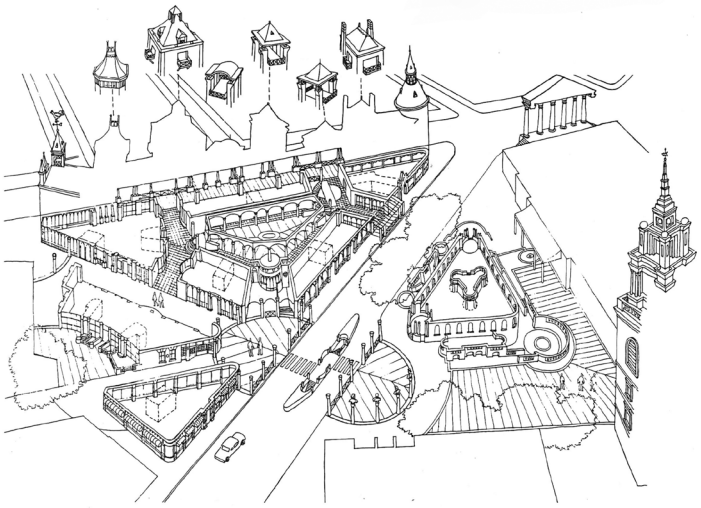
[1] See Greg Pitcher, "Architects blamed for 'crap towns'", *The Architects' Journal*, 15 August 2013, http://www.architectsjournal.co.uk/news/architects-blamed-for-crap-towns/8652027.article.

Conservation and community

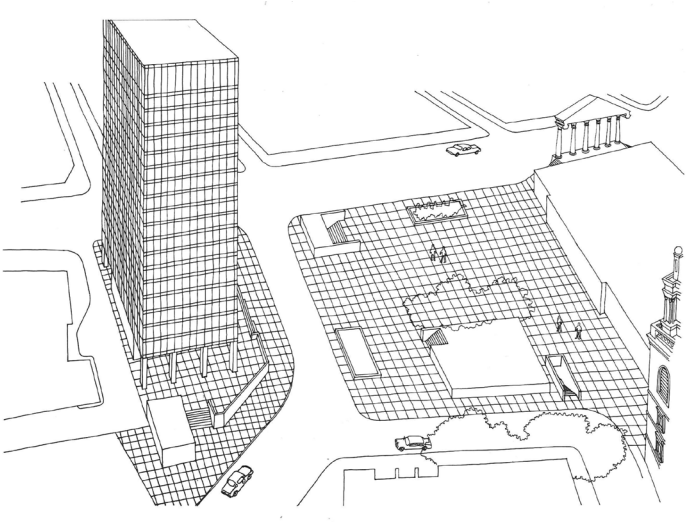
Plans like the one to save Covent Garden from demolition in the 1970s were drawn up by design and planning professionals calling themselves "community architects". Primarily trained as architects, they were independent of the public sector that was responsible for the grandiose and destructive plans they were objecting to, and of the private sector looking to capitalise on new development after demolition had taken place.

This voluntary force was game-changing and the spirit of urban activism has stayed with me throughout my career. In the same era I founded a housing association based on the success of Farrell/Grimshaw's Park Road housing at Regent's Park, and I continued doing this kind of work helping to found and run housing associations and working with SAVE Britain's Heritage to design schemes that gave old buildings a new lease of life. One of these in 1982–5 was opposing the Mies van der Rohe-designed scheme for Mansion House, to show that redevelopment was not the only option. This led to a phone call from the then RIBA Chief Executive to say that I should desist for the "good of the tribe" and should support only new modern development at Mansion House, which I found extraordinary and unacceptable. The profession collectively has been very slow to adapt.

Terry Farrell's 1980s proposals for Mansion House



Proposals for the same location by Mies van der Rohe



Conservation and community consultation was often led by planning and design professionals founded on a new belief that things change and improve when they start from a popular, informed base. Localism, openness in the planning system, intense public lobbying and the validity of non-expert opinion increasingly became the norm. New weapons in defence of local environments were discovered in, for example, the listing of historic buildings. On one day in 1973, Environment Minister Geoffrey Rippon listed 265 buildings of London's Covent Garden in a stroke, rendering a proposed redevelopment of the area impossible and leading to the establishment of an elected neighbourhood council which produced its own plans for Covent Garden. History was made and a culture that recognised the value of our built heritage began to emerge.

The heritage lobby, however, still seemed to be defensive of the conservative way of life of a particular social class in British society. In the 1980s, these attitudes began to change and Environment

Minister Michael Heseltine encouraged the widespread listing of historic buildings – no doubt with an eye on the importance of the tourist industry. I and a number of other architects such as Piers Gough, Richard MacCormac and Chris Wilkinson agreed to become commissioners at English Heritage (EH) despite the commonly held view amongst architects that EH was an opponent of modern architecture. As we and others who followed us found, EH had a serious case to argue, even if we sometimes disagreed about the detail. Its core idea was that there is an inextricable relationship between heritage, place and identity and that it was implausible for architects to think they could remove old buildings simply because they or their clients wanted to.

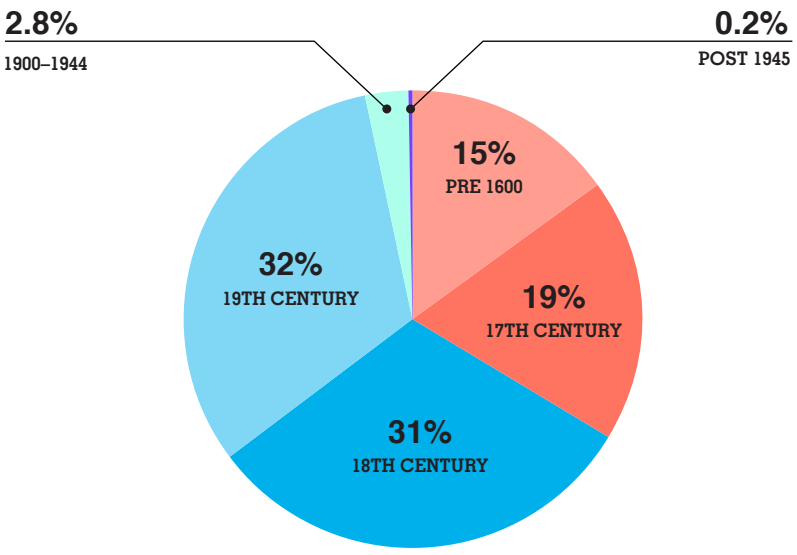
These concerns were addressed by the Urban Design Group, of which I was President from 1985 to 1989, and reinforced more recently by the Urban Task Force. Today there is much less of a conflict between heritage and modernity, which was symbolised by the Stirling Prize being awarded to the restoration and reinterpretation of the 12th-century Astley Castle in 2013. But where does this leave us today?

- **What are the roles for institutions like English Heritage and CABE's successor, the Cabe team at the Design Council, now that heritage and modernity are no longer so at odds with each other in this country?**

The heritage sector which was founded to protect the very old is now increasingly recognising the value of recent and contemporary buildings. Whilst at the London County Council, I designed the two Blackwall Tunnel ventilation buildings, one of which pokes out of the Millennium Dome, and they are both now listed. At their time of construction in 1964 there were 60,000 listed buildings, compared to 376,198 today, of which less than 0.5% are modern buildings built after 1945. At the same time, the industrial heritage found largely in the Northern cities is extremely valuable for our collective memory and national identity, yet arguably receives less attention from those who make the decisions about listings. Heritage is a continuous contemporary process: the past has merged into the present, and this must be reflected within the heritage debate.

- **How do we make conservation of our future heritage a more open, democratic and interactive process?**

AGE RANGE OF LISTED BUILDINGS, 2013



We are not always listing the buildings people want and like, but rather on an academic method of evaluating. Most of these are from the 18th and 19th centuries, with barely any from the 20th century.

Source: English Heritage Designation Department

Future heritage and sustainability

The issue of heritage became more and more significant as the scope of architects' work moved from greenfield sites, new towns, business parks and university campuses into the more complicated arena of the city and its urban metropolitan sites. Gradually a new take on managing resources began to emerge, and in the *RIBA Journal* in May 1976 I wrote an article pleading for others to see existing buildings as a resource – "like coal in the ground or oil under the sea".

My first project when in partnership with Nicholas Grimshaw in the late 1960s was an imaginative and ground-breaking conversion of terraced houses into a student hostel. In 1974 I undertook a study of several of Westminster City Council's large estates, with more than 1,000 dwellings that were 40 to 60 years old. We looked at alternatives to demolition, which was widely believed to be the only solution. We found that through adaptation, improved services and re-planning we could prolong the lives of these buildings by sixty years or more, and could devise ways for communities to stay intact while their physical environment was renovated and adapted.

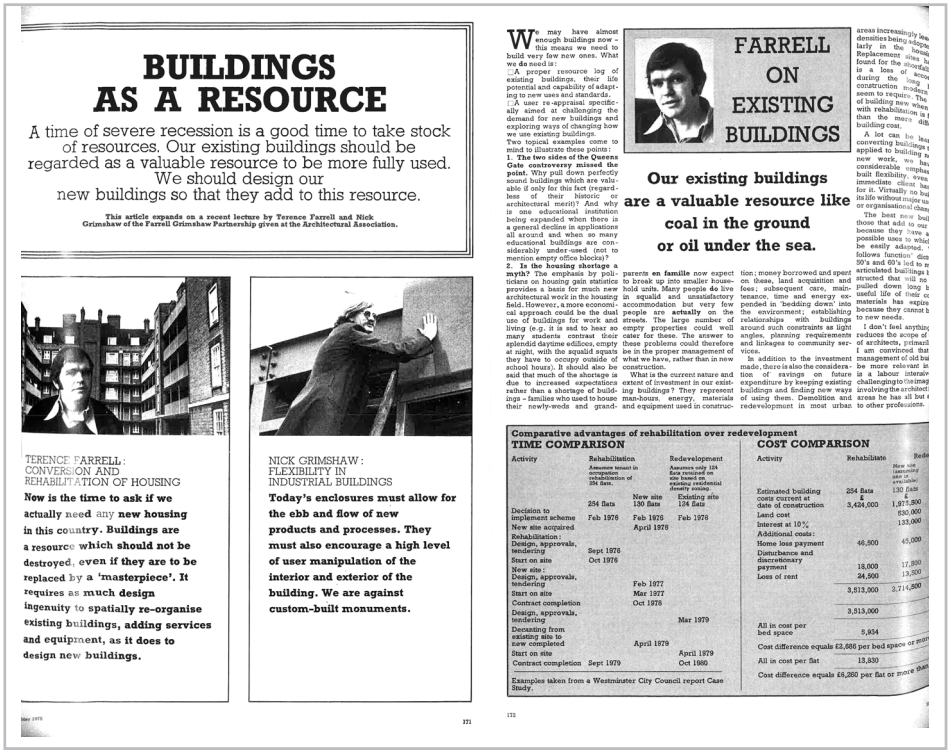
Before this, refurbishment and retrofitting had not been considered to be architectural issues, and these concerns still struggle to be accepted as legitimate by the architectural community. It was the beginning of what is now described as sustainable thinking, in which the throw-away ethos of the pre-oil crisis era has been replaced by a demand that architects design buildings whose energy consumption is the lowest that it possibly could be. In my view, the future of heritage is inextricably linked to the future sustainability of our villages, towns and cities.

- **What is the future of heritage, and particularly what is its role in the future husbanding of resources and in the wider concerns of sustainability?**

Heritage has an increasingly important role to play in the social and economic life of our country and Brand UK. Emerging countries of vast size and disposable income are increasingly coming here to see for themselves, sending their children to study here and investing in our built environment as valuable real estate.

- **How do we plan our future based our past and celebrate the sense of national identity that was captured by, say, the Olympics opening ceremony?**

Terry Farrell, "Buildings as a Resource", *RIBA Journal* (1976)



BUILDINGS AS A RESOURCE

A time of severe recession is a good time to take stock of resources. Our existing buildings should be regarded as a valuable resource to be more fully used. We should design our new buildings so that they add to this resource.

This article expands on a recent lecture by Terence Farrell and Nick Grimshaw of the Farrell Grimshaw Partnership given at the Architectural Association.

TERENCE FARRELL: CONVERSION AND REHABILITATION OF HOUSING

Now is the time to ask if we actually need any new housing in this country. Buildings are a resource which should not be destroyed, even if they are to be replaced by a 'masterpiece'. It requires as much design ingenuity to spatially re-organise existing buildings, adding services and equipment, as it does to design new buildings.

NICK GRIMSHAW: FLEXIBILITY IN INDUSTRIAL BUILDINGS

Today's enclosures must allow for the ebb and flow of new products and processes. They must also encourage a high level of user manipulation of the interior and exterior of the building. We are against custom-built monuments.

FARRELL ON EXISTING BUILDINGS

Our existing buildings are a valuable resource like coal in the ground or oil under the sea.

Comparative advantages of rehabilitation over redevelopment

TIME COMPARISON

Activity	Rehabilitation (Assumes tenant in occupation pending completion of 254 flats.)	Redevelopment (Assumes only 124 flats required on site of 254 existing residential density zoning.)	
	254 flats	New site 130 flats	Existing site 124 flats
Decision to implement scheme	Feb 1976	Feb 1976	Feb 1976
New site acquired		April 1976	
Rehabilitation: Design, approvals, tendering	Sept 1976		
Start on site	Oct 1976		
New site: Design, approvals, tendering		Feb 1977	
Start on site		Mar 1977	
Contract completion		Oct 1978	
Design, approvals, tendering			Mar 1979
Decanting from existing site to new completed		April 1979	
Start on site			April 1979
Contract completion	Sept 1979		Oct 1980

Examples taken from a Westminster City Council report Case Study.

COST COMPARISON

Activity	Rehabilitation	Redevelopment
	254 flats £	130 flats £
Estimated building costs current at date of construction	3,424,000	1,971,800
Land cost		630,000
Interest at 10%		133,000
Additional costs:		
Home loss payment	46,500	45,000
Disturbance and discretionary payment	18,000	17,800
Less of rent	24,500	13,500
	3,513,000	2,714,800
	3,513,000	
All in cost per bed space	5,854	
Cost difference equals £3,886 per bed space or more		
All in cost per flat	13,830	
Cost difference equals £6,260 per flat or more		

4. ECONOMIC BENEFITS

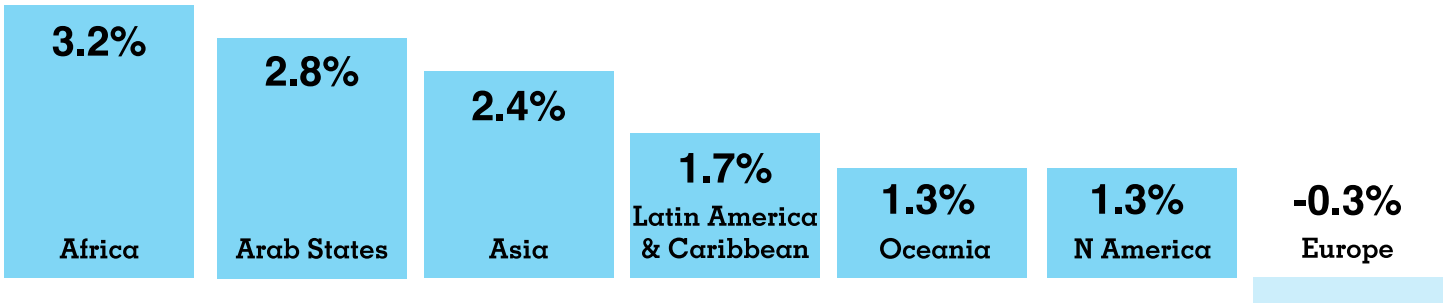
Global shifts

I first went to Hong Kong and saw China in 1964 as a student on a world trip funded by travel scholarships from the RIBA. In 1991 I opened an office there, when China's GDP was just 15% of that of the US. Ten years later it equated to 30% of the US's GDP, and had gone from being the seventh largest economy in the world to the third; and it is now expected to match or overtake the US and become the world's largest economy very soon. These are rapid and dramatic changes that have profound consequences for the UK. Global wealth is no longer the preserve of the West, and we are seeing hugely increasing levels of investment in our built environment and ownership in our infrastructure.

We have to adapt here in the UK and globalise our outlook. In recent years, my practice was told that we could not qualify for a shortlist to design 250 stations, including along the Thameslink line, as we had insufficient experience of station design in the UK. Then later the Hong Kong rail investment company MTR were among those selected for consideration to carry this work out, and we were immediately appointed by them as they saw that we have more experience than most other UK practices, having designed a large number of stations overseas in Beijing, Guangzhou, Singapore, South Africa, Delhi and Hong Kong. This tells its own story about our current UK inability to operate within an increasingly global marketplace and our short-sighted and insular methods of procurement for public-sector projects.

In 1850 we were the first nation on Earth to be truly "urbanised", that is to have over half the population

URBAN GROWTH 2005–2010



The world's URBAN population in 1900

220,000,000

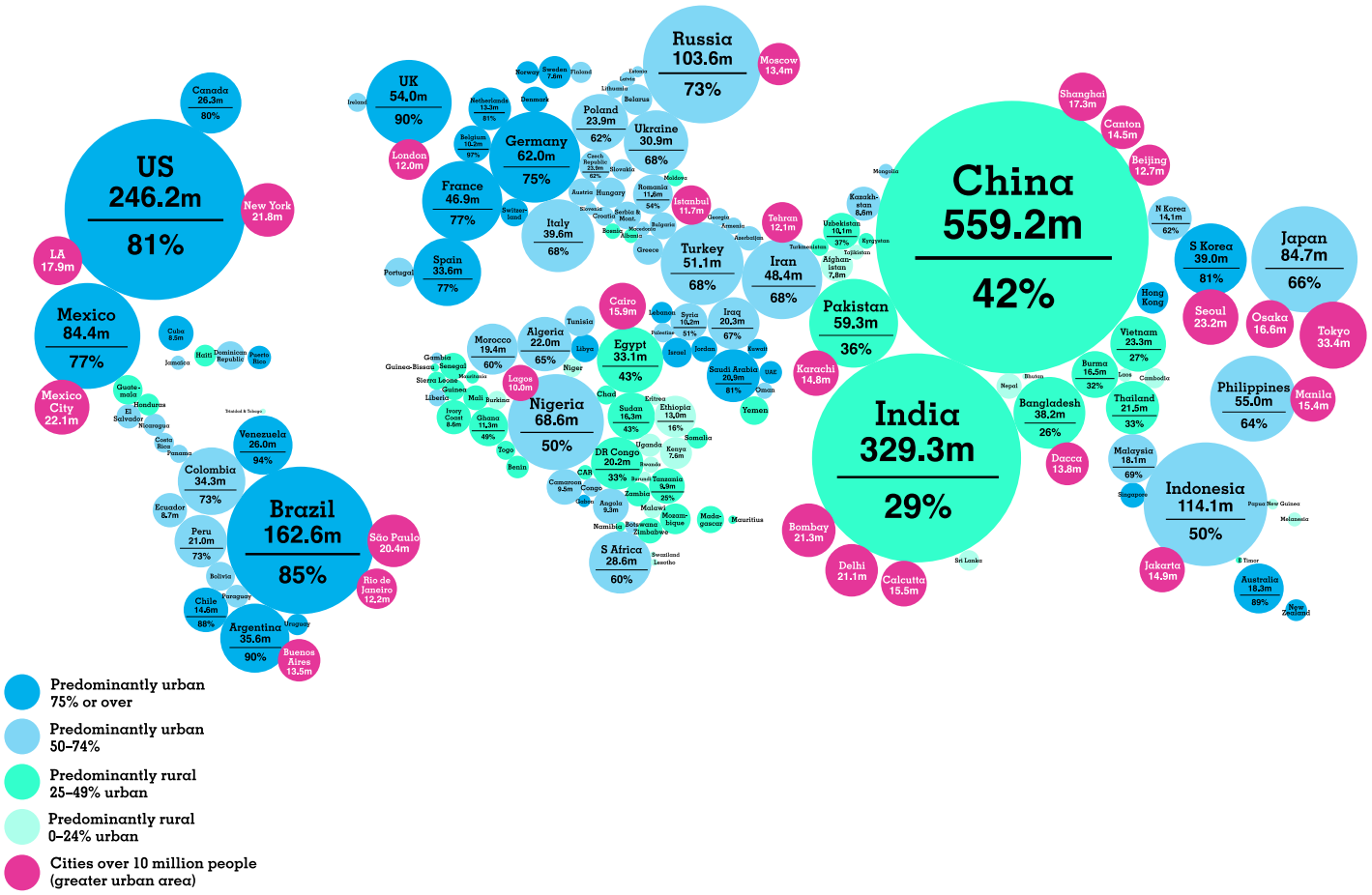
The world's URBAN population in 2013

3,307,950,000

The high rates of urban migration across the globe will create demand for city building and all the related professions that make up the built environment.

Source: Guardian / UNFPA

GLOBAL URBAN POPULATION



Many of the world's largest economies are still in the process of urbanisation. City building will be the biggest industry of the 21st century.

Adapted from: Guardian (Paul Scruton)

living in urban areas. Now most of the globe lives this way, and very soon it will be 60–70%. I have called this the "urbicultural revolution", in comparison to the previous economic and social changes brought about by the agricultural revolution. Urbiculture requires a different kind of urban planning, one that is organic and evolutionary to allow for growth rather than the top-down "designed" cities favoured by earlier planners and architects. Even the "designed" parts of cities like Manhattan and Milton Keynes have seemingly chaotic but highly self-organised and complex districts within and around them evolving in an energetic and dynamic way. This is a subject I wrote about in a recent book *The City as a Tangled Bank: Urban Design versus Urban Evolution*. I believe we are extremely well placed in this country to export these city-making skills to the rest of the world, as we have been world leaders in creating dynamic, changing yet liveable parts of towns and cities.

- **How do built environment professionals capitalise on this country's city-making skills, developed over the last two hundred years and increasingly required by the rest of the world on a massive scale?**

Countries that were once "emerging" like China, India and Brazil have well and truly emerged, and others in Asia, the Middle East, South America and Africa will dominate the global economic landscape in the years to come. This will bring further opportunities for UK cultural and professional institutions to exchange thinking and for our construction professionals to increase trade. It will also bring environmental threats resulting from climate change to these shores.

- **How do we prepare for the changing world order and rapid urbanisation across the globe in the 21st century?**

I have witnessed first hand how governments and institutions can differ in the way they help spread the cultural and professional interests of architecture and the built environment. In 1999 I was one of the final two competitors for the biggest cultural building of its time in China, the National Centre for the Performing Arts in Beijing. I presented to the Chinese government and to the Union of International Architects (UIA) which was holding its annual conference there at the same time. Whilst the French turned out in force for the UIA conference, the RIBA was boycotting China and so decided not to attend at all and the UK government viewed it as a low-key "trade deal". The French had the Minister of Culture as part of Paul Andreu's visiting presentation team, and they offered ongoing cultural links to their own National Opera House.

Things are better today, and we have learnt from others, but the competition is more fierce and other countries still have a much better understanding of the "soft power" that projects like these bring. Today the government's UK Trade & Investment department (UKTI) and British Council are much more effective and the RIBA now actively pursues a very positive relationship with China, but government and Ministers really should do much more.

- **What can be done by government and our institutions to support UK built environment design on the world stage and harness the soft power it brings?**

The UK picture

The working world of architects has changed dramatically, together with the quantity and complexity of the built environment. The whole marketplace and its methods have shifted, yet the economic benefits of what built environment designers do is still undervalued and misunderstood. The value of good design needs to be much better understood by all those involved, as we are now in a century of city making and a building boom on a scale unprecedented in human history. The demand for built environment designers and planners in the global marketplace has increased exponentially, and we must be better prepared to take part. At the same time, built environment designers must understand the economic drivers behind development in order to influence decision makers in the private and public sectors.

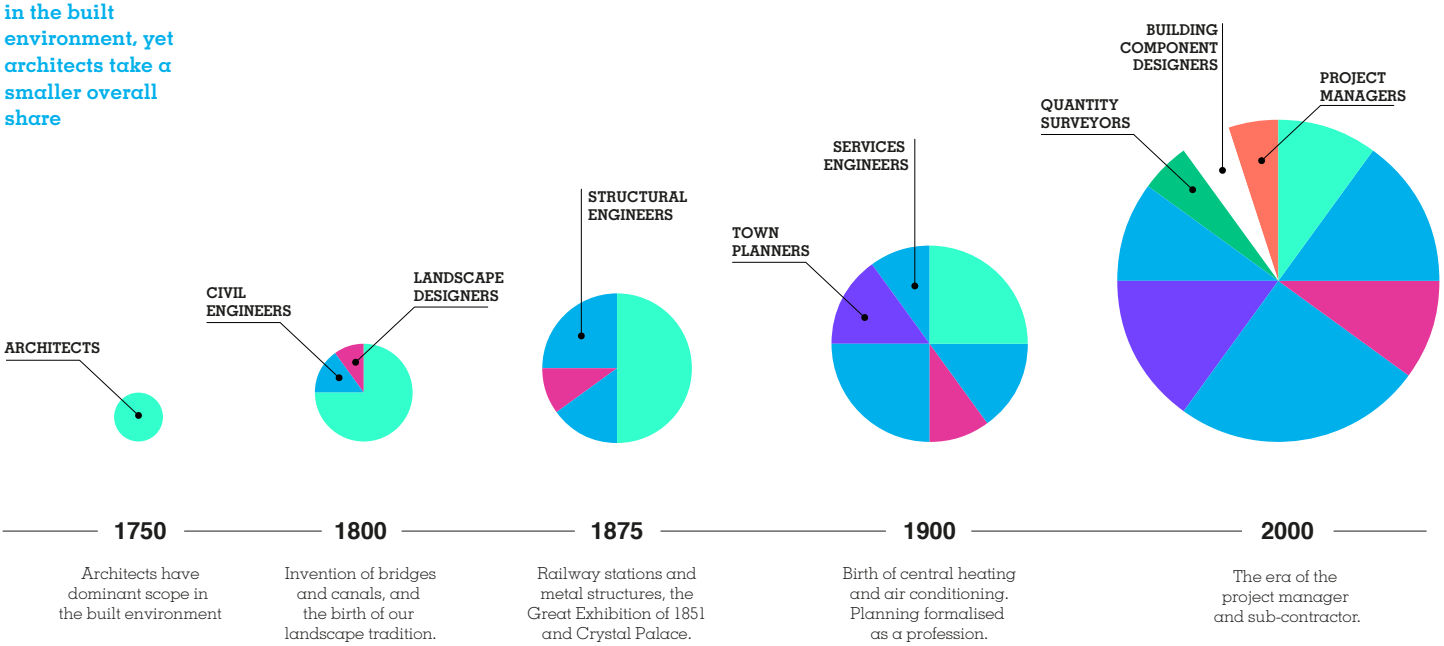
- **How do built environment practices prepare for the future opportunities and challenges presented by a globalised marketplace and promote the value of good design and planning more effectively?**

As a student then a practitioner, up until the mid-1980s I worked at a large drawing board using tracing paper, pens and pencils, erasers and simple mechanical drawing equipment which the Victorians would have recognised. Today, virtually all architects work at computer screens where the end product is similar – plans, elevations, sections and details – but having the drawings on the screen, and the power of software like building information modelling, have dramatically transformed methods and processes. A complete description of how every part of the building is made up and specified is at our fingertips, including materials, performance and energy efficiencies.

At the larger scale, we have a similar ability to add layers of information including behavioural data, rental yields, the cost of construction and energy performance, enabling us to visualise, analyse and test the infinite possibilities. Decisions such as the location of airports, shopping centres and stadia need no longer to

PEOPLE INVOLVED IN THE BUILT ENVIRONMENT

The volume of work has increased in the built environment, yet architects take a smaller overall share



be based on crude sample surveys and hunches of vested interests. The permutations of urban design including site layout and movement patterns can be investigated to a far larger degree than can be achieved by human analysis alone. However, this analysis through capturing and testing data, alongside lessons learned from best practice around the world, must always be matched by a human perspective of standing still and looking at the urban condition from the street, so that we don't lose our common sense.

Commonplace among architects for at least the last two decades, the possibilities of digital technology in areas like city and building information modelling and 3-D printing are potentially extraordinary. At the same time, the possibilities for interacting with the public and related professionals have risen exponentially through information and communications technology. But rapid technological growth brings its own problems, not least of which are training and education and continuously retraining and re-equipping as technological change accelerates.

- **How do we continue to educate and train students and practitioners in rapidly changing digital technology?**

London in particular has attracted the best students and undoubtedly become the centre of world excellence for built environment design. When I was teaching and visiting at London architectural schools, I watched some of the students become highly successful architects on the world stage like Rem Koolhaas, Zaha Hadid and David Chipperfield. I saw mega-firms from the US like SOM, KPF and HOK set up major offices here after London's big bang in financial services in the 1980s, as well as international landscape architects like Martha Schwartz. London is where the debate is globally and where the best students and practices from all over the world come to make their home alongside the best in related fields of design, construction and development.

- **How can we capitalise better on the success of London as the global capital of built environment design, and what can our government and institutions do to help?**

5. BUILT ENVIRONMENT POLICY

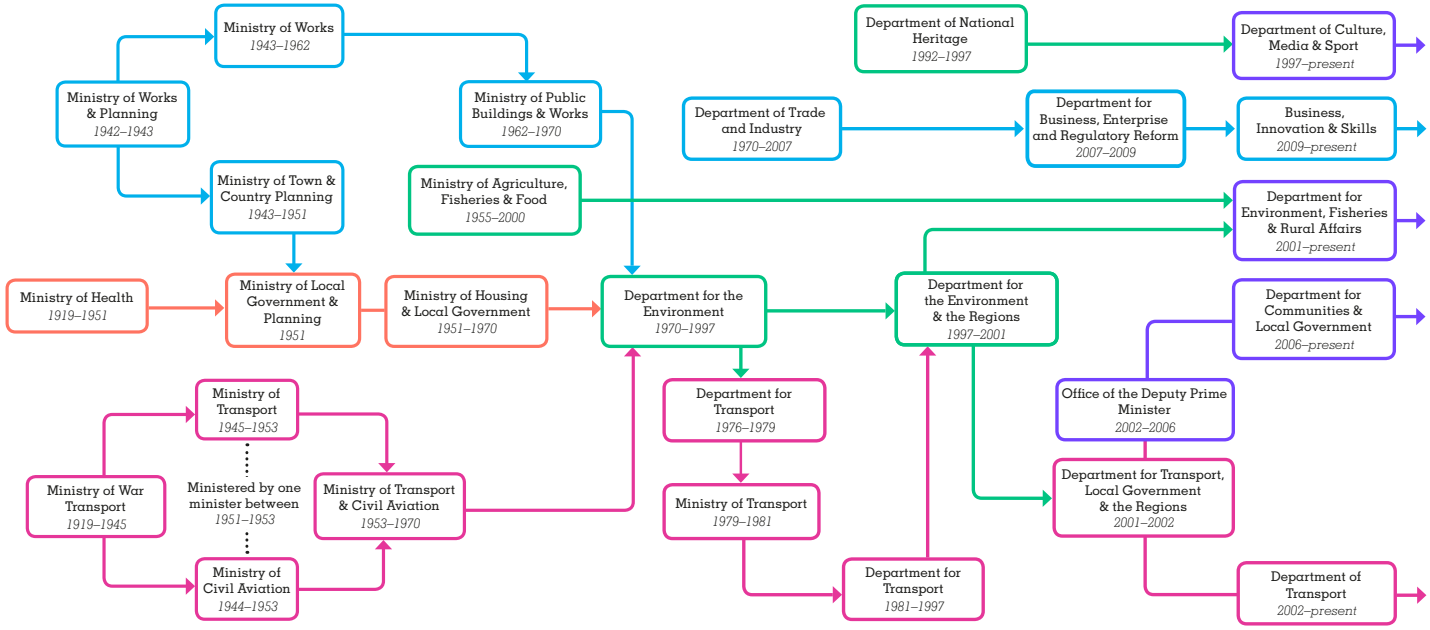
Looking ahead: A question of policy

During my career I have seen many bewildering changes, with Whitehall departments added and then struck off, and different swings and changes in the attitudes of successive governments to architecture, housing, infrastructure, transport and planning. Whilst the traditional "core" departments of the Treasury, Foreign Office and Home Office kept their names and identity and the first two the splendid Victorian masterpieces housing them, the environment and all its manifestations have gone through every identity and departmental combination possible. The diagram mapping the changes, shown here, speaks volumes. So what are we to make of this, and what is the role of an architecture policy of the sort that many of our European counterparts including Scotland and Northern Ireland now have in place?

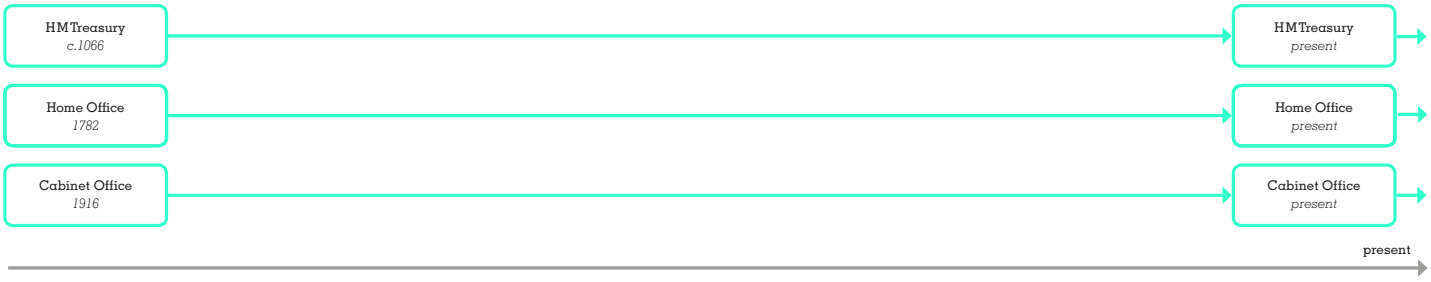
- **What is the potential role of an architecture policy for this country?**

MINISTERIAL DEPARTMENTS RESPONSIBLE FOR THE BUILT ENVIRONMENT SINCE 1919

The built environment has continuously been divided between government departments



Other government departments have long-standing continuity



The future of city making

Another feature in recent decades has been the radical changes in local government. If it's true that – as Bruce Katz says very convincingly in his recent book *The Metropolitan Revolution* (2013) and others have similarly noted – the future of planning is at city level, then what are the appropriate governance structures?

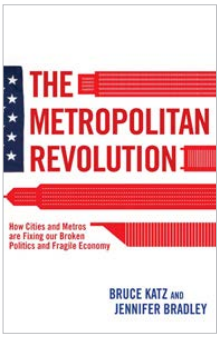
From the 1970s onwards, London effectively became a monopoly, giving very little space for local and diverse economies to flourish in regional cities. The same was true of politics as more and more was centralised to Whitehall. The once locally and excellently led cities like Birmingham, Manchester and Liverpool that created the industrial revolution have become dominated by centralised power in Westminster and a shift from entrepreneurs to councillors. In the words of Lord Heseltine, writing in his 2012 report *No Stone Unturned: In Pursuit of Growth*, "Local government assumed the character of Whitehall's branch offices."

By the 1980s, the closure of the Greater London Council removed a symbolic city-level governance structure that did not get replaced until 1999, and even then only in a different form, with the creation of the Greater London Authority. Of the mayoral referendums for 11 major cities held in 2012, only Bristol opted in. The fact that George Ferguson, the current Mayor of Bristol, has put planning and the built environment high on the city's agenda is a part of the reason why his tenure has proved so successful and popular. The real reason is that civic leadership works, and when local authorities want to collaborate on broader, metropolitan-scale issues, the legislative infrastructure should be in place for them to do so.

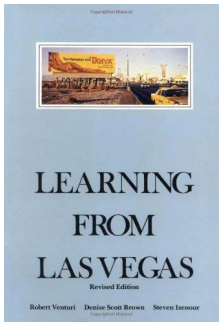
Individuals as champions for the built environment can be very effective. As a student I learnt about the profound effects of Ebenezer Howard and Le Corbusier on city planning, and as a practitioner I saw what community architects and conservation lobbyists could do. The works of my tutors Robert Venturi and Denise Scott Brown, including *Learning from Las Vegas* (1978), had a similarly profound effect on architecture and taste, whilst the works of Jane Jacobs were truly seismic in their impact on urban planning. In the UK, political leaders have played a significant role, like Sir Simon Milton who introduced opportunity areas to London and Michael Heseltine who became so involved in Liverpool and the future of the Thames Gateway. Today, figures like Jan Gehl, the Danish architect who transformed Copenhagen's public realm, are making an important impact on their cities and those overseas. But such figures are few and far between in this country, and those like Amanda Burden, Director of the Department of City Planning in New York, and Tina Saaby, City Architect for Copenhagen, are seen as leading on the international stage.

Governments certainly don't have all the answers, and I have seen politicians and civil servants with very little national and international experience of planning and design trying to solve projects like the Thames Gateway and the future of airports or High-Speed Rail. But the private sector does not act at the large strategic scale either, as it tends to be driven by short-term profits and the bottom line. We need leadership from private and public sectors that is not subject to the short-term political cycles and changes of government or driven by short-term profits and share values.

- **How can we encourage place-based built environment policies at the city and local level alongside the potential for renewed civic leadership?**



Bruce Katz and Jennifer Bradley, *The Metropolitan Revolution* (2013)



Robert Venturi, Denise Scott Brown and Steven Izenour, *Learning from Las Vegas* (1978)

Summary

The changes I have experienced over the last fifty years as a practising architect and town planner have been dramatic and profound in all areas that this Review covers. The pace of acceleration is evident enough right now, as even during our year of consultation for the Review from 2013 to 2014, really significant changes have taken place, including:

- **The splitting of English Heritage into a charity and a separate regulatory body**
- **The RIBA introducing a new intermediate title, "associate architect"**
- **Education reforms and new models emerging to make the programme more affordable**
- **UKTI and the RIBA forming stronger links and creating new opportunities**
- **Open House London going global**
- **The creation and screening of more television programmes about architecture and the built environment than ever before**
- **The opening up of travel grants by the Arts Council and British Council for architects to travel overseas and secure work**
- **The Department for Communities & Local Government (DCLG) instigating a review of the ARB and of the protection of the title "architect".**

These are, in my opinion, indicative of the extraordinary and accelerating revolution in which the most dominant forces are city making, urbanisation and the growth of what were once Third World countries combined with the extraordinary explosion of digital technology. These forces will bring about greater and previously unimagined empowerment of everybody, everywhere to shape the places they live in but at the same time very serious challenges of depleting resources, climate change and pollution.

We will continue to track ongoing progress made in achieving the ambitious vision that this Review sets out, and will keep updating our website www.farrellreview.co.uk. We are particularly mindful that this Review will be delivered in the run-up to a general election, and will be examining all of the party manifestos to see whether these issues and our recommendations are being taken up.

I am extremely grateful for and humbled by the energy and enthusiasm of everyone who has been involved in the Review. But this is only the beginning, and I sincerely hope that the spirit of the Review is taken up by others and that everyone does their bit to bring about the positive changes that are needed.

The Minister Ed Vaizey has committed to regular meetings with the Panel, and we hope that the website will act as a living and evolving hub for the debate to continue. I for one will do everything I can to make sure the Review acts as a rallying call to heighten awareness of what can and should be done – to help change our culture and priorities by making architecture and the built environment one of the biggest public issues. In the last few decades our food and our health have been transformed and we now expect and demand so much more, such higher standards. Our built environment, our buildings and places are just as critical to our happiness and wellbeing. What is facing us is how to raise this part of our culture to similar levels.

To read the full Review and to keep track of progress, please visit:
www.farrellreview.co.uk

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nla LONDON'S CENTRE FOR THE BUILT ENVIRONMENT

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