

150 URBAN DESIGN

Spring 2019
Urban Design Group Journal
ISSN 1750 712X

**NORTHWESTERN
EUROPE**



**URBAN
DESIGN
GROUP**



into the heart of planning, design and engineering. Throughout the year there will be a series of conversations and events, as well as a website to explore what 21st century people-friendly places should be like and how it can be achieved. I would like to invite UDG members, or anyone with an interest in urban design, to join in the conversation. Please check out the website www.people-friendlyplaces.org

Our second campaign, *Creating Better Urban Form* is being led by Roger Evans. We are inviting local authorities to use the UDG's experts to review their draft local plans and site allocations with a view to locating new development in the best places and avoiding unsustainable locations. Our experts are happy to make presentations on how to achieve good urban form through the planning system to officers, councillors or community groups. We invite local authorities to get in touch with the UDG for more information, via the email address below.

At the time of writing we are hoping to host events covering such diverse topics as: designing a safer urban environment for children; future High Streets; masterplanning; main streets and boulevards; and a Big Draw. We have potential urban design visits to Battersea Power Station, Margate and an overseas trip to Vancouver (more like 5 days). We also plan to build on the UDG's trip to China and to forge new international links. You might have noticed the current website has been tidied-up. This year we will be working on creating a new UDG website, bringing you news, videos, jobs, twitter and more in a more attractive and easier to use format. Finally, I can reveal that the venue for this year's UDG conference is Birmingham. We look forward to seeing you there in September.

I would like to remind members of our three objectives: to be relevant; to be cutting edge; and to be fun. As ever, if you have an idea for an urban design event, or would like to get more involved, please do get in contact with us at administration@udg.co.uk.

Leo Hammond, Chair of the Urban Design Group and Associate Director at Lambert Smith Hampton

UDG'S NEWS

I am writing this at the start of the year when Brexit is hitting fever pitch. Needless to say at this point there is no clear indication whether, by the time the journal is published, the UK has just fallen off a cliff face, entered a brave new world or will remain unchanged. Whichever way, we at the UDG are marking this time in history with a Brexit-themed issue on urban design in Northwestern Europe, enjoy...

UDG SNAPSHOT

Since the last issue, we have had several memorable UDG events. At the end of 2018, there was the Inclusion, Diversity and Urban Design talk and hands-on session in The Gallery at Cowcross Street. This is the sort of event we will be doing more of: pithy talks on relevant subjects, followed by audience participation and debate. And we are keen to do this outside London too. On the same day, we also had the Recognised Practitioners' event. It was great to hear what we can be doing more of and how we can use your knowledge and experience to shape the urban design agenda. As ever, the UDG Awards in March showcased the best in public and private sector projects, student projects and books. It is wonderful to see the UDG Awards continue to be the cornerstone for rewarding and celebrating genuinely great urban design.

THE YEAR AHEAD

This year we have welcomed new members to the UDG Executive Committee, adding to the skills of our experienced older hands. So with new energy we have been planning campaigns and events. We have also had the pleasure of welcoming two new UDG Trustees: Janet Tibbalds and Marion Roberts.

One subject that the Executive Committee has been discussing is how the UDG can best promote good urban design, the urban design profession and you, as members. Our aim is to raise the profile of urban design and urban designers in the built environment sector and among the public at large. The first meeting of 2019 saw a discussion of age-old questions: what is urban design and who are the urban designers? Yes, that tricky question we get asked at parties. Being a relatively young profession and group, we feel that there is the opportunity to continue to debate these questions. We settled on urban design being the creation of successful places, and we would be happy to hear from members on their thoughts via the email address below.

So far this year we have two UDG campaigns. The first is a year-long campaign on *Making People Friendly Places*, which is being run with a number of other organisations and led by Katja Stille, the UDG's Treasurer. The aim is to celebrate Francis Tibbalds' *Making People Friendly Towns* book with a campaign to put people back

DIARY OF EVENTS

Throughout 2019 the UDG will be marking the 25th Anniversary of the publication of Francis Tibbalds book *Making People Friendly Towns* with a series of events on the theme of Making People Friendly Places. If you would like to run your own Making People Friendly event – please contact administration@udg.org.uk. See www.udg.org.uk for further details.

FORTHCOMING EVENTS

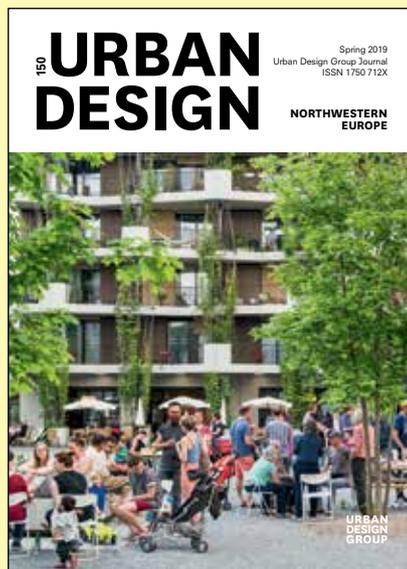
Check out the UDG website for details about events on

- **Designing for Children**
- **Making People-friendly main streets and boulevards**
- **A Manual for Towns and Cities?**
- **Walks and Visits**

THE NATIONAL URBAN DESIGN CONFERENCE 2019

Making People Friendly Places
Birmingham, Friday 27 September 2019
plus conference fringe events

Videos of past UDG events can be viewed on UrbanNous
www.urbannous.org.uk



Urban Design Group

70 Cowcross Street
London EC1M 6EJ
Tel 020 7250 0892
Email administration@udg.org.uk
Website www.udg.org.uk

Office

Robert Huxford, Director
Alexandra Rook, Development Manager
Jacqueline Swanson, Events and
Projects Manager

CHAIR Leo Hammond

PATRONS Irena Bauman, Alan Baxter,
Dickon Robinson, Lindsey Whitelaw and
John Worthington
TRUSTEES Arnold Linden, Marcus
Wilshire, Janet Tibbalds, Marion Roberts

Editorial Board

Matthew Carmona, Richard Cole,
Tim Hagyard, Joe Holyoak,
Sebastian Loew, Daniela Lucchese,
Jane Manning, Chris Martin,
Malcolm Moor, Geoff Noble,
Judith Ryser, Louise Thomas

Editors

Louise Thomas (this issue)
louisethomas@tdrc.co.uk
and
Sebastian Loew
sebastianloew@btinternet.com

Book Review Editor
Jane Manning

Design

Claudia Schenk
trockenbrot
www.trockenbrot.com

Printing Henry Ling Ltd
© Urban Design Group ISSN 1750 712X

Advertising enquiries

Please contact the UDG office

Contents

This issue has been kindly sponsored by
GreenBlueUrban

COVER

The non-profit mixed use district Hunziker Areal (*Mehr als Wohnen*) development in Zurich. Photograph ©Johannes Marburg, Genf

UPDATE

- 3 — New Town Utopia
- 3 — Low Traffic Neighbourhoods
- 4 — Understanding Local Distinctiveness
- 5 — Early Years Learning from Landmarks
- 6 — UD Library #29: A Thousand Plateaus, Gilles Deleuze and Felix Guattari
- 7 — My Favourite Plan: Joe Holyoak
- 8 — Behind the Image: Granary Square, King's Cross

RESEARCH

- 10 — Exploring the Significance of Local Mixed Streets, Agustina Martire

INTERNATIONAL

- 12 — Disappearing Urban Communities, Gihan Karunaratne
- 14 — Public Space after Conflict, Horacio Gómez Murcia
- 16 — The Remodelling of the Gran Vía, Teresa Franchini

TOPIC: NORTHWESTERN EUROPE

- 18 — Introduction, Judith Ryser, guest topic editor
- 21 — How we live: Observations from Space, Hannes Taubenbock, Christian Geiss and Michael Wurm
- 24 — Ludwigsburg: A City of the Future and Living Lab, Sven Dübner and Constanze Heydkamp
- 27 — Working in the Context of the Brussels Canal Plan, Dirk van de Putte

- 31 — Creating Green Networks in Flanders, Michael Stas and Jan Zaman
- 33 — Rethinking the Village, Jeff Mirkes
- 36 — Shaping Zurich's Development with Non-profit Housing, Roman Streite
- 39 — Designing with Children, Aafke Nijenhuijzen
- 41 — Places of Fear, Peter Zeile and Fabian Schlosser
- 44 — Encouraging Mobility for People with Dementia, Clemens Beyer and Wolfgang W Wasserburger

BOOK REVIEWS

- 46 — The Handbook of Urban Morphology, Karl Kropp
- 46 — Building and Dwelling, Richard Sennett
- 47 — New Suburbanism, Sustainable Tall Building Development, Kheir Al-Kodmany
- 47 — Vertical Urbanism, ed. Zhongjie Lin and José L S Gámez
- 48 — Modernist Estates - Europe, Stefi Orazi
- 48 — Adapting Cities to Sea Level Rise: Fresh and Gray Strategies, Stefan Al
- 49 — Walkable City Rules, Jeff Speck
- 49 — A Vertical Forest, Instructions booklet for the prototype of a forest city, Stefano Boeri

50 — PRACTICE INDEX

56 — EDUCATION INDEX

ENDPIECE

- 57 — As much as necessary, as little as possible, Joe Holyoak



Learning from Elsewhere



Given the uncertainty about what type of Brexit, if any, we will be dealing with in the coming months and years, this issue is a celebration of this journal's ability to bring together great thinking about places, people and processes. This openness is reflected not only in this issue's main topic that looks at Northwestern Europe thanks to Judith Ryser's curatorship, but also in visits to many other places from Nottingham, Belfast, and Birmingham to Villaviciencio in Colombia, Ljubljana, Naples and Madrid, via Jakarta.

Looking at the Gran Via in Madrid, Teresa Franchini's article describes ideas which should be at the heart of all urban designers' thinking, namely to make cities open and liveable. It may not be by chance that a woman, the mayor of Madrid, Manuela Carmena, had the stamina and political courage to transform a main traffic artery which crosses the centre of Madrid into a liveable urban space. In it, people can now enjoy the city, linger, sit in the shade of new pear trees, and drink at public fountains, without having to put up with roaring traffic and exhaust fumes.

We are also delighted to be able to give more space in this issue and in the future to the Behind the Image feature, as the team producing it are doing a great service to us all with their illustrated visits to and analysis of valuable places.

As the journal depends upon contributions from readers and their networks, we are always interested in hearing from you with ideas for articles, or if you want to make a contribution to one of our regular Update features. ●

Louise Thomas, independent urban designer

HOW TO JOIN

To join the Urban Design Group, visit www.udg.org.uk and see the benefits of taking out an annual membership.

- Individual (UK and international)** £55
- UK student / concession** £35
- Recognised Practitioner in Urban Design** £85
- Small practice (<5 professional staff)** £275
- Large practice (>5 professional staff)** £495
- Education** £275
- Local Authority** £100
- UK Library** £90
- International Library** £120

Film Night: New Town Utopia (2017), Director Christopher Smith

9 January 2019, The Gallery, London

A film about Basildon, a place so often mocked, was a thoughtful and stimulating choice for the Urban Design Group's film night. The question posed by Paul Reynolds in his introduction to the evening was: What can be learnt from the post-war aspirations and idealism that led to the 10 new towns (in England) created by The New Towns Act of 1946?

The audience was delighted to welcome Christine Lyons, Basildon's Head of Planning who reported on the planned regeneration of the town centre, which sits like an island amongst housing estates and green spaces. With London so expensive and Basildon so close, what can be done to attract families there, apart from its lower house prices?

The film beautifully captured the brutalist architecture, and the contrast with its landscape. It did not focus on dereliction and the disgruntled, but on the spirit of the

people who animate the town, especially the artists and musicians. Brookes House, the tall signature residential slab block in the town centre, was designed as housing for professionals; now it provides accommodation for the town's homeless, a potent symbol of aspirations unmet.

The voice-over by actor Jim Broadbent reciting Lewis Silkin's words was a powerful commentary on the post-war aspirations and vision of a better life, its healthy housing away from city slums, space for leisure, and a more classless society, where town and country meet, and 'a new type of citizen with a sense of beauty, culture and civic pride' would flourish. Interviewees talked about the contrast with East End slums, and how it seemed such a gift (with indoor WCs and proper kitchens). The architecture was modern, futuristic and like Harlow, the town was gifted a generous amount of public art, a well-used arts centre and other social facilities.

To the director of the arts centre, the town's design was not the problem but the post-war shortage of materials, untested construction methods, and fundamentally, the lack of public investment in maintaining the public realm. The handover from the Development Corporation to the local authority was also singled out as the beginning of the decline.

The New Towns were not just about housing, but moving industry out of the city, and so people moved with their firms; Ford employed 6,500 people alone. The social bonds created by the intimate proximity of work and home (a walk or cycle ride away, despite planning envisaging the increase of car use) is a lesson for us now. However, one of the interviewees commented on the role of women, confined and isolated as homemakers after the liberation of work during the war, and the rise of depression.

Perhaps the new town layout is just too space-age. A bold new vision of how it could develop would be worth exploring, to generate a more intense density to accommodate more people, but also to create workspaces and support local facilities. This would enable people to live and work in the same place and not waste energy commuting. ●

Alexandra Rook, Development Manager,
Urban Design Group



Low Traffic Neighbourhoods

31 January 2019, The Gallery, London

Leo Hammond and David Harrison launched *A Guide to Low Traffic Neighbourhoods and Low Traffic Neighbourhoods; An Introduction For Policy Makers* (available from London Living Streets and London Cyclign Campaign). Ester Kurland, chairing the event, introduced Chris Martin (Urban Movement) who explained the theory behind low traffic neighbourhoods emphasising their scale. Local workshops should be used to identify urban cells, and cells of an appropriate scale create a safer and healthier environment, where pedestrians spend 10 per cent more

locally. Three elements were needed for connected low traffic neighbourhoods: urban boulevards, quiet streets and traffic cells.

Hackney's Deputy Mayor, Fayal Demirci, gave further examples, as the area has poor air quality, rising obesity and bus reliance. Hackney has reduced its road widths, created people's parklets, and introduced cycle hangers. The parklets used former parking spaces, and had been a legal nightmare to create. School streets were also closed for 45 minutes each morning and afternoon. Locally 71 per cent of respondents supported this, but external opposition and Transport for London were concerned about traffic displacement. There would be traffic displacement but also evaporation as people made different trips.

For Fran Graham, London Cycling Campaign, low traffic neighbourhoods are essential. New Quietways created problems at their crossings with main traffic routes, and so it was not possible to make all roads safe, but they should all have low traffic levels. But how low traffic is low – is it 2,000 passenger car units (pcus) per day, 1500 pcus as in Holland, or Waltham Forest's 1000 pcus? Filters, road narrowing, planting and footpaths across junctions all improve safety, and the aim is for all of London to be within 400m of a high-quality cycle route.

Laurie Johnston, Dulwich and Herne Hill Safe Routes to School Group, had fought the loss of lollipop ladies. Their success

has spurred them on to focus on safety and changing attitudes towards children's needs in road design. Positive campaigning was difficult, and this emphasised the need to work together and compromise to achieve their long-term aims. They have had successes with junctions, but roads were still perceived as dangerous and traffic flows had not diminished. Pollution concerns were being used to seek a holistic walking plan. The mismatch of school catchments and local authority boundaries was also a problem. School Streets should be permanent, not time-limited, as better roads serve both children and older people.

Rachel Aldred, University of Westminster, concluded with the need for an evidence base, as there is more evidence about cycling than walking. Green spaces encourage walking, and Appleyard had shown that walking encourages socialising. Mini Holland was a rich source of information; traffic filters had resulted in a 20 per cent reduction in car use. In Church Street, Hounslow, direct interviews with pedestrians and cyclists about interventions showed that they were beneficial and traffic had diminished in the area. The health benefits of increased activity were worth £0.5m in cost savings.

This closed a great evening perhaps preaching to the converted. ●

Richard Cole, architect and planner



Understanding Local Distinctiveness

17 January 2019, The Urban Room, Nottingham

Nottingham Urban Room, officially opened to the public in October 2018, is already buzzing with place-making events. On the 17th January, Nottingham City Council hosted an event about Understanding Local Distinctiveness, a real taste of what is to come in the city this year. At the seminar, local residents, industry and authorities came together to debate how understanding local distinctiveness can help to deliver places of good quality that genuinely work for all.

Dr Laura Alvarez, Nottingham City Council, opened the event introducing the *Design Quality Framework for Nottingham City* as the reason for the day's theme. She explained that the framework, referred to as the DQF, is a series of interconnected design guides that together, aim to raise the bar of design quality in the city. The scheme is part-funded by the Ministry of Housing, Communities and Local Government. Laura explained that the contents of the DQF guides respond to collective aspirations and visions for the city, which are being developed with a place-making ethos at the Urban Room. The guides, she added, target both the quality of places and buildings, and the effectiveness of the planning process in securing design quality. The first three guides will be ready for testing in April 2019, and will be on housing design, streets design and façades design; other themes will follow.

The seminar continued with a review of existing character and new 'characterless' developments that have emerged in the region. Richard Shaw, South Kesteven District Council, looked at examples from practice where local distinctiveness was identified and celebrated, and then compared these

cases with poorer attempts. Going into some depth to examine the methods that are regularly applied to understand local character, Richard concluded that good examples always start with a strong, clear vision and a deep understanding of the context.

Louise Thomas, TDRC, followed with a presentation that explored examples of how local distinctiveness can inform new development in rural areas. Although existing broad landscape classifications are often not helpful in understanding local character, the landscape setting is one of the most crucial variables to be considered. However, it must include the analysis of historic and contemporary development to highlight how place, use, topography, human factors and lifestyles become a pattern that defines place.

Charlotte Mackey, GreenBlue Urban, followed with a range of worldwide case studies where trees and urban landscapes became the primary source of added character. With this presentation, it became clear how the appropriateness and quality of the landscape treatment often makes the whole difference in terms of place quality.

Representing the Historic Towns and Villages Forum, Louise Thomas later debated how character assessments can support design policy at a local level. She looked at the *Oxford Character Assessment toolkit*, at Planning Aid's *Toolkit Character Assessment* to support neighbourhood planning and at Historic England's *Understanding Place, Historic Character Area Assessments*, as well as at a national house builders' approach to defining and achieving character. A comparison of the various toolkits and their application in practice highlighted that each method could be useful depending on the case and the motivation behind the study, but they all had gaps and areas of weaknesses.

PLACES AND CHARACTER

The workshop session began with a fascinating exercise by Dr Ana Souto, Nottingham Trent University, in which participants were asked to draw a postcard of Nottingham

and to note their favourite place. During this session – and many other workshops led by Ana – participants consistently chose a symbolic place for the postcard and a place of personal emotional attachment as their favourite place. The debate then focused on how people perceived the city both physically and emotionally, and the ways in which each one of us defines local character and place identity.

Organised in groups, participants then tried to answer three key questions. The results of the workshop were the first step in the search for the role of local distinctiveness and character across the various guides of the Nottingham Design Quality Framework. In summary, these were:

1. What are the key components of local character?

All groups used lists and bullet points to answer this question. The results were shown in a word cloud format.

2. What tools are more relevant to appraise local character?

There is no one specific tool to appraise character with a place-making ethos. Each urbanisation, zone or site will need to use a range of toolkits to understand and illustrate the local characteristics. This is especially important to ensure a collective approach that gives everyone a voice.

The traditional method of using questionnaires, interviews and surveys still has a place in urban characterisation, but other innovative tools might be more appropriate and time-efficient, saving valuable resources for all parties involved. For instance, simply asking participants to mark the places they love on a map, or draw their mental image of the place, can trigger deeper conversations. Any place survey needs at least one group site visit. This is so important because dialogue on the spot can be richer and more informative than desktop studies. A good group site visit can also give some clues for deciding what the most appropriate evaluation tools are. Multidisciplinary walkabouts can be very effective and these can be combined with appraisal tools like Placecheck.

3. How can we ensure the character debate is inclusive and considers collective views through place-making processes?

A number of reach-out strategies working in combination can be more effective and inclusive than a single form of engagement. For example, using apps, social media and online platforms as well as meetings, gatherings and events can help achieve broader participation and wider reach-out.

Setting up forums and interest groups led by community members is always an excellent way to ensure that place-making processes do not start and end with a specific project but that larger urban areas, towns and villages are looked after in the long term.

There were a number of tips for positive engagement:

- Gathering around food, as this removes barriers and pre-conceptions often become looser
- Working on cohesion and mutual understanding between different parts, ahead of the engagement
- Setting expectations and asking specific questions that focus on what can be co-designed rather than broader issues that participants cannot control
- Explaining the site evaluation and the need for development from the outset, setting out a starting point
- Listening well and speaking in plain language to help everyone in the dialogue
- Acknowledging the power of children, their intuition and their potential to change the culture towards a stronger place-making and governance ethos
- Ensuring that councillors and planning committee members play an active part, and
- Providing adequate feedback and follow-ups so that engagement does not finish with the event itself.

KEY FINDINGS

The main findings from this fascinating day were that a good result always begins with a deeper understanding; human factors define character as much as physical or



environmental factors; quality and character go hand-in-hand; product design and process management are equally relevant to build-in character; and no single method can be used to appraise every place. ●

Dr Laura Alvarez, principal urban design and conservation officer, Nottingham City Council

Early Years Learning from Landmarks

As recently as the 1990s when technology was less prominent in people’s lives, children were much more involved with their surroundings. They experienced sensations and

built memories in places where they played or went with their friends and parents. This was before indoor entertainment and technological gadgets took over, and when the neighbourhood was a place for learning.

Now in the digital era, where everything is expected to be fast and instantaneous, children have many other things to learn in their early years. A survey conducted in Asia showed that 98 per cent of children spent between 2-5 hours a day (beyond school

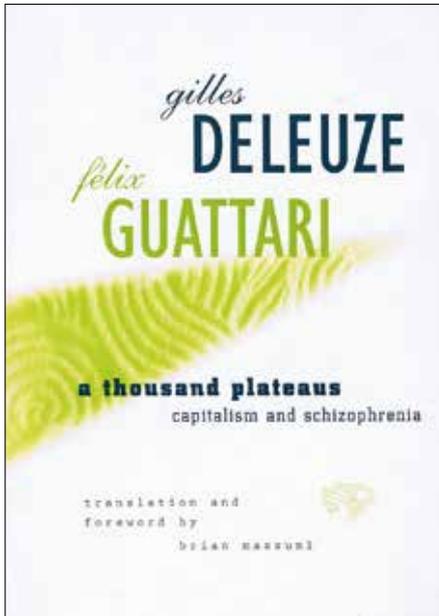
hours) indoors or using gadgets, or both. As a result, children have fewer opportunities to learn about their environment. They live in cities, but probably do not know their city’s locality and unique characteristics.

Although there are many ways to tackle this issue, @100anak.emas are trying to introduce the idea of ‘wearing your city’ for toddlers, in the belief that the toddler years are the best learning period in human life. We have created hand-drawn T-shirts that show the everyday streetscapes of the city set against the background of the city’s landmarks, in this case Jakarta. The idea is to get children to learn about city landmarks from simple graphics, so that they will recognise them, love them, and hopefully become curious to learn more about other elements of the city.

‘100 anak emas’ is derived from Bahasa Indonesia, the national language of the Republic of Indonesia, and means 100 golden kids. It is a charity which aims to sell 100 hand-drawn city landmark T-shirts for 100 children of this golden age. All of the profits go to the charitable foundation that helps homeless street children in Jakarta. ●

Cindy Sulaiman, architect and urban designer, and co-ordinator of @100anak.emas





Urban Design Library #29

A Thousand Plateaus, Capitalism and Schizophrenia, Gilles Deleuze and Felix Guattari (translation and Foreword by Brian Massumi), University of Minnesota Press, 1987

This is no ordinary book... It does not have any linear arguments or a specific subject, which reflects the very core of the philosophy that it offers: the rhizomic connections between seemingly discrete areas of human thinking. It is the second and final volume of *Capitalism and Schizophrenia*, the first volume being *Anti-Oedipus, Capitalism and Schizophrenia* published in 1972 on Marx's and Freud's theories of capitalism and psychoanalysis. The way in which *A Thousand Plateaus* is written enables it to be a functioning form in itself, encouraging the reader to have new encounters with the world, rather than being a representation of the world. It employs a spatial logic of multiple sections (plateaus), explained as rhizome with each chapter presented in a non-linear order. Deleuze and Guattari define rhizome (pp. 3–28) as the opposite to hierarchical or structural views. For them connections and becoming are more important than essence and being. This way of thinking contradicts binary (dialectic) thinking and aims to have a fresh look at the specific logic (code) of any combination of connected entities (assemblage) regardless of presupposed mental structures.

Post-structuralism was a belief that society and its spatial realisation (i.e. cities) should not merely be understood as the product of the powerful majority exercising influence over the minority. Instead, power resides in ordinary language, and in the way that people organise their everyday lives.

In this context, capitalism is seen as creating the parlous condition of the world. What the Frankfurt School criticised was the big scale, authoritative and Fordist version of modernism, whereas post-structuralism considers power to be uncertain, complex and addressing a post-Fordist idea of modernisation.

During the 1960s, at the same time as the emergence of post-structuralism, seminal urban design thinkers began to criticise top-down, big-scale modern urbanism for its oversimplified understanding of human beings and cities. Le Corbusier's work had come to symbolise this modernist approach exemplified in massive-scale post-war urbanisation (i.e. Fordist). Christopher Alexander and Jane Jacobs, among many others, aimed to replace this simplified understanding with a more complex model of appreciating that there are aspects of cities which can never fully be grasped or understood e.g. the life or patterns of cities. This reverberates with what is discussed in many post-structuralist philosophies. *A City is Not a Tree* (Alexander, 1965) has similarities with the concept of the rhizome. Within their different scopes, both call for an acknowledgment of the unpredictable connections between seemingly-separate sections of cities or processes in the world.

Architectural theories and practice have borrowed, and widely misunderstood, the concept of Fold by Deleuze during the 1980s and 1990s. Nowadays in urban design, the ideas of autonomy (Aureli 2008), participatory urban design (Sendra 2015) and urban assemblage (Dovey 2009) are examples of *rhizomic* thinking.

I tackled this formidable book during my doctorate study of the gap between theory and practice in urban design, creating a multi-disciplinary reading group in order to discuss Deleuze's works in more depth. As a result, I used Deleuzoguattarian philosophy as the research methodology for my PhD. In short, the advantages of this methodology compared to the mainstream methodologies, are:

- enabling the research to go beyond conceptual frameworks and see them as results of socio-political forces
- seeing knowledge, professionals (theorists and practitioners) and locations as a dynamic rhizome and,
- allowing each interviewee to frame their own understanding of the research problem.

The way of thinking offered in this book will work better in the 21st century, when philosophical frameworks are merging together, for example, psychology is now more closely related to the housing market. With the aim of understanding today's world and find ways forward, this book suggests advocating ways of thinking and life that have become minorities. Such a value set would be about safeguarding minority values and resisting giving more power and resources to those who are already running the system. However hard

it may be to directly apply this thinking to urban design, once we have broken through the difficult language of this book, it could provide a valuable guide for thinking, researching and perhaps living. ●

Hooman Foroughmand Araabi, Senior Lecturer in Urban Planning and Design, University of West of England

READ ON

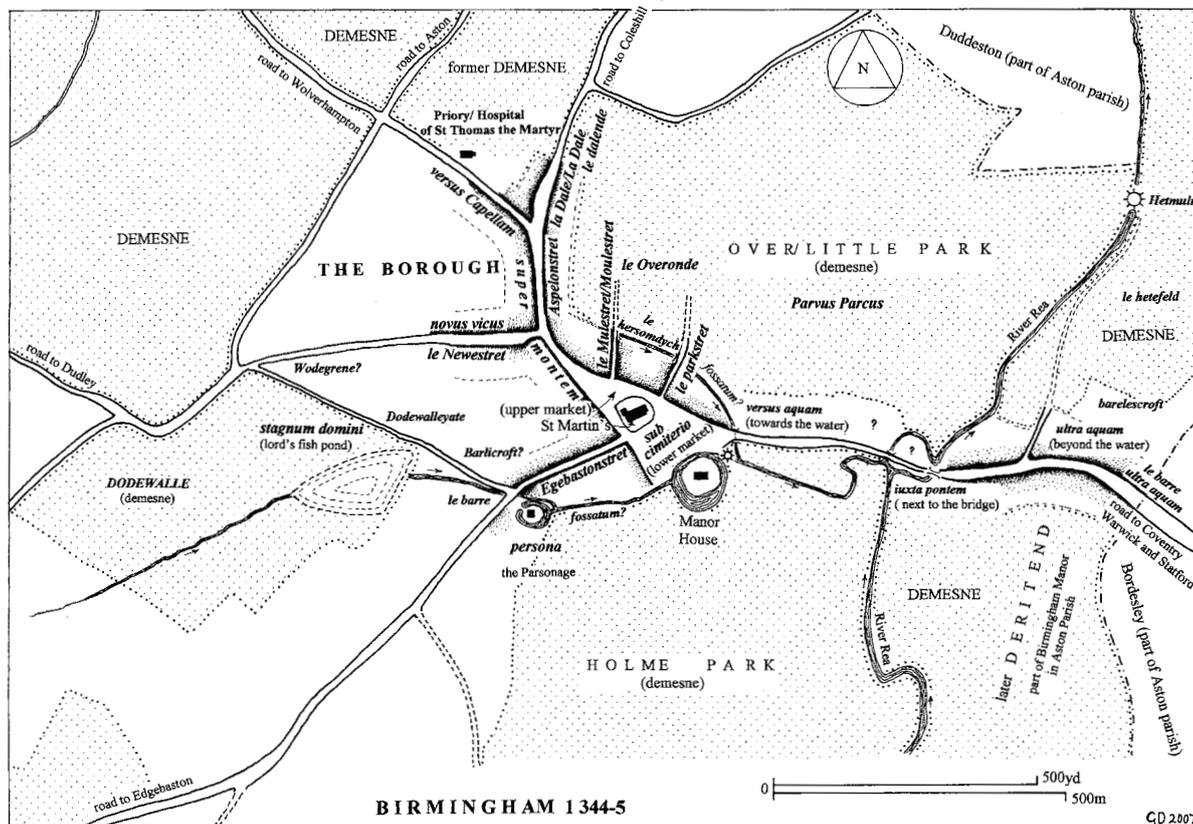
- Alexander, C. (1965). *A city is not a tree. Architectural Form*
- Buchanan, Ian. 2008. *Deleuze and Guattari's Anti-Oedipus: A Reader's Guide*. Continuum Reader's Guides. London ; New York: Continuum.
- DeLanda, M. (2006). *A new philosophy of society: Assemblage theory and social complexity*. A&C Black.
- De Landa, M. (2016). *Assemblage theory*. Edinburgh: Edinburgh University Press.
- Dovey, K. (2009). *Becoming places: urbanism/architecture/identity/power*. Routledge.
- Dovey, K. (2016). *Urban design thinking: a conceptual toolkit*. Bloomsbury Publishing.
- Foroughmand Araabi, H. (2018). Minding the gap: the professionals' view on the interaction between urban design theory and practice. *Town Planning Review*, 89(3), 209-228
- Foroughmand Araabi, H., & McDonald, A. (2018). Towards a Deleuzoguattarian methodology for urban design. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*.
- Foroughmand Araabi, H (2017) *The Formation of Urban Design Theory in Relation to Practice*, PhD thesis of Urban Planning, Bartlett School of Planning, UCL, London
- Foroughmand Araabi, Hooman. 2014. 'Deleuze and Research Methodologies: The Impact on Planning.' *City* 18 (4-5):589-93.
- Jacobs, J. (1961). *The death and life of great American cities*. Vintage.
- Parr, A. (Ed.). (2010). *Deleuze Dictionary Revised Edition*. Edinburgh University Press.

CONTRIBUTE TO URBAN DESIGN JOURNAL

This journal has a number of regular features, which are contributed by UDG members, and the editors are always happy to receive your suggestions, for example:

- Reviews of recent urban design-related events
- Books for the Urban Design Library shelves
- My Favourite Plan
- Research undertaken as part of a taught course or a research commission.

Urban Design journal has a rich history of great articles from a wide array of UDG followers. If you would like to be one of them, please email your ideas to the editors: louisethomas@tdrc.co.uk or sebastianloew@btinternet.com



My Favourite Plan: Joe Holyoak

Birmingham 1344-5, drawn by George Demidowicz

WHY I LIKE IT...

George is a historian, author and archaeologist, and a friend. He used to lead Coventry City Council's conservation and archaeology team, but he has done a lot of work on Birmingham's mediaeval history, and also on Matthew Boulton's and James Watt's industrial enterprises. This plan, and a similar one of 1296, are based upon George's chance discovery in Longleat House of two rental rolls belonging to the lord of the manor of Birmingham. From these rentals, he was able to reconstruct the topography and street pattern of the town, establish the distribution of wealth through landholdings, name the leading citizens, and identify the occupations, crafts and industries which they pursued.

It is enjoyable to trace those features and names which have survived and are recognisable, nearly seven centuries on from 1344. The most striking is the triangular hillside upper market place, closed at its lower end by the parish church of St Martin. This space persisted, under its later mediaeval name of the Bull Ring, until Herbert Manzoni's Inner Ring Road crashed through it in 1960. The citizens' group Birmingham for People sought to reinstate the space in our 1989 counter-plan to the proposed redevelopment of the 1964 indoor Bull Ring Shopping Centre. We

half-succeeded.

The river Rea continues to flow north, although its course has been altered over time by the engineering of mill-races serving several watermills. One of them, Hetmulne (Heath Mill) is shown, and has since given its name to the anonymous lane to the right of the map. Le Moulestret still exists, with its name corrupted to Moor Street, and with an Edwardian railway station of the same name. George's research reveals that the street was named after the town's richest citizen Roger le Moul, who rented thirteen burgages, eight half-burgages, and six tenements.

Le parkstret is still there. It was so named as it led to the lord of the manor's deer park, now long ago buried under the industrial development of Digbeth. But it is a nice coincidence that Park Street today connects the Bull Ring to the 2013 Eastside Park designed by Patel Taylor and Allan Provost, located about where George has placed his north point (although HS2 will sever this connection).

WHAT TO LEARN FROM IT...

George's purpose in drawing the plan was to give tangible form to an otherwise invisible 14th century town. But by recording the past, plans also provide information which can give clues about how we should build in the future. Urban designers rarely if ever start from zero; we add to and amend what is already there, and I am a firm believer that recorded history can suggest appropriate ways in which to do it. Plans like George's, interpreted with intelligence, discrimination and imagination, can help us to establish a beneficial continuity between the past and the future. ●



CURRENT POSITION

Principal, Joe Holyoak architect and urban designer

EXPERIENCE

Previously Course Director of MA Urban Design, Birmingham City University

EDUCATION

Diploma in Architecture, Birmingham College of Art and Design
MA Urban Design, Oxford Polytechnic

SPECIALISMS

Community-based local planning, local design activism, and teaching the importance of urban design

AMBITIONS

To at least finish the big job I am now working on before I have to retire.

Granary Square, King's Cross, London

One of Europe's largest urban regeneration projects has created new public spaces embedded between relics of the area's industrial heritage



In each issue of Behind the Image, one of our contributors visits a contemporary public space from around the world. The photography tries to reveal an alternative perspective on a familiar precedent, famous space or place. These images illustrate how the public space works in practice: exploring its features (designed and unintended), and the way it relates to the surrounding context. ●

Lionel Eid, George Garofalakis, Rosie Garvey and Alice Raggett



Water: Particularly during the winter months, the use of water fountains cleverly helps to fill the vast space of Granary Square which is over 100m wide. In high summer the space acts almost like a beach for local families, with children playing in the water.

Details: The retention of subtle historic details adds texture and makes traces of the site's industrial past visible. This is in stark contrast to the colourful branding and more blatant advertising used to signpost new openings and events in each space.



Then and now: The retention of 'ordinary' older warehouses, shown in their previous condition on the left, has helped to shape the character of the public spaces. Careful extensions and retrofitting with new details have transformed these buildings for modern use. This route forms part of the western edge of Granary Square and the widest route into Coal Drops Yard. One of the key characteristics of King's Cross is this sense of connection and progression through a series of distinct and diverse spaces to explore.



Changing time and seasons: The stepped seating facing the Regent's Canal offers different identities throughout the seasons, creating a destination, an art installation, a place to meet or just relax by the river, keeping people in Granary Square.



Skyline: Long views across Granary Square present a backdrop of varied building profiles and roofscapes. The heterogeneous skyline reflects the layering of development from distinct historic periods.



Planting and furniture: The amount of furniture and planting in Granary Square is minimal with movable temporary chairs and tables creating flexibility and informality. A group of trees defines a character zone within this large space.



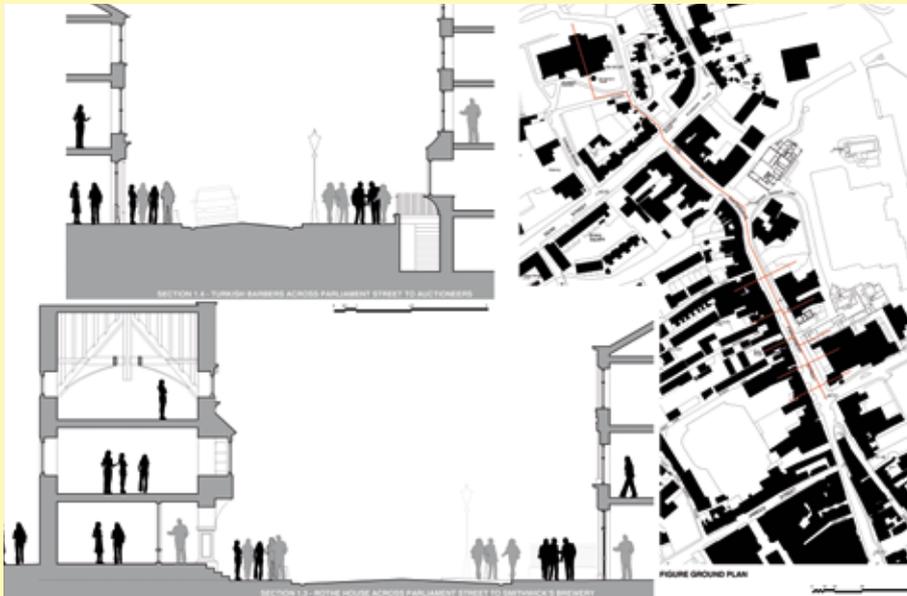
Opening up the canal: The southern edge of Granary Square is more porous, formed by the Regent's Canal at a lower level. This offers new connections to the towpath, public spaces and views along the waterway.



Reflection: Central St Martins art college acts as an important anchor in Granary Square, generating regular footfall through the space and a sense of creative identity for the area. The buildings have an openness to their facades, encouraging connections between internal and external public spaces. The careful management and curation of tenants by the developer, Argent, is a significant factor in the ongoing success of the regeneration of King's Cross.

Exploring the Significance of Local Mixed Streets

Agustina Martire explains the StreetSpace project which looks at how places are used and valued



Local mixed streets have been part of the urban fabric as long as cities have existed. They contain retail, service, production, leisure and residential uses. They host a series of different cultures, activities and identities. Despite the car and retail-led redevelopments of the last half-century, they are still a significant part of everyday urban life around the world. However, even though they are valuable spaces, many of these streets have succumbed to generic and commercial urban regeneration. Some have been built upon, others privatised, and more generally their local, organic, gradual and piecemeal condition has been replaced by large franchised development, which is less diverse and less local. This article illustrates how the StreetSpace project aims to enhance and deepen our understanding of local mixed streets through analysis and design.

Sociologists, historians and geographers have closely studied the histories and memories, behaviour of people and

gentrification processes at work in local mixed streets, with Sharon Zukin and Phil Hubbard in particular highlighting the value of the everyday and mundane qualities. Urban designers, planners and architects study their form, space, movement and potential, but do not always consider people's perceptions and experiences. Matthew Carmona, Suzi Hall and Laura Vaughan have developed very interesting local case studies on mixed streets, opening the door to a deeper and cross-disciplinary understanding, but these approaches are yet to significantly influence the world of practice of architecture and planning. Therefore, the StreetSpace project based at Queen's University Belfast, intends to bridge the gap between disciplines of the built environment, humanities and social sciences, engaging the public, practice and policy, and enquiring about issues such as physical fabric and mobility, but also experience, perceptions and aspirations that reflect realities of a wide diversity of issues of

local mixed streets. These approaches also address class, age, gender, culture and heritage, often overlooked in built environment disciplines. The project aims to highlight the value of existing local mixed streets and challenge large-scale placeless urban regeneration.

CITY STREET SECTIONS

The project started in 2011 with a simple exercise in which first year architecture students drew sections of different streets in Belfast. The exercise was also carried out in Buenos Aires, Edinburgh and Kilkenny, providing a very precise comparison of the physical conditions of streets in those cities. What became evident from these explorations was that behind the drawing of the street section, a much wider set of conditions existed. Discussions about space, dwelling and atmosphere began, but also class, accessibility, traffic, ritual, experience and memories were some of the many different issues raised by students. These discussions made it clear that architecture and design were not readily responding to many issues.

As a response, the StreetSpace project now organises a series of multidisciplinary workshops and a year-long design studio, which explore ways of understanding local mixed streets by tapping into different disciplines in academia, while also including practitioners, civil servants, NGOs and students. The aim of the workshops and studio is to produce representations that give a broader and deeper understanding of local mixed streets. We look for ways to analyse and understand how the urban form of local mixed streets relates to how they are experienced. So far, the project has studied three streets in Belfast, one in Naples, one in London and one in Ljubljana.

The first two workshops studied North Street and Castle Street, two of the most culturally and architecturally rich streets in Belfast city centre, and currently under threat of demolition and redevelopment. The workshop brought together scholars and practitioners from architecture, planning, anthropology, sociology, history, geography, art and sound. The results of the workshop were four maps that told different stories about the streets: the aspirations, histories, sound and perceptions. The maps produced had an impact on the members of Belfast City Council and the Northern Ireland Department for

1 Parliament Street, Kilkenny
by Warren Flavin and Eoghan
Harford

2–3 The blocks and plots of
North Street in 1969 and 2017,
by the author, based on OS
maps

Communities, who subsequently became partners and funders of the project.

TWO BELFAST STREETS

The findings of the workshop were analysed further in the year-long architectural design studios. North Street and Castle Street reflect the gradual and incremental transformation of the built environment and uses through time. The bombs of the 1941 Blitz and the Troubles (from the 1960s to the 1990s) did not cause large physical damage to these streets. The largest transformation of the urban fabric was instead due to planning decisions about transport and housing in the 1980s and 1990s, and later commercial urban redevelopment. In this context, the western part of Castle Street along with a large amount of terraced housing was cleared for roads and parking space, while North Street suffered major demolition in the 2000s and 2010s. These two streets, together with Donegall Street, are the only ones that still support local trade in Belfast city centre.

Despite existing in a similar urban context, each street has changed differently in the last four decades. Castle Street has sustained its activities and vitality with a constant community for more than two centuries, yet it lacks buildings of great historic or architectural significance. Meanwhile North Street, which still includes a large number of very high quality 19th and early 20th century buildings, has lost most of the community of traders and visitors it had in the past.

A series of buildings were demolished in 2015–16 on North Street Upper, to give way to a new flagship building for enhancing tourism in Belfast city centre. This is still in the pipeline and there are no hints of its actual planning or design. In North Street Lower the threat of demolition is still imminent but not yet formally approved. The top floors of most of the existing buildings have been empty for decades, under the ownership of a succession of large developers, who neither maintain the buildings nor encourage their use. However, between 2014 and 2018, a selection of retail units reopened and their products have been mapped.

Interviews with local traders have revealed that even though the street seemed derelict and in need of repair, there was a vibrant local community, which at least for a few years thrived and supported an ecosystem of local artists, office workers and



4



5

local traders. This community still exists in the background and is in grave need of new spaces in which to live, work and perform. In 2018 most of the shops were closed and their traders evicted; the only surviving businesses in December 2018 were a barber, an independent second-hand bookshop and a fish and chip shop.

WORKSHOPS ACROSS EUROPE

In Naples, London and Ljubljana, the two-day workshops revealed the hidden realities of the streets studied. These workshops were all people-oriented, including techniques for participant observation. In London's Kingsland High Street, the local market was studied and taxonomies of products were contrasted with the experience of three very different public spaces in the depth of the street.

In Naples' Corso Garibaldi, the ethnic diversity was mapped through the spilling out of products and transactions onto the public space of the street, and the heights of buildings explained the density of the population using the street on a daily basis.

In Ljubljana, the history of everyday life on Poljanska Cesta was evident through the stories and narratives of traders and dwellers in a street, which would be very difficult to define in simple or even branded terms, as other parts of the city have in order to enhance tourism.

EXPLORATIONS TO HIGHLIGHT VALUE

Finally, in the most recent StreetSpace design studio, we are studying the personal



6

stories of those who live, work and pass through the corridor of Donegall Street, Clifton Street and Crumlin Road in Belfast. This time, an ethnographer trained us in the difficult task of talking to people and explained how letting people tell their stories of a place actually reveals very profound realities, memories and experiences. The challenge was to turn those stories into drawings, which was most successfully achieved by the drawing of the North Street Arcade, a building which caught fire in 2004 and has been abandoned ever since.

The StreetSpace project is an exploration, it does not intend to solve the problems of local mixed streets, but aims to highlight their value by exposing hidden stories and realities often ignored in their redevelopment. We hope to continue the project by focusing on the relationship between urban form and ethnography as ways to highlight the value and significance of local mixed streets. ●

Agustina Martire, lecturer in architecture,
School of Natural and Built Environment,
Queen's University Belfast
www.streetspaceresearch.com

4 The elevations of North Street, Belfast by Brian Maguire

5 A taxonomy of walkers on Writers Square by Eline Combes

6 Street space Corso Garibaldi, Naples by Ben Stevenson

Disappearing Urban Communities

Gihan Karunaratne describes the challenges facing a tribal neighbourhood in Colombo



a veritable finely-tuned and vibrant choreography of washing.

THE STANDARD OF LIVING

Within the Dhobi, people like the men who iron clothes and linens work eight hours a day, seven days a week, and earn an average of 35,000-45,000Rs per month (approximately £150 -195), according to an interview with the Dhobi labourers in 2018. Residents live and work in the Dhobi, paying nominal rent to the local council, which typically provides each family with two rooms and a concrete washing tank. Unlike in many other underserved settlements in Colombo, in the Dhobi unorthodox ad hoc construction is strictly controlled by the municipal council and, from the outside, many of the original colonial workers' houses in the neighbourhood appear unchanged. In most cases, only the interior of the house has been altered.

A small shrine room located at the entrance of a typical Dhobi dwelling is dedicated to Hindu gods. The living area is situated at the front of the house, linked by a narrow central corridor to a small bedroom and the kitchen, which houses an open shower. Overhead a dark loft bedroom is also accessible from the central corridor. In most cases indoor toilet facilities are not available and residents use public toilets at the entrance to the precinct. The resulting unorthodox living conditions are marked by the lack of adequate private spaces. Many of the houses in the Armer street Dhobi have deteriorated over time due to structural defects, poor maintenance and overuse.

In addition to problems related to the precarious conditions of the individual dwelling units, the Dhobi is plagued by problems which create slum-like conditions in the neighbourhood and place a heavy social and economic burden on the families that live there. These chronic problems include the lack of spaces for communal activities and recreation, insufficient utilities, the insecurity of land tenure, and the devastating effects of recurrent flooding during monsoon season. The resulting culture of poverty is characterised by poor links with the wider society of the city, a lack of collective organisation, weak family structures, and prevailing attitudes of resignation, fatalism and a lack of concern for future.

NEW PLANS

In order to combat these issues and preserve the positive and vital aspects of the Dhobi,

Like many developing cities in South East Asia, Sri Lanka's capital city Colombo is stitched together by a rich diversity of communities. The Dhobis, entire tribal neighbourhoods dedicated to washing laundry, have formed part of Colombo's urban tapestry since the era of British colonialism, when they were employed to do the laundry of travellers and seafarers docked in the city's port. There are currently five Dhobis still operating in the city.

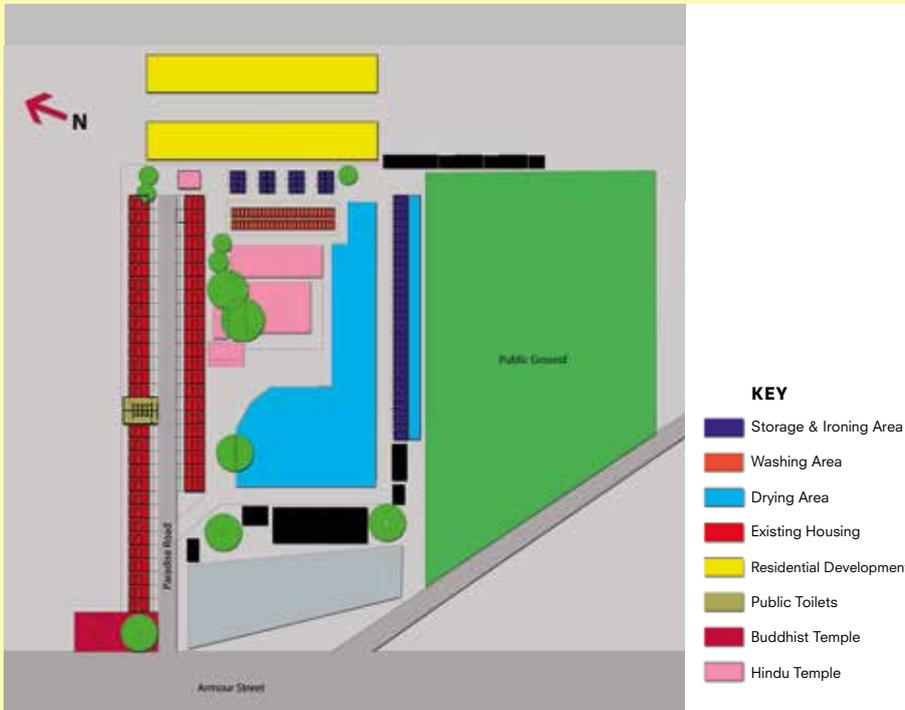
One of Colombo's largest Dhobis, the subject of this study, is located on Armer Street, a bustling wholesale retail and warehousing area. This Dhobi dates back to 1931, when Sri Lanka was still a British colony. Since then, Armer Street and the surrounding area have undergone several phases of development, change and growth. Today the area includes thriving micro-industries and vibrant live-work units. Within the upscale contemporary global urban fabric that is gradually engulfing Colombo, traditional enclaves like the Armer Street Dhobi are vital contributors to a thriving local economy.

FAMILY LIVE-WORK UNITS

As you approach the Dhobi through the hustle and bustle of Armer Street and into Paradise Road, the neighbourhood is revealed as compact rows of clustered tenement houses. Most of these single-family units were built by colonial entrepreneurs between 1880 and 1930 to provide rental

accommodation for port, factory and other workers. Typically a minimum of five family members occupy each tenement house, although in extreme cases a unit might house up to 30 people, with four extended families living packed tightly together. At the centre of the neighbourhood are two Hindu temples (Kovil watta). In the morning before the work day begins, residents visit the Kovil to offer flowers and be blessed. The temples provide an esoteric and democratic space where the community comes together to celebrate Hindu festivals and participate in colourful parades and vegetarian feasts. Today the Armer Street Dhobi is home to 700 occupants and 120 families.

The word Dhobi comes from the Hindi word *dhona*, to wash. As you walk into the Armer Street Dhobi you are surrounded by a myriad of sights and sounds related to washing laundry on a massive scale. Colourful clothes and sheets hang to dry above your head and along the street, or sorted on a grid of clotheslines over grass lawns. Within small workshops, dirty linen is sorted, and categorised by colour and the required method of washing. Some clothes soak in tall blue plastic barrels, while others are slapped against stony surfaces to loosen the dirt and grime. Washer men working inside concrete tanks scrub the laundry in foaming soapy water. After drying, it is pressed in small rooms by men wielding red-hot charcoal-operated irons. The Dhobi presents



3



4



5

preserving. Are they sustainable? And if so, how can the city sustain and improve the physical quality of these neighbourhoods without losing the unique and proud identity they have as a thriving commercial urban system? Will projects like the Armer Street Dhobi housing be enough? What other ways can be designed to enable the Dhobis to continue to play a key role as a vital element within the project of creating a sustainable, meaningful city that balances the old and the new. ●

Gihan Karunaratne, architect, with contributions from Jagath Munasinghe, University of Moratuwa, Sri Lanka and Director General, National Physical Planning Department; Dhanesh Chathuranga, architect; Karen Rogers, Auburn University; and Koen De Wandeler, KU-Leuven

2

Colombo Municipal Council has developed a strategy which includes the design and construction of culturally appropriate new housing adjacent to the neighbourhood.

According to the housing authority, the objectives of the proposed 176-unit project include improving living standards in individual housing units while sustaining a sense of community through shared spaces. Although the two-bedroom apartments provide upgraded, modern facilities, the housing authority's ambitious plans for integrating the community both physically and culturally into the rapidly-changing city will be more difficult to achieve, particularly since the masterplan for the neighbourhood lacks spaces for shared activities. This could eventually lead to the erosion of the vital cultural patterns and activities that currently bring the community together in their struggles with day-to-day life.

Sri Lanka, lying in proximity to rapidly emerging economies like India and China, has itself embarked on a pathway to urban regeneration. In 2010 the government launched an ambitious development programme for Metropolitan Colombo. The interventions in the Armer Street Dhobi form part of this broader strategy, whose goal include the provision of better housing for underserved communities within the overall vision of a cleaner, greener, more liveable city without slums by 2020. With projects like the new housing units for the Armer Street Dhobi, the government and the Colombo Municipal Council aspire to stimulate redevelopment and bridge the psychological and physical divides between the formal city and its informal communities. Attention to the Dhobis is characteristic of an overall positive planning approach that recognises the potential of this type of community, and aims to improve the quality of life by harnessing the vibrant human resources that

they house rather than thinking of them as a liability, and provides a framework for them to become net contributors to the economy and the surrounding urban environment.

SUSTAINING A NEIGHBOURHOOD AND TRADE

Currently however, the city's strategies for mega urban development have resulted in a conflict between the Armer Street Dhobi and the surrounding urban environment: the Dhobi community has come to seem isolated from the large-scale development and beautification of the city. The areas occupied by this and other Dhobis are perceived by market forces and powerful real estate developers as underutilised land, which could be better occupied by more profitable developments. The high-rise structures emerging around these neighbourhoods threaten to swallow them and displace their hapless inhabitants. An aerial view of the city shows the endangered colour, variety and vibrancy of the Dhobis.

Just as the temples unite the neighbourhood's residents, there are other issues that threaten to divide them and cause the disintegration of the community. The local authority is currently working to identify whether legitimate procedures are in place to ensure that the Dhobi residents have a decent, respectable place to engage in their profession. However, most of the older workers are unsure about whether their children should even continue their trade into the next generation. Many younger members of the Dhobi families have left the trade altogether and are working in the Middle East or other service sectors in Colombo.

In light of these negative factors, as we approach the next phase of urban regeneration and economic development in Colombo, we are forced to question whether the Dhobi communities and culture are worth

1 Clothes drying on lines in the open spaces

2 The layout of the Dhobi buildings and open spaces, and adjacent Paradise Park. Images by the author unless otherwise stated

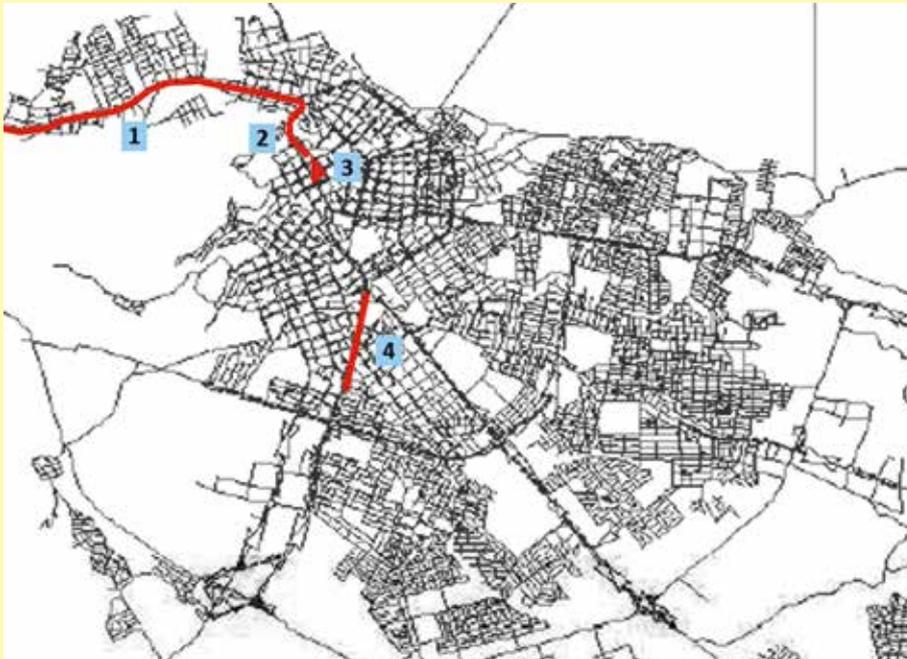
3 The folding workshop. Photograph by Dhanesh Chathuranga

4 A typical dwelling. Photograph by Dhanesh Chathuranga

5 The existing and proposed housing blocks. Photograph by Dhanesh Chathuranga

Public Space after Conflict

Horacio Gómez Murcia reports on public space projects aimed at bringing citizens together



The city of Villavicencio, lies at 464m above sea level in a tropical climate, and is the capital of the District of Meta in Colombia. After the signing of the peace agreement between the Colombian state and the Revolutionary Armed Forces of Colombia (FARC) insurgents in September 2016, the city became a strategic centre for the reception and care of the victims of the war.

A few years earlier, the city had started an urban renewal programme focussing on public spaces around the city centre, aimed at restoring historic patterns of movement as well as traditional destinations. This has had unexpected but positive consequences since once the war ended, the resulting lack of tolerance for the others had to be addressed as it was affecting the dynamics and use of the city. One direct way of promoting reconciliation was through the location of public spaces that would encourage equality and encounters.

As is normally the case in Latin America, the city evolved following two different patterns: on the one hand institutional planning influenced by the modern movement and far removed from citizens' expectations; and on the other spontaneous unplanned development generated by local people. In both scenarios, in Villavicencio public space has been limited to its function and not considered part of the development of citizenship. As a result, it is a 'striated' space, irregular, uneven, full of obstacles,

vehicles and street vendors.

The design team's main proposal consists in ironing out the striated spaces to generate a network of inclusive places, where everybody is welcome and where institutional and community ideas come together, without social differences and with similar chances of success.

KEY CRITERIA

The renewal and redesign of the public realm was therefore based on five criteria:

- **Physical-spatial:** to guarantee universal accessibility without barriers limiting people's movement, and with wide visibility. A physical-spatial connection helps us to understand urban space and enhances feelings of security.
- **Socio-cultural:** the projects must build communities through the promotion of social activities, and the restriction of negative activities such as illegal trade and criminality, and not be limited to the redesign of the pavement.
- **Mobility:** to provide adequate infrastructure for non-motorised mobility, since most people in Villavicencio move about mainly on foot. Amongst motorised forms, public transport needs to have priority.
- **Land use:** well-designed public space must enhance the value of land, open up opportunities and ensure that the space will be utilised.
- **Environmental:** public space has the

potential to restructure the natural environment and encourage connections between areas of ecological protection.

FOUR LINKED PROJECTS

Four key and linked projects are located adjacent to the city centre: the Entrada Antigua (Old Gate), from the Glorieta de la Grama to the centre (the Grama roundabout), Plaza Centauros, and Avenida 40.

The Old Gate of Villavicencio is the original link with the country's capital, Bogotá, but a new motorway under construction has displaced it. The road carries heavy lorry traffic, and so street furniture has been used to reduce vehicular speeds and give pedestrians priority.

The design covers 4.5km from the city boundary to the Grama roundabout and its objective is to ensure a good link between the local traditional neighbourhoods and the city centre. In order to facilitate pedestrian movement, the design gives a sense of unity to the space through the use of colour, texture, disabled access and landscaping, on both sides of the road. A geometric pattern used over the whole length expresses its unity and, through colour, enhances the dynamic relationship between the urban grid and the exuberant natural environment, applying a gradient of colour to mark the differences between blocks or areas.

The Grama roundabout proposals were a first for the city: the design created an urban connection between important sites of the area – the traditional roundabout with a central fountain, some historic houses, the bridge over the Parrado river, the children's park (the site of the city's foundation), and the Cielos Abiertos Boulevard, and at this point it joined the city centre's pavement network.

Based on a mobility analysis, the two-way carriageway became one-way with a cycle path with pavements on both sides. A pedestrian bridge over the Parrado river takes advantage of the opportunity to provide a wide viewpoint.

The project's other objective is to enhance the role of this historic area as a place to meet, through the renewal of the architecture and landscape of the properties that line the new pedestrian route.

The slightly sloping Plaza Centauros is Villavicencio's main civic space. The decision to create a public space network from Santander park to De la Cruz park, justified modifying this space in order to remove the

1 The main projects in Villavicencio: the Entrada Antigua (1), Glorieta de la Grama to the centre (2), Plaza Centauros (3), and Avenida 40 (4). Source: Mobility Plan of Villavicencio, National University of Colombia

2 Plaza Centauros with the historic samas tree and level surfaces
3 The remodelled Plaza Centauros as a new place to meet
4 The remodelled Avenida 40, the venue of the joropodromo

elements that compromise its connections. Making it smoother has meant getting rid of a platform, trees in poor condition and obsolete street furniture. Two key elements recall the space's heritage: the historic *saman* tree and the equestrian statue that gives the square its name. The design aims to make a clear connection between the upper and lower sides of the space through a continuous surface. Around the trunk of the *saman* tree, a bench provides protection and a filter allows for water to irrigate its roots and ensure its survival. The statue will be moved from the upper side of the space to the opposite edge where it will be more visible. A management body will be granted a concession to ensure the maintenance of the public space and better security, in order to encourage citizens' encounters.

The role of Avenida 40 as the main institutional and commercial axis, and its cultural potential have justified its redesign. It is the location of the *joropo* festival, a dance typical of the Colombian and Venezuelan plains. The festival consists of a big street parade known as the *joropodromo*, in which schools and institutions public and private, coming from all parts of Colombia and Venezuela, participate by dancing to live music amplified all along the route.

Heavy traffic affects the Avenue and the side of street which has been improved was often overrun by cars, deterring pedestrians. The design creates a wide route with pavements and gardens inspired by the movement of the skirts worn for dancing *joropo*. The objective is to encourage the community to take ownership of the space and create a commercial promenade with an urban identity missing at the moment.

PROMOTING CITIZENSHIP

However we need to go beyond isolated interventions and establish holistic policies that include all stakeholders, with the aim of promoting an effective use of public space and the development of citizenship, political culture and citizens' participation.

The first step is to develop the concept of the public good. The next step is to bring together the agencies and mechanisms that can lead to the consolidation of new public spaces, bringing the citizens, institutions and public bodies with the common goal of enjoying those spaces, at the same time as building the community and citizenship.

These projects have resulted in the community recognising and taking



2



3



4

ownership of the public realm as a place to walk, to meet and to share. For new inhabitants arriving after the end of the war, these interventions are seen as a sign of welcome and a benefit for what is public and loved. ●

Horacio Gómez Murcia, director, Rizoma Proyetos, Colombia

The Remodelling of the Gran Via

Teresa Franchini describes how Madrid's main street has changed



On April 4, 1910, works on one of the largest ever urban interventions began in Madrid. The project was the opening of a street 1.36 kilometres long joining the east and west of the city across the dense urban fabric of its historical centre.

The technical conditions for the new street were defined in the internal reform plan approved in 1901, which planned its construction in three sections. The public works were completed in 1932, after a long process of land expropriation, the demolition of existing buildings, and the reorganisation of adjacent streets. The final result was a new avenue 25-35 meters wide, with broad pavements and six lanes for vehicles, which made its way through the old buildings of medieval Madrid.

Private investors responded positively to the municipality's intention to turn the existing street into the main axis of the city, and they planned the pace of their own interventions to match the progress of the public works. New plots of land were occupied by buildings for housing, shops, offices and leisure activities, which made the new avenue the most emblematic space in the city and a favourite meeting place for Madrilenian society of that time. The resulting urban landscape, built between 1911 and 1955, brought together the dominant architectural trends of the first half of the 20th century, as shown by the historicist styles of the first two sections of the route, and the later functional examples that characterise the third section. Although the avenue had different official names, in 1982 the city council decided to give it the name by which it was

already popularly known: the Gran Via.

Since the 1970s and in response to the growing traffic congestion on the avenue, the city council made a series of proposals that opted either for the reduction of pavements to increase the number of traffic lanes, or the construction of tunnels in certain sections. For technical and economic reasons, none of these projects were implemented and municipal interventions were limited to timely redesigns of the pavements to facilitate pedestrian circulation.

The location of an increasing number of national and international fashion brands along the Gran Via during the first decade of the 21st century, linked to the growing tourism in Spain, consolidated the role of the Gran Via as one of the most dynamic commercial axes in Europe. The need to facilitate the movement of people along the Gran Via which, at certain times of the year exceeds 100,000 people per day, was the main factor that motivated the local government to begin an unprecedented process of urban transformation.

THE REINVENTION OF THE GRAN VIA

In May 2017, the Mayor of Madrid Manuela Carmena announced the start of a remodelling project for the Gran Via which was to be radically different from the existing situation. In line with the trend of promoting sustainable urban development and reducing the high levels of air pollution affecting the city, the local government, newly elected in 2015, put in motion a new model of urban mobility. Based on increasing pedestrian space at the expense of private vehicles, and

the intensive use of public transport, the proposal opted for a reduction of existing traffic lanes, the broadening of the pavements, and the elimination of private vehicle circulation.

The remodelling works took place between March and November 2018. With an investment of €6.5 million, the changes made the following improvements:

Traffic Lanes:

- a reduction from six traffic lanes to four, two lanes in each direction, one for public transport and another for vehicles and bicycles
- the use of sound-absorbing asphalt to improve its acoustic quality
- the addition of six new pedestrian crossings and widening of the existing ones to facilitate pedestrian movement, and
- the incorporation of 95 new traffic lights, some exclusively designed for this purpose, in addition to 228 LED street lights using the latest technology to meet energy efficiency criteria.

Pavements:

- doubling the pavement widths, with an average extension of 3 meters through the reuse of adjacent vehicular lanes. This amounted to increasing pedestrian space by 6,800 m², 31 per cent more than previously
- planting 248 trees to enhance the avenue's landscape and climatic qualities; the species selected, Chinese pears, are deciduous following seasonal changes and with the right overall form to fulfil their role in public space

- 1 The existing street
- 2 The proposed streetscene
- Source: Madrid City Council
- 3 The new Gran Via at the iconic Callao Square
- 4 Pavements with extra space for pedestrians
- 5 Pavements as wide as squares allowing an extended view of the urban landscape
- 6 Four lanes of traffic for public transport and authorised vehicles only

- the incorporation of flower beds and drainage pavements to facilitate plant watering
- the placing of 143 seats for people to rest, of which 33 are made of wood and were chosen by public vote, and 110 are made of granite, to also act as physical obstacles to guarantee the security of pedestrians from possible vehicle invasions
- the adaptation of materials and profiles of the pavements to universal accessibility regulations and the reduction of barriers
- the relocation of bus shelters nearer to pedestrian crossings
- the placing of new urban furniture such as kiosks for magazines sellers, litter bins and drinking fountains, at strategic points along the avenue, and
- the upgrading of the squares adjacent to the street and nearby.

THE MADRID CENTRAL PLAN

The transformations adopted in the remodelling of the Gran Vía responded to the *Plan de Calidad de aire de la ciudad de Madrid y Cambio Climático* (Plan A) approved by Madrid City Council in September 2017, which aimed to reduce the high levels of air pollution affecting the city. In this plan, access to the Zero Emission Central Area – which includes Gran Vía – is restricted to residents, services and public transport, people with reduced mobility, zero emission vehicles, and those holding environmental certificates of low level contamination, to enter the area exclusively to reach a public parking garage.

The poor air quality in some Spanish cities has been a recurrent problem raised by the European Union, which urged the implementation of effective measures to reduce the emission of the main pollutants. The Madrid City Council responded with its first initiative in 2004, by delineating 59 hectares of the central area as Residential Priority Areas with exclusive vehicular access for residents. The extension of this measure to 352 hectares of the adjacent neighbourhoods was proposed in 2014, but was not enacted mainly due to objections from the commercial sector.

In the light of possible fines due to non-compliance with the emission levels required by the European Commission, the new municipal government produced the Central Plan of Madrid which was approved in September 2017. This plan covers 472 hectares of the central area and eliminates 37 per cent of vehicular streets (measured



3



4



5

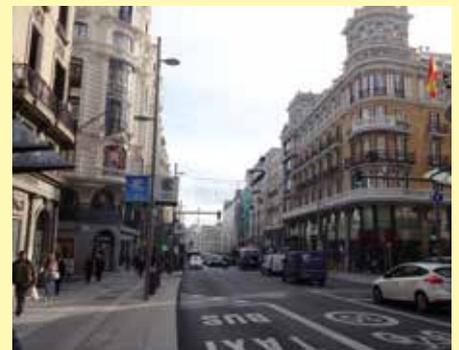
in kilometres), with the intention to reduce emissions by 40 per cent by 2020, especially nitrogen dioxide and its derivatives.

The new mobility model came into force in December 2018 and involves the implementation of an innovative urban proposal based on discouraging the use of private cars and prioritising pedestrian and cyclist movements. This puts Madrid at the forefront of European cities in initiatives of this kind.

ACTIONS AND REACTIONS

The remodelling of the Gran Vía and the implementation of the Madrid Central Plan have been the subject of strong criticism from the political opposition, the groups affected by the restrictions of the free movement of vehicles, especially the traders in the area and the citizens who resist changing habits related to urban mobility, and even from the supra-municipal administration. In contrast, environmental associations, residents of the neighbourhoods affected by these regulations and a significant number of citizens, support the adoption of the measures intended to improve liveability in the city.

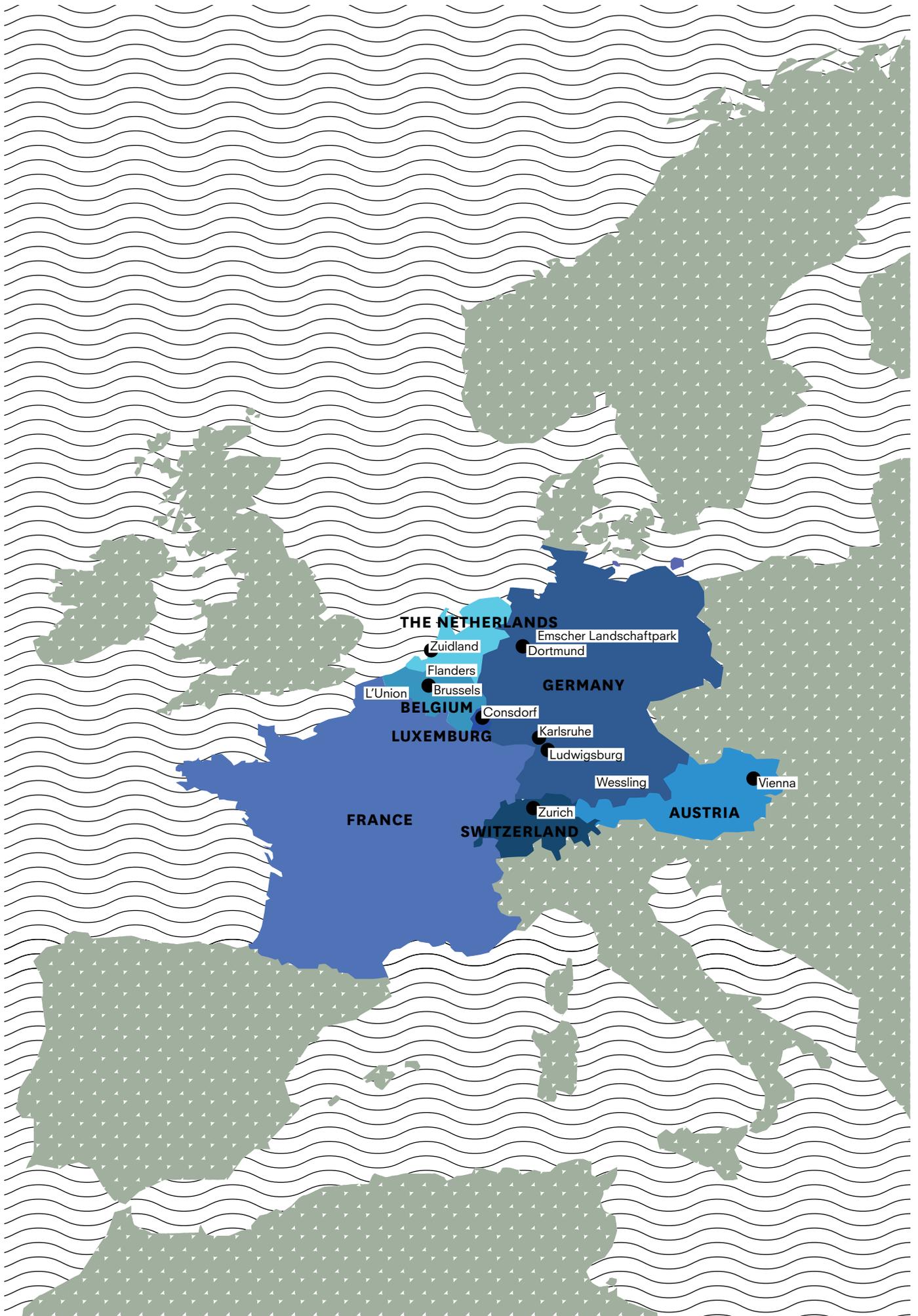
As normally happens in these cases, objections to the changes will continue until the results of the adopted measures and their impacts on the rest of the city are known and can be appreciated. At present,



6

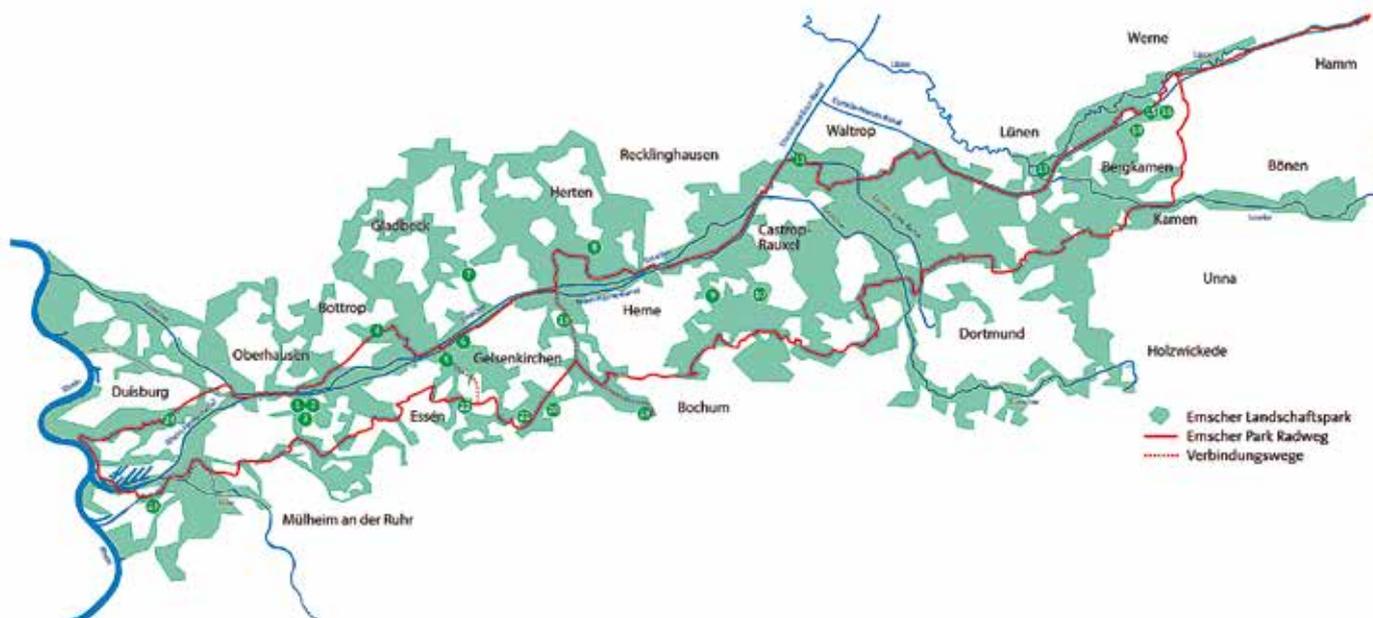
the municipal action in the Gran Vía has triggered substantial private activity, reflected in the improvement works being undertaken on numerous buildings along it. Finally, even though traffic restrictions have reduced the accessibility of the area by private vehicles, the centre of Madrid continues at the pace of urban life that has always characterised it. ●

Teresa Franchini, architect and urban planner, senior professor at the Polytechnic School, Faculty of Architecture of the San Pablo CEU University of Madrid



Northwestern Europe

Judith Ryser asks what Northwestern Europe has to offer urban designers in the UK



1

Why an issue on Europe when the UK is turning its back on the European Union and is casting its gaze further afield to what it considers are greener pastures with rich pickings for a service economy? Why focus on Europe when the Urban Design Group is establishing ties with China, one of the fastest growing world economies and urbanising at a breathtaking pace? As globalisation affects urban design and opens up opportunities for urban designers, this journal is well known for its reporting of information on urban design practice in other continents, including Europe.

Small in size compared to America, Asia and Africa but densely populated and urbanised, continental Europe shares a long, albeit often bloody, history with the UK, besides monarchic ties and continuous intense trade relations. Taking the long view, mass migrations have swept through Europe for centuries and left their traces on the built environment. Colonial conquests and decolonisation are also experiences shared among a number of European nations with aspirations to rule the world. Two world wars triggered by European governments left devastation worldwide and form part of our common heritage. The will to repair this damage together and build a lasting peaceful co-habitation and solidarity in Europe motivated today's European Union, despite a quarter of a century of the Cold War dividing the continent. All of this has created intense exchange and cooperation among many, including design professionals.

ADAPTING EUROPE

Here is not the place to lament the loss of such positive *acquis communautaire* but to continue the process of learning from each other and cooperating the future. A handful of articles cannot do justice to how urban design is practised elsewhere. This is particularly true for Europe, due to its diversity and mature built environment which is less in need of expansion than maintenance, regeneration and conservation. The current 100th year

celebration of the Bauhaus or the regularly challenged legacy of CIAM witness the worldwide influence of Europe on design, and many of these ideas crudely applied are embedded in Europe's urban fabric.

Tightly-packed groups of unsustainable glass and steel skyscrapers in city centres, and dense motorway networks complying with the demands of car-based societies have become a problem in European cities and landscapes. Retrofitting such built environments is far more difficult and costly than starting again on greenfield sites, which is not really an option in north-western Europe. Cities and their hinterlands need to respond to new challenges through innovative design practices. Some, like climate change, are universally urgent, others are more related to the history and evolution of Europe's built environment and the new demands being put on it by shifting work and living habits, as well as its transformation due to new technology.

REGENERATING LEGACIES

Just as in the UK, the legacy of heavy industry remains a burden for many European regions which are trying to restructure their economies and adapt to the knowledge society, often without the advantages of traditional university and service cities. The Ruhr, which used to be the powerhouse of Germany with many coal mines, steel plants, industrial cities and the Emscher Valley region, is a classic example of such investments into economic and environmental transformation. The International Building Exhibition (IBA) and ten years of public subsidies provided the vehicle to start the process of regeneration which took several decades to implement. At present the Emscher Park is a successful regional recreation and industrial heritage attraction.

Northern France is co-operating with Belgium to revitalise and transform the meta-region L'Union, a traditional textile region which forms part of Société d'Economie Mixte Ville Renouvelée (a federation of local public enterprises, including



2



4

the European metropolis of Lille) in charge of regenerating this region. The area including Tourcoing, Roubaix and Wattrelos has managed to develop 400,000sqm floorspace to accommodate around 8,000 new jobs in both industrial and tertiary sectors, along with 4,000 students. Projects range from regional regeneration to infrastructure, housing, commercial and workplace development, science and economic activity parks. However, much more land and many redundant buildings need to attract further regeneration investment.

This selection of articles, arbitrary and somewhat random by its nature, aims to provide insight into a broad spectrum of urban design interventions at regional, urban and neighbourhood scales in Europe. They are place-dependent, reflecting the local built environment and how its transformation needs are influenced by history, its current state, local culture and values, as well as local governance and power relations between key stakeholders. None of them, therefore, can be templates or best practice to be applied directly elsewhere, as no two places are the same. Their narrative and outcomes should instead inspire and inform, and some examples may have more in common with current urban design concerns in the UK than others.

SUSTAINABILITY IN POLICY & PRACTICE

Many countries and cities in continental Europe are genuinely committed to sustainable development, and are concerned with the need to reduce greenhouse gas emissions and manage water resources more responsibly to create resilient and hopefully future-proof environments. Implementing such policies at the regional scale is a new challenge as Jan Zaman and Michael Stas show here. Techniques to reduce urban heat islands by greening roofs and façades, and returning soils to a porous water-absorbent state are common practice, as are improvements to building insulation, the use of solar energy, decentralised energy generation, as well as mobility by electric bike and car, and car-free neighbourhoods.

The classic examples of sustainable urbanism widely cited are Vauban, a suburb of Freiburg im Breisgau, and Hammarby Sjostad in Stockholm. Their approaches are common throughout Europe and are developed and adapted to local conditions. Besides climatic design, they also value and provide good public realm which they see as the lifeblood of city life with semi-public space, as Roman Streite discusses. Owing to their history, most European cities are compact and medium-sized. This does not

80 hectares pour faire ville



3

Many countries and cities in continental Europe are genuinely committed to sustainable development, and are concerned with the need to reduce greenhouse gas emissions... and create resilient and hopefully future-proof environments

mean that they should be preserved in aspic, that there should be no urban growth, nor indeed shrunk or unsung like our rural areas, as Jeff Mirkes writes. Making cities liveable to a wide range of people from different walks of life means both the inclusion of housing affordable for those with low incomes and a public realm accessible to all, which Streite and Aafke Nijenhuis explain.

LEARNING FROM SCIENCE

All of the articles look at how specific principles and tools are applied or new ones developed. In particular a better understanding is sought of how people experience the built environment and how they respond to it through their emotions as well as their actions, which Peter Zeile and Fabian Schlosser describe. Experiments with body sensors to measure people's responses when they use the city are becoming widespread. Applying IT to assist people with special needs, for example those with Alzheimer's disease, to continue to go out without fear is another interest of European urban designers, as Clemens Beyer and Wolfgang Wasserburger explain. Genuine participation, or what is seen as co-production with those directly affected by urban design is also at the forefront of urban design practice in Europe, as well as of growing interest for urban design teaching and applied research. In the UK, Charles Landry and his Comedia team seem to be closest to these people-centred design preoccupations with their work on *Psychology and the city* (2017).

Although the articles are relevant to current urban design issues in the UK, they may also challenge some of the conventional wisdom so readily and

1 Emscher Landschaftspark.
Source: Metropole Ruhr

2 L'Union area, Lille Metropole. Source: L'Union

3 The 80ha site's development potential. Source: L'Union

4 The existing buildings. Source: J M Rijssel, www.skyscrapercity.com

uncritically adopted under time pressures from developers and constrained public sector budgets. Most examples also address my personal concern about the unsatisfactory state of public participation. There too, conventions and ready-made toolkits seem to have replaced innovation and fresh thinking, instead of a genuine commitment to bringing satisfaction to end-users through urban design, which Sven Dubner writes about, as well as devising innovative tools to protect people from displacement during regeneration, as Dirk van de Putte describes.

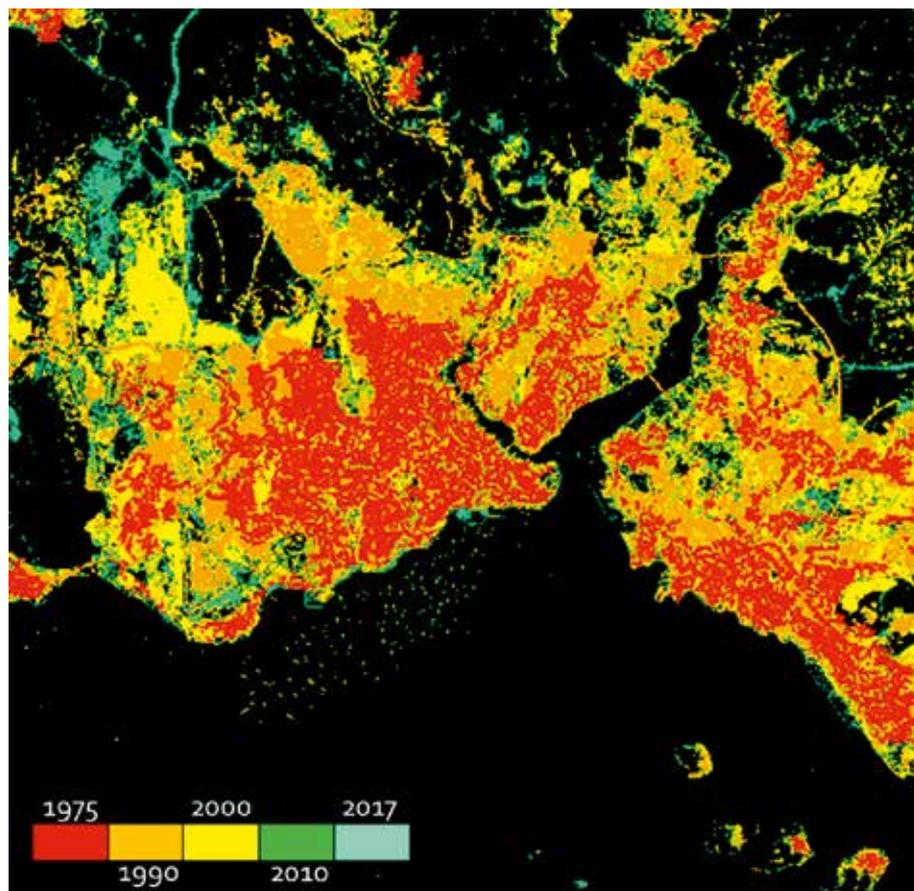
This topic starts with a view from outer space which shows how and at what pace the urban fabric is changing while retaining some of its essence, grain and morphology, captured so well by Hannes Taubenboeck, Christian Geiss and Michael Wurm. This visual tool borrowed from space technology brings

new insights to the broader picture of urbanisation over the long term, and is an inspiration for future smaller scale and shorter term interventions in tune with this process of evolution. The topic concludes with a small-scale project whose innovative feature is that public participation involved children, as Aafke Nijenhuijzen writes. ●

Judith Ryser, guest topic editor, researcher, journalist, urbanist, senior consultant to Fundacion Metropoli, Madrid and Editorial Board member

How we live: Observations from Space

Hannes Taubenböck, Christian Geiß and Michael Wurm explore the dynamics of urbanisation and variations in built structures



Fifty years ago, mankind set off into space. While the main intention was to discover new planets, we more or less unintentionally discovered our own blue planet from a different perspective. The view from space allowed us to capture the spatial organisation of how we live together. We realised how limited our living environment is and this consciousness spawned the ecological movement. With more than 54 per cent of the global population now living in cities, the design of urban space is crucially important.

1 A changing spatial settlement pattern since 1975 exemplified here by the growing mega-city Istanbul

Urban design may be understood as the art of designing and shaping the physical features of cities as well as the provision of services for people. Urban design deals with the shaping of groups of buildings, streets and public spaces, whole neighbourhoods and districts, and entire cities, with the goal of making urban areas functional, attractive, and sustainable. The designs by which cities are shaped are determined by many underlying processes: economic arrangements, social relations and divisions, legal constructs, political systems and the history of all of these interdependent processes. The results of these become visible in the urban fabric and the distant view of remote-sensing data from space allow us to grasp these spatial ingredients.

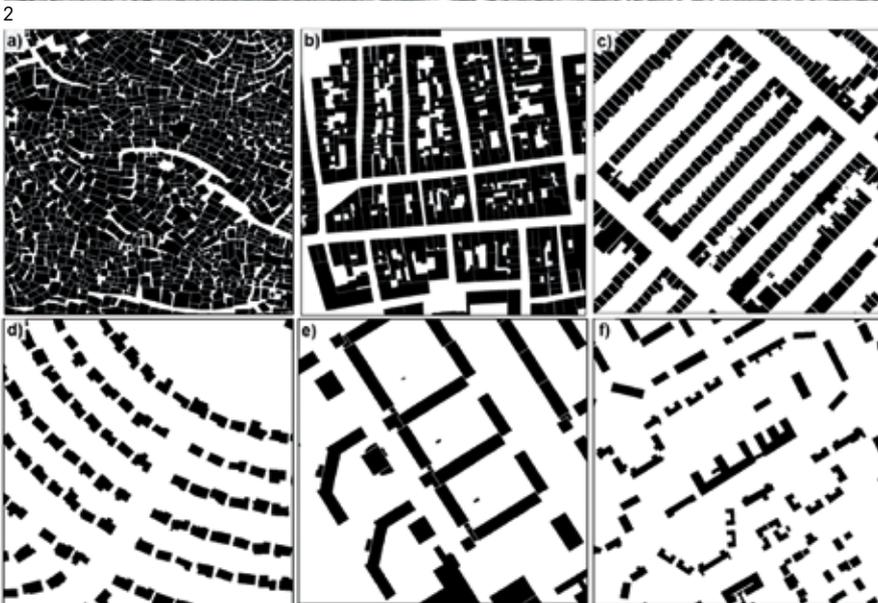
In this article, we approach the design and shape of physical features of cities using multi-sensoral Earth observation data from space. We aim to shed light on the spatial dynamics of urbanisation and on the diversity of built structures across the globe, with an explicitly spatial perspective in two, three and four dimensions.

SPATIAL DYNAMICS

Urban form can be described at very different scales. When mapping changing settlement patterns over time, long time periods of data sets are a prerequisite. Commercial satellite data provides data sets dating back to the 1970s; however, lower resolutions allow the tracking of changes at an aggregated level of settlement areas with a high level of accuracy. Using data from various sources, such as Landsat (for 1975, 1990 and 2000),



Within settlements, urban space is designed in very different compositions within and across cities, within and across cultural areas or the globe



the city scale in the shape of an aircraft with the government located in the virtual cockpit, and the people in the wings, symbolising the fuel.

- The mass production of houses in American suburbs illustrates monotonous and geometric market-driven designs at district scale.
- The planned spatial arrangements of large housing estates on the periphery of Moscow in Russia are shown at the neighbourhood scale.
- In stark contrast is the organic, dense and informal slum structure in Caracas, Venezuela.

These examples show that urban design is influenced at any scale by political, economic, social, cultural or historical mind-sets as well as by topography (e.g. Seto & Reba, 2018).

However, these images do not give reliable spatial information on structural peculiarities. In remote-sensing many image classification methods have been developed to derive geo-information in two and three dimensions. Classifications of building footprints, streets or empty spaces allow for the systematic analysis of spatial urban design using parameters such as density, orientation or homogeneity or sizes. In building footprints, the structural details of how we live together is exemplified by such mapping products in two dimensions.

The diversity of urban form is immense. The range of urban footprints show the almost total use of available space in informal areas, compared to very low intensity in planned areas. Informal building processes use land differently,

TerraSAR-X (for 2010) and Sentinel-2 (for 2017), we can track the growth patterns of settlements. In the example of the mega-city of Istanbul, the high spatial dynamics and different growth patterns are illustrated. Its spatial expansion has been enormous on both sides of the Bosphorus River, and the evolving urban patterns form a complex configuration of space.

STRUCTURAL DIVERSITY

The binary classifications of settlement versus non-settlement areas shed light on the general patterns of urbanisation at city scales. However, mapping products do not allow for a more detailed spatial classification of urban layouts. Within settlements, urban space is designed in very different compositions within and across cities, within and across cultural areas or the globe (Taubenböck, Kraff & Wurm, 2018).

The spatial arrangement of buildings, streets and open spaces define the built-up form of cities. With the distant view of Earth from space, configurations such as structural diversity can be captured at various scales; for example:

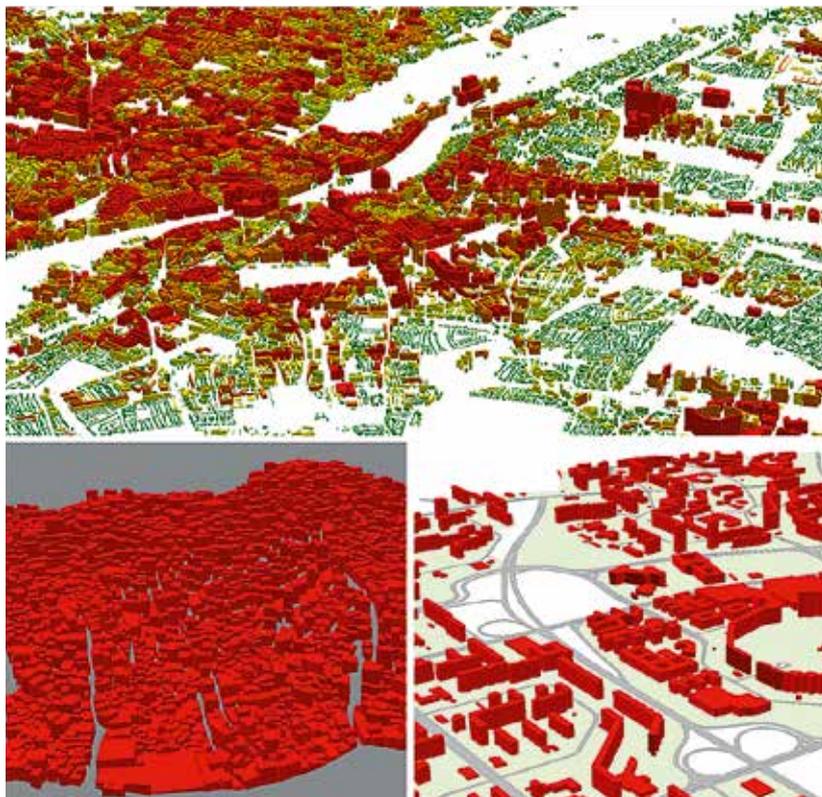
- The planning efforts of political symbolism show Brasilia at

2 The variability of urban form and design:

- a) Brasilia, Brasil;
- b) Sun City, Arizona;
- c) Moscow housing estate; and
- d) Petare, Caracas, Venezuela

3 Plans illustrating the variability of urban form:

- a) Petare, Caracas;
- b) Heidelberg old town, Germany;
- c) row houses, Bremen, Germany;
- d) Sun City, USA;
- e) Erfurt housing estate, Germany; and,
- f) Letchworth Garden City, UK



4

so that in the Petare slum in Caracas, land coverage is more than 80 per cent in complex, non-geometric spatial layouts. These are significantly more intense than in old historic towns as Heidelberg in Germany, which has about 60 per cent land coverage. Planned row house developments, exemplified in Neustadt in Bremen, Germany, feature land coverage levels of about 30–40 per cent. The market-driven mass production of houses in American suburbs produces land coverage as low as 20 per cent. Other forms of town planning such as large housing estates are developed at even lower levels: Lobeda in Erfurt has a 17 per cent land coverage level on average, and lower levels are evident in places like Letchworth Garden City in the UK, at less than 15 per cent.

THE CO-CREATION PROCESS

The way that planners and urban designers think, imagine, create and communicate about existing and future settlements, as well as their ideas and their solutions is largely although not exclusively, visual. Beyond building footprint plans, 3D visualisations of urban form can improve the realism of its presentation, which is denied to those who visualise settlements on the ground.

Three examples demonstrate the capabilities of multi-source, remotely-sensed data based visual representations of urban reality in three dimensions and at different scales.

- The area-wide availability of remote-sensing data (here, airborne laser scanning to derive building heights for the city of Munich) can create a general overview of a city's physical structure. It shows the morphological built-up change, from the dense city centre with large building volumes to the low density, small building volumes of terraced and single houses on the peripheries. These images convey the density gradient towards the edge of the city. In addition, the overview captures the spatial arrangement of open spaces within the complex urban landscape.

- In another example, the morphological representation focuses on a specific structural urban type – the dense, complex building pattern in the informal settlement of Petare in Caracas, Venezuela. The complexity of the built landscape here is extended by the addition of the topography (based on data from the TanDEM-X digital surface model). The visualisation

illustrates the steepness of the site on which the buildings are located, almost stacked on top of each other.

- The third example is the planned large housing estate in Neuperlach, Munich. Here the illustration of building structures is enriched by additional features of the urban landscape with streets and other land cover information. Further possible enrichments are visualisations of building facades by optical images either from satellite or airborne sensors, or by ground level camera systems, such as street view data.

CONCLUSION

Humankind is developing and designing urban space across the globe in very heterogeneous forms. Remote sensing data and methods prove to be powerful tools for documenting, quantifying and visualising the dynamic patterns of urban change over long time periods, as well as of detailed structural layouts across the planet. The examples shown underline the capability of multi-source remotely-sensed data for two, three and four dimensional representations of the urban landscape. This type of representation is possible at various scales, with various thematic land cover types. This unambiguous measurement, in terms of quantitative spatial measures, reveals that earth observation data can play a decisive role in urban planning and design. Only this knowledge provides the tools for a systematic analysis of which ingredients of spatial coexistence support can help societies.

We know that there is a strong link between urban design and sustainable development. Unfortunately, this link is not simple and straightforward. Nevertheless, empirical studies demonstrate dependencies between the configuration of the built environment and economic activities, social interaction or environmental issues. Against this background, we call for interdisciplinary cooperation between urban planners and designers, landscape architects and architects, civil engineers, remote-sensing specialists, social scientists, among many others, to understand the ingredients of living together in a more comprehensive and ultimately better way. ●

Hannes Taubenböck, Christian Geiß and Michael Wurm, Earth Observation Centre EOC, German Aerospace Center (DLR), Wessling, Germany

4 Anticlockwise from top, views of Munich, Germany illustrating large building volumes in the city centre (red) and the smaller units towards the periphery (green); the complex urban morphology of Petare, Caracas on sloping terrain; and, the Neuperlach housing estate, Munich with street and land cover information added

REFERENCES

- Seto KC & Reba M (2018): *City unseen. New visions of an urban planet.* Yale University Press. New Haven, USA.
- Taubenböck H, Kraff N & Wurm M (2018): *The Morphology of the Arrival City – A global categorisation based on literature surveys and remotely sensed data.* Applied Geography 92, pp. 150-167.



1

Ludwigsburg: A City of the Future and Living Lab

Sven Dübner and Constanze Heydkamp explain processes for co-creating urban development

The city of Ludwigsburg in Germany considers itself a living lab for innovative projects in sustainable integrated urban development. It has become the subject of a research project in the second phase of the City of the Future competition, funded by the German Ministry for Education and Research. The guiding principle of the research is that the digitisation of urban space should play an equally important role in the content of local projects as in their methodological approaches.

The project area Weststadt is an urban area in transition. In 2009 the train station acted as a new portal between the baroque city centre and this former industrial zone, which was turned into a modern commercial quarter with a strong focus on digitisation and service industries. It is located closely to a previously isolated residential neighbourhood. The newly-established access to public transport facilitates urban development and improves the attractiveness of this urban quarter. Plans to redesign the train station and the bus terminal together with slowly changing adjacent land-ownership structures, create development options for the study area of significance for the wider city of Ludwigsburg.

Participation processes can often leave stakeholders or actors disappointed, as their expectations of participation and actual decision-making exceed reality. This research explores alternative participation and governance formats to deal with the growing complexity of urban development and digitisation

processes. In this living lab environment, the aim is to test co-creation processes as a new governance format for urban development.

The chosen study methods are 'makeathons' (combining 'to make' with 'marathon'). Three consecutive makeathons were carried out and scientifically studied in Ludwigsburg between July 2017 and April 2018. The makeathon format is a method tested against normal practices, and its uniqueness is in developing and rapidly testing operational solutions to urban problems at workshops based on co-creation processes involving local actors with heterogeneous backgrounds. The organising team consisted of staff from the City of Ludwigsburg, the research Institute Fraunhofer IAO, and the non-profit initiative Tinkertank of the Interactive Media Foundation. The aim of the workshops is to generate and visualise technical and social innovations for integrated urban development. Thanks to the diversity of the participants, the preparation, development, implementation and

1 The study area, Weststadt, Ludwigsburg

post-event processing of the project to create new urban spaces becomes an interactive, fruitful and interdisciplinary process.

THE CO-CREATION PROCESS

Three principles are considered essential in this co-creation process:

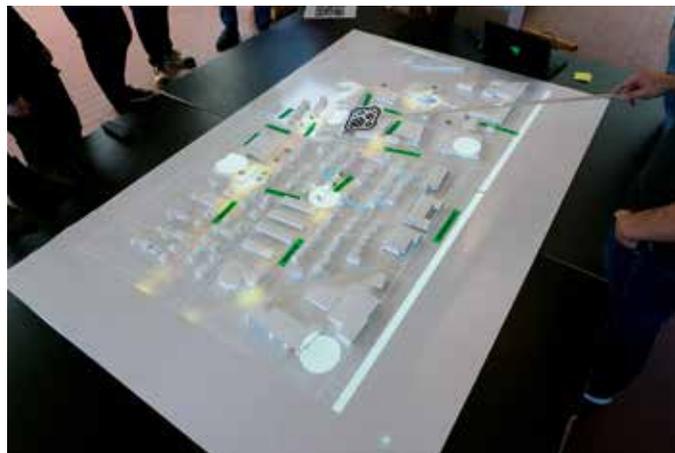
- Finding solutions to complex challenges requires a diverse set of skills, knowledge and expertise. Co-creation formats encourage creativity by mixing heterogeneous actors.
- By working up solutions collaboratively for a shared living environment, participants feel highly responsible for what is being created, develop a strong identification with the results and involve others, which is very relevant in the acceptance and settling in of new solutions.
- Integrating the heterogeneous everyday practical experience of residents and users with formal knowledge of urban development processes and specialised technological expertise requires the cooperation and solidarity between different actors, and an understanding that they are equally valuable. The focus of this creative process is on learning from each other.

These principles underpin the following key components for the conception and execution of urban change:

- **Enabler:** Initiated by the city administration, the makeathons are jointly designed and implemented by the applied research Institute Fraunhofer IAO and the local creativity incubator Tinkertank. The latter works at the intersection of science and technology to open up a new space for children and young people’s creativity based on sustainability, and interdisciplinary working, using initiative and inspiration.
- **Problem identification:** The subject of the urban project is usually identified by the city administration, leaving sufficient space to develop creative spatial and thematic solutions for Weststadt in Ludwigsburg, itself chosen for its high development dynamic.
- **Actors:** Participants are from the local creative industries, other companies, the city administration, as well as citizens, residents and users. They represent a variety of skills and knowledge while also sharing a local identity.
- **City lab:** The venue of the makeathons accommodates the workshops, and serves as exhibition space and information repository. The space provides the infrastructure and equipment for the co-creation processes and changes for each event.
- **Materials:** Digital and analogue materials donated by local companies and acquired by the project team, together with the tools to make use of them are the basis for the co-creative process. Mentors support participants to use the materials enabling them to familiarise themselves with previously unfamiliar materials.
- **Process:** The 15-hour makeathons are divided into three phases: idea generation, experimentation, and prototype development. Each participant is welcome to find a challenge that suits his/her interests. Continuous dialogue between the working groups and the assigned mentors ensure the integration of the results.
- **Prototypes:** The ideas generated during the makeathons are physically represented in prototypes, which give first impressions of form or functionality, and enable participants to test, reflect, adapt and develop them further. The results are open-source and can be accessed by the city administration, businesses, citizen’s groups and others.

THE CITY AS A PLAYING FIELD

The first makeathon dealt with the physical constitution of the city lab. An important part was the interactive city model aimed at stimulating public discussion within and about the selected city quarter. It was designed as an interactive table where different information levels were projected onto a physical 3D city model. In addition, users could move a marker over the model and its location was tracked by a webcam to retrieve extra



2



3

information via augmented reality.

The second makeathon focused on mobility issues within the city quarter surrounding the living lab. A heat map was generated from emotional mapping, visualising stressful situations during cycling and electric bike (pedelec) trips. This was added to the city model from the first makeathon. A second prototype took participants on a virtual city tour via smartphone and QR codes. Users discovered the city quarter through video walks guided by locals who talked about the local history as well as future developments, or through interactive collages augmented by additional information and 360° visualisations.

The third makeathon revolved around gamification – the application of game-design elements and game principles in non-gaming contexts. A community party was organised and a slot machine type of game was selected to improve neighbourhood identity and community building. The game called ‘pop-up hocketse’ started with a box which was placed somewhere in the community, but where nobody could see what was going on inside. During a specified timespan community members interacted with the box via a display, and fulfilled certain tasks, e.g. sending out invitations, contributing to the organisation of the event, etc. A timer kept track of the process, and if all of the tasks were fulfilled within a given time, the box would pop open and offer

2 The interactive 3D-city model with augmented reality features. Source: Tinkertank 2018

3 The slot machine game ‘pop-up hocketse’ and the participants of Makeathon 3. Source: Tinkertank 2018



4

everything that was needed for the party. If the community did not complete the tasks in time, the box was moved to the next location where another community benefited from a head-start thanks to the work others had already put in.

One objective was to improve the duration and quality of participants' time spent in the inner city, e.g. shopping trips or cultural activities. Familiar board games were available to encourage visitors' creativity. The subjects of the games could involve the visitors themselves (e.g. hopscotch), or could be added virtually (e.g. as battleships). Alternatively, a racecourse for remotely-controlled virtual cars could be borrowed from local businesses; or individual players could convert stones, bottle caps or other objects into ping-pong points or bowling cones.

REFLECTIONS ON THE LABORATORY FORMAT

Makeathons as a new governance format could fulfil a variety of roles:

- enabling other future smart city projects to create solutions in answer to real urban demands,
- ensuring the usability and comprehension of an urban space, and
- improving local identification with proposed projects being a valuable addition to existing participation methods by offering a different level of participatory intensity
- engaging multiple stakeholders in constructive discussions about urban development and, most importantly,
- including new external actors in the participation process.

An advantage of makeathons is that they are not confined exclusively to city lab situations, but can be easily applied to whole urban districts, public spaces, and open countryside. Nevertheless, this wide range of possible living lab areas can bring new challenges and may be limited by bureaucratic obstacles or weather conditions for example.

In the Ludwigsburg city lab, augmented and virtual reality are incorporated into the creative process, and the diversity of their application is seen as an integral part of the unfolding solutions. Here augmented and virtual reality are used in two ways, as a process tool for prototype development, and as a representation tool for the design of urban space, and are applicable to numerous problems and challenges.

The main challenge of this approach is to ensure that the results of the co-creation process actually find their way into the official urban planning process. The most critical step is therefore the transition from invention to innovation, according to Roger's innovation theory. We can see that the following

One objective was to improve the duration and quality of participants' time spent in the inner city, e.g. shopping trips or cultural activities. Familiar board games were available to encourage visitors' creativity

improvements to the current makeathon method would be helpful:

- maintaining the city lab and opening its space and format to other projects besides the funded project;
- this would entail designating an officer within the city administration to look after the city lab, promote the participation format internally, organise a programme of events for co-creation, facilitate discussions and the presentations of results via multiple channels; and lastly,
- including the selection process and budgets to guarantee the delivery of selected prototypes in the public realm.

These improvements will be explicitly addressed in the planned third phase of the research project in 2019. ●

Sven Dübner, urban planner, Institute of Human Factors and Technology Management IAT, University Stuttgart, and Constanze Heydkamp, human geographer, Fraunhofer Institute for Industrial Engineering IAO, Stuttgart

REFERENCE

Rogers, E M (2010), *Diffusion of innovations*. Simon and Schuster

4 Makeathon 3 resulted in a combination of a real-life playing field and an augmented battleships game. Source: Tinkertank 2018



Working in the Context of the Brussels Canal Plan

Dirk van de Putte describes two private sector led urban regeneration projects

The Brussels *Canal Plan* area amounts to 17.7 per cent of the Brussels Capital Region, with 20 per cent of its population located there, and it covers 14km between its northern and southern borders. It encompasses the main industrial sites of the Senne Valley with historic neighbourhoods and strong local identities in seven of the 19 municipalities of Brussels. The three largest railway stations are located in this area.

The *Canal Plan* integrates special development areas which rely on key policy instruments: the European Fund for Regional Development (EFRD), neighbourhood contracts, and designated industrial regeneration areas in the north, the south and the port. This territorial approach is aimed at dealing with the adverse consequences of de-industrialisation since the late 1960s. Alexandre Chemetoff & Associés were commissioned to prepare a masterplan in February 2013 and were chosen from among 17 competitors to ensure the consistent urban planning of the canal area, with contributions from competing consultancies.

The masterplan developed under Perspective.brussels and the Chief Architect of the Brussels Capital Region (*Bouwmeester*) is of paramount importance in tackling the two-pronged challenges of the next 20 years: solving the problems of housing, jobs availability, mobility and the local economy, while furthering functional land use mix and better living conditions. Two original development instruments were designed to retain local populations and improve their quality of life. Sustainable

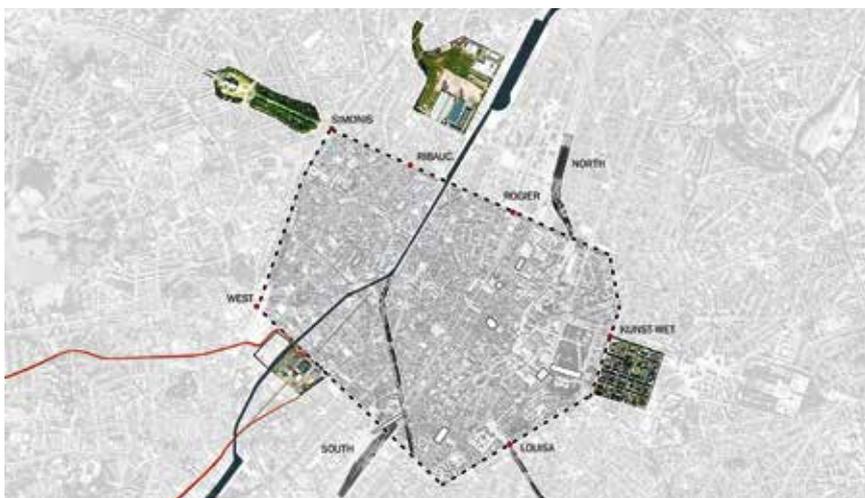
Neighbourhood Contracts (*Contrats de quartier durable*) are subsidised action plans limited in time and space and agreed between the regional government, the municipality and the inhabitants of a district. Urban Renewal Contracts (*Contrats de rénovation urbaine*) are action plans, also limited in time, covering a larger area and managed by regional and municipal operators under the guidance of the Region.

The *Canal Plan*, approved in February 2015, is based on an urban acupuncture approach focusing on a few selected areas (amounting to 1400 ha, 600ha of which are in public ownership) where the government planned to implement six pilot projects to test the potential of the area as a whole. This process was affected by significant changes to public strategic planning regulations and implementation procedures, which delayed its implementation. Besides the complexity of Belgian institutions, the complexity of the real challenges and the need to formulate inclusive solutions to real contradictions

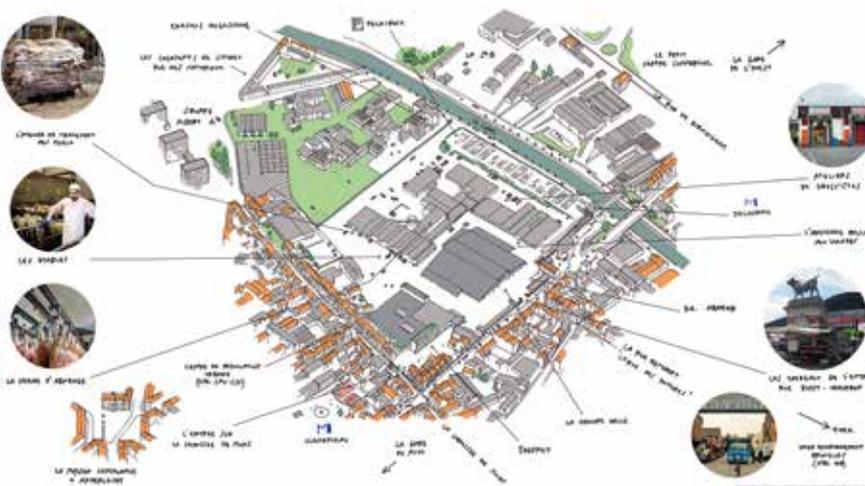
1 Aerial view of the proposals for the Slaughterhouse site



2



3



4

are equally important, especially if the projects are to be successful. The two projects described here were able to accommodate these issues.

The success of long-term projects requires the gradual achievement of a delicate balance between the three key aims of the project: the necessity of a social dialogue, interaction with the stakeholders, and a continuous focus on urban design. The masterplans for these two projects were in the hands of personalities who showed commendable restraint by readily acknowledging that they alone could not bring these ideas to fruition.

SELECTION OF THE SITES

Both projects were designed to achieve greater efficiency by merging their respective activities: the storage of goods under

customs supervision, tax and excise duty collection at the Tour & Taxis (T&T) site; cattle trading, slaughtering, and meat processing before distribution at the Slaughterhouse site. Recognising the spatial palimpsests of the sites, development planning was based on the potential of their current settings. Operational initiatives were largely transferred to private bodies for both sites while the respective authorities retained predominantly regulatory, but diverse roles. For the Slaughterhouse site, the aim was to undertake urban regeneration while preserving and retaining the local, mainly immigrant and working class population and their livelihoods. The T&T site corresponded to the usual large-scale urban renewal projects which aim to attract contemporary activities in both new build and transformed historic buildings.

THE SLAUGHTERHOUSE SITE

When a new management group took over the slaughterhouse in 1983, it brought its activities up to modern standards. It eliminated the livestock markets, while keeping and upgrading slaughtering units, diversifying the market's functions and putting on a variety of events. The site is now also within walking distance of two underground stations built when the downtown circular line was completed in 1987. It is very busy at weekends (with up to 100,000 visitors a day) and during the week (with up to 40,000 visitors a day) as people stroll around the flea market, fruit, vegetable, meat, fish, herb and textile markets. Initially used to grow mushrooms, the cellars (*Caves de Kureghem*) have been a venue for events since 1992. From the beginning, the management group actively involved local people as well as regular visitors in this renewal process. This approach of working with social enterprises and local associations continues to play a key part in the provision of housing and a local business centre.

In 2007 there was a proposal to turn the site into a large urban park, dispensing with the slaughterhouse activities. This led the abattoir CEO and its architect Alexander Dhooge to produce a long-term, comprehensive urban vision and an operational plan with ERDF funding for an innovative agri-food park, integrating all of the activities on the site. The Quality Chamber created in 2009 requested the involvement of people from both the neighbourhood and the adjoining areas to make the masterplan more inclusive. Urban design proposals would turn the entire historic covered market into a central square, attracting users and visitors from various backgrounds, while new buildings around it would reinforce its urban character.

In place since 2012, the masterplan aims to optimise existing activities on

2 A historic poster of the abattoir and markets area in Brussels' Anderlecht-Cureghem area
 3 The Slaughterhouse site lies to the southwest of the Canal Plan area, and the Tour and Taxis site in the north
 4 The activities on the Slaughterhouse site.
 Source: www.forum-abattoir.org

the site and attract new ones mainly in the food sector and including craft shops, light industries and various wholesale and retail stores. The plan also provides for different housing units and stimulates educational and cultural activities in a mixed use project. These flagship activities are expected to boost creative activities all around the canal area.

The regeneration of the site will take place incrementally and flexibly to avoid interrupting existing activities. The joint development of the food market Foodmet, the first iconic building in operation since 2015 and the abattoir farm, built on the roofs of Foodmet by the start-up Building Integrated Green Houses (BIGH) are great examples of a profitable, transparent, qualitative and ecological circular economy, in perfect symbiosis with its urban environment. With 4,000 m², the aquaponic company is the largest roof-top farm in Europe. Since 2018, plants and fish have been grown in two closed circular systems linked by a common biological filter. The outdoor vegetable garden takes up 2,000 m² of roof area while the other half is covered with greenhouses. The aquaponic system generates a microclimate in the vegetable garden as a result of a unique combination between intensive small-plot farming and permaculture.

The Urban Farm project has been created by Travie, social enterprise caring for disabled people working together with the Atelier Groot Eiland, which laid out the vegetable garden. This fertile synergy with the social economy combines learning and professional skills with high tech urban agriculture. A number of start-ups are responding to this and use local agricultural products in the restaurant and social shops on site. Cooperation with Culturegehem which organises Kookmet, young people cooking for the market and now also for other companies, and Ketmet, which provides children with play opportunities in the summer, enables local communities to interact more, making the place more attractive and pleasant to live in.

THE TOUR & TAXIS SITE

Covering 35 hectares, the Tour & Taxis is a significantly larger and more prestigious site than the 11ha Slaughterhouse site. For nearly a century, T&T was the hub for goods distribution at the historic gates of the capital. After reaching a peak in the 1960s, the site experienced a downturn. The gradual lifting of trade barriers led to the closure of the customs warehouse in 1998; a reduction of rail freight, the increase of container traffic and growing competition from road haulage, all brought an end to the site's activities in 1993. Three public institutions owned the site at that time: the Port of Brussels owned the Royal Storage and the saw-tooth roofed shops, the Ministry of Finance, the Customs Court, and the National Belgium Railway Company, the freight station and the railway sidings. Normally such a site would be under the control of the authority responsible for spatial development. Here instead, each owner acted as a free agent. In urgent need of funding to build the high speed rail network TGV, the Belgian Railway Company decided to sell off its disused infrastructure. As the newly created Brussels Capital Region had other priorities than buying such sites, the Railway Company and the Port of Brussels sold their real estate to private companies to develop new activities and housing, resulting in the partial loss of control over the property by the public sector.

As an iconic site of the golden era of worldwide industrialisation, the T&T site has triggered vast speculation with plans and counter-plans. In 1993, intending to link economic development with education, La Fonderie proposed a museum complex on the site. The Music City project included a 12,000 seat arena, which required the demolition of most of the saw-tooth roof storehouse and would have generated huge social and environmental problems. As the saw-tooth roof buildings are an exceptional example of architecture and civil engineering in iron and stonework to capture daylight, a group of determined and uncompromising local, national and international advocates of industrial heritage managed to save it. The city council commissioned a study to find a new location for the Music City but this was later



5

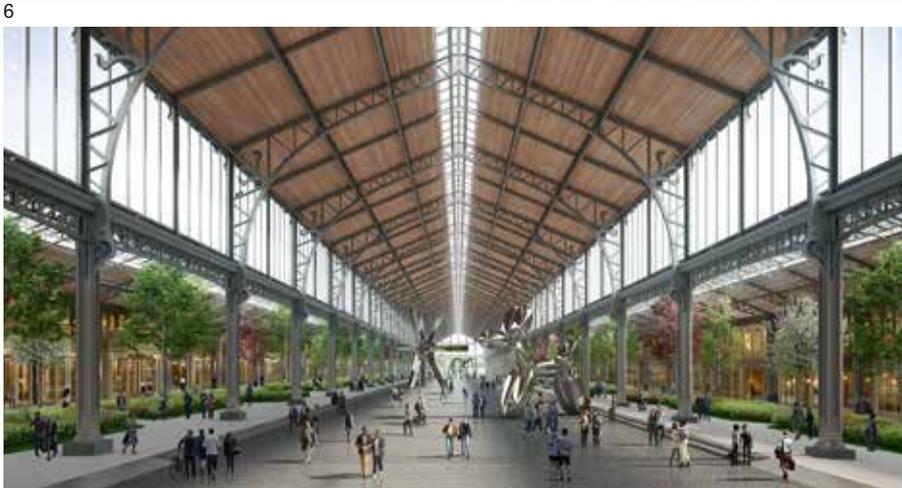
The masterplan aims to optimise existing activities on the site and attract new ones mainly in the food sector and including craft shops, light industries and various wholesale and retail stores

abandoned due to its lack of profitability. Meanwhile after various transactions, the real estate company Extensa became the sole owner of the T&T site and has so far developed and sold three buildings.

There was a growing awareness of the need for stronger ties between the T&T site and the adjoining neighbourhoods. The area was registered in 2001 as an area of 'regional interest' in the Regional Land Use Plan and in 2002 as a 'leverage zone' furthering the diversity of functions in the Regional Development Plan. After the regional and municipal authorities and various members of the public had failed to agree on a strategy, a masterplan was launched in 2005, bringing together all of the players to produce a common vision for interventions; it was adopted by the government of the Brussels-Capital Region in December 2008.

In July 2009, an agreement in principle with the T&T site's owners was reached on the creation of a 30 hectare mixed use area: a new district of 1,000 – 2,000 housing units, offices and

5 The Foodmet market hall on the former Slaughterhouse site



which together with the activities give this heritage site its stronger identity.

The urban designer of the site, Michel Desvigne, focuses on a greenway which crosses the site along the former railway tracks and includes a 4ha park with evolving planting to improve its soil quality. It links the Parckfarm and the Bockstael Bridge with the Repair House, and leads to the 9ha T&T-park (designed by Bas Smets) covering one third of the site. Another third is taken up by historic buildings, and the remaining third by new constructions (440,000m² of floor space, with a site coverage of 1.5). The size of the tree-lined streets, concourses, gardens and the park will mitigate the height of the taller new buildings. The various prices of the housing units (with a public authority cost cap on 500 units) suit their various locations, sizes and standards.

The approval of the detailed development plan sped up the implementation of the Hôtel de la Poste in 2013, the Brussels Environment building in 2014, and the Herman Teirlinck building in 2017. A covered village will be completed by 2019 under the already renovated roof of the Maritime Station (40,000 m²). It will contain economic, commercial, cultural, sports, leisure, tourist and catering functions in three large halls connected to a smaller one. The first floor will house a new generation of offices and training rooms.

A nodal management system was chosen to facilitate the more flexible use of space reflecting future working methods (with on-site services and a work-conducive atmosphere). The new buildings erected along a covered *Rambla* that will cut across the warehouse, will be made of glued laminated wood, a technique allowing mechanical assembly under the roof. The starkness of the current building's glass and steel will be softened by a better CO₂ control with innovative geothermal technology (smart glass remotely dimmed by smartphones).

CONCLUSIONS

The lessons from these projects for urban designers are that despite complex governance and political upheavals large-scale regeneration projects stand a better chance of coming to fruition in the long-term if they benefit from a statutory spatial framework agreed by a large number of stakeholders. Most importantly, successful urban regeneration depends on the active involvement of the local population which helped to shape it while reaping real benefits from it, and also on a dialogue with the urban population at large who claim legitimate ownership over the future of their city. ●

Dirk van de Putte, independent urban and territorial development advisor, Brussels, Belgium

green spaces connected to the northern district by a new tram line crossing the canal on a new bridge. A Special Land Use Plan drawn up by the City of Brussels in close collaboration with the Region was adopted in April 2017 after consultation with citizens and stakeholders.

The combined T&T masterplan and management plan sets out a flexible and resilient framework for sustainable development to benefit as many people as possible. After substantial redevelopment, the site will be opened up and seamlessly linked to the surrounding neighbourhoods and the banks of the canal. Transport alternatives will reduce car usage, green buildings will curb energy consumption, water wastage will plummet, and urban open spaces of high environmental quality will be created, as well as jobs and social amenities, such as schools and nurseries. As a long-term project, the site will also accommodate various temporary activities.

The sturdy historic buildings are inward-facing with vast central avenues lit by large glass roofs. They use little energy and benefit from climate control and a healthy atmosphere. Under the well-known saw-tooth roofs of the Royal Warehouse, the 17,000m² space now hosts trade fairs, book and antiques exhibitions, and various cultural events. The Europa Nostra Prize was awarded in 2008 to the quality of the restoration of this building,

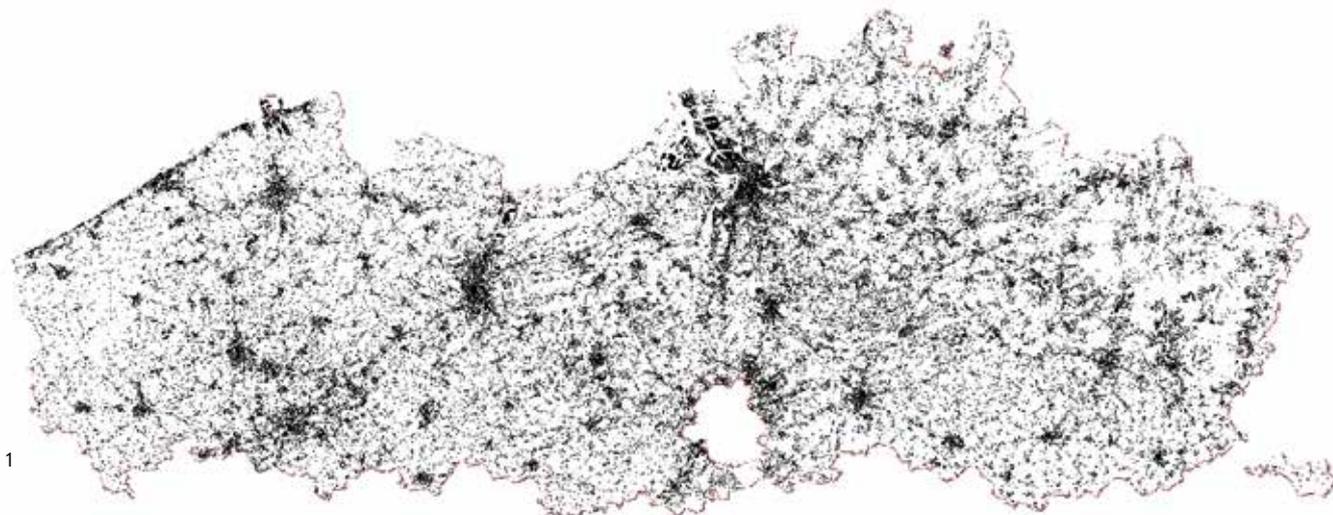
6 The Tour and Taxis site. Source: www.tourtaxi.com via Pinterest

7 The Tour and Taxis site – the mixed use village and large event halls at the Maritime Station

8 The avenues created to the side of the main event halls of the Maritime Station

Creating Green Networks in Flanders

Michael Stas and Jan Zaman report on initiatives linking green spaces and making built-up areas permeable



Flanders faces large social and related spatial challenges. The evolution of globalisation, demographics, mobility, climate, energy, technological innovation, food production and biodiversity impose new demands on space. The strategic vision of the Flanders Spatial Policy Plan (*Beleidsplan Ruimte Vlaanderen* or SPP BRV) includes several important objectives to develop a resilient Flemish region that offers answers to social and spatial issues not only for today, but in the longer term. One of the main ambitions that runs through the entire strategic vision of the SPP BRV as a *leitmotif* is to reduce the net land take for new development, currently consuming about 6 hectares per day, to zero by 2040, a goal set for the entire EU by 2050. This goal relates to the now commonly-accepted knowledge that open and natural spaces are important for a variety of reasons, and will play an important role in adapting our regions to climate change. Yet, the question of how to reach these goals often remains unanswered.

Therefore the Department of Environment and Spatial Development of Flanders has set up several new approaches and programmes to deal with the scattered open spaces in the region by linking, reinforcing and enlarging them. Recently, the Department took the lead in convincing other actors to reinstate lost green links. Two opportunity areas were studied within the context of current cross-border cooperation between Flanders and the Brussels Capital Region. The first is the airport corridor between Brussels and the airport in Flanders. The second is to improve and optimise an existing industrial area while creating strong green infrastructure across the Senne river valley.

This case-based approach is complemented by a generic Flanders-wide policy to point out the importance of a shift in attitude if the region is to become more resilient to climate change and flood risk. One of them is the call for ‘unsealing’ proposals, opening up impervious land to nature, which was launched in November 2018 by the Flemish Minister for Environment, Spatial Development, Nature and Agriculture.

THE AIRPORTS CORRIDOR

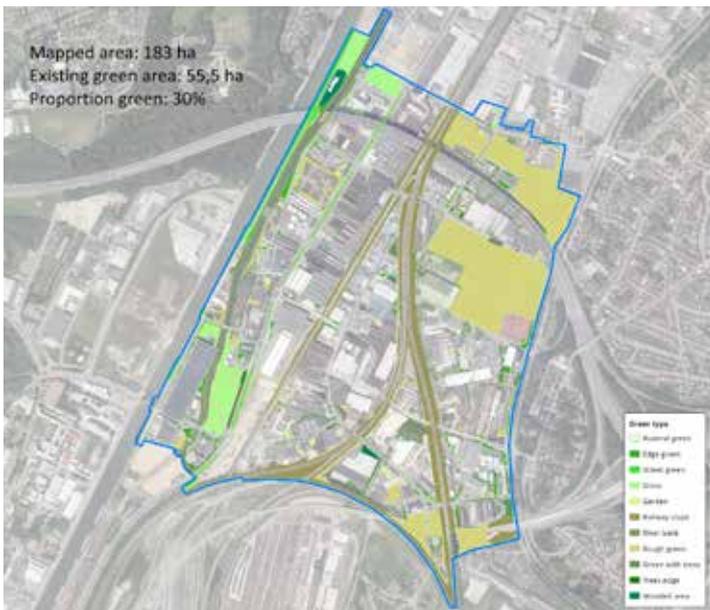
Brussels airport is located close to the city centre, but just outside the administrative borders of the Brussels Region. Since

the 1950s, the economic development of this area has been uncoordinated, and inspired by a model of the suburban American dream. All urban activities were separated by park-type green spaces, and individual car ownership dominated connections between home, work and recreation. The low density of activities, low-rise buildings and oversized car-based infrastructure define the main characteristics of this area.

However, during the 1970s the Green Belt Policy was adopted, which halted the further expansion of the city, and protected the open spaces that were not yet claimed by suburban development. As a result, the isolated green spaces located parallel to this economic corridor could again form a green link. One of the main obstacles to creating such a green link, is the military zone of the former NATO headquarters and the headquarters of Belgian Defence. This area, on the border between Flanders and Brussels, will be completely redeveloped from 2019 onwards. Negotiations between the Brussels and Flemish spatial development administrations and the Belgian Ministry of Defence started in 2015, and will result in a signed agreement early in 2019.

Both the Flemish and Brussels authorities want to achieve a high density, mixed use development on the northern part of the site and open space in the south. While new functions will be sought for existing buildings in the new green space, most of the roads and paved spaces will be removed. Integrating the park cemeteries (shown in dark green on the map) into the

1 Flanders: 14 per cent of the area is made up of sealed impervious surfaces



open space will create a unique 300ha park as a major attraction on the 8 kilometre green link between the parks in the centre of Brussels and the open agricultural land in the east.

SENNE VALLEY

The small River Senne runs almost invisibly through Brussels. Underground in the south of the city, it reappears 10 kilometres to the north, in the middle of the port and industrial area. The last navigable part of the river constitutes the origins of the city from the 10th century. Buda, on the Brussels-Flanders border, is the first place where potentially a green and ecological link could be established between both sides of the Senne Valley. However, in the context of current demographic and economic growth, it is implicit that the economic areas will also be intensified when creating this green link.

Field work and aerial photographs show that almost 30 per cent of the 183ha industrial area is existing green space. So, the question shifts from 'is there a lack of green space?' to 'does the green space deliver what is needed?'

The existing green space is unevenly distributed, and is not able to provide an east-west ecological link. Moreover, most of the green areas along the infrastructure are in a pitiful state. After classifying the existing ecological value of the different green areas, we can define what species and habitats need to be supported with this ecological link between the eastern and western valley slopes. Together with the companies on the industrial estate, we will design a shared strategy for a green and ecological structure in Buda. This may point to some green areas being transformed into workspaces, while others will

Opening up impervious land is not a goal in itself, but a means to safeguard and enforce the various roles of open spaces and natural areas, which have not only an ecological value, but also an economic and social impact

be reorganised with better and more ecologically-relevant management and maintenance. The intensification of the industrial area will also put pressure on some open spaces and may result in the reduction of the total amount of green space. In this case, the overall ecological value should be improved by adding green roofs and walls to fill the missing links.

This strategy relies on cooperation with, and investment by private partners. Subsidies and innovative cost-sharing schemes will be needed to cover excessive costs for private parties to turn the industrial zone into an active ecological link, while improving working conditions for companies.

'UNSEALING' FLANDERS – LEARNING BY DOING

With its new programme of spatial transformation, the Department of Environment and Spatial Development in Flanders wants to tackle the question of how to reach its goals. Within a larger framework to accommodate the need for densification, reuse and recycling, the first phase of this project focuses on a rather sensitive issue, namely to lower the degree of sealed soil and inert surfaces in Flanders. With 14 per cent of its surface sealed by buildings, roads, pavement, it is one of Europe's most sealed regions. If current trends continue, this region will reach a soil-sealing rate of 20 per cent.

Therefore after a successful first forum on 14 September 2018, the Flemish Minister for Environment, Spatial Development, Nature and Agriculture launched a call for 'unsealing projects' (*proeftuinen ontharding*). The Minister and her administration want to stimulate and support initiatives and efforts by governments, associations, organisations, companies, schools and others to unseal areas of land. Initiators receive financial contributions for the development and execution of their ideas and also for design, legal advice and communications support. The ambition is to deliver projects and develop knowledge about how to tackle the opening up of such built surfaces and to make it widely applicable and feasible.

These proposals should contribute to improving the spatial quality of the environment and make it possible to re-link existing or create new open spaces

2 The principles for connecting green areas at the former NATO headquarters and the headquarters of Belgian Defence
3 Buda, in the Senne Valley, where almost 30 per cent of the industrial area is green space

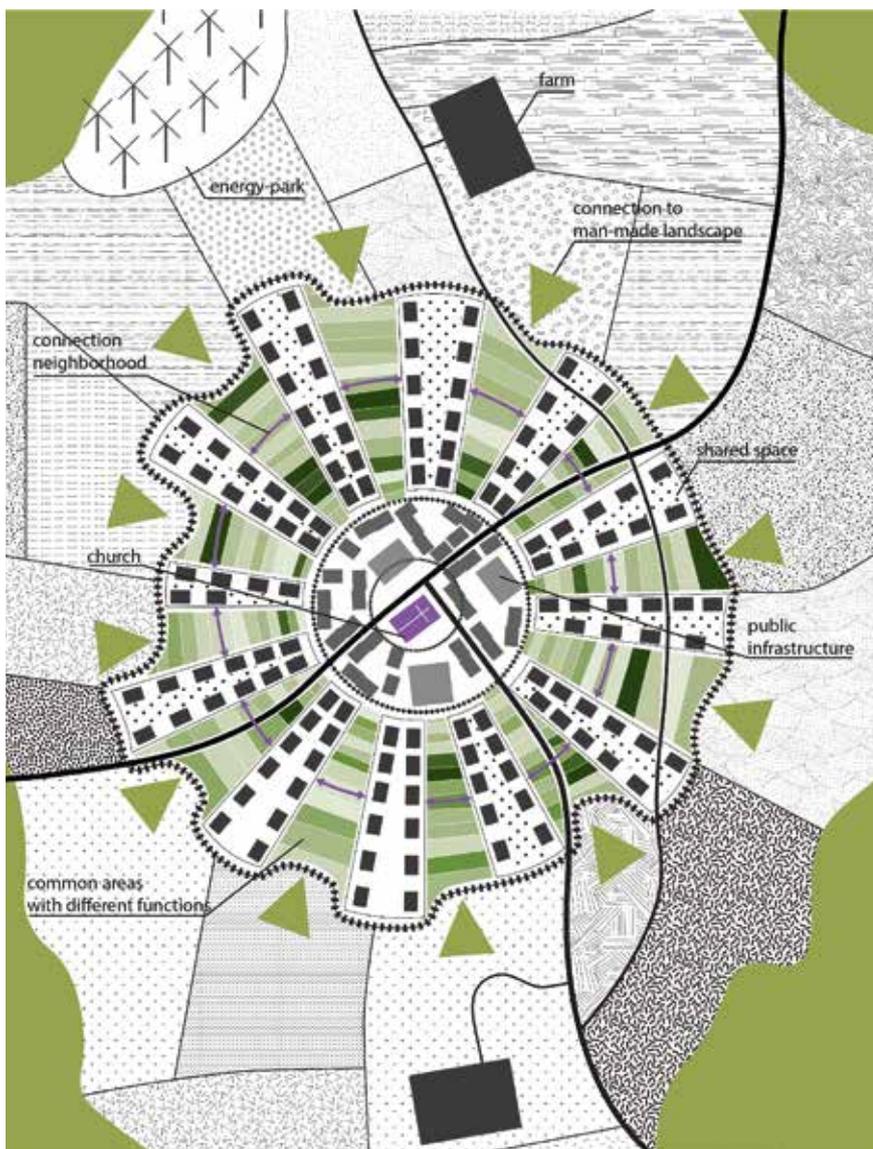
and natural areas. The projects must contribute to the transition from a practice of adding more sealed spaces to the transformation of already existing areas. The call for projects was a great success and more than 300 proposals were submitted. This high number shows the need and the will to proceed with softening our approach to development and to contribute to the spatial transformation and reduction of our land take. The many good and interesting project proposals exceeded the allocated budget and 23 proposals were selected, but another €5 million will be made available in 2019 to stimulate and support further initiatives and efforts. It is remarkable how quickly various organisations have managed to put this on their social agendas.

Opening up impervious land is not a goal in itself, but a means to safeguard and enforce the various roles of open spaces and natural areas, which have not only an ecological value, but also an economic and social impact. This ambition thus touches a wide spectrum of local, area-oriented or regional spatial development and research. The call for pilot projects and the accompanying guidance process fulfils three ambitions:

- the delivery of new high quality and exemplary projects that can inspire others;
- the development of a new social dynamic and the creation of a public platform around unsealing land in terms of culture and entrepreneurship; and,
- the development of knowledge and recommendations to guide future projects and policies.

Instead of first studying and constructing complicated policies or legislation, this programme sets up a practice-oriented approach, which through ‘learning by doing’, generates and shares knowledge on the challenges and opportunities of opening up impervious land, and aims to contribute to a change in spatial practice. If successful, this might be a pioneering programme within the Eurodelta area, contributing towards the ambition of no more net land take and a reduction in the vast amounts of sealed surfaces. In order to reach this goal, we must dare to think more radically than the current densification and mixed use projects being implemented throughout Europe, and have the courage to change current practices. ●

Jan Zaman, spatial planner and researcher, programme manager for the Brussels Northern Area Territorial Development Programme, www.omgevingvlaanderen.be
 Michaël Stas, architect and urbanist, working on the programme of Spatial Transformation for the Department of Environment and Spatial Development Flanders

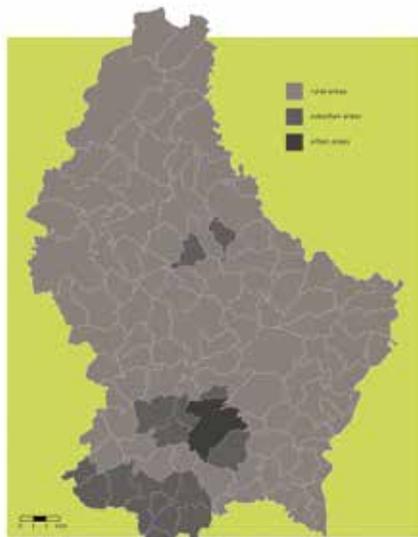


Rethinking the Village

Jeff Mirkes explores a new spatial concept for structuring villages

The future is the city’ is a recurring statement made by futurologists, but what about non-urban areas, the rural areas, which are often densely inhabited? At present more than 50 per cent of Europe’s population lives in rural areas. Most planners, urbanists and architects are not aware of the drastic changes taking place in the countryside, or that the countryside has a significant impact on a country’s overall cultural influence. Moreover, rural areas have much undiscovered potential that could play an important role in the future. This is one of the reasons why designers such as Rem Koolhaas are devoting their attention to non-urban places, as shown by Koolhaas’ 2018 exhibition in Manhattan.

Luxembourg is the perfect country to develop a new concept for villages, firstly because most of it is rural, and secondly because its population is growing quickly



2



3



4



5

and in a limited space. Consdorf, a town in eastern Luxembourg, serves as a good example of this strategy of rethinking the village.

CURRENT SITUATION

Historically, villages and cities have had closer connections because they depended on each other. Cities and the countryside were opposites in many ways, and village life was very different to living in a city.

Influenced by imagery promoted in the media, we often have an idyllic picture of the countryside in our mind. These idyllic visions, which influence how we see reality, have little in common with the actual spatial situation in most rural areas. The pronounced differences, which were real in the past, barely exist

in current lifestyles. In middle Europe, urbanisation has reached every inch of the territory and leaves no significant differences between those living in the countryside and city dwellers. Since the 1950s, villages have expanded beyond the village core. Detached houses have appeared along the existing road network, surrounded by gardens, like introverted private oases, and barely connected with their environment. The surrounding man-made landscape, part of the local authority's territory, is no longer connected to the way of life there. Conversely, the village centre is committed to resisting change, although it is threatened by empty units, because the old buildings no longer correspond to today's needs and uses. The church, an important part of the village's identity, is often an empty shell. The question is: what are people living in the countryside looking for? Most of them want a home where they can live in peace with their family, ideally surrounded by green space. In addition, they can afford their own house.

However, a real home is more than just a house in any location. People need to integrate their daily life with their history which gives them identity, and this is dependent on being in specific places. We tend to reduce rural places to virtual areas, which makes local places and their geography lose their meaning. Ironically, being seen as virtual areas makes the countryside more attractive, because it does not feel cut off from the rest of the world. However, new concepts are needed to rethink the village and adequately deal with the culturally valuable older structures in villages and their surrounding man-made landscapes. This is necessary to guarantee the spatial quality of real homes in non-urban areas so that they are truly integrated with their environment in a digitised and global world. The question is which structures or types of villages could be most useful in the future?

VILLAGES WITH A FUTURE

The special functions of the village of the future can be seen from different perspectives. For example, the Zukunftsinstitut (Futures Institute) has summarised them as six different types:

1. The Health Village, in which elderly people are cared for to improve their quality of life. It is also available to younger generations for holidays, offering treatments to improve their health and well-being
2. The Bio Oasis, a mix of bio-agriculture, gastronomy and tourism organised in the form of a small village community
3. The Energy Village, large enough to be energy autonomous, is no longer dependent on global energy networks and can assume a pioneering function as a prototype of new concepts
4. The Creative Hub, using the village as

- 1 A new conceptual model for villages
- 2 Luxembourg's rural areas shown as the lightest grey areas
- 3 Old village centres have historic buildings, but do not correspond with today's needs and uses
- 4 The village of Consdorf in its rural setting
- 5 Typical new and detached housing being built in Consdorf

a focus for new employment trends, such as co-working spaces, flexible working hours, home offices, freelancing and collaboration, all of which have become possible thanks to contemporary communication technology. This kind of environment offers many features which are currently synthetically produced on many campuses

5. The Pioneers' Community, offering space for different styles of community living organised around chosen social objectives, such as an unconditional basic income or, as has been tried in Langenegg, in the Austrian Vorarlberg, strengthening the power of the village by creating its own trading currency, and

6. The Downshifting Village, intended as the opposite of hectic, stressful cities, embodies a decelerated idyllic style of country life, similar to the slow food movement in gastronomy.

One interesting reference project is the ReGen Village, the goal of which is to produce its own energy and food without waste and using as little space as possible (*Effekt Regen Village* 2016). One criticism of such a concept is that it only works for new-built villages and does not offer solutions for existing villages and their spatial challenges.

HARNESSING LOCAL SPATIAL POTENTIAL

Another new proposal based on seven guidelines is the aforementioned concept of rethinking the village, which can be applied to many different village types. Many examples in history have shown how cities could be improved, Ebenezer Howard's Garden City being one of them. But ironically, current ideas for rural areas tend to overlook some of their existing potential and qualities that are under threat of being lost forever.

When analysing different village typologies, it is important to look at how their structural development integrates unused green areas, which have become too small for economically efficient agriculture. They are in danger of disappearing as they are being taken for house building, thus giving villages a suburban character. Therefore rethinking the village requires us to reconsider the area as a whole. One important guideline is to clearly define a boundary for maximum growth to prevent the village from extending uncontrollably. Conversely, it is important to establish a connection with the surrounding man-made landscape as well as to integrate this in-between space with the existing village.

In considering existing open areas in and around villages, it is clear that they are a valuable asset that has to be made accessible to the inhabitants. This way the village gets restructured by its common areas, i.e. green areas used by the community, with the houses oriented to address them. This approach offers new possibilities for dealing with real estate property in the future, making the idea of common ground more attractive. The villages no longer expand solely along streets in a linear pattern; rather they develop within their own maximum size limits. Thanks to the open spaces, villages can grow or develop in an organic way that supports existing typologies. Furthermore, looking at the village area as a whole this approach facilitates the integration of the man-made landscape, which is very important for local identity and also supports regional culture. Organising villages in terms of areas creates spaces for neighbourhoods, which in turn foster community life.

Restructuring villages using communal areas has other advantages, such as distributing housing densities around the village, incorporating different ranges from the centre of a village to its fringes. This concept shows how spaces can be used efficiently without being built up completely. It furthers the development of villages instead of denying their historical roots.

Agricultural enterprises are often no longer located within villages because of their size. Being run on an industrial scale, they are already situated outside the village in their own farming environment. The necessary space for a decentralised energy supply is also located outside the village. This ensures that villages will no longer be completely tied to global power systems



6



7

The future of villages and the countryside will not only rely on internet speeds or highway connections, but rather on their spatial qualities and surroundings

and will become self-sufficient at least in part.

Village centres contain public spaces and buildings, i.e. schools, community halls, etc. and depending on the situation, these can be connected by public spaces, in which traffic can be integrated in a form of shared space. In addition to enhancing mobility generally, the common areas provide a public space network for pedestrians and cyclists strengthening relationships between residential areas and the village core. The goal is to make the village centre accessible within ten minutes' travel on foot or by bicycle, while enjoying the surrounding landscape. As no one can predict the future 30 years from now, these common areas offer the flexibility to accommodate entirely new ways of living. They contain spaces for the future, for example for drone delivery and other ideas that we cannot even imagine now.

6 Rethinking the village of Consdorf and the areas around the existing development
7 An artist's impression of how the common areas in villages could be used

CONCLUSION

This study shows that villages will have a future and be important in most countries, especially in growing regions which are attracting a denser population. Existing villages already have much hidden potential. Not only are they contributing to cultural diversity, but they also offer more attractive ways of living, which would be difficult to create artificially in urban areas. People seek places with a local identity and as a considerable proportion of the population in middle Europe likes to live outside cities, non-urban areas are popular. It is important, therefore, to become more sensitive to existing villages and areas in the countryside, when thinking about future solutions, and take note of their undiscovered potential. Better communications between different professional disciplines are necessary to implement such concepts, in particular between spatial planners, urban designers, architects, engineers, politicians and, of course, digital disciplines. In conclusion, the future of villages and the countryside will not only rely on internet speeds or highway connections, but rather on their spatial qualities and surroundings. Of course they have to be integrated digitally with

global networks, to enable them to flourish within the global world. However, the human experience is the only way to measure the spatial quality of such experiments. ●

Jeff Mirkes, research assistant, Karlsruhe Institute of Technology (KIT), Institute for Urban and Landscape Design, Department of Urban Design, and working at ASTOC Architects and Planners

BIBLIOGRAPHY

- Mirkes, J (2017), 'Dorf neu denken, IESL, STQP, Karlsruhe
Seitz, J (2015), 'Dörfer mit Zukunft'. In Trend Report 2015; Zukunftsinstitut, Frankfurt am Main
Effekt ReGen Villages (2016), <https://www.effekt.dk/regenvillages/>

Shaping Zurich's Development with Non-profit Housing

Roman Streite explains the city's pro-active development strategy



1

Around a quarter of the 220,000 residential units in the city of Zurich are non-profit rental apartments. They are managed either by the city administration, the city's own companies, or by one of the many non-profit housing cooperatives that exist in Zurich. The city has the highest non-profit market share of all cities in Switzerland and this has a huge impact on the affordability and quality of housing in a city that is more associated with its banking sector and high living costs, than its active housing policies.

1 The non-profit mixed use district of Hunziker Areal (*Mehr als Wohnen*): the planning model from the local exhibition

111 YEARS OF HOUSING POLICY

In Switzerland, industrialisation took place in a decentralised manner at different times and rates and in different locations. In some cities like Zurich, the industrial revolution led to a very rapid growth in its population during the 19th century. The villages around the city were quickly urbanised and formally incorporated into the city in two key stages in 1893 and 1934.

As a consequence, its population grew from less than 20,000 inhabitants in 1800 to more than 150,000 by 1900. At the beginning of the 20th century, the housing shortage worsened and dramatically rising housing prices led to the beginning of an active housing policy by the city's authorities. The three main pillars of the city's housing programme from 1906 were:

- the far-sighted acquisition of land by the city for the construction of affordable housing
- the development of municipal housing, and
- the support by the city of privately-established housing cooperatives, mainly by giving them low-interest loans and contributing to the required capital.

Remarkably, this strategy has continued for more than 100 years to the present

day. The acquisition and provision of land by non-profit housing cooperatives is arguably the most effective support measure given by the city. Around 15 per cent of cooperative non-profit apartments are situated on land that is rented out by the city and an additional 15 per cent on land that was acquired from the city by the cooperatives on favourable terms. Even though around two thirds of all cooperative non-profit apartments have been built on privately-purchased land, the land provision by the city has been a crucial factor in the delivery of neighbourhoods strongly characterised by non-profit housing, such as Schwamendingen or Friesenberg. Now land reserves in Zurich are becoming ever sparser and land prices are rising fast. Therefore additional non-profit housing is currently being developed through the densification of the existing non-profit housing stock, as well as through new development on public land.

LAND PROVISION REQUIREMENTS

Since the 1950s, the city of Zurich no longer sells land to non-profit housing providers, but leases it with long-term contracts of usually 60 years, with the potential to extend them to a maximum of 90 years. The annual rate for these leases is based on a hypothetical land value that is determined as a percentage of the total investment costs (including the planned construction). This hypothetical land value is independent of and in general substantially lower than actual market value to ensure that housing at an affordable price can be delivered. In return for having access to public land, the non-profit housing providers have to adopt a number of measures. Apart from the obligation to calculate rents on a sole-cost basis (meaning that rents cover only the costs of building and maintaining the project and creating reserves for future non-profit housing), an architectural competition has to be carried out to guarantee the quality of the project. Moreover, there is a high energy performance standard required of the buildings, as well as a minimum occupancy of the available apartments. In addition floorspace has to be provided for social services managed by the city authorities as well as for public use (e.g. a kindergarden). As these services can be numerous, a controversial question is whether the reduced land price represents a real economic subsidy or just a compensation for the requirements of the city,

GIVING RESPONSIBILITY TO HOUSING PROVIDERS AND LOCAL RESIDENTS

In recent years many non-profit housing projects have shown that their providers – in most cases housing cooperatives – have gone much further in creating innovative housing concepts than was formally necessary. The resulting quality of these projects stems to a large extent from the initiative and ideas of these organisations and their managing boards. The housing project Hunziker Areal in Zurich is a good example. It was developed on public land by the housing cooperative *Mehr als Wohnen* (More than Housing), which was founded in 2007 as an innovation and learning platform, to celebrate the city of Zurich’s hundred years of housing policy. It consists of 13 buildings with 370 housing units ranging from small studio apartments to shared residences with up to twelve rooms, in a dense urban typology with a plot ratio of around 1:1.8.

The cooperative together with the city organised an international architectural competition as a basis for the project with a new approach. The winning team needed to set out the basic urban design principles (urban density and typology) and the landscaping on the 4ha whole site. The winners would design four buildings, and the other nine buildings on the site would be assigned to teams awarded second to fourth places in the competition, and who each would design three buildings. This procedure created both a recognisable urban design framework and a diversity in the concept and architecture of the individual blocks of flats.

The cooperative and the winning team played a key role in guiding the dialogue between the different architects and other



2



3

specialists, especially in the transition phase between the architectural competition and the construction of the project. They kept the costs down and refined the schedule of indoor and outdoor spaces. An important element was the ground floor usage. The aim was to create a lively city district instead of a mere housing estate. Therefore almost all of the buildings’ ground floors accommodated non-residential uses ranging from cafes, shops and communal services, to workplaces for people with disabilities and very specialised businesses such as a violin-making and an audio engineering studio. Implementing such a non-residential ground floor mix is remarkable in a district situated towards the periphery of the city and has to generate a large part of the demand for this floorspace locally.

The cooperative aimed to make this happen by requiring a minimum height of 3.8 meters for the ground floors and developing a comprehensive business plan, taking into account the existing demand in the district in order to define the required room sizes, equipment, pricing and marketing. It also actively approached possible future users, including the City of Zurich itself and social enterprises. In addition, parts of the ground floors such as seminar rooms or communal spaces with cooking facilities, are allocated to non-commercial activities. The use of those so-called commons

2 The low density housing project Friesenberg built in 1925, was the first building of the district
3 The denser Grünmatt project, built in 2010-12

was determined by residents together with the administration board of the cooperative. All of these spaces can be used by the members of the cooperative and some also by outsiders. Other publically usable spaces of the project include a number of playgrounds, community gardens and a rooftop sauna.

Overall, the project *Mehr als Wohnen* was based largely on the ideas and initiatives of local people who live or work in the district (or both). This bottom-up approach is represented not only in the cooperative itself where every member has an equal vote in important decisions, but also in the numerous participatory workshops, events, surveys and more, which accompanied the planning, building and operational phase of the project and which were also intended to shape the future development of the area.

While the cooperative aims to have a broad mix of uses and a range of residents with regard to their income, origins, family situations and lifestyles, its high environmental standards form a common bond across the project. With only around 0.3 car parking spaces per apartment and a total of around 1,300 bicycle racks, it promotes car-free mobility. Its residents contribute to sustainable land use by using significantly less living space than the average in Zurich (around 32sqm compared to 39sqm). Finally, the buildings achieve the highest energy standards (Minergie-P-Eco) and are heated mostly by waste heat from a nearby computer centre as well as a waste incineration plant. Photovoltaic systems on the roofs provide around a quarter of the total power needed.

GROWTH WITHOUT EXPANDING THE CITY

After peaking in the 1960s at around 440,000 people, Zurich's population began to decrease and stagnated at around 360,000 inhabitants in the 1990s. Only after the turn of this century did it begin to grow again, and at an accelerating pace. Since 2010, the population is growing at a rate of between 1 and 2 per cent per year and is currently approaching 430,000 people. As in many other European cities, demand for housing is high and prices are rising. At the same time, there is a strong political will to limit urban sprawl in Switzerland, and the city of Zurich has a spatial strategy intending to concentrate future growth within the current settlement area. In recent years non-profit housing providers have supported this strategy by densifying their own housing stock. In most cases, this was achieved by tearing down old structures and replacing them with new buildings that typically offer a significantly larger and more diversified apartment offer as well as a stronger use mix. With this procedure, providers are better able to satisfy current housing needs, attract more families to the city, and create more energy-efficient structures.

One example is the residential project Grünmatt, a non-profit housing cooperative. The replacement of a former single-family housing estate of the 1920s with new three to four storey buildings created over 90 additional housing units, a much broader mix of apartment types, as well as a kindergarden, a crèche and a common room for all residents. By preserving the general urban typology, the project can be seen as a reinterpretation rather than a reorientation of the former garden city structure of the estate.

DENSIFICATION AND CONSERVATION – FINDING THE RIGHT BALANCE

As undeveloped sites are scarce in Zurich, densifying their own stock is the most effective (and sometimes only) option for many housing providers to increase supply within the city. The housing providers then have to decide which built structures they preserve and which they redevelop or demolish and replace. This decision is often complex as the project Grünmatt also shows. Situated in a green garden city environment on the slopes of the city, the first building phase of the *Friesenberg* district represents a very attractive and historically valuable ensemble of buildings and spaces. On the other hand, it is also located right next to a regional train station, has a very low urban density with



4

large private gardens, and is in need of refurbishment. After studying possible development options (not only for this first construction phase, but for the whole district), the cooperative developed a masterplan in collaboration with the city of how this district should be densified. It was decided to replace, *inter alia*, the buildings from the first construction phase with denser urban structures, because the public interest of creating more living space close to public transport was given greater weighting than preserving this historic ensemble.

The decision was based in part on the fact that the renovation of the existing structure would lead to such high costs that affordable housing could no longer be offered there – the latter being a key interest of the cooperative. An association for cultural heritage challenged the decision in court, but the arguments to replace the buildings were supported by judges. This shows however that finding the right balance between increasing housing supply and preserving architectural heritage can be very complex. This is also linked to social inclusiveness, as apartments in older buildings are often particularly affordable.

Further challenges arise from a political initiative that demands an increase in the share of non-profit apartments in the rental market of currently slightly over a quarter to a third by 2050. As this was approved by around three quarters of all voters, the city authorities have to find ways to support the non-profit sector in Zurich even more than they have done over the last 111 years. ●

Roman Streit, spatial planner and PhD student, ETH, Zurich

FURTHER INFORMATION

- A map of all non-profit housing projects in Zurich is available at: <http://bit.ly/1K4s01>
- Examples of densification projects in Zurich can be seen at: https://www.stadt-zuerich.ch/hbd/de/index/staedtebau/Themenhefte/publikation_dichter.html

4 The Hunziker Areal (*Mehr als Wohnen*) project as built

Designing with Children

Aafke Nijenhuijzen describes how a play area in a new neighbourhood has been designed



Kreken van Nibbeland is a north-western extension of the village of Zuidland, part of the municipality of Nissewaard. Nissewaard, with more than 85,000 inhabitants, is located on the island of Voorne-Putten, south west of the city of Rotterdam. After the Second World War, the village of Zuidland was expanded to accommodate new commuters from the port area of Rotterdam. Due to 1970s provincial policies which stipulated that new housing should only be allowed in residential areas with facilities, Zuidland was allowed to expand while the surrounding villages were not.

In 2008 the local government prepared an outline plan for the area of Kreken van Nibbeland with around 600 new homes located in an open landscape with straight polder roads and extensive views. This urban extension consists mainly of single-family homes and terraced houses. In 2009 the construction of the first homes began, but due to the economic crisis, followed by the housing crisis, construction stalled for years as there were no buyers or investors. Since 2015, when the housing market started to improve, house building has restarted and currently there are around 120 houses under construction and 60 houses are for sale. At present, the housing shortage in the Netherlands is estimated to be around 200,000 homes. This means that by 2030, one million new homes will need to be built to continue to meet demand, and given people's preferences, only a small proportion will be built in cities; most houses will be built in areas like Kreken van Nibbeland.

LAND POLICY

In general terms, municipalities in the Netherlands can choose between four types of land policy, namely:

- **Active land policy:** The municipality buys the land, parcels it up and sells it as building plots; the area around the project described later in this article is being developed in this way;
- **Facilitating land policy:** Planning law stipulates that landowners can agree the subdivision of their land in consultation

with the local government. The municipality provides public facilities and charges the cost of this to the landowners, who implement the construction plans.

- **The municipality sells land to a developer:** The developer develops the area, sells the buildings, and sells the public space to the municipality. The municipality gives specifications for the design of the public areas (above and below ground level);

- **Public-private partnership:** Land is redistributed and subdivided in plots through a joint venture between the municipality and developers.

COMMUNITY SCHOOL

The associated facilities are included in the plan for the Kreken van Nibbeland residential area and a key element is the building of a primary school. Because the need for facilities are bound to change over time, the De Vlasbloem primary school is also flexible. It is designed so that classrooms can be easily converted into apartments. The school forms part of a community facility – a collaboration between different sectors working together in a broad learning and living environment. This includes provision for leisure activities as well as education, with the aim of maximising development opportunities for all children and young people. Therefore, the building houses a primary school, a childcare unit, a

1 An artist's impression of the play area in Kreken van Nibbeland
All images by Eric Douma landscape architecture



2

playgroup, a youth support team, a centre for youth and family, a midwives' practice, children's physiotherapy and speech therapy practices, a music school, and also has accommodation for intermediate and extracurricular activities.

As so many facilities are included, the children can remain in the same multi-purpose building for many activities, and as there are many young families in this new residential area, a large children's playground was also needed in the vicinity. The site at Zoetemanring, next to the school building was ideal; its size is 60x60m and it is enclosed by pavements. The site is also next to a slow traffic network, which constitutes a green link between this building and the creek on the west side of the planned area. Small play facilities are included within this network.

INVOLVING USERS

Outdoor play is an important activity for children, and is therefore laid down in the *Children's Rights Treaty* of the United Nations. The Municipality of Nissewaard considered it important that the design of the play area be tailored to its target audience. It appointed Eric Douma of Eric Douma Landscaping as the designer of Kreken van Nibbeland's outdoor space, as his practice has extensive experience in designing school open spaces and play facilities.

In August 2017, the landscape architect was commissioned to produce the design and he proposed involving pupils of the adjacent Vlasbloem School. The school was willing to cooperate and a team was set up with three pupils from each class from Year 3 to 8 (i.e. children aged 6-12 years old) to participate in a workshop which lasted about 2.5 hours.

Douma brought along six bases for the models, work materials and tools. This included clay, wood, cardboard, sticks, markers, and paint, with which the children could create a 3D design for the playground.

The results were varied: one girl pleaded for a monkey ladder and this was included in the design. Several groups suggested a cable car and this was also included. Children from Year 8 made proposals based on existing play equipment. Another year group created sports facilities (included in the northern part of the playground), and others made a proposal for a romantic, natural and fantasy play area. Surprisingly the youngest group delivered a well thought-out concept for the southern part of the play area.

The department in charge of managing the public space in Nissewaard also wanted to provide a football cage with artificial grass that could be used intensively, as opposed to natural grass which is not suitable all year round.

DESIGN

Douma created a design incorporating the children's input: the north-western half of the site was planned for sports facilities, namely a football and basketball court surrounded by a running track; the south-western part, closest to the dwellings became the romantic play area, in which a wide variety of playing opportunities are possible. The slope that was created on the site attenuated the noisier play elements from the nearby houses. This artificially-created height difference was also used for a high slide and zip wire, and there is a crawl tunnel, a mega swing, climbing trunks, and a monkey ladder. This facility, which was entirely financed by the Municipality of Nissewaard, is always open to all children.

The design also provides seating areas in the form of a long curved bench positioned between the sports and the play areas. In the strip between the two entrances, there is a place for children to sit. It is also good place for their parents and grandparents to sit in the playground and catch up while the children play. When the weather is good, the sports facilities at the playground next to the multi-purpose building provide a place for everyone to exercise.

Importantly, there is no bike storage in the school playground itself. The gym classes take place in a sports hall about 1.5 kilometres from the school, and so the children come to school by bike on the day that they have gym classes. The bikes used to be kept at the side of the play facility, but the new design provides storage for bikes at the side of the school, so that children do not have to cross a street with car traffic.

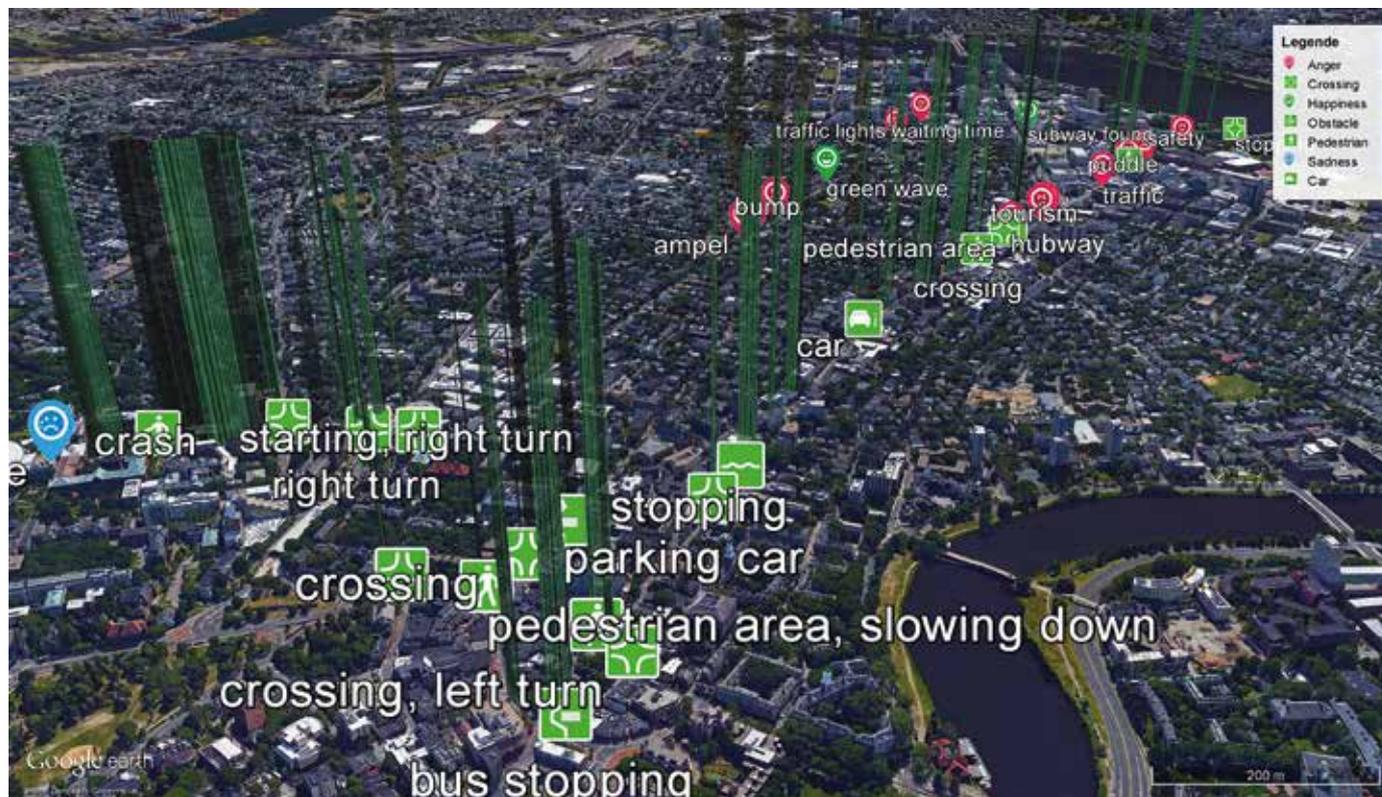
In December 2017, the concept design was sent to the school, the workshop participants and the relevant departments in the municipality. The pupils and the school team had no comments to add to the design and were very positive about it, and only a few practical adjustments were made by the municipality's officers. The construction of the play facility took place during the summer of 2018. The football and basketball court surrounded by a running track could be used from the outset, while the southern part remained closed for the grass to grow; however, this did not work because the children played on the recently sown grass regardless. It was officially opened in September 2018. The children's participation yielded a good result and they, their parents and the school staff are happy with the new play facility and its broad variety of play and sport opportunities. ●

Aafke Nijenhuis, urban planner, senior project manager, Municipality of Nissewaard, The Netherlands

2 The activities and results of the inspirational design session at the school

Places of Fear

Peter Zeile and Fabian Schlosser investigate whether it is possible to measure emotions to design better cities



1

The Urban Emotions initiative tries to create a new citizen-centric view of the 'city as an organism' and is an example of how digital, almost real-time planning methods can be integrated into traditional planning and design processes. For that, we have combined technologies like image processing, geo-informatics and sensors to detect how people feel in the city. Pedestrian or bicycle mobility, accessibility, way-finding as well as experiments in a virtual environment are models already tested for the urban context. A city is not comparable to a traditional laboratory; but we can try to create standardised, nearly replicable situations from which researchers can draw more reliable and focused conclusions about human responses to their physical environment. The intention is that planners will better understand these relationships and use the urban emotion approach to create a new perspective on cities. Despite excitement around new technologies, traditional planning should be supported by bio-sensing and geo-informatics algorithms, and not be replaced by them. In this article, we present a new approach to using bio-statistical measurements to detect 'places of fear' (*Angsträume*) in urban areas.

NEW TECHNOLOGIES FOR OLD ISSUES

In discussions about liveable cities, including issues such as perceived safety or places that feel welcoming, it is essential for urban planners to understand how people react to urban environments. Traditional methods for analysing people's behaviour and feelings are questionnaires, observations like the Burano method, or drawing-oriented approaches like mental maps. Newer approaches operate with online-based map drawing tools to mark special points in a city, partly supported by GPS. All of these methods have three disadvantages:

- long post-processing and analysis phases
- a high degree of interpretation of the context of a situation by the analyst, and
- a very subjective snapshot of, and sometimes influenced by, the surveyed situation.

The urban emotion approach reduces these drawbacks by measuring people's stress with the help of objective bio-statistical values and an automated analysing process to create maps of stress hotspots in a city. With only four sensors, it is possible to create a new image of the city:

- Electrodermal Activity (EDA in US) to measure skin conductivity levels, which delivers a signal of arousal in the participants
- Skin temperature to detect temperature drops in extremities, which is a hint of fear because veins contract
- The position of the test person via Global Positioning System (GPS), and
- Image sensors for 360° or ego-perspective video streaming to recap the detected stress situation.

1 The stress points identified by a cyclist in the city of Cambridge, MA. The green bars symbolise stress triggers, and the icons are the result of video stream analysis

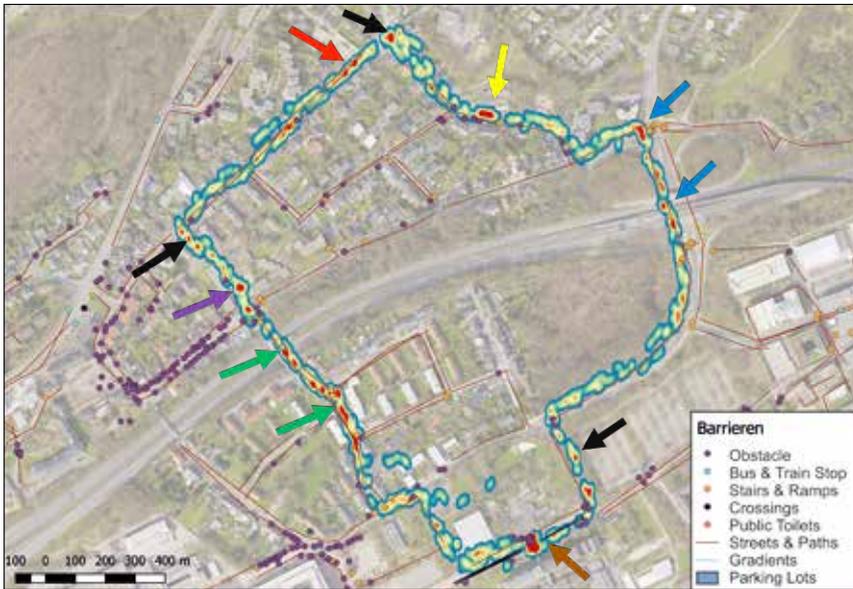
The bio-statistical detection of stress patterns, which are an emotional construction of anger and fear, is relatively



2



3



4

2 Stress points identified by two people during a walk in the city of Karlsruhe
 3 The detected stress points in a small town from trips by an electric wheelchair user, a blind person and a parent with a buggy
 4 The barrier plan of Bochum Querenburg and the detected moments of stress of test persons wearing the age-suit

simple. If people perceive a stress factor – a stressor – the sympathetic system starts to produce sweat and the skin conductance level increases. Unfortunately, an increasing skin conductivity level is not always a negative sign, sometimes it could just be a higher level of arousal. But with the help of decreasing skin temperatures – the well-known phenomenon of a cold sweat – a stress reaction is measurable. Combined with knowledge of the test person's location, it is easy to locate a stress point in the city. If all of the data is aggregated, it is possible to make a stress map of the investigated area.

EXISTING EXAMPLES

Promising tests with this new method have been made in research on the spatial perception of pedestrians, and the accessibility and detection of perceived personal stress amongst bike riders.

On accessibility, one test was to compare a renovated village street and area designed according to the German industry norm DIN 18040 for barrier-free planning, to find out whether impaired people would still find them stressful places even though the alterations were intended to reduce the negative impacts of the built environment on daily lives. A blind person, an electric wheelchair user, a parent with a buggy, as well as a non-handicapped person took part in this experiment. The result was that the non-handicapped person as well as the buggy pusher had no responses and only three stress triggers on the chosen route. The electric wheelchair user had fewer stress points than the blind person, but what was interesting was that we detected two situations where both had high stress levels. We examined the specific place again using the DIN 18040 standard and found that the refurbishment was incorrectly executed (and it had to be restructured after our findings).

In another experiment, in collaboration with the University of Applied Science in Bochum, we simulated the impacts of age with a so-called 'age-suit' worn by young planners. With the help of weights, glasses which simulate eye disease, ear plugs to give the impression of deafness, ten students had to take a 20 minute walk twice, once without the suit and the second time wearing the age-simulation equipment. It was interesting to see what an obstacle public infrastructure was, albeit designed specifically for progressive ageing by well-trained (and young) engineers. Even young planners have to be aware of these issues when designing the environment of their own future old age.

PLACES OF FEAR IN URBAN PLANNING

Following the analysis of these examples, we tried to apply the approach to detect the often cited places of fear. We found several problems. The first is that there is no general definition of a place of fear. For our study, we resorted to Schmid's definition which describes a place of fear as an 'area, in which blood pressure, pulse and walking steps

accelerate and trigger a negative feeling'. Another definition from crime researcher Hiller (2010) fits more into spatial planning discussions: 'A place of fear is a public or semi-public place in which people fear to fall victim to crime'. Generally speaking, the topic is more about perceived safety and not always linked to a real level of crime. This very personal feeling can manifest itself as a place of fear if people feel unsafe, change their habits and avoid going there; well-known examples are underpasses or confusing open spaces. Consequently, perceived safety is closely linked to design issues and the quality of public spaces.

PLACES OF FEAR IN A DORTMUND PROJECT

Looking at places of fear, a team of researchers from the Technical University of Dortmund and Karlsruhe Institute of Technology examined emotional mapping in Dortmund-Dorstfeld, in the Ruhr area in western Germany, in May and on a sunny and cloudless day. The weather conditions are mentioned as they are an important influence on the lighting conditions, as part of the test subjects' spatial perception. In close coordination with the department of urban planning of the City of Dortmund, we chose a route around the S-Bahn station in Dortmund-Dorstfeld which is part of the Nordwärts planning project, due to the variety of urban situations that are likely to cause discomfort or fear. One of the main parts of the route is the tunnel of the S-Bahn station, which is seen as a scary place, as it is badly lit, narrow and long and it cannot be avoided. Another spot is an underpass with similar conditions, except that the lighting is even worse. One of the main goals of the Nordwärts project is to eliminate places of fear in Dortmund, therefore the planners involved were very interested in testing a method in which measuring stress does not depend on personally influenced questionnaires, but is more objective thanks to scientific measuring.

Nevertheless, we supported our bio-statistical measurement with traditional questionnaires to gain information about subjective perceptions and about the test subjects themselves. This data was useful to allow us to compare the EmoMapping with the questionnaire. In total ten test people participated in the research project – five women and five men, between 21 und 55 years old.

EXAMINING POTENTIAL PLACES OF FEAR

Both approaches, EmoMapping as well as the questionnaires, detected unpleasant spots and areas along the test run. Surprisingly, neither the expected underpass, nor the S-Bahn station area were the high stress spots that we had assumed. Another interesting finding was that there was no significant difference in the detected numbers of stress moments between women and men. Only the spatial distribution differed a little, but even then this was not related to a specific spot of fear. As in all of our other experiments, normal urban incidents triggered stress, such as noise, unclear orientation in way-finding, vehicles or people passing close by, as well as long waiting times at traffic lights. One weak point of this special test set-up was that we undertook our experiments during the daytime, and not at night-time, thus avoiding potential crime incidents. Had we done so, the results would have been closer to our expectations, but due to our responsibility for the test participants, we declined this option.

SUMMARY

One of the main lessons learned from the EmoMapping in Dortmund-Dorstfeld is that the objective measurement of stress does not deliver the same results as subjective spatial perceptions amongst test participants. Therefore, EmoMapping is a useful approach to explore the topic of places of fear and a helpful addition to already established methods of participation. The use of this method is highly recommended because it requires little effort from test participants or other citizens. Thus, it is an appealing method, as long as it is thoroughly prepared. Although the sample of ten participants is not representative in any way,



5



6

Perceived safety [is] not always linked to a real level of crime. This very personal feeling can manifest itself as a place of fear if people feel unsafe, change their habits and avoid going there... Consequently, perceived safety is closely linked to design issues and the quality of public spaces

it is still possible to state that EmoMapping is a developing method with more potential for the future. The connection with 360-degree videos, and virtual and augmented reality systems is also a possible and positive argument in favour of this ever-changing method. ●

Peter Zeile, senior researcher, Urban Emotions initiative, Karlsruhe Institute of Technology, Institute for Urban and Landscape Design, Germany. www.urban-emotions.com, and Fabian Schlosser, spatial planner

5 The stress hotspots in Dortmund Dorstfeld, are not in expected places of fear
6 The 360° video of an expected place of fear

Encouraging Mobility for People with Dementia

Clemens Beyer and Wolfgang W Wasserburger describe research integrating technology with free movement



1

We have all heard of dementia and in particular Alzheimer's disease. Some of us know people whose parents or grandparents are suffering from dementia. One day, out of the blue, we get a phone call, Mum is on the line, nervous and full of fear: 'Daddy's gone! He called me and said he felt disoriented, then the connection was interrupted and I can't reach him anymore'. We can't predict whether and when we will be affected ourselves, but as people are living longer, the probability is increasing.

There are many ways to deal with dementia but one of the most important is to detect it as early as possible and then take steps to delay its progress. Physical activities are important in doing so and therefore, the mobility of people suffering from dementia must be supported. However, depending on the severity of the disease, mobility can give rise to potentially dangerous situations.

For example, people with dementia may find themselves in emergency situations when deviating from their standard routes or suddenly losing their orientation. An Austrian research consortium led by the Technical University of Vienna (TU Wien) won the VCÖ *Mobilität mit Zukunft* (mobility with a future) award in the category 'barrier-free mobility and social participation' for their project WAY-KEY. This addresses these problems and encourages people to integrate mobility in their life with an interactive day planner.

STATE OF THE ART

WAY-KEY has been designed to help improve a number of existing situations:

● Senior-friendly devices

Electronic devices for elderly people are often designed in a way that does not fit their needs. For example, there are 'senior-friendly' mobile phones with very big buttons on the top face, and a number of shortcut buttons around the case.

However, the big buttons use up a lot of the phone's surface leaving only a small area for the screen, which therefore can show only a small amount of information. Moreover, elderly people tend to clench small devices like mobile phones rather than holding them softly, because their tactile senses are deteriorating. By clenching the device, they can accidentally touch the shortcut buttons which may make the alarm go off, or activate the torch or alarm clock. As they do not realise how they are turning all of these features on, they are somewhat helpless in turning them off again. Such situations may result in irritation, distress and ultimately their refusal to accept a device which was intentionally meant to help.

● Mobility for people with dementia

Mobility for people with dementia is closely linked to risks of getting lost or falling. Existing technical solutions have primarily aimed at monitoring the mobility of dementia patients, or restricting or preventing mobility for those with a more advanced state of the disease. This makes life for relatives and caretakers easier. However, it hugely diminishes the quality of life of the dementia sufferer who is confined to a passive life with rules and regulations that they cannot understand. Other technical solutions have been tried to encourage mobility with devices such as smartphones, but this tends to overstrain the current generation of people with dementia as they are not 'digital natives', and therefore have difficulties with things they were not familiar over many years.

THE WAY-KEY PROJECT

WAY-KEY uses a very different approach: it encourages mobility and is a steady companion that stays quiet most of the time, but can decide independently whether assistance is necessary. It can also be activated by the users themselves. The main aspects of this approach are:

● **Familiarity:** Using familiar tools or things resembling familiar tools will increase their acceptance. Elderly people, especially those in the early stages of dementia, have problems becoming accustomed to new technology. They may remain unable to use it and refuse to accept it.

● **Discretion:** Technology should be unobtrusive so that people using it will not be stigmatised. Therefore, auxiliary

1 The red alert prototype uses a person's expected path to flag up problems if they leave the virtual corridor mapped out for their day

means must be included to link devices to standard items of daily life normally used by people, like a pin board, a bunch of keys or a mobile phone.

● **Simplicity:** The tool must be easy to use. It must communicate using simple signs or language to provide information which can be easily understood. Otherwise confusion may arise, leading to even more dangerous situations.

● **Privacy:** There must be a balance between privacy protection and necessary monitoring. Monitoring is not allowed if the person to be monitored is not able to explicitly accept monitoring, which may be a problem for those with dementia. Access to monitoring data must be restricted to emergency situations: to avoid abuse, if nothing happens data must be deleted as soon as possible.

The WAY-KEY project lasted for two years and was completed at the end of 2018. It resulted in the approval for three prototypes. They demonstrate both separate aspects of mobility assistance for people with dementia of each one of them, and how they can be connected to each other to act as an integrated tool.

PROTOTYPE 1: RED ALERT

The red alert prototype analyses the mobility status of elderly people. It tracks users automatically to find out if the movement pattern of a person is normal or may be problematic. If everything is rated as unproblematic, positioning information collated by Red alert is not passed on to anyone. Only if there is an alert, for example after a person left a virtual corridor (in terms of space and time), action is triggered and relatives or caretakers are informed that a problem was detected.

PROTOTYPE 2: CONTEXT-AWARE

The context-aware prototype works in situations where a person experiences a sudden disorientation, which is typical in the early stages of dementia. For the client-user, this prototype takes the form of an emergency button (for example as a wristband or a smart-watch app used during the testing phase); people who are still able to use their mobile phone can call a number or use a smart emergency button on screen or physically attached to the mobile phone. For the caretaker, this prototype consists of a map which is generated by the client's positioning and tracking information (if the alarm is triggered), and a conversation script helping the telephone agent to calm the client down and lead him/ her to a safe place or home.

PROTOTYPE 3: DAY PLANNER

The third prototype is a digital day planner. It helps to structure the daily routine of a client together with relatives or nursing staff, and therefore acts as a link for social interaction. Moreover, it aims to create an emotional connection to dates, appointments and other events during the day. The main aspect of this prototype is the creation of an analogue haptic device where the dates or tasks of one's day can be put onto a calendar with big signs. This shows the structure of the day to the user in a familiar way, while in the background the position of the signs is read by a mini computer and sent to a server where a connection to time and geo-information is made. This leads to the automatic creation of virtual corridors in space and time, and if the user moves out of these corridors, the system is able to send a reminder, inform someone or trigger an alarm.

This prototype is a specially designed device for elderly people. What currently remains unresolved and needs to be covered by future projects is the application of this approach to urban design. Streets and urban spaces need to be designed so that they can act as a reliable companion to the elderly. As a comparison, imagine a road network without petrol stations: car drivers would feel very unsafe because they would not know if they could complete their journeys if they ran out of fuel. If we transfer this example to urban space, we can consider public benches placed at certain distances, so that people who need to use them such as the elderly can rely on their availability.



2



3

PROJECT RESULTS

For reasons of research ethics, the project consortium could not test their prototypes on real people with dementia. Therefore, all tests were done either by the consortium members themselves or through the involvement of elderly people with various age-related disabilities, excluding dementia.

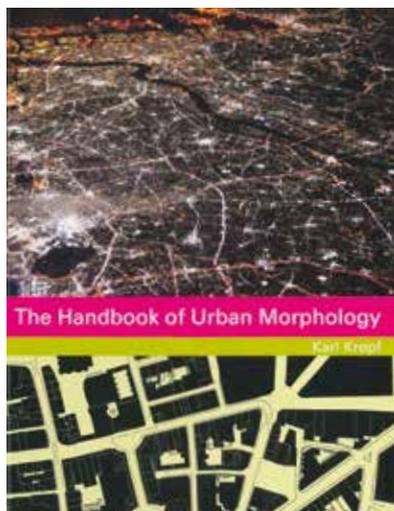
All of the technical solutions worked well, and one of the most important outcomes was that information had to be kept simple on both sides: for the user (the elderly person) who may not be able to handle a large amount of information in a short period of time, such as during a phone call, as well as for those assisting who have to be provided with information designed in a simple way, so that it can be passed on to the disoriented person. The most important element is not to increase the stress of people who are already distressed by their current situation, as this would lead to further complications and higher potential danger.

In summary, the project created an enhanced understanding of the problems and needs of people with early dementia. It highlights the deficits of existing solutions and prepares the way for better innovation to facilitate mobility in the built environment for people with dementia. ●

2 The context aware approach whereby contextual clues can help to track a person's location and help them to be led home

3 Vienna: a minor side street with traffic calming, where a tree was planted and benches installed, as a resting place

Wolfgang W. Wasserburger, chair AccessibleMap Association, and Clemens Beyer, AccessibleMap Association and Competence Center for Urban and Regional Planning, www.corp.at



The Handbook of Urban Morphology

Karl Kropf, 2017, Wiley, £45.00, ISBN 978-1118747698

This book is for serious urban designers: *The Handbook of Urban Morphology* is a detailed companion for the analysis of urban grain and character, one that illustrates the gold standard for analysis. It draws on Karl Kropf's extensive experience in urban analysis and characterisation and is the richer for it. Kropf expertly illustrates how such analysis can provide a more objective understanding of places, and therefore a more robust basis for intervention. He wants us to 'slow down the normative impulse' and give time to proper analysis, to suspend our judgements long enough to understand what is really going on in places.

The handbook is divided into three parts: Part 1 is a short section on principles, exploring how we should define urban morphology and approach analysis. Part 2 is a substantial section on methods, and the meat of the book. The city of Bath is used to take us through the steps of desktop analysis. Helpfully, this section identifies the best data sources throughout. Methods for field survey are also covered extensively, with sample field survey sheets provided in an appendix. The final chapter in this section covers 'synthesis'. Here Kropf, delicately brings together the products of the analysis drawing on different levels of resolution and timeframe. He introduces labels and definitions for different forms and characters. Part 3 is a series of case studies showing the application of the approach, taken from places that include London, Hereford, Brighton, Lisbon and Buenos Aires.

The book is well illustrated throughout, with maps and diagrams on every page. The language can be technical at times, but the book is more authoritative for it. For those undertaking urban design analysis and characterisation, this book is a sobering reminder of the depth of scientific analysis available. It is a great guide for those



carrying out detailed morphology studies, and a very practical handbook for encouraging greater use of data in everyday urban design analysis. The examples used throughout show how detailed and objective analysis can help us to see places we think we know in a new light. ●

Jane Manning, Director at Allies and Morrison Urban Practitioners

Building and Dwelling: Ethics for the City

Richard Sennett, 2018, Allan Lane, £25.00, ISBN 978-0713998757

This book was my companion for some time. *Building and Dwelling* appears to be an easy read of a very personal narrative, but Sennett's distinction between *ville* and *cit * is quite challenging. In reality it is a synthesis of Sennett's lifelong observing, discovering, acting upon and moving on, both as a thinker and a maker. I went through his 'ethics for the city' in stages, arousing critical thinking about books on conventional approaches to urban design. Then I read it in reverse, moving backwards through Sennett's profound reflections, always related to a broad range of other thinkers, historic and contemporary, and illustrated with his own actions in practical situations.

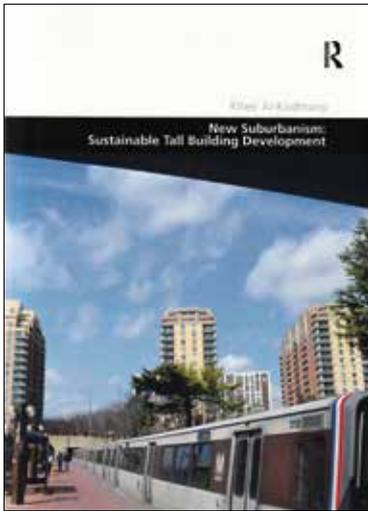
Sennett starts by explaining what he means by *ville*, the built form, the product of the maker's will, and *cit *, linked to *cityoennet *, the lived experience, a sort of consciousness. He notices that 'making derived from dwelling' has turned into a separation between the two at present.

He asks, should urbanism represent society as it is or seek to change it? He stands on the side of the open city, fitting together the odd, the curious, the possible, implying diversity, tolerance and equality. For his pragmatic urbanism, it means following the path from the possible to the doable, but he queries whether his modest approach is

possible for fast-growing cities. Commenting on the 20th century divorce between *cit * and *ville*, with urbanists concentrating on city-making, he analyses spatial-social segregation and the opposing effects of technology into either a nightmare or a place of promise. He focuses on five open forms which can make urban places positively complex: synchronous, punctuated, porous, incomplete and multiple. He explores how urbanists may achieve this in dialogue with urbanites. He then discusses how time disrupts the relations between 'lived' and 'built' places, citing the turbulence and uncertainties of climate change as an example which leads him to ask again whether ethics can shape the design of the city.

This skeleton description cannot do justice to the rich and complex content, presented as a dialectic between theoretical thoughts in natural and social sciences throughout urban history, and practical interventions by him and his team, mainly with poorer communities in cities damaged by decline or warfare. Let's pick just two specific aspects of the interaction between the built environment and its uses which dominate current debates among urban designers. One is what Sennett calls the detached creativity whereby he compares the *de facto* Googleplex ghetto, an apparently friction-free, user-friendly, shared space 'in the city but not of it', to places where resistance and internal tensions act as creative spurs for development and fulfilment. Elsewhere he compares the prescriptive smart city to the coordinative smart city. The former is closed, top-down, centrally techno-controlled, the other is open, using technology to coordinate not to control, serving people as they are to develop intelligence and to have more control over feedback. While discussing co-production he compares replicants to robots, the former a potential perceived threat and the latter sufficiently different to humans to encourage interaction. This third volume of Sennett's *homo faber* trilogy is definitely a candidate for urban designers to take on a desert island. ●

Judith Ryser



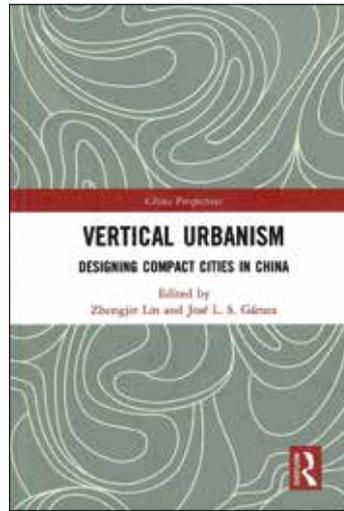
New Suburbanism: Sustainable Tall Building Development

Kheir Al-Kodmany, 2016, Routledge, £37.00, ISBN 978-1138392823

We have imported New Urbanism from the USA, so we might have expected to get New Suburbanism. Except that there is nothing new here. The book promotes the idea of tall buildings in suburbia, as though it were a new idea. The author seems to be unaware of what happened in the 1960s. Al-Kodmany is fixated with building height, as he has written five books whose titles all contain the words tall, towers or vertical. His justification for building taller is that higher densities are more sustainable than low-rise sprawl. True enough, but extraordinarily there is barely a quantification of density in all his case studies; only mentions of vertical density, which is a meaningless phrase. There is just one page which briefly mentions Floor Area Ratio (FAR), the measure of density employed by US zoning codes.

Al-Kodmany documents 24 high-rise developments in suburbia around Chicago, Washington DC and Miami, described with pages of statistical tables (minus density) and pages of grey photographs of unremarkable tall buildings, taken by himself. His perseverance in pursuit of his subject is admirable; less so his analysis. He is Professor of Sustainable Urban Design at the University of Illinois in Chicago, yet not one of his case studies contains a site plan. We are given no evidence or analysis of built morphology, or of the quality of public space and place-making achieved. Judging from his photographs, the results in many locations are pretty poor.

The author's conclusion from all of his research is that building tall near to rapid transit stops is an effective model for sustainable suburban development. This is hardly a new insight. But there is no excuse for a professor of urban design to confuse high-rise with high density. It is well known



that high-rise developments are not necessarily high density, and that, conversely, high densities can be achieved without building tall. Critical, analytical thinking about urban design is largely absent from this book. The social and environmental arguments against high-rise living, familiar since the 1960s, are briefly noted, but not considered. Similarly, Al-Kodmany documents high-rise gated developments, while being equivocal about their acceptability. The book ends with a bizarre appendix on the features found in luxury tall buildings in Miami suburbs. These include a gated entrance, identification techniques including iris scanning and voiceprint, and floor-to-ceiling glass which can withstand not only a hurricane but also a 38-calibre bullet. ●

Joe Holyoak, architect and urban designer

Vertical Urbanism

Ed. Zongjie Lin and José L. S. Gámez, 2018, Routledge, £175.00 HB (e-book £20), ISBN 978-1138208995

The editors Zongjie Lin and José L S Gámez have brought together a number of eminent Chinese scholars to contribute to a discourse on vertical urbanism as an approach to analysing the spatial transformation of cities.

In recent years, academics have been wrestling with paradigms for sustainable growth and debates have surrounded the pursuit of designing the compact city primarily conceived within the parameters of Western concepts of urban form. However in China rapid economic growth has been accompanied by rapid rural to urban migration. In 1950 the urban population was around 10 per cent of the total, whereas by 2015 it had reached 50 per cent and was still increasing rapidly.

Vertical Urbanism argues for an alternative notion of the compact city, recognising the influence of global economic and cultural contexts in shaping different forms of urban

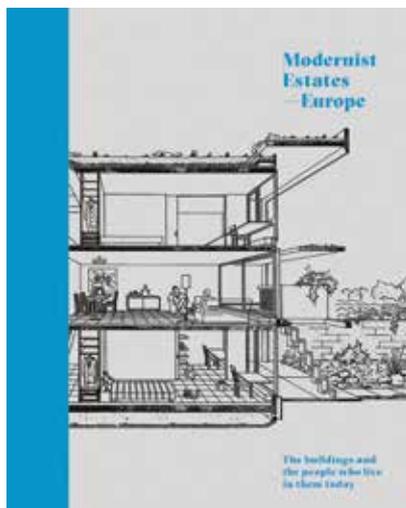
density. This concept responds to contemporary metropolises characterised by density, complexity and verticality. It is concerned with physically complex and socially engaged spatial forms, featuring the contemporary city as a multi-layered and multi-dimensional organism. Vertical urbanism differentiates itself from two other urban transformations: New Urbanism, focussed on traditional urbanism with smart codes and transit orientated development; and Modernist ideology with tall buildings as landmarks in space.

Vertical Urbanism addresses the design issues of high density urban areas supported by complex urban systems that conventional planning approaches have had limited success in managing. The book sets out a number of case studies and uses Chinese cities as laboratories of investigation, examining the socio-cultural and economic dimensions of urban transformations.

Vertical urbanism is not just simply about high density urban form or the imagery of the skyscraper city. Rather it constitutes a holistic system that responds to the nature of contemporary metropolises as interacting layers of space, ecology, infrastructure, architecture and culture. It advocates a design method that is both integrated and flexible, with an emphasis on the adaptability of urban networks to contemporary social conditions in different areas of the world and within different cultures. As the case studies demonstrate, it is particularly relevant to the spatial characteristics of Chinese cities that are undergoing dynamic transformation in response to rapid urbanisation and economic growth.

The editors and contributors to this book recognise that it is part of a continuing dialogue on the spatial transformation of cities. Nevertheless it provides valuable insight into the issues affecting urban growth and the contribution that vertical urbanism can make in designing cities. ●

Barry Sellars, principal planner-urban designer, London Borough of Wandsworth and UDG Executive member



Modernist Estates – Europe: The buildings and people who live in them today

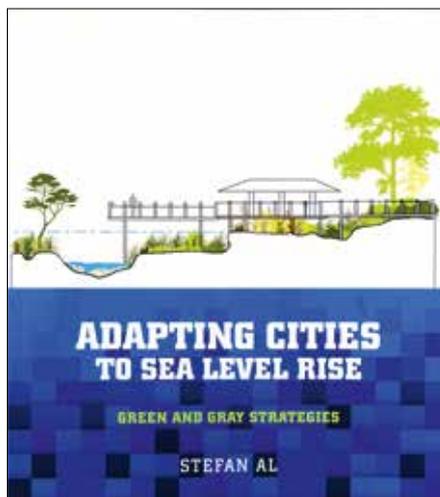
Stefi Orazi, 2019, White Lion Publishing, £30.00, ISBN 978-0-711-23908-1

The online platform, *Modernist Estates*, has for several years been an essential go-to source for those interested in the many excellent and often under-appreciated housing estates produced by 20th century architects, many on behalf of local authorities. Having previously published a review of UK examples, mostly around London, Stefi Orazi has now taken the format across Europe to 15 estates from Scandinavia to Spain, and covering a period from the early 1930s right up to the completion of Neave Brown's Medina project in Eindhoven in 2002. However, in a pointed introduction, the author makes it clear that the European approach transcended geographical boundaries as evidenced by the inclusion of high quality estates in both Birmingham and Edinburgh.

This geographical spread and chronology is interesting as it reminds us that Modernism in these terms is much more than a stylistic label. Although the examples selected include Le Corbusier's Unité in Marseilles and works by Arne Jacobsen, there are also projects by Aldo Rossi and Ricardo Bofill, architects who defy easy categorisation as orthodox modernists.

It is a fairly diverse selection, including several projects which many readers will be unfamiliar with. What holds this diversity together is a set of attitudes to the creation of dwellings by each architect, backed up by the kind of imaginative applied research that seems a neglected art nowadays when most new housing is market-led.

Each study begins with a concise but informative history of the project, illustrated with high quality new photography. However, what particularly illuminates this book is alluded to in the second part of its title *the buildings and the people who live in them*



today. Interviews with present day occupiers cut through conventional academic analyses to reveal answers to questions that we would probably all want to ask: what is it like to live here, how successful is the community, how do the homes cope with young families, is the building fabric holding up, is statutory protection a blessing or a burden?

Overall, this is a very well-produced book, clearly conveying the value of the modernist approach in creating well-designed homes and civilised communities. With the examples featured largely the product of government initiatives of one kind or another, its arrival is well timed at a point when there is an increasing realisation that the next generation of new housing need not be left exclusively for the market to provide. ●

David Henderson, Glenn Howells Architects

Adapting Cities to Sea Level Rise: Fresh and Gray Strategies

Stefan Al, 2018, Island Press, £27.00, ISBN 978-1-610-919074

'Space is big. Really big. You just won't believe how vastly, hugely, mind-bogglingly big it is.' So Douglas Adams introduces us to one of the most important entries in the *Hitchhiker's Guide to the Galaxy*. The Earth's oceans need exactly the same sort of introduction: they are vast. They cover over 71 per cent of the Earth's surface to an average depth of 3.6 kilometres, and are the engines of the Earth's climate. They are capable of immense destruction with wind-waves of up to 30 metres, low pressure storm surges of up to 10 metres above normal sea levels, and tsunamis. *Adapting Cities to Sea Level Rise* addresses what to do to protect the waning 29 per cent of the Earth's surface that is not yet flooded.

The book starts with a discussion of the latest research and forecasts, and mentions

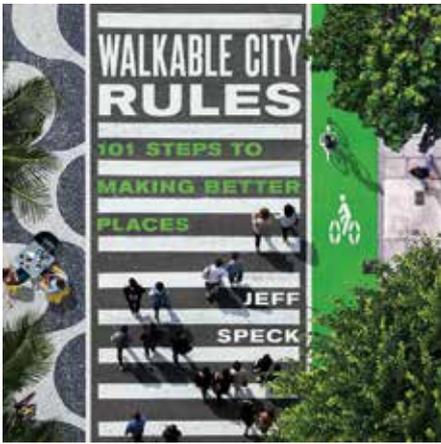
recent cataclysmic events, such as at New Orleans, inundated by the 8m storm surge created by Hurricane Katrina, or the rapid coastal erosion on the eastern seaboard of the USA. The chapters that follow describe the strategies being adopted by some of the world's key cities with measures ranging from hard engineering defences through to increasing community resilience (a somewhat optimistic term for being able carry on after a serious flood). The strategies are not convincing; they read as if they are government propaganda for 'don't worry, we've got it all under control'.

The final chapters are a comprehensive catalogue of measures including sea walls, breakwaters, offshore reefs, soft defences and upstream measures. For each, there is a schematic diagram, bullet points listing their advantages and disadvantages, and a discussion on the design objectives.

There are some issues not covered by the book such as providing an underlying understanding of different types of beach, beach dynamics, and of terms such as run-up, overtopping, littoral drift, fetch, and so on. There is nothing on costs and on the systems used to assess the economic viability of coastal defence schemes. Here, the use of discounted cash flow models can lead to wildly different conclusions depending on the discount rate used. The book awkwardly mixes descriptions of measures to address coastal erosion, flooding from the sea, and upstream flooding caused by rain, with sustainable drainage system techniques. The decision to use a single shade of blue to illustrate both fresh and sea water hampers the diagrams too. However, the richness of the coverage of the different measures and the discussion of how the brutalising impact of hard engineering can be avoided or moderated are to be commended.

This is a book that should be on the shelves of anyone involved in coastal defence. But the lasting impression is that against the impending enormity of oceanic onslaught, the available measures are but a finger in the dyke. ●

Robert Huxford, Director, Urban Design Group



Walkable City Rules, 101 Steps to Making Better Places

Jeff Speck, 2019, Island Press, £22.99, ISBN 978-1-610-91898-5

This book is the latest addition to the New Urbanism canon. In 2000 Duany, Plater-Zyberk and Speck published *Suburban Nation*. After nearly two decades, it seems that there is still much persuading for the New Urbanists to do. *Walkable City* followed in 2012 and in many ways *Walkable City Rules* is a repackaging of the ideas presented in that book. New elements are certainly included, and reference is made to, but no deep discussion of, the potential impact of autonomous or electric vehicles, and concerns about climate change are expressed.

What is new is the manner of its presentation. One hundred and one rules are grouped into 19 parts. Each rule is set out at the end of a short discussion. In many ways the book is like a collection of tweets, each rule an individual tweet. Together they form a code book, but as Speck reminds us, codes need to be reviewed and closely questioned.

Speck admits that the book is an artifice. The 101 rules could be reduced by half or even doubled. The 19 parts illustrate the complexity of urban design: a wide range of issues is covered, from the health benefits of walking to the importance of affordable housing downtown, and from the geometry of junctions to the need for interesting street façades. American experience is different in many ways from British experience, especially with regard to the amount of space that can be devoted to movement in urban areas. By my calculation, a total width of 47m would be needed if pedestrians, cyclists and cars were to be accommodated on a road following his recommendations. Part of this width is accounted for by Speck's use of a parallel parking strip as a protective barrier between cars and people. This is a notion with which I would strongly disagree. Speck sees roadside parking as a benefit, slowing



traffic, protecting cyclists and pedestrians and pleasing shop owners. Research done in Cheshire showed roadside parking was dangerous for children as they were hidden by parked cars and were unable to see moving cars. That difference of experience aside, Speck does draw on UK experience, and Poynton in Cheshire comes in for praise in its use of naked streets.

Overall the book is well and liberally illustrated, although some of the images are rather small. It includes a very full set of notes and a bibliography. ●

Richard Cole

A Vertical Forest, Instructions booklet for the prototype of a forest city

Stefano Boeri, 2015, Corraini Edizioni, £25.00, ISBN 978-8-875-70541-1

Having seen the vertical forest (*bosco verticale*) towers in Milan's Porta Nuova district on a UDG study visit a few years ago, and after they appeared on the front cover of issue UD149 of *Urban Design*, I wished that I had bought a copy of this book when I quickly scanned it in a Milanese bookshop. Intriguingly peppered with images of the species and microsystems created by the wild inhabitants of the *bosco verticale*, a proper review of this book proved just as inspirational, and given the other reviews on taller buildings in this issue, one from which we could all learn more.

Published as parallel English and Italian texts, this is more than a booklet. It opens with seven inspirations by Boeri on how and why the two towers came to be designed and built with such a strong commitment to natural systems. Boeri had witnessed the domination of glass skyscrapers in global cities, and set out to create an 'ecological and sustainable tower' persuading his (subsequently very sympathetic) client of the value of this design 'quirk'. The underlying principle

is to make the ecosystem of the towers more sustainable by modifying their microclimate with planting; two trees are included for each inhabitant, 'a Tower for trees which incidentally housed human beings'. His vision is that all tall buildings could adopt the *bosco verticale* principles and make whole cities with a far better environmental future.

The following section is a series of vignettes on the interactions between residents, the flying gardeners who maintain the forest, and their wild neighbours, in similar terms to Jane Jacobs' sidewalk ballet, but many storeys up. The statistics section seems convincing, and leads onto an illustrated dictionary of 100 elements, which is the main part of the book. Being alphabetical, this section is not very helpful to the reader as it mixes influences (e.g. the German artist Joseph Beyers), technical information (anchor systems), species (blackbird) and planning principles (anti-sprawl device) in a way that makes the messages frustratingly hard to assimilate.

Sections 1 and 2 are simpler on how to learn from VFO1, these first two *boschi verticali*, how they would work in different climates, and which species would work where (i.e. exporting the towers to other contexts or grafting the principles onto existing cities). The basic principles behind the concept may not be new to urban designers, but the means are fascinating, and they are beautifully illustrated in this book. However the most critical information that we need to begin a similar dialogue with others is missing: the floor plans, how the vegetation relates to the interior spaces, the cost of construction and maintenance, etc. This data is no doubt available elsewhere and it is a fundamental part of the evidence base that we need to take this great vision further. ●

Louise Thomas

Practice Index

The following practices and urban design courses are members of the Urban Design Group. Please see the UDG's website www.urbandesigndirectory.com for more details.

Those wishing to be included in future issues should contact the UDG

70 Cowcross Street
London EC1M 6EJ
T 020 7250 0892
C Robert Huxford
E administration@udg.org.uk
W www.udg.org.uk

A2 / URBANISM + ARCHITECTURE

Unit 6, The Courtyard
707 Warwick Road
Solihull B9 3DA
T 0121 775 0180
C James Hughes
E james@A2architecture.co.uk
W www.a2architecture.co.uk

A2 are a young, modern, forward thinking architectural practice recognised for its imagination, creativity and often unconventional approach.

ADAM URBANISM

Old Hyde House
75 Hyde Street
Winchester SO23 7DW
T 01962 843843
C Hugh Petter, Robert Adam
hugh.petter@adamarchitecture.com
robert.adam@adamarchitecture.com
W www.adamurbanism.com

World-renowned for progressive, classical design covering town and country houses, housing development, urban masterplans, commercial development and public buildings.

AECOM

Aldgate Tower, 2 Leman Street
London E1 8FA
T 020 7798 5137
C Ben Castell
E ben.castell@aecom.com
W www.aecom.com

One of the largest built environment practices in the UK offering an integrated life-cycle approach to projects from architects, engineers, designers, scientists, management, and construction consultants. Urban design is a core component in both the private and public sectors in the UK and across the world.

ALAN BAXTER

75 Cowcross Street
London EC1M 6EL
T 020 7250 1555
C Alan Baxter
E abaxter@alanbaxter.co.uk
W www.alanbaxter.co.uk

An engineering and urban design practice. Particularly concerned with the thoughtful integration of buildings, infrastructure and movement, and the creation of places.

ALLEN PYKE ASSOCIATES

The Factory 2 Acre Road
Kingston-upon-Thames KT2 6EF
T 020 8549 3434
C David Allen
E design@allenpyke.co.uk
W www.allenpyke.co.uk

Innovative, responsive, committed, competitive, process. Priorities: people, spaces, movement, culture. Places: regenerate, infill, extend create.

ALLIES & MORRISON: URBAN PRACTITIONERS

85 Southwark Street, London SE1 0HX
T 020 7921 0100
C Anthony Rifkin
E arifkin@am-up.com
W www.urbanpractitioners.co.uk
Specialist competition winning urban regeneration practice combining economic and urban design skills. Projects include West Ealing and Plymouth East End.

ANDREW MARTIN PLANNING

Town Mill, Mill Lane, Stebbing,
Dunmow, Essex CM6 35N
T 01971 855855
C Andrew Martin
E andrew@am-plan.com
W www.am-plan.com

Independent planning, urban design and development consultancy. Advises public and private sector clients on strategic site promotion, development planning and management, planning appeals, masterplanning and community engagement.

AREA

Grange, Linlithgow
West Lothian EH49 7RH
T 01506 843247
C Karen Cadell/ Julia Neil
E ask@area.uk.com
W www.area.uk.com

Making places imaginatively to deliver the successful, sustainable and humane environments of the future.

ARNOLD LINDEN

Chartered Architect
31 Waterlow Court, Heath Close
Hampstead Way
London NW11 7DT
T 020 8455 9286
C Arnold Linden

Integrated regeneration through the participation in the creative process of the community and the public at large, of streets, buildings and places.

ASSAEL ARCHITECTURE

123 Upper Richmond Road
London SW15 2TL
T 020 7736 7744
C Russell Pedley
E pedley@assael.co.uk
W www.assael.co.uk

Architects and urban designers covering mixed use, hotel, leisure and residential, including urban frameworks and masterplanning projects.

ATKINS PLC

Euston Tower, 286 Euston Road,
London NW1 3AT
T 020 7121 2000
C Richard Alvey
E richard.alvey@atkinsglobal.com
W www.atkinsglobal.co.uk

Interdisciplinary practice that offers a range of built environment specialists working together to deliver quality places for everybody to enjoy.

BACA ARCHITECTS

Unit 1, 199 Long Lane
London SE1 4PN
T 020 7397 5620
C Richard Coutts
E enquiries@baca.uk.com
W www.baca.uk.com

Award-winning architects with 100 per cent planning success. Baca Architects have established a core specialism in waterfront and water architecture.

BARTON WILLMORE PARTNERSHIP READING

The Blade, Abbey Square
Reading RG1 3BE
T 0118 943 0000
C James de Havilland, Nick Sweet and Dominic Scott
MANCHESTER
Tower 12, 18/22 Bridge Street
Spinningfields
Manchester M3 3BZ
T 0161 817 4900
C Dan Mitchell
E masterplanning@bartonwillmore.co.uk

W www.bartonwillmore.co.uk
Concept through to implementation on complex sites, comprehensive design guides, urban regeneration, brownfield sites, and major urban expansions.

BE1 ARCHITECTS

5 Abbey Court, Fraser Road
Priory Business Park
Bedford MK44 3WH
LONDON
The Green House
41-42 Clerkenwell Road
London EC1R 0DU
T 01234 261266
C Selma Hooley
E selma.hooley@be-1.co.uk
W www.be1architects.co.uk

be1 is a practice of creative and experienced architects, designers, masterplanners, visualisers and technicians. We are skilled in the design and delivery of masterplanning, architectural and urban design projects and are committed to designing the appropriate solution for all of our projects.

BIDWELLS

Bidwell House, Trumpington Road
Cambridge CB2 9LD
T 01223 559800
M 07500 782001
C Johnny Clayton
E johnny.clayton@bidwells.co.uk
W www.bidwells.co.uk

Planning, landscape and urban design consultancy, specialising in masterplanning, townscape assessment, landscape and visual impact assessment.

BOYER

24 Southwark Bridge Road
London SE1 9HF
T 020 3268 2018
C Ananya Banerjee
ananyaabanerjee@boyerplanning.co.uk
W www.boyerplanning.co.uk

Offices in Bristol, Cardiff, Colchester, London and Wokingham. Planning and urban design consultants offering a wide range of services to support sites throughout the development process. We believe in shaping places through responsive design.

BOYLE + SUMMERS

Canute Chambers
Canute Road
Southampton SO14 3AB
T 02380 63 1432/ 07824 698033
C Richard Summers
E richard@boyleandsummers.co.uk
W www.boyleandsummers.co.uk
Space-shapers, place-makers, street designers and development promoters. Value generators, team workers and site finders. Strategists, pragmatists, specialists and generalists. Visioners, urbanists, architects and masterplanners.

BROADWAY MALYAN

3 Weybridge Business Park
Addlestone Road, Weybridge,
Surrey KT15 2BW
T 01932 845599
C Jeff Nottage
E j.nottage@broadwaymalyan.com
W www.broadwaymalyan.com
We are an international interdisciplinary practice which believes in the value of placemaking-led masterplans that are rooted in local context.

BROCK CARMICHAEL ARCHITECTS

19 Old Hall Street, Liverpool L3 9JQ
T 0151 242 6222
C Michael Cosser
E office@brockcarmichael.co.uk
Masterplans and development briefs. Mixed use and brownfield regeneration projects. Design in historic and sensitive settings. Integrated landscape design.

BUILDING DESIGN PARTNERSHIP

16 Brewery Yard, Clerkenwell,
London EC1V 4LJ
T 020 7812 8000
C Andrew Tindsley
E andrew.tindsley@bdp.com
W www.bdp.co.uk
BDP offers town planning, masterplanning, urban design, landscape, regeneration and sustainability studies, and has teams based in London, Manchester and Belfast.

BURNS + NICE

70 Cowcross Street
London EC1M 6EJ
T 020 7253 0808
C Marie Burns/ Stephen Nice
E bn@burnsnice.com
W www.burnsnice.com

Urban design, landscape architecture, environmental and transport planning. Masterplanning, design and public consultation for community-led work.

CARTER JONAS

One Chapel Place
London W1G 0BG
T 020 7518 3226
C Johnny Clayton
E johnny.clayton@carterjonas.co.uk
W www.carterjonas.co.uk/
masterplanning-and-urban-design
Multidisciplinary practice working throughout the UK with dedicated masterplanning studio: specialises in urban design and masterplanning, placemaking, new settlements and urban extensions, urban regeneration, sustainability and community consultation.

CHAPMAN TAYLOR LLP

10 Eastbourne Terrace,
London W2 6LG
T 020 7371 3000
E ctlondon@chapmantaylor.com
W www.chapmantaylor.com
MANCHESTER
Bass Warehouse, 4 Castle Street
Castlefield, Manchester M3 4LZ
T 0161 828 6500
E ctmcrc@chapmantaylor.com
Chapman Taylor is an international firm of architects and urban designers specialising in mixed use city centre regeneration and transport projects throughout the world. Offices in Bangkok, Brussels, Bucharest, Düsseldorf, Kiev, Madrid, Milan, Moscow, New Delhi, Paris, Prague, Sao Paulo, Shanghai and Warsaw.

CITY ID

23 Trenchard Street
Bristol BS1 5AN
T 0117 917 7000
C Mike Rawlinson
E mike.rawlinson@cityid.co.uk
W cityid.co.uk
Place branding and marketing vision masterplanning, urban design, public realm strategies, way finding and legibility strategies, information design and graphics.

CSA ENVIRONMENTAL

Dixies Barns, High Street
Ashwell SG7 5NT
T 01462 743647
C Clive Self
E ashwell@csaenvironmental.co.uk
W www.csaenvironmental.co.uk
Delivering masterplanning, design coding and implementations. Specialist knowledge across landscape, ecology, archaeology and urbanism leading to well-presented, high quality, commercially aware schemes.

DAR

74 Wigmore Street,
London, W1U 2SQ
T 020 7962 1333
C Simon Gray
E simon.gray@dar.com
W www.dar.com
Dar is a leading international multidisciplinary consultant in urban design, planning, landscape, engineering, architecture, project management, transportation and economics. The founding member of Dar Group, we are 10,000 strong in 40 offices worldwide.

DAVID HUSKISSON ASSOCIATES

17 Upper Grosvenor Road,
Tunbridge Wells, Kent TN11 2DU
T 01892 527828
C Nicola Brown
E dha@dha-landscape.co.uk
W www.dha-landscape.co.uk
Landscape consultancy offering masterplanning, streetscape and urban park design, estate restoration, environmental impact assessments.

DAVID LOCK ASSOCIATES LTD

50 North Thirteenth Street,
Central Milton Keynes,
Milton Keynes MK9 3BP
T 01908 666276
C Will Cousins
E mail@davidlock.com
W www.davidlock.com
Strategic planning studies, area development frameworks, development briefs, design guidelines, masterplanning, implementation strategies, environmental statements.

DEFINE

Unit 6, 133-137 Newhall Street
Birmingham B3 1SF
T 0121 237 1901
C Andy Williams
E enquiries@wearedefine.com
W www.wearedefine.com
Define specialises in the promotion, shaping and assessment of development. Our work focuses on strategic planning, masterplanning, urban design codes, EIA, TVIA, estate strategies, public realm design, consultation strategies, urban design audits and expert witness.

DESIGN BY POD

99 Galgate, Barnard Castle
Co Durham DL12 8ES
T 01833 696600
C Andy Dolby
E andy@designbypod.co.uk
Masterplanning, site appraisal, layout and architectural design. Development frameworks, urban regeneration, design codes, briefs and design and access statements.

DHA PLANNING & URBAN DESIGN

Eclipse House, Eclipse Park,
Sittingbourne Road, Maidstone,
Kent ME14 3EN
T 01622 776226
C Matthew Woodhead
E info@dhaplanning.co.uk
W dhaplanning.co.uk
Planning and Urban Design Consultancy offering a full range of Urban Design services including masterplanning, development briefs and design statements.

ENVIRONMENTAL DIMENSION PARTNERSHIP

Tithe Barn, Barnsley Park Estate
Barnsley, Cirencester GL7 5EG
T 01285 740427
C Tom Joyce
E tomj@edp-uk.co.uk
W www.edp-uk.co.uk/
The Environmental Dimension Partnership Ltd provides independent environmental planning and design advice to landowners, and property and energy sector clients throughout the UK from offices in the Cotswolds, Shrewsbury and Cardiff.

FABRIK LTD

1st Floor Studio
4-8 Emerson Street
London SE1 9DU
T 0207 620 1453
C Johnny Rath
E johnny@fabrikuk.com
W www.fabrikuk.com
we are a firm of landscape architects, landscape planners, urban designers and arboriculturists based in Alton and London.

FARRELLS

7 Hatton Street, London NW8 8PL
T 020 7258 3433
C Max Farrell
E mfarrell@terryfarrell.co.uk
W www.terryfarrell.com
Architectural, urban design, planning and masterplanning services. New buildings, refurbishment, conference/exhibition centres and visitor attractions.

FAULKNERBROWNS

Dobson House, Northumbrian Way,
Newcastle upon Tyne NE12 6QW
T 0191 268 1060
C Ben Sykes
E b.sykes@faulknerbrowns.co.uk
W www.faulknerbrowns.co.uk
FaulknerBrowns is a regionally-based architectural design practice with a national and international reputation. From a workload based initially on education, library, sports and leisure buildings, the practice's current workload includes masterplanning, offices, healthcare, commercial mixed use, industrial and residential, for both private and public sector clients.

FERIA URBANISM

Second Floor Studio, 11 Fernside Road
Bournemouth, Dorset BH9 2LA
T 01202 548676
C Richard Eastham
E info@feria-urbanism.eu
W www.feria-urbanism.eu
Expertise in urban planning, masterplanning and public participation. Specialisms include design for the night time economy, urban design skills training and local community engagement.

FLETCHER PRIEST ARCHITECTS

Middlesex House
34/42 Cleveland Street
London W1T 4JE
T 020 7034 2200
F 020 7637 5347
C Jonathan Kendall
E london@fletcherpriest.com
W www.fletcherpriest.com
Work ranges from city-scale masterplans (Stratford City, Riga) to architectural commissions for high-profile professional clients.

FOWLER ARCHITECTURE & PLANNING LTD

19 High Street, Pewsey, Marlborough
Wiltshire SWN9 5AF
T 01672 569 444
E enquiries@faap.co.uk
W www.faap.co.uk
We are a family-run practice of architects, town planners and urban designers with over 30 years of experience. We create homes rooted in tradition and designed for contemporary living.

FPCR ENVIRONMENT & DESIGN LTD

Lockington Hall, Lockington
Derby DE74 2RH
T 01509 672772
C Tim Jackson
E tim.jackson@fpcr.co.uk
W www.fpcr.co.uk
Integrated design and environmental practice. Specialists in masterplanning, urban and mixed use regeneration, development frameworks, EIAs and public inquiries.

FRAMEWORK ARCHITECTURE AND URBAN DESIGN

3 Marine Studios, Burton Lane,
Burton Waters, Lincoln LN1 2WN
T 01522 535383
C Gregg Wilson
E info@frameworklincoln.co.uk
W www.frameworklincoln.co.uk
Architecture and urban design. A commitment to the broader built environment and the particular dynamic of a place and the design opportunities presented.

GARSDALE DESIGN LIMITED

High Branthwaites, Frostron,
Sedburgh, Cumbria, LA10 5JR
T 015396 20875
C Derrick Hartley
E info@garsdaledesign.co.uk
W www.garsdaledesign.co.uk
GDL provides masterplanning and urban design, architecture and heritage services developed through 25 years wide ranging experience in the UK and Middle East.

GILLESPIES**LONDON**

1 St John's Square
London EC1M 4DH

T 0207 251 2929

C Steve Wardell

E steve.wardell@gillespies.co.uk

W www.gillespies.co.uk

MANCHESTER

Westgate House

44 Hale Road, Hale

Cheshire WA14 2EX

T 0161 928 7715

C Jim Fox

E jim.fox@gillespies.co.uk

Offices also based in Oxford, Leeds and Moscow.

Gillespies is a leading international multidisciplinary design practice specialising in urban design, masterplanning, strategic planning, design guidelines, public realm design, landscape design and environmental assessments.

GLEN HOWELLS ARCHITECTS

Middlesex House, 34-42 Cleveland Street, London W1T 4JE

T 020 7407 9915

C Jack Pritchard

E mail@glenhowells.co.uk

W www.glenhowells.co.uk

Clear thinking designers, exploring ideas of making buildings and places that improve people's lives.

GLOBE CONSULTANTS LTD

The Tithe Barn, Greestone Place, Lincoln LN2 1PP

T 01522 563 515

C Lynette Swinburne

E enquiry@globelimited.co.uk

W www.globelimited.co.uk

Provides urban design, planning, economic and cultural development services across the UK and internationally, specialising in sustainable development solutions, masterplanning and regeneration.

GM DESIGN ASSOCIATES LTD

22 Lodge Road, Coleraine

Co. Londonderry BT52 1NB

Northern Ireland

T 028 703 56138

C Bill Gamble

E bill.gamble@g-m-design.co.uk

W www.g-m-design.com

Architecture, town and country planning, urban design, landscape architecture, development frameworks and briefs, feasibility studies, sustainability appraisals, public participation and community engagement.

HOK INTERNATIONAL LTD

Qube, 90 Whitfield Street

London W1T 4EZ

T 020 7636 2006

C Tim Gale

E tim.gale@hok.com

W www.hok.com

HOK delivers design of the highest quality. It is one of Europe's leading architectural practices, offering experienced people in a diverse range of building types, skills and markets.

HOSTA CONSULTING

2b Cobden Chambers

Nottingham NG1 2ED

T 07791043779

C Helen Taylor

E info@hostaconsulting.co.uk

W www.hostaconsulting.co.uk

An urban landscape design studio that uses an innovative approach to create green spaces for people, biodiversity and the environment.

HTA DESIGN LLP

78 Chambers Street, London E1 8BL

T 020 7485 8555

C Simon Bayliss

E simon.bayliss@hta.co.uk

W www.hta.co.uk

HTA Design LLP is a multi-disciplinary practice of architecture, landscape design, planning, urban design, sustainability, graphic design and communications based in London and Edinburgh, specialising in regeneration. Offices in London & Edinburgh.

HYLAND EDGAR DRIVER

One Wessex Way, Colden Common,

Winchester, Hants SO21 1WG

T 01962 711 600

C John Hyland

E hed@heduk.com

W www.heduk.com

Innovative problem solving, driven by cost efficiency and sustainability, combined with imagination and coherent aesthetic of the highest quality.

IBI GROUP

Chadsworth House

Wilmslow Road, Manchester

Cheshire, SK9 3HP

T 01625 542200

C Neil Lewin

E neil.lewin@ibigroup.com

W www.ibigroup.com

We are a globally integrated urban design, planning, architecture, town planning, master planning, landscape architecture, engineering and technology practice.

ICENI PROJECTS

Da Vinci House

44 Saffron Hill

London EC1N 8FH

T 020 3640 8508

C Nivedita D'Lima

E mail@iceniprojects.com

W www.iceniprojects.com

Iceni Projects is a planning and development consultancy with an innovative and commercially-minded approach aimed at delivering success.

IDP GROUP

27 Spon Street

Coventry CV1 3BA

T 024 7652 7600

C Luke Hillson

E lhllson@idpgroup.com

W www.weareidp.com

We are IDP. We enhance daily life through architecture. We use design creativity, logic, collaboration and pragmatism to realise places and space. Ideas, delivered.

JB PLANNING

Chells Manor, Chells Lane

Stevenage, Herts SG2 7AA

T 01438 312130

C Kim Boyd

E info@jbplanning.com

W www.jbplanning.com

JB Planning Associates is an independent firm of chartered town planning consultants, providing expert advice to individuals and businesses on matters connected with planning, property, land and development.

JTP

Unit 5, The Rum Warehouse

Pennington Street

London E1W 2AP

T 020 7017 1780

C Marco Adams

E info@jtp.co.uk

EDINBURGH

2nd Floor Venue Studios, 15-21

Calton Road, Edinburgh EH8 8DL

T 0131 272 2762

C Alan Stewart

E info@jtp.co.uk

W www.jtp.co.uk

JTP is an international placemaking practice of architects and masterplanners, specialising in harnessing human energy to create new places and breathe life into existing ones.

KAY ELLIOTT

5-7 Meadfoot Road, Torquay

Devon TQ1 2JP

T 01803 213553

C Mark Jones

E admin@kayelliott.co.uk

W www.kayelliott.co.uk

International studio with 30 year history of imaginative architects and urban designers, creating buildings and places that enhance their surroundings and add financial value.

LANDSCAPE PROJECTS

31 Blackfriars Road, Salford

Manchester M3 7AQ

T 0161 839 8336

C Neil Swanson

E post@landscapeprojects.co.uk

W www.landscapeprojects.co.uk

We work at the boundary between architecture, urban and landscape design, seeking innovative, sensitive design and creative thinking. Offices in Manchester & London.

LAVIGNE LONSDALE LTD

22 Lemon Street, Truro,

Cornwall TR1 2LS

T 01872 273118

C Martyn Lonsdale

E info@lavignelonsdale.co.uk

BATH

First Floor Stable Block

Newton St Loe

Bath BA2 9BR

T 01225 421539

W www.lavigne.co.uk

We are an integrated practice of masterplanners, urban designers, landscape architects and product designers. Experienced in large scale, mixed use and residential masterplanning, health, education, regeneration, housing, parks, public realm and streetscape design.

LDA DESIGN

New Fetter Place, 8-10 New Fetter

Lane, London EC4A 1AZ

T 020 7467 1470

C Mark Williams

E Mark.Williams@lda-design.co.uk

W www.lda-design.co.uk

GLASGOW

Sovereign House,

158 West Regent Street

Glasgow G2 4RL

T 0141 2229780

C Kirstin Taylor

E Kirstin.taylor@lda-design.co.uk

Offices also in Bristol, Cambridge, Exeter, Manchester, Oxford & Peterborough.

LDA Design is an independent consultancy helping clients to create great places where people belong. We provide landscape-led masterplanning, design and planning services to developers, landowners, communities, universities and government.

LEVITT BERNSTEIN**ASSOCIATES LTD**

Thane Studios, 2-4 Thane Villas,

London N7 7PA

T 020 7275 7676

C Glyn Tully

E post@levittbernstein.co.uk

W www.levittbernstein.co.uk

Urban design, masterplanning, full architectural service, lottery grant bid advice, interior design, urban renewal consultancy and landscape design.

LHC URBAN DESIGN

Design Studio, Emperor Way, Exeter

Business Park, Exeter, Devon EX1 3QS

T 01392 444334

C John Baulch

E jbaulch@ex.lhc.net

W www.lhc.net

Urban designers, architects and landscape architects, providing an integrated approach to strategic visioning, regeneration, urban renewal, masterplanning and public realm projects. Creative, knowledgeable, practical, passionate.

LICHFIELDS

14 Regent's Wharf, All Saints Street,

London N1 9RL

T 020 7837 4477

C Nick Thompson

E ntompson@lichfields.co.uk

W www.nlplanning.com

Also at Newcastle upon Tyne and Cardiff

Urban design, masterplanning, heritage/conservation, visual appraisal, regeneration, daylight/sunlight assessments, public realm strategies.

LIZ LAKE ASSOCIATES

Unit 1, The Exchange 9 Station Road,

Stansted, Essex CM24 8BE

Essex CM24 8AG

T 01279 647044

C Matt Lee

E office@lizlake.com

W www.lizlake.com

Urban fringe/brownfield sites where an holistic approach to urban design, landscape, and ecological issues can provide robust design solutions.

LUC

43 Chalton Street, London NW1 1JD

T 020 7383 5784

C Adrian Wikeley

E london@landuse.co.uk

GLASGOW

37 Otago Street, Glasgow G12 8JJ

T 0141 334 9595

C Martin Tabor

E glasgow@landuse.co.uk

W www.landuse.co.uk

Urban regeneration, landscape design, masterplanning, sustainable development, environmental planning, environmental assessment, landscape planning and management. Offices also in Bristol and Edinburgh.

MALCOLM MOOR URBAN DESIGN

27 Ock Mill Close, Abingdon

Oxon OX14 1SP

T 01235 550122

C Malcolm Moor

E malcolmmoore@aol.com

W www.moorud.com

Master planning of new communities, urban design, residential, urban capacity and ecofitting studies, design involvement with major international projects.

METROPOLIS PLANNING AND DESIGN

4 Underwood Row, London N1 7LQ
 T 020 7324 2662
 C Greg Cooper
 E info@metropolis.com
 W www.metropolispd.com

Metropolitan urban design solutions drawn from a multi-disciplinary studio of urban designers, architects, planners and heritage architects.

METROPOLITAN WORKSHOP

14-16 Cowcross Street
 London EC1M 6DG

T 020 7566 0450
 C David Prichard/Neil Deeley
 E info@metwork.co.uk
 W www.metwork.co.uk/

Metropolitan Workshop has experience in urban design, land use planning, regeneration and architecture in the UK, Eire and Norway. Recent projects: Ballymun Dublin, Durham Millennium Quarter, Adamstown District Centre Dublin, Bjonvika Waterfront.

MOSAIC LTD

The Workary, Pembroke Square
 London W2 4EW

M 07734 867 866
 C Steve Robins
 E steve.robins@mosaicltd.co.uk
 W www.mosaicltd.co.uk

A masterplanning practice focussing on strategic greenfield land in the UK, we work on a range of projects from smaller schemes of 50 homes for bespoke house builders through to 6,000-home mixed use settlements.

MOTT MACDONALD

10 Fleet Place
 London EC4M 7RB

T 020 87743927
 C Stuart Croucher
 E stuart.croucher@mottmac.com
 W www.mottmac.com
 London, Cambridge, Birmingham and Manchester

Mott MacDonald's Urbanism team specialises in placemaking, streetscape design, landscape architecture, security design, policy and research.

NASH PARTNERSHIP

23a Sydney Buildings
 Bath, Somerset BA2 6BZ

T 01225 442424
 C Donna Fooks-Bale
 E dfooks-bale@nashpartnership.com
 W www.nashpartnership.com
 Nash Partnership is an architecture, planning, urban design, conservation and economic regeneration consultancy based in Bath and Bristol.

NEW MASTERPLANNING LIMITED

2nd Floor, 107 Bournemouth Road,
 Poole, Dorset BH14 9HR

T 01202 742228
 C Andy Ward
 E office@newMasterplanning.com
 W www.newMasterplanning.com

Our skills combine strategic planning with detailed implementation, design flair with economic rigour, independent thinking with a partnership approach.

NICHOLAS PEARSON ASSOCIATES

The Farm House, Church Farm Business
 Park, Corston, Bath BA2 9AP

T 01225 876990
 C Simon Kale
 E info@npaconsult.co.uk
 W www.npaconsult.co.uk

Masterplanning, public realm design, streetscape analysis, concept and detail designs. Also full landscape architecture service, EIA, green infrastructure, ecology and biodiversity, environmental planning and management.

NODE URBAN DESIGN

33 Holmfield Road
 Leicester LE2 1SE

T 0116 2708742
 C Nigel Wakefield
 E nwakefield@nodeurbandesign.com
 W www.nodeurbandesign.com

An innovative team of urban design, landscape and heritage consultants who believe that good design adds value. Providing sustainable urban design and masterplan solutions at all scales of development with a focus on the creation of a sense of place.

NOVELL TULLETT

The Old Mess Room, Home Farm
 Barrow Gurney BS48 3RW

T 01275 462476
 C Simon Lindsley
 E bristol@novelltullett.co.uk
 W www.novelltullett.co.uk

Urban design, landscape architecture and environmental planning.

OPTIMISED ENVIRONMENTS**OPEN**

Quatermile Two
 2nd Floor, 2 Lister Square
 Edinburgh EH3 9GL

T 0131 221 5920
 C Pol MacDonald
 E info@op-en.co.uk
 W www.optimisedenvironments.com

A multidisciplinary design company encompassing master planning, urban design, landscape architecture, and architecture, with depth of experience at all scales, from tight urban situations to regional landscapes. We work in the UK and overseas.

ORIGIN3

Tyndall House
 17 Whiteladies Road
 Clifton, Bristol BS8 1PB

T 0117 927 3281
 C Emily Esfahani
 E info@origin3.co.uk
 W www.origin3.co.uk
 Planning and urban design consultancy

OUTERSPACE

The Boathouse, 27 Ferry Road
 Teddington TW11 9NN

T 020 8973 0070
 C Richard Broome
 E rbroome@outerspaceuk.com
 W www.outerspaceuk.com
 Outerspace was founded in 2008 by Managing and Creative Director Richard Broome. Our designers strive to create places for the 'everyday', balancing creativity with practicality, working closely with our clients and communities to create better places for people and nature.

OVE ARUP & PARTNERS

Consulting West Team
 63 St Thomas Street
 Bristol BS1 6JZ

T 0117 9765432
 C J Shore
 E bristol@arup.com
 W arup.com

With 14,000 specialists, working across 90+ disciplines, in more than 34 countries, we offer total design to help clients tackle the big issues and shape a better world. Our approach to integrated urbanism acknowledges the interdependence of urban systems and communities.

PARC DESIGN SOLUTIONS LTD

68 Derngate
 Northampton NN1 1UH

T 01604 434353
 C Simon Charter
 E info@parcdesign.co.uk
 W www.parcdesign.co.uk

Parc specialises in residential development and housing layout design, as well as undertaking projects in the commercial, leisure and healthcare sectors.

PEGASUS GROUP

Pegasus House,
 Querns Business Centre
 Whitworth Road, Cirencester GL7 1RT

T 01285 641717
 C Michael Carr
 E mike.carr@pegasuspg.co.uk
 W www.pegasuspg.co.uk

Masterplanning, detailed layout and architectural design, design and access statements, design codes, sustainable design, development briefs, development frameworks, expert witness, community involvement and sustainability appraisal. Part of the multidisciplinary Pegasus Group.

PHILIP CAVE ASSOCIATES

70 Cowcross Street, London EC1M 6EJ

T 020 7250 0077
 C Philip Cave
 E principal@philipcave.com
 W www.philipcave.com

Design-led practice with innovative yet practical solutions to environmental opportunities in urban regeneration. Specialist expertise in landscape architecture.

PHIL JONES ASSOCIATES

Seven House, High Street
 Longbridge, Birmingham B31 2UQ

T 0121 475 0234
 C Nigel Millington
 E nigel@philjonesassociates.co.uk
 W www.philjonesassociates.co.uk

One of the UK's leading independent transport specialists offering the expertise to deliver high quality, viable developments which are design-led and compliant with urban design best practice.

PILBROW AND PARTNERS

2-5 St John's Square
 London EC1M 4DE

T 020 3696 7000
 C Gorana Shepherd,
 Neng-Nio van Santvoord
 gshepherd@pilbrowandpartners.com
 neg@pilbrowandpartners.com
 W www.pilbrowandpartners.com

PLACE BY DESIGN

Unit C, Baptist Mills Court
 Bristol BS5 0FJ

T 01179 517 053
 C Charley Burrough
 E info@placebydesign.co.uk
 W placebydesign.co.uk

Urban Design and architectural practice working with some of the biggest developers in the country, we are involved in projects from conception to technical drawing and construction, producing masterplans and visualisations to support successful planning applications.

PLACE-MAKE

Alexander House, 40a Wilbury Way
 Hitchin, Hertfordshire SG4 0AP

T 01462 510099
 C David Edwards
 E dedwards@place-make.com
 W www.place-make.com

Chartered architects, urban planners and designers with a particular focus on place-making. An independent team, we support public and private sector clients across the UK and overseas. Underpinning every project is a commitment to viable and sustainable design and a passion for places.

PLANIT-IE LLP

2 Back Grafton Street
 Altrincham, Cheshire WA14 1DY

T 0161 928 9281
 C Peter Swift
 E info@planit-ie.com
 W www.planit-ie.com

Design practice specialising in the creation of places and shaping of communities. Our Urban Designers work at all scales from regeneration strategies and conceptual masterplans through to Design Codes – making environments, neighbourhoods and spaces for people to enjoy.

PLANNING DESIGN PRACTICE

4 Woburn House, Vernon Gate
 Derby DE1 1UL

T 01332 347 371
 C Scott O'Dell
 E Scott@planningdesign.co.uk
 W www.planningdesign.co.uk

We are a multi-disciplinary practice offering services in planning, architecture and urban design who seek to create better places.

POLLARD THOMAS EDWARDS ARCHITECTS

Diespeker Wharf, 38 Graham Street,
 London N1 8JX

T 020 7336 7777
 C Robin Saha-Choudhury
 Andrew Beharrell
 E robin.saha-choudhury@ptea.co.uk
 W www.ptea.co.uk

Masterplanners, urban designers, developers, architects, listed building and conservation area designers; specialising in inner city mixed use high density regeneration.

PRO VISION PLANNING

Grosvenor Ct, Winchester Rd
 Ampfield, Winchester SO51 9BD

T 01794 368698
 C James Cleary
 E j.cleary@pvprojects.com
 W pvprojects.com

A practice of integrated development consultants covering town planning, architecture, urban design and heritage, we provide carefully designed, context driven and client focused plans and buildings.

PRP ARCHITECTS

10 Lindsey Street,
 London EC1A 9HP

T 020 7653 1200
 C Vicky Naysmith
 E london@prp-co.uk
 W www.prp-co.uk

Architects, planners, urban designers and landscape architects, specialising in housing, urban regeneration, health, education and leisure projects.

RANDALL THORP

Canada House, 3 Chepstow Street,
Manchester M1 5FW

T 0161 228 7721

C Pauline Randall

E mail@randallthorp.co.uk

W www.randallthorp.co.uk

Masterplanning for new developments and settlements, infrastructure design and urban renewal, design guides and design briefing, public participation.

RE-FORM LANDSCAPE ARCHITECTURE

Tower Works, Globe Road

Leeds LS11 5QG

T 0113 245 4695

C Guy Denton

E info@re-formlandscape.com

W www.re-formlandscape.com

re-form specialises in creating enduring, sustainable designs which create a sense of identity, support the local economy and inspire communities.

RG+P

130 New Walk

Leicester LE1 7JA

T 0116 204 5800

C Shweta Desai

E design@rg-p.co.uk

W www.rg-p.co.uk

Multidisciplinary architectural design, project management and quantity surveying practice offering an unrivalled range of supporting professional services including planning consultation, landscape architecture, and more.

RICHARD COLEMAN CITYDESIGNER

14 Lower Grosvenor Place

London SW1W 0EX

T 020 7630 4880

C Lakshmi Varma

E r.coleman@citydesigner.com

Advice on architectural quality, urban design, and conservation, historic buildings and townscape. Environmental statements, listed buildings/area consent applications.

RICHARD REID & ASSOCIATES

Whitely Farm, Ide Hill

Sevenoaks TN14 6BS

T 01732 741417

C Richard Reid

E rreid@richardreid.co.uk

W www.richardreid.co.uk

Award winning practice specialising in urban design, mixed use high density projects, townscape design and regeneration, sustainable masterplanning and environmental education.

RYDER ARCHITECTURE

Cooper's Studios

14-18 Westgate Road

Newcastle upon Tyne NE1 3NN

T 0191 269 5454

C Cathy Russell

E CRussell@ryderarchitecture.com

W www.ryderarchitecture.com

Newcastle London Glasgow Liverpool

Hong Kong Vancouver

Melbourne Sydney Perth Barcelona

Budapest

Our core specialisms include architecture, urban design, placemaking, stakeholder and community engagement, planning, interiors and heritage. We follow a holistic approach to placemaking focused on understanding the nature of places, seeking out opportunities which exist beyond the limits of a red line site boundary.

SAVILLS (L&P) LIMITED

33 Margaret Street

London W1G 0JD

T 020 3320 8242

W www.savills.com

SOUTHAMPTON

2 Charlotte Place,

Southampton SO14 0TB

T 02380 713900

C Peter Frankum

E pfrankum@savills.com

Offices throughout the World

Savills Urban Design creates value

from places and places of value.

masterplanning, urban design, design

coding, urban design advice, planning,

commercial guidance.

SCOTT BROWNRIGG

St Catherine's Court, 46-48

Portsmouth Road

Guildford GU2 4DU

T 01483 568686

C Jeremy Wills

E j.wills@scottbrownrigg.com

W www.scottbrownrigg.com

Award winning international practice with the purpose of creating timeless, sustainable and beautiful environments that are aspirational to our client and communities.

SCOTT TALLON WALKER ARCHITECTS

19 Merrion Square, Dublin 2

T 00 353 1 669 3000

C Philip Jackson

E mail@stwarchitects.com

W www.stwarchitects.com

Award winning international practice

covering all aspects of architecture,

urban design and planning.

SCOTT WORSFOLD ASSOCIATES

The Studio, 22 Ringwood Road

Longham, Dorset BH22 9AN

T 01202 580902

C Gary Worsfold / Alister Scott

E gary@sw-arch.com

alister@sw-arch.com

www.garyworsfoldarchitecture.co.uk

An award winning practice of chartered

architects, urban designers and experts

in conservation, all with exceptional

graphic skills and an enviable record in

planning consents.

SHEILS FLYNN LTD

Bank House High Street, Docking

Kings Lynn PE31 8NH

T 01485 518304

C Eoghan Sheils

E norfolk@sheilsflynn.com

W www.sheilsflynn.com

Award winning town centre regeneration

schemes, urban strategies and design

guidance. Specialists in community

consultation and team facilitation.

SHEPHEARD EPSTEIN HUNTER

Phoenix Yard, 65 King's Cross Road

London WC1X 9LW

T 020 7841 7500

C Steven Pidwill

E stevenpidwill@seh.co.uk

W www.seh.co.uk

SEH is a user-friendly, award-winning

architects firm, known for its work in

regeneration, education, housing,

masterplanning, mixed use and

healthcare projects.

SHEPPARD ROBSON

77 Parkway, Camden Town

London NW1 7PU

T 020 7504 1700

C Charles Scott

charles.scott@sheppardrobson.com

W www.sheppardrobson.com

MANCHESTER

27th Floor, City Tower, Piccadilly Plaza

Manchester M1 4BD

T 0161 233 8900

Planners, urban designers and

architects. Strategic planning, urban

regeneration, development planning,

town centre renewal, new settlement

planning.

SIGNET URBAN DESIGN

Rowe House, 10 East Parade

Harrrogate HG1 5LT

T 01423 857510

C Andrew Clarke

Andrewclarke@signeturbandesign.com

W www.signetplanning.com

A team of talented urban design

professionals providing masterplanning,

detailed layout and architectural design,

design and access statements, design

codes and development frameworks

throughout the UK.

SLR CONSULTING

7 Wornal Park, Menmarsh Rd

Worminghall HP18 9PH

T 0117 906 4280

C Jonathan Reynolds

E jreynolds@slrconsulting.com

W www.slrconsulting.com

SLR is a global environmental

consultancy, providing robust advice

to investors, developers, regulators,

policy makers, landowners and other

stakeholders.

SMEEDEN FOREMAN LTD

Somerset House, Low Moor Lane

Scotton, Knaresborough HG5 9JB

T 01423 863369

C Mark Smeeden

E office@smeeden.foreman.co.uk

W www.smeedenforeman.co.uk

Ecology, landscape architecture and

urban design. Environmental

assessment, detailed design, contract

packages and site supervision.

STRIDE TREGLOWN

Promenade House, The Promenade

Clifton Down, Bristol BS8 3NE

T 0117 974 3271

C Graham Stephens

grahamstephens@stridetreglown.com

W www.stridetreglown.com

Established in 1953, now with nine

regional offices offering town planning,

masterplanning, urban design,

landscape architecture, historic building

conservation, interior & graphic design,

& project management, across a wide

range of sectors.

STUDIO PARTINGTON

Unit G, Reliance Wharf

Hertford Road, London N1 5EW

T 020 7241 7770

C Richard Partington

E info@studiopartington.co.uk

W www.studiopartington.co.uk

Urban design, housing, retail, education,

sustainability and commercial projects

that take a responsible approach to the

environment and resources.

STUDIO | REAL

Oxford Centre for Innovation

New Road, Oxford OX1 1BY

T 01865 261461

C Roger Evans

E revans@studioreal.co.uk

W www.studioreal.co.uk

Urban regeneration, quarter

frameworks and design briefs, town

centre strategies, movement in towns,

masterplanning and development

economics.

TEP - THE ENVIRONMENT**PARTNERSHIP**

Genesis Centre

Birchwood Science Park

Warrington WA3 7BH

T 01925 844004

C Steve McCoy

E tep@tep.uk.com

GATESHEAD

Office 26, Gateshead International

Business Centre

Mulgrave Terrace

Gateshead NE8 1AN

T 0191 605 3340

E gateshead@tep.uk.com

CORNWALL

4 Park Noweth

Churchtown, Cury

Helston TR12 7BW

T 01326 240081

E cornwall@tep.uk.com

W www.tep.uk.com

Tep provides independent planning and

design advice with a strong emphasis

on personal service. Our award-winning

multi-disciplinary team has a track

record of delivering complex projects

for private, public and voluntary sector

clients.

TERENCE O'ROURKE

7 Heddon Street

London W1B 4BD

T 020 3664 6755

C Kim Hamilton

E enquiries@torltd.co.uk

W www.torltd.co.uk/

Award-winning planning, design and

environmental practice.

THE TERRA FIRMA CONSULTANCY

Suite B, Ideal House, Bedford Road,

Petersfield, Hampshire GU32 3QA

T 01730 262040

C Lionel Fanshawe

contact@terrafirmaconsultancy.com

W www.terrafirmaconsultancy.com

Independent landscape architectural

practice with considerable urban design

experience at all scales from EIA to

project delivery throughout UK and

overseas.

THE PAUL HOGARTH COMPANY

Bankhead Steading

Bankhead Road

South Queensferry EH30 9TF

T 0131 331 4811

C Claire Japp

E clairej@paulhogarth.com

W www.paulhogarth.com

The Paul Hogarth Company is a long

established and passionate team of

landscape architects, urban designers

and planners that puts people at the

heart of placemaking.

THRIVE

Building 300, The Grange
Romsey Road, Michelmersh
Romsey SO51 0AE
T 01794 367703
C Gary Rider
E Gary.Rider@thrivearchitects.co.uk
W www.thrivearchitects.co.uk
Award winning multi-disciplinary practice encompassing architecture, urban design, masterplanning, design coding, regeneration, development frameworks, sustainable design/planning and construction. Residential and retirement care specialists.

TIBBALDS PLANNING & URBAN DESIGN

19 Maltings Place, 169 Tower Bridge Road, London SE1 3JB
T 020 7089 2121
C Katja Stille
E mail@tibbalds.co.uk
W www.tibbalds.co.uk
Multi-disciplinary practice of urban designers, architects and planners. Provides expertise from concept to implementation in regeneration, masterplanning, urban design and design management to public and private sector clients.

TOP HAT TECHNOLOGIES LTD

14 Great James Street
London WC1N 3DP
C Katarzyna Ciechanowska
E info@tophat.co.uk
W www.tophat.co.uk
TopHat Technology is part of the TopHat Group that designs, builds, delivers and sells housing within the UK. It is responsible for the overall masterplanning design of the TopHat housing neighbourhoods, where the technology component forms a critical part.

TOWNSCAPE SOLUTIONS

208 Lightwoods Hill, Smethwick
West Midlands B67 5EH
T 0121 429 6111
C Kenny Brown
kbrown@townscapesolutions.co.uk
W www.townscapesolutions.co.uk
Specialist urban design practice offering a wide range of services including masterplans, site layouts, design briefs, design and access statements, expert witness and 3D illustrations.

TURLEY

10th Floor, 1 New York Street
Manchester M1 4HD
C Stephen Taylor (North)
T 0161 233 7676
E stephen.taylor@turley.co.uk
C Craig Becconsall (South)
T 0118 902 2830
W www.turley.co.uk
Offices also in Belfast, Birmingham, Bristol, Cardiff, Edinburgh, Glasgow, Leeds, London and Southampton.
Integrated urban design, masterplanning, sustainability and heritage services provided at all project stages and scales of development. Services include visioning, townscape analysis, design guides and public realm resolution.

TWEED NUTTALL WARBURTON

Chapel House, City Road
Chester CH1 3AE
T 01244 310388
C John Tweed
E entasis@tnw-architecture.co.uk
W www.tnw-architecture.co.uk
Architecture and urban design, masterplanning. Urban waterside environments. Community teamwork enablers. Visual impact assessments.

TYRENS

White Collar Factory
1 Old street Yard
London EC1Y 8AF
T 020 7250 7666
C Anna Reiter
E communications@tyrens-uk.com
W www.tyrens-uk.com
Tyrens is one of Europe's leading integrated urban planning, environment, mobility and infrastructure design consultancies.

UBU DESIGN LTD

7a Wintex House
Easton Lane Business Park
Easton Lane
Winchester SO23 7RQ
T 01962 856008
C Rachel Williams
E rachelw@ubu-design.co.uk
www.ubu-design.co.uk
Ubu Design is an innovative urban design and landscape architecture practice. We combine creativity with understanding to shape development and produce designs that are considered, viable and inspiring, from strategies and frameworks, through masterplanning to detailed design.

URBAN DESIGN BOX

The Tobacco Factory
Raleigh Road
Bristol BS3 1TF
T 0117939524
C Jonathan Vernon-Smith
E info@urbandesignbox.co.uk
W www.urbandesignbox.co.uk
We are an integrated masterplanning, architecture and urban design service. Working nationally, we have designed, delivered and completed residential, mixed use and commercial projects, from sensitive urban infills to strategic sites.

URBAN GRAPHICS

31 Castle Lane
Bedford MK40 3NT
T 01234 353870
C Bally Meeda
E info@urban-graphics.co.uk
W www.urban-graphics.co.uk
With over 25 years experience, Urban Graphics deliver the tools to secure investment, attain planning permissions, turn visions into reality and influence the regeneration of major projects.

URBAN IMPRINT

16-18 Park Green, Macclesfield
Cheshire SK11 7NA
T 01625 265232
C Bob Phillips
E info@urbanimprint.co.uk
W www.urbanimprint.co.uk
A multi-disciplinary town planning and urban design consultancy dedicated to the delivery of high quality development solutions working with public, private and community organisations.

URBAN INITIATIVES STUDIO

Exmouth House, 3-11 Pine Street
London EC1R 0JH
T 0203 567 0716
C Hugo Nowell
E h.nowell@uistudio.co.uk
W www.uistudio.co.uk
Urban design, transportation, regeneration, development planning.

URBED (URBANISM ENVIRONMENT & DESIGN)

MANCHESTER
10 Little Lever Street
Manchester M1 1HR
T 0161 200 5500
C John Sampson
E info@urbed.coop
W www.urbed.coop
LONDON
The Building Centre
26 Store Street, London WC1E 7BT
C Nicholas Falk
T 07811 266538
Sustainable urbanism, masterplanning, urban design, retrofitting, consultation, capacity building, research, town centres and regeneration.

URBEN

Studio D, Main Yard Studios
90 Wallis Road, London E9 5LN
T 020 3882 1495
C Paul Reynolds
E paul.reynolds@urbenstudio.com
W www.urbenstudio.com
Urban planning and design consultancy with a focus on using placemaking and infrastructure to make our towns and cities more efficient and better places to live and work.

VINCENT AND GORBING LTD

Sterling Court, Norton Road
Stevenage, Hertfordshire SG1 2JY
T 01438 316331
C Richard Lewis
E urban.designers@vincent-gorbing.co.uk
W www.vincent-gorbing.co.uk
Masterplanning, design statements, character assessments, development briefs, residential layouts and urban capacity exercises.

WEI YANG & PARTNERS

Wei Yang & Partners
33 Cavendish Square
London W1G 0PW
T 020 7182 4936
C Jun Huang
E info@weiyangandpartners.co.uk
W www.weiyangandpartners.co.uk
Award-winning multi-disciplinary company driven by a commitment to shape more sustainable and liveable cities. Specialising in low-carbon city development strategies, garden cities and communities, urban regeneration, urban design, mixed use urban complex design and community building strategies.

WEST WADDY ADP LLP

The Malthouse
60 East St. Helen Street
Abingdon, Oxon OX14 5EB
T 01235 523139
C Philip Waddy
E enquiries@westwaddy-adp.co.uk
W westwaddy-adp.co.uk
Experienced and multi-disciplinary team of urban designers, architects and town planners offering a full range of urban design services.

WESTON WILLIAMSON + PARTNERS

12 Valentine Place
London SE1 8QH
T 020 7401 8877
C Chris Williamson
E team@westonwilliamson.com
W www.westonwilliamson.com
Weston Williamson is an award winning architectural, urban design and masterplanning practice with a wide variety of projects in the UK and abroad.

WHITE CONSULTANTS

Enterprise House
127-129 Bute Street
Cardiff CF10 5LE
T 029 2043 7841
C Simon White
E sw@whiteconsultants.co.uk
W www.whiteconsultants.co.uk
A holistic approach to urban regeneration, design guidance, public realm and open space strategies and town centre studies for the public, private and community sectors.

WOOD

Wood Environment and Infrastructure Solutions, Floor 12, 25 Canada Square, London, E14 5LQ
T 020 3 215 1700
C Jeremy Wills
E jeremy.wills@woodplc.com
W woodplc.com
MIDLANDS OFFICE:
Gables House, Kenilworth Road, Leamington Spa, CV32 6JX
T 01926 439000
C David Thompson
E david.thompson@woodplc.com
W woodplc.com
Wood, (formerly Amec Foster Wheeler) is an award winning multi-disciplinary environment, engineering and development consultancy with offices around the globe. Our core UK urban design teams in London and Leamington consist of a diverse group of professionals with exceptional knowledge and skills in placemaking.

WYG

11th Floor, 1 Angel Court
London EC2R 7HJ
T 020 7250 7500
C Colin James
E colin.james@wyg.com
W www.wyg.com
Offices throughout the UK
Creative urban design and masterplanning with a contextual approach to placemaking and a concern for environmental, social and economic sustainability.

Education Index

Universities with courses in Urban Design are welcome to join the Urban Design Group and be listed in this index. The Journal has a circulation of circa 2000 to individuals, practices, the bookshops of the AA, RIBA and Building Centre in London, and UK & international libraries. See www.udg.org.uk/join

CARDIFF UNIVERSITY

School of Geography and Planning and Welsh School of Architecture, Glamorgan Building, King Edward VII Avenue
Cardiff CF10 3WA
T 029 2087 5607/029 2087 6131
C Aseem Inam
E inamat@Cardiff.ac.uk
W www.cardiff.ac.uk/architecture/courses/postgraduate-taught/ma-urban-design
 One year full-time MA in Urban Design.

CARDIFF UNIVERSITY

School of Geography and Planning, Glamorgan Building, King Edward VII Avenue
Cardiff CF10 3WA
T 029 2087 5607/029 2087 6131
C Richard Bower
E bowerrit@Cardiff.ac.uk
W www.cardiff.ac.uk/study/postgraduate/taught/courses/course/international-planning-and-urban-design-msc
 One year full-time MSc in International Planning and Urban Design.

EDINBURGH SCHOOL OF ARCHITECTURE AND LANDSCAPE ARCHITECTURE

ECA University of Edinburgh Lauriston Place, Edinburgh EH3 9DF
T 0131 651 5786
C Dr Ola Uduku
E o.uduku@ed.ac.uk
W www.ed.ac.uk/studying/postgraduate/degrees
 Jointly run with Heriot Watt University, this M.Sc in Urban Strategies and Design focuses on urban design practice and theory from a cultural, and socio-economic, case-study perspective. Engaging students in 'live' urban projects, as part of the programme's 'action research' pedagogy, it also offers research expertise in African and Latin American urban design and planning processes.

LEEDS BECKETT UNIVERSITY

School of Art, Architecture and Design, Broadcasting Place, Woodhouse Lane, Leeds LS2 9EN
T 0113 812 3216
C Chris Royffe
E c.royffe@leedsbeckett.ac.uk
W https://courses.leedsbeckett.ac.uk/urbandesign_ma/
 Master of Arts in Urban Design consists of 1 year full time or 2 years part time or individual programme of study. Shorter programmes lead to Post Graduate Diploma/Certificate. Project based course focusing on the creation of sustainable environments through interdisciplinary design.

LONDON SOUTH BANK UNIVERSITY
Faculty of Law and Social Science
103 Borough Road, London SE1 0AA
T 0207 815 5877
C Manuela Madeddu
E madeddum@lsbu.ac.uk
W www.lsbu.ac.uk/courses/course-finder/urban-design-planning-ma

The MA Urban Design and Planning (FT or PT) provides an inter-disciplinary approach to urban design and equips students with a comprehensive understanding of urban design, planning and development issues. Through working at different scales of the city and engaging with theoretical debates, students will learn to think about the characteristics of good places and will be equipped to make a critical contribution to shaping those places in the decades ahead. The programme is fully accredited by the RTPI and includes a field trip to a European country.

NEWCASTLE UNIVERSITY

School of Architecture, Planning and Landscape, Claremont Tower
University of Newcastle, Newcastle upon Tyne NE1 7RU
T 0191 222 6006
C Georgia Giannopoulou
E georgia.giannopoulou@ncl.ac.uk
W www.ncl.ac.uk/apl/study/postgraduate/taught/urbandesign/index.htm

The MA in Urban Design brings together cross-disciplinary expertise striking a balance between methods and approaches in environmental design and the social sciences in the creation of the built environment. To view the course blog: www.nclurbandesign.org

OXFORD BROOKES UNIVERSITY

Faculty of Technology, Design and Environment, Headington, Oxford OX3 0BP
T 01865 483 438
C Georgia Butina-Watson
E gbutina@brookes.ac.uk
W www.brookes.ac.uk
 Diploma in Urban Design, six months full time or 18 months part time. MA one year full-time or two years part-time.

UNIVERSITY COLLEGE LONDON

Development Planning Unit
34 Tavistock Square
London WC1H 9EZ
T 020 7679 1111
C Camillo Boano and Catalina Ortiz
E c.boano@ucl.ac.uk
catalina.ortiz@ucl.ac.uk
W <https://www.ucl.ac.uk/bartlett/development/programmes/postgraduate/msc-building-urban-design-development>

The DPU programme has a unique focus on Urban Design as a transdisciplinary and critical practice. Students are encouraged to rethink the role of urban design through processes of collective and radical endeavours to design and build resilient strategic responses to conflicting urban agendas, emphasising outcomes of environmental and social-spatial justice.

UNIVERSITY COLLEGE LONDON
Bartlett School of Planning
22 Gordon Street, London WC1H 0QB
T 020 7679 4797
C Filipa Wunderlich
E f.wunderlich@ucl.ac.uk
W www.bartlett.ucl.ac.uk/planning/programmes

The MSc/Dipl Urban Design & City Planning has a unique focus on the interface between urban design & city planning. Students learn to think in critical, creative and analytical ways across the different scales of the city – from strategic to local – and across urban design, planning, real estate and sustainability.

UNIVERSITY COLLEGE LONDON

Bartlett School of Planning
14 Upper Woburn Place
London WC1H 0NN
T 020 7679 4797
C Matthew Carmona
E m.carmona@ucl.ac.uk
W www.bartlett.ucl.ac.uk/planning/programmes/postgraduate/mresinter-disciplinary-urban-design

The MRes Inter-disciplinary Urban Design cuts across urban design programmes at The Bartlett, allowing students to construct their study in a flexible manner and explore urban design as a critical arena for advanced research and practice. The course operates as a stand-alone high level masters or as preparation for a PhD.

UNIVERSITY OF DUNDEE

Town and Regional Planning
Tower Building, Perth Road
Dundee DD1 4HN
T 01382 385246 / 01382 385048
C Dr Mohammad Radfar / Dr Deepak Gopinath
E m.radfar@dundee.ac.uk / D.Gopinath@dundee.ac.uk
W www.dundee.ac.uk/postgraduate/courses/advanced_sustainable_urban_design_msc.htm

The MSc Advanced Sustainable Urban Design (RTPI accredited) is a unique multidisciplinary practice-led programme set in an international context (EU study visit) and engaging with such themes as landscape urbanism, placemaking across cultures and sustainability evaluation as integrated knowledge spheres in the creation of sustainable places.

UNIVERSITY OF HUDDERSFIELD

School of Architecture and 3D Design
Queen Street Studios
Huddersfield HD1 3DH
T 01484 472208
C Dr Ioanni Delsante
E i.delsante@hud.ac.uk
W www.hud.ac.uk/courses/full-time/postgraduate/urban-design-ma/MA;PgDip;PgCert in Urban Design (Full Time or Part Time).
 The MA in Urban Design aims to provide students with the essential knowledge and skills required to effectively intervene in the urban design process; develop academic research skills, including critical problem-solving and reflective practice; facilitate design responses to the range of cultural, political, socio-economic, historical, environmental and spatial factors. It also aims to promote responsibility within urban design to consider the wider impact of urban development and regeneration.

UNIVERSITY OF MANCHESTER
School of Environment, Education and Development
Humanities Bridgeford Street,
Oxford Road, Manchester M13 9PL
T 0161 275 2815
C Dr. Philip Black
E Philip.black@manchester.ac.uk
W www.seed.manchester.ac.uk/study/taught-masters/courses/list/urban-design-and-international-planning-msc/

MSc Urban Design and International Planning (F/T or P/T)
 The fully accredited RTPI MSc Urban Design and International Planning explores the relationship between urban design and planning by focusing on internationally significant issues. With a strong project-based applied approach students are equipped with the core knowledge and technical competencies to design across various scales in the city.

UNIVERSITY OF NOTTINGHAM

Department of Architecture and Built Environment, University Park
Nottingham NG7 2RD
T 0115 9513110
C Dr Amy Tang
E yue.tang@nottingham.ac.uk
W www.nottingham.ac.uk/pgstudy/courses/architecture-and-built-environment/sustainable-urban-design-march.aspx

Master of Architecture (MArch) in Sustainable Urban Design is a research and project-based programme which aims to assist the enhancement of the quality of our cities by bringing innovative design with research in sustainability.

UNIVERSITY OF SHEFFIELD

School of Architecture, The Arts Tower, Western Bank, Sheffield S10 2TN
T 0114 222 0341
C Florian Kossak
E f.kossak@sheffield.ac.uk
W www.shef.ac.uk/architecture/study/pgschool/taught_masters/maud

One year full time MA in Urban Design for postgraduate architects, landscape architects and town planners. The programme has a strong design focus, integrates participation and related design processes, and includes international and regional applications.

UNIVERSITY OF STRATHCLYDE

Department of Architecture
Urban Design Studies Unit
Level 3, James Weir Building
75 Montrose Street, Glasgow G1 1XJ
T 0141 548 4219
C Ombretta Romice
E ombretta.r.romice@strath.ac.uk
W www.udsu-strath.com
 The Postgraduate Course in Urban Design is offered in CPD, Diploma and MSc modes. The course is design centred and includes input from a variety of related disciplines.

UNIVERSITY OF WESTMINSTER

35 Marylebone Road, London NW1 5LS
T 020 7911 5000 ext 66553
C Bill Erickson
E w.n.erickson@westminster.ac.uk
W www.westminster.ac.uk/architecture-and-interiors-planning-housing-and-urban-design-courses/2019-20/september/full-time-urban-design-ma
 or ending in
urban-design-postgraduate-diploma
 MA or Diploma Course in Urban Design for postgraduate architects, town planners, landscape architects and related disciplines. One year full time.



1



2



3

1 Artists' studios next to a metal recycling business
2 An art gallery next to a taxicab repairers
3 The Custard Factory

As much as necessary, as little as possible

Fifty years ago, on 20th March 1969, the magazine *New Society* published a feature titled *Non-Plan: an experiment in freedom*, which became notorious and controversial. It derived from a conversation in a pub between the magazine's editor Paul Barker and the geographer Peter Hall, one of his regular contributors. Discussing the current state of planning and development, Barker floated a subversive idea – could things be any worse if there were no planning at all? They might even be somewhat better. Barker invited two other *New Society* writers to consider the idea, the architectural historian Reyner Banham and the architect Cedric Price, and *Non-Plan* was published under their four names.

Barker later wrote that '...at the time, all the architects, conservationists and socialists I knew were highly offended by it'. The *Non-Plan* thesis certainly fractured ideological boundaries, and had both supporters and detractors among anarchists, left-wing social reformers and *Daily Telegraph* leader writers. It led indirectly, via Peter Hall, to the Thatcher government's brief experiment in enterprise zones in 1980. I suspect that its influence could also be traced in an examination question on my MA course at the Joint Centre for Urban Design in that same year: 'A plan which can't be implemented is worse than no plan at all. Discuss'. The implication was that an unimplementable

plan will prevent any change from happening, thereby leading to decline and decay, whereas no-plan might at least allow some initiatives to start, and lead to growth. The principle I drew from this, which I think has universal application, is that a good plan contains the minimum of rules. It should include only those which are essential to the plan's success, and include nothing which might inhibit any positive future actions.

This principle applies to the future development of even complex places. Take Digbeth, where I work. Currently, the district's three biggest landowners – Homes England, the Custard Factory and the Gooch Estate – are funding the production of a proposition for the future of Digbeth which they call Digbeth Vision. It is being prepared jointly by the consultants Allies and Morrison and Egret West. Digbeth is a complicated place. It is a conservation area, with ancient origins as a suburb of the mediaeval town lying between the manor house and the river Rea. Its street pattern is largely from the 18th and 19th centuries. It is crossed by the river, the Warwick Canal, and three railway viaducts. Its land uses are very mixed up, and in a state of transition. The arrival of the HS2 terminal at Curzon Street in 2026 will complicate it even more.

Digbeth has two characteristics which make it special. Its built fabric is predominantly small scale, with two exceptions, Alfred Bird's custard works and the Typhoo tea factory, and it is diverse in its land uses, with different activities promiscuously mixed up. A design code for Digbeth is needed which addresses these two characteristics. Firstly, there should be a size limit placed upon parcels of new development, in order to keep the scale small. This could be done in a variety of ways, by setting maxima

for plot size, plot ratio, street frontage, building footprint, gross floor area, cubic capacity, building height, or some combination of these measures. Whatever the measure, it might vary across the different sub-districts of Digbeth in order to reflect and reinforce existing character as well as economic differences. Secondly, the code should not allow too many parcels of one land use to be built next to each other, in order to keep Digbeth diverse and mixed. There could be a simple numerical rule for this, and again the rule might vary from one sub-district to another.

These are not normal British design rules, but they are simple and I cannot see why they could not be specified. If they were to be embodied in a design code, I believe that little else would need to be specified in order to ensure that new development maintains and enhances the character of Digbeth – except perhaps a rule about building to the back of the pavement. A masterplan is certainly not required. New development could freely employ a variety of different forms, materials and types of buildings. Digbeth is not a conservation area with the special homogeneity of Bournville or Bloomsbury. Its nature is diverse, with surprising juxtapositions and collisions. It does not require the usual conservation area rules about brickwork, pitched roofs, window reveals, proportions and so on. This policy is not exactly *Non-Plan*; let's maybe call it *As-Little-as-Possible-Plan*. ●

Joe Holyoak, architect and urban designer

ENABLING SUSTAINABLE CITIES THROUGH GREEN & BLUE INFRASTRUCTURE



#soilcellswork



greenblue.com
0800 018 7797

GreenBlue
URBAN 
Establishing the future urban landscape