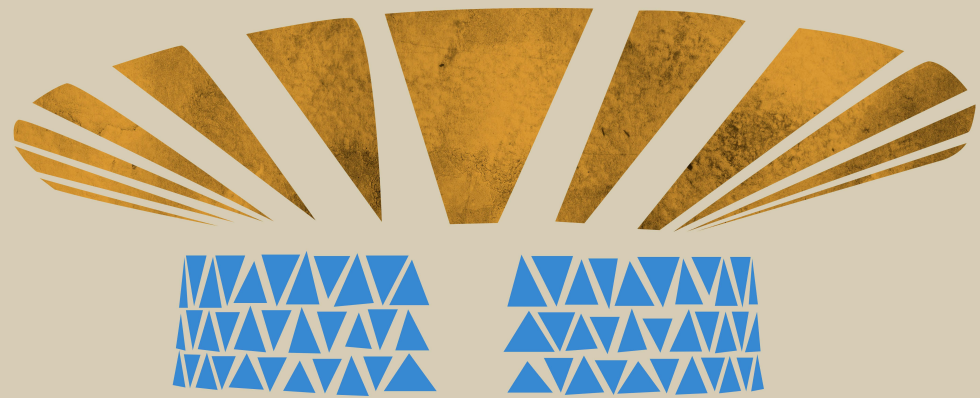# BUILD YOUR OWN PAVILION

*The freedom to make and remake our cities and ourselves is one of the most precious yet most neglected of our human rights.*

David Harvey (2003) 'The Right to the City' *International Journal of Urban and Regional Research*, 27(4), pp. 939–941.

# INTRODUCTION

Build Your Own Pavilion is a project that invites young people to ask critical questions about their local area and to design and build pavilions for the neighbourhoods they would like to live in.

This resource provides a framework that will take you from an introduction to the concept of public space through to the development and presentation of collaboratively produced models.

buildyourownpavilion.serpentinegalleries.org

Since 2000 the Serpentine has commissioned a prominent international architect to design a temporary summer Pavilion each year. The Pavilions are in place for 4 months as social spaces where people can gather for art, music, film, dance and refreshment.

In 2017 the Pavilion was designed by Francis Kéré and is inspired by a tree that served as a central meeting point in his home town in Burkina Faso. It reflects his interest in socially and ecologically engaged design, an approach concerned with issues affecting people and the environment that aims to minimise any destructive impacts.

*The starting point in my design process is always the people who will use it, but when it comes to young people, their needs are too often overlooked. Build Your Own Pavilion is an important project because it takes young people's opinions on the built environment seriously. By tapping into their unique sense of creativity, the project inspires children to become socially aware citizens and, hopefully, the architects of our future cities.*
Francis Kéré

## Approach

The Serpentine Gallery's approach to education is based on a belief in the importance of teachers and students working in conversation with their local area and exploring ideas through collaboration. This is an alternative approach to the standard DfE guidance that focuses on individual accumulation of knowledge. Serpentine Education projects are research based and ask critical questions about the world we live in. This project foregrounds young people's lived experience of their neighbourhoods as the starting point for rethinking the urban environment.

## How to use this resource

Sections in this resource are based around questions that are to be used as starting points for group discussions and suggestions for practical activities. All sections can be expanded or edited according to your group's needs and abilities. Students should be encouraged to devise their own questions and answers. You can also use this resource to develop a project that links art, design and technology with geography and citizenship. At the end are links to a range of examples that you may wish to explore further for inspiration.

## Rights to the City

Build Your Own Pavilion sits under the research strand in the Serpentine's programme called Rights to the City, which considers people's collective right to exercise power to shape, transform and remake their cities, as discussed by David Harvey in his essay 'The Right to the City'. Harvey questions why regeneration is presented by city authorities 'as an ideologically neutral opportunity to become safer, happier', yet public resources seem to be spent creating 'more and more urban renewal projects that result in the demolition of public housing'. Build Your Own Pavilion invites you to consider his statement 'the freedom to make and remake our cities and ourselves is one of the most precious yet most neglected of our human rights', and think about how you would choose to remake your neighbourhood.

newleftreview.org/II/53/david-harvey-the-right-to-the-city

# 1. PUBLIC SPACE

## What is public space? Discuss

*[prompts]*

*shared places*

*places where you encounter strangers*

*space owned by the government or 'the people'*

*space between buildings*

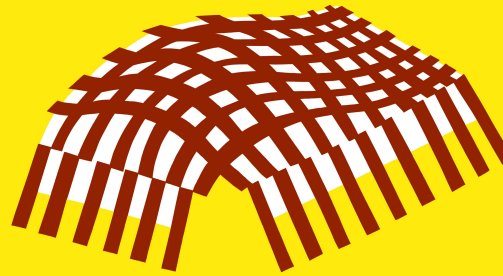*places that anyone can access*

*places that are free (are they always?)*

*the opposite of private spaces, e.g. not homes*

*public transport versus private cars*

*places where you can do what you want/express yourself (can you always?)*

*places open to everyone (is this true or are some groups discriminated against, or made to feel unwelcome?)*

## Is there one public or many?

*[prompts]*

*people in a city*

*bigger than a community*

*diversity of people making up a place*

*citizens*

*strangers*

*participants*

*an audience*

*locals and tourists*

## List as many public spaces as you can

*[prompts]*

streets

parks

pavements

footpaths

trains

buses

beaches

shops

stadiums

swimming pools

public toilets

squares

courtyards

corner shops

places of worship

museums

leisure centres

shopping centres

restaurants

cafes

pubs

(some) schools

hospitals

town halls

newspapers

the voting booth

community centres

the internet/social media

# 1. PUBLIC SPACE

## Look at your list

Which spaces are privately owned versus owned by the government (e.g. local council)?

Which are free?

Are some people excluded from any of these spaces? How?

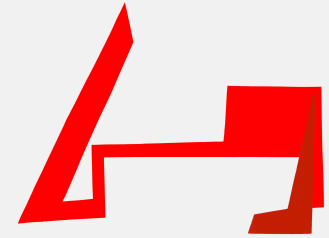What are some of the best public spaces in your neighbourhood or city?

What are some of the worst?
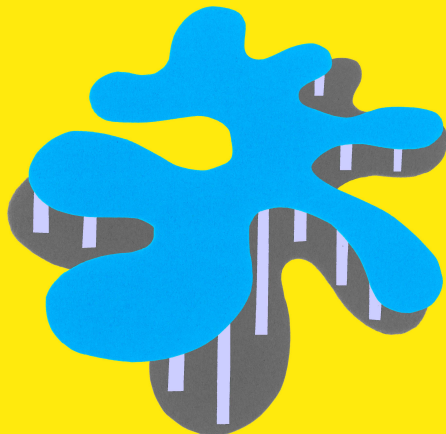
Which spaces are the most inclusive?

Which spaces have the most rules?
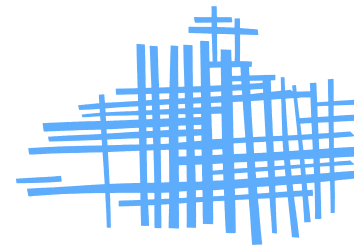
Who is in charge of each of these spaces?

## What social opportunities can public space provide?

## What values are associated with good public spaces?

*[prompts]*

*place to belong*

*freedom to assemble*

*space for protest*

*sharing space*

*accessible*

*open to all*

*inclusive*

*good amenities*

*place to relax*

*meeting people*

*expressing yourself*

*learning from others*
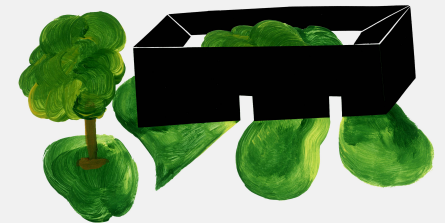
## Can you identify and evaluate public space?

**Visit the local environment around the school together**

Print out a map of the area to take with you as well as paper, pens, cameras and clipboards.

**Find a space that looks unused or unpopular and sketch it**

Why do you think it is unused, what are the clues as to why it is unpopular? Make sure you draw them.

**Interview people you meet and ask them what they think of the area**

Is it their first visit or do they come here often? Do they come at the same time of day?

**Mark on your map all the public and private space**

**How has the built environment been designed to facilitate or restrict different kinds of uses?**

How is the public space organised? Annotate on your map the objects, surfaces and materials.

Mark walls, gates benches, pathways, guard rails, surfaces on your map too.

**Are there rules forbidding certain behaviour?**

Make a note of any instructional signs you can see. Are there any unspoken rules?

**Before you return to school can you find a space you've never noticed before?**

Don't forget to look up, look round corners and look behind things.

**Can you find the borders between public and private spaces?**

What is used to mark the difference? Photograph gates, walls, signage, surveillance cameras, bollards, spikes — what else can you find that keeps people out?

**Who looks after the space, who repairs it, who cleans it?**

Can you find out just from looking?

# 3. URBAN MAPPING

## Use different coloured pens for each section to provide a clear visual layering of your investigation

### Mapping your location

**Work in groups and draw a big map of the journey you make from home to school (black felt pens)**

What should you draw?
*school, home, roads, parks, transportation, shops, benches, water features, squares, landmarks, parking spaces, etc.*

### Mapping people

**Write or draw people onto your map
(red felt pens)**

Who do you encounter on your way to school?
Who lives or works in this area?
Who visits and why?

### Mapping public spaces

**Draw, identify and annotate spaces or areas on the map
(blue felt pens)**

What places do you like to hang out in?
Which of the spaces that you drew on the map are public spaces?
Have you missed any public spaces?

### Mapping what is missing

**Look at your list of people and add what is missing
(green felt pens)**

What other spaces would the people you drew benefit from?
What is missing in the area?
Where would you locate these new public spaces?
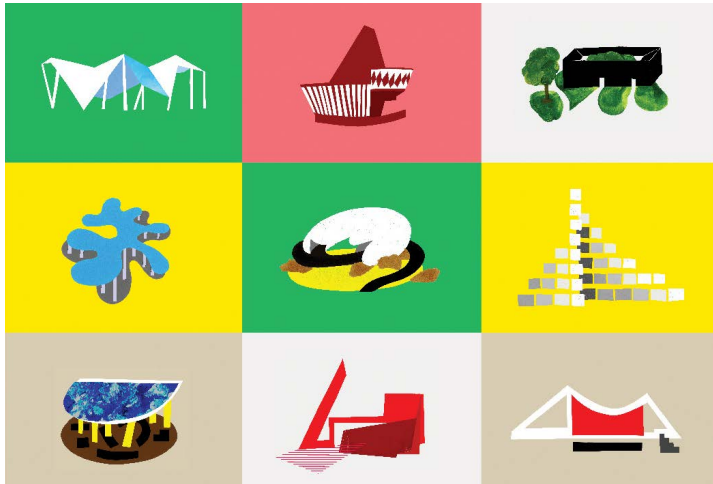
## What will it provide?

What problems in the area can you solve? Who will this pavilion help? (The existing context + human needs = what we need to design.)

To help decide, make notes of the following:

What were important findings from your field trip and discussion?
What different categories would benefit the neighbourhood?

*[prompts]*
*leisure, housing, nature, culture, play*

Who will be its main users? Try to be specific.
Are they young, old, alone, in groups, living here, visiting? What do they like?

## Design a pavilion for a new public space Where will it go?

Decide on a location to build your pavilion.
It could be an open space or you could reimagine an existing or in-between space.

*[prompts]*
*wasteland, rooftops, subways, bridges, on the water, under flyovers, car parks, disused buildings.*

Think about what you saw on your field visit.

Once ideas are gathered you could look at the suggested examples for further inspiration (links are at the end of this resource).

## Generate a multitude of ideas and concepts for pavilions

In groups of 4 to 5 people, individually sketch your ideas on A5/A6 card.

Create 1 idea per card — draw and annotate — BE QUICK — produce as many cards as possible.

Think about what your area needs.
Design for different groups, different problems, different benefits.

As you draw, discuss your ideas with your group.

What did others come up with?
What do you like about their ideas?
Can some ideas be combined?

# 4. DESIGN

## Annotate your sketches so people can understand your thinking

What is the purpose of your pavilion?
Where will it be located?
How will people get there?
Is it human-centred?
Think about social responsibility, should it be free?
What does your pavilion offer to the people who use it?
Which materials have you chosen to use and why?
Why is this a good public space for the neighbourhood?

Move groups so you are talking to new people, keep sketching new ideas, keep discussing, be inspired by other people's ideas.

*[prompts]*
*don't decorate, broad strokes, flow, don't restrict, follow the what and who it is for, see where it takes you, mind map, add things and do not rub out, quantity not quality, expand your ideas, spark your creativity, use your imagination, create, contribute, listen, respond*

## Evaluate through discussion, choose the best and discard the rest

Now you have a large collection of possible ideas for pavilions which will benefit your area.

Still in groups, look at the designs you have and divide them into different categories. Different types of use? Different locations? Different users? Addressing different problems?

As a group, discuss which ones would work best for your particular neighbourhood. Remember you are thinking about solving problems, not what you want for yourself or what looks good. If you cannot agree you may have to put it to a vote.

*[prompts]*
*define your direction, edit, discard, focus, concretise*

Ideally you will have a diverse collection of designs.

When your group has chosen the designs you think will work best, each person should choose a design from this selection that they would like to develop.

## Focus and develop

Individually, draw your final pavilion in detail. Concentrate. Think about:

Structure.

Entrances, exits, windows, doorways.

Materials.

Shapes.

Details.

Who will use it?

When will it be used?

What facilities does it need?

Is it accessible?

How will it feel when you approach it?
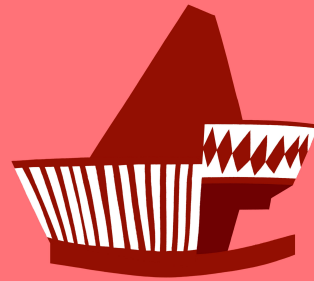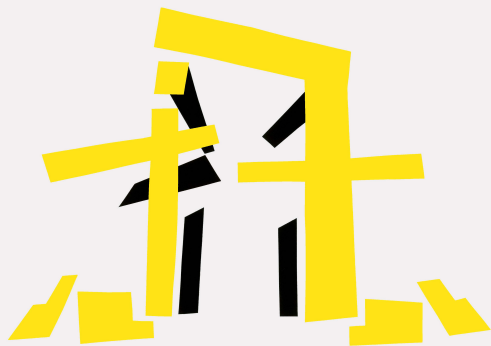
How will it feel when you are in there?

Do you have a design for a pavilion which is a public space that responds to human and neighbourhood needs?

# 5. PHYSICAL MODEL

Working on your own, make a physical model of your pavilion that will fit on a base the size of an A6 piece of paper.

Use a wide range of materials to express and demonstrate what the pavilion would look like.

Use the following guidelines to help you:

Use an A6 base.
Keep in mind your original brief and try to include the most important elements.
Compare with your original drawing and written notes.

## Materials

Think about:

Will it stay structurally strong?
What materials would be used in real life?
Human scale — how big is a human in your model?
Is it accessible for your users?

foam board base (A6 size)
colour card
masking tape
string or thread
metal wire
plasticine (for joining only)
wooden matchsticks or coffee stirrers
paper craft straws
acetate or film
stapler
single hole-punch
scissors
wire cutters

Share models with the class and give feedback:

What did you like?
What did you find challenging?
Why did you use those particular materials?
Is it sustainable?
Is it accessible?
How will it benefit the neighbourhood?

**For more inspiration, Build Your Own Pavilion has its own YouTube playlist with videos of architects making models:**

https://www.youtube.com/playlist?list=PLLrFzV6gBibddxm2ijS7aqcXa21VjlDic

# 6. DIGITAL 3D MODELS

If you have access to CAD software you can explore making digital 3D models.

Programmes include:

Tinkercad (online)
www.tinkercad.com
Shapr3D (iPad)
shapr3d.com

Explore 3D CAD tutorials – buildyourownpavilion.
serpentinegalleries.org/teachers/

Play around with different tools until you feel confident. The following are prompts and suggestions to support your exploration.

## First discuss the difference between 2D and 3D

What basic 3D shapes can you think of?

*[prompts]*
*cube, cuboid, sphere, cylinder, pyramids, cone, triangular prism, pentagonal prism, hexagonal prism*

3D CAD programmes have tools to make basic 3D shapes.

## Make a digital 3D model of the final pavilion design to help understand its geometry and structure

Keep in mind your original design brief.
Compare with your original drawing and written notes.

Identify all the different 3D shapes in your pavilion design. Think of how to combine or group basic 3D shapes to make complex ones.

You can subtract one 3D shape from another. Think about how you could use this. You could use this to make even more complex 3D shapes.

Create 3D shapes by transforming 2D shapes. Extrude any 2D shape into a 3D prism.

You can copy and move 3D shapes around in your workplane or grid.

What axis do you want to move your shapes on — up and down, backwards and forwards, side to side?

How else can you manipulate 3D shapes?
Try to scale and rotate them. Can you pull out just one corner at a time? How about moving just one edge of your shape?

Try to transform multiple elements in your design at the same time. Select them all before you modify them.

Group your shapes if you want them to stay together always. Ungroup them if you need to edit an individual element.

Use the camera controls to view your design from all sides. Find out how to zoom in and zoom out. Take a closer look at your design. Add details.

You might want to make even more interesting 3D shapes. Check if your software has these features: Revolve, Loft, Sweep, Chamfer, Shell, Intersect.

## Share your 3D model

Models should be saved on the computer and/or on the cloud.

Upload your 3D design to the Build Your Own Pavilion website — buildyourownpavilion.serpentinegalleries.
org/upload-your-pavilion/

## Print your finished design in 3D

Designs can be 3D printed if saved/exported in STL file format.

# 7. PRESENTATION

## Write a manifesto

Manifestos are a space for people to publicly voice their intentions, opinions and visions for a better world.

Write a collective statement calling for improved public spaces that will benefit your neighbourhood. This is your chance to tell people what your class wants for your future city and why it matters.

**WE BELIEVE...**
**WE WANT...**
**WE NEED...**
**WE WILL.....**
**WE...**

How can you share your manifesto?
Hand it out to local people?
Send it to your council or local newspaper?

*[prompts]*
*intention, opinion, vision, social responsibility, advocate, activist, beliefs, commitment, grassroots campaign*

## Design a poster

Create a poster for a campaign for better public spaces in your neighbourhood.

Which spaces did you choose to improve?
What does your area need?
What do young people need?
What do other people need?

Include drawings or photos of your pavilion ideas. Make it clear what benefits your pavilion will add to the neighbourhood.

Find out who you need to ask and see if you can display your finished posters locally in public, on billboards, hoardings, or in your local library.

Can you convince local people to get behind your ideas?
You could use social media to reach more people.

## Make a video

Create a simple storyboard of what you want to include. Keep the video short, no more than 3–5 minutes.

Film the public spaces around your school that you agreed need improving.

Write a voiceover explaining what your ideas are and how they will benefit people.

Include video of your drawings and models.

Share the videos online.

How else can you share your ideas, designs and models?

*[prompts]*
*zines, instagram and twitter (if you are over 13 or have a school account), school website*

## Upload to the website

Photograph and upload your designs to the Build Your Own Pavilion gallery to share them with others across the country.

buildyourownpavilion.serpentinegalleries.org/your-pavilions

You can also upload your 3D design file, provided it is less than 18MB in size. Otherwise, you can link to your design on Dropbox, Google Drive, or Tinkercad.

To upload your design, please visit our Upload Your Pavilion page:

buildyourownpavilion.serpentinegalleries.org/upload-your-pavilion/

We also want to see your manifestos, posters and videos! Just send them using the form above, or email:

buildyourownpavilion@serpentinegalleries.org

# 8. EXAMPLES
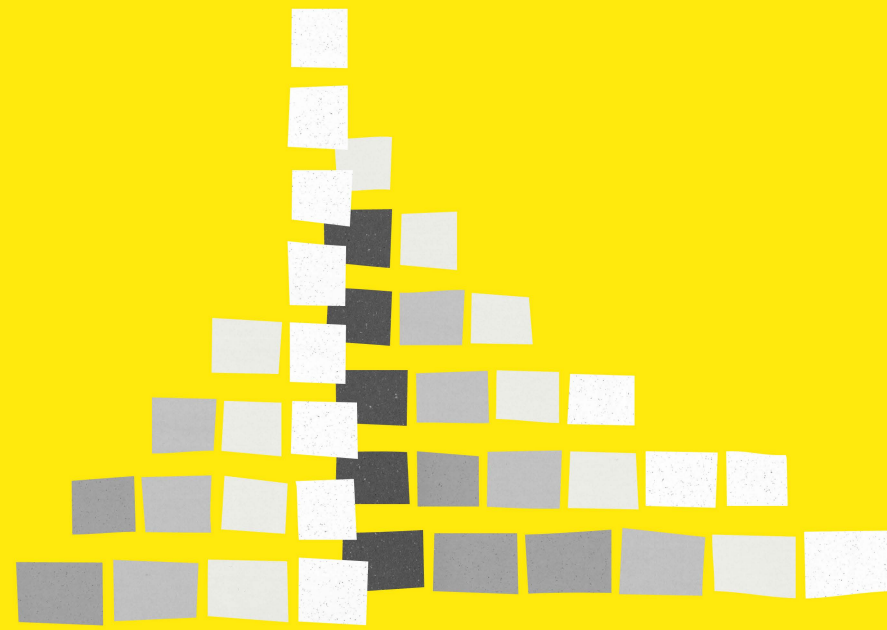
**Francis Kéré — Gando Primary School**
www.kere-architecture.com/projects/primary-school-gando/

As a child Kéré had to travel almost 25 miles to school, which was in a building with poor ventilation and lighting. Once he had started training as an architect he decided to return to build a school in his home village of Gando. Traditionally buildings in Burkina Faso are built by the community, so the techniques had to be low-tech and the materials affordable and sustainable, but with Kéré's introduction of modern engineering methods the resulting building has become the centre of the community.

**Koo Jeong A × Wheelscape — Evertro**
www.biennial.com/collaborations/wheels-park
A permanent glow-in-the-dark sculpture that is also a wheels park by artist Koo Jeong A, devised in collaboration with young local people in Liverpool.

**Vo Trong Nghia Architects — Farming Kindergarten, Dongnai, Vietnam**
votrongnghia.com/projects/farming-kindergarten-2/
This kindergarten is designed for the children of factory workers and has a continuous green roof that provides both food and gardening experience for the 500 pre-school children who go there.

**Latz+Partner — Duisburg Nord Landscape Park**
www.latzundpartner.de/en/projekte/postindustrielle-landschaften/landschaftspark-duisburg-nord-de/
This project transformed a disused industrial zone into a landscape garden. Walking paths now link previously disconnected sections of the landscape whether by actual, visual or imaginary links.

**Rebuild Foundation**
rebuild-foundation.org/site/archive-house/
Led by artist Theaster Gates, Rebuild Foundation are interested in how art and cultural development can impact on local neighbourhoods. The Archive House contains a micro-library and at least two world-class archives which otherwise might have been lost to the area. The foundation also houses Black Cinema House, which focuses on films by and about black people and the issues that affect their lives.

**Michael Rakowitz — paraSITE homeless shelter**
www.moma.org/collection/works/94026
paraSITE is a temporary shelter designed for homeless people which the artist Rakowitz hopes will become obsolete. It is designed as a protest not a solution, and uses the heat from the air ducts of the building it is attached to, hence its name. The first shelter Rakowitz designed was made from discarded materials, thereby making use of someone else's waste.

**Assemble — Folly for a Flyover**
assemblestudio.co.uk/
A disused urban space under a London motorway flyover that would normally have been passed through quickly or avoided was transformed into a public space and arts centre by Turner Prize winners Assemble. It was designed as a simple construction kit so people of any ability or experience could be involved in building it. The transformation of this in-between space was so successful the local council have decided to allow it to continue being used as an active public space.

**Public Works — R-Urban Wick**
r-urban-wick.net/
R-Urban Wick was a 2-year experiment in utilising a temporary urban site. It aimed to connect existing groups, create a network of participants and encourage the dissemination of knowledge through participation — its focus was on sustainable urban construction and recycling. Key ideas were around resilience, networks, production and consumption.

# CREDITS

This resource was developed by Dejan Mitrovic and Kidesign, Regan Koch, Sarah Carne, Emily Ballard, Year 8 students and teachers at Westminster Academy, North London and the Serpentine Education Team.

**Dejan Mitrovic**
Is a creative entrepreneur and founder of Kidesign, a London-based creative studio specialising in educational toys, games and activities for children. Kidesign aims to inspire the next generation of creative problem-solvers through its curricular projects with 3D design and 3D printing. Dejan also lectures in design, enterprise and sustainability at the Royal College of Art, Imperial College and City University (Cass Business School) in London.

**Regan Koch**
Is a Lecturer in Human Geography at Queen Mary University of London. His interests are in matters of urban public space, collective culture, and the representation and imagination of cities. Working between London and cities across the USA, his research has explored food-related trends, social entrepreneurship, regulation and changes in how we live together in cities. He is co-editor of *Key Thinkers on Cities* (Sage 2017, with Alan Latham, UCL).

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