

**FREETOWN  
YANGON  
HAVANA  
YOGYAKARTA  
BARRANQUILLA  
KAMPALA  
SAN JOSÉ  
DANANG  
DARESALAAM  
NAKHONSAWAN  
LIMA  
JAIPUR**

THE BARTLETT REVIEW 2019



Self-build housing programme community dinner  
in Nakhon Sawan, Thailand. Photographed for  
KNOW by David Heymann (2019).

## WELCOME

We're The Bartlett, UCL's global faculty of the built environment. We're here to build a better future.

Combining architecture and planning with disciplines such as energy and construction, heritage and public policy, we explore human spaces. Not just physical structures like homes, office blocks and cities, but the invisible structures that govern them.

By sharing our research with leading thinkers from industry, government and beyond, achieving true diversity of perspective and expertise, we can understand how these structures affect the way we live. And we can create a vision of a fairer and more prosperous society.

*The Bartlett Review*, published once a year, is 100-plus pages of groundbreaking thinking and research to have emerged from The Bartlett in 2019 and its impact on the world.

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## LETTER FROM THE DEAN

04

Professor Christoph Lindner, in his first letter as Dean of The Bartlett, says the faculty has a vital role to play in reshaping the built environment for a more resilient and just future.

## SHORT STORIES

08

School of Planning

### DEREGULATED AND DISREGARDED

10

School of Architecture

### PRESENT AND FUTURE ARCHITECTURE

12

School of Construction and Project Management

### SAFETY UNCONSCIOUS

13

Institute for Innovation and Public Purpose

### IT'S NOT ROCKET SCIENCE

14

Energy Institute

### BUILDING KNOWLEDGE

16

Institute for Environmental Design and Engineering

### HEALTHY DEVELOPMENT

18

Urban Laboratory

### WEAPONS OF MASS DISTRACTION

20

Institute for Sustainable Resources

### WHERE'S THE POLITICAL WILL?

22

Institute for Global Prosperity

### INDIGENOUS INNOVATION

## LONG STORIES



26

Development Planning Unit

### CO-CREATING THE CITY



34

Institute for Sustainable Resources

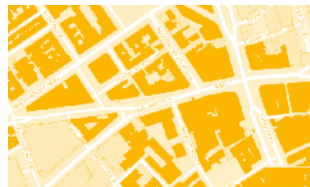
### PLASTIC PLANET



42

Institute for Environmental Design  
and Engineering

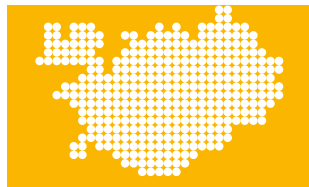
### DESIGNING OUT DISEASE



50

Centre for Advanced Spatial Analysis

### MAPPING HISTORY



58

Energy Institute

### PARADOX ISLAND



66

School of Architecture

### A DIFFERENT WAY OF SEEING

## ANATOMY



76

The Bartlett

### 100 YEARS OF THE BARTLETT



86

The Bartlett

### THE EDGE OF TOMORROW



94

The Bartlett

### THE BARTLETT IN NUMBERS 2019

## ESSAYS X 8

### SPECIAL SUPPLEMENT

Enjoy 20 pages of radical thinking from across The Bartlett, including: Laurie Macfarlane on the role of mission-oriented national investment banks in industrial strategy; Jacqui Glass on transforming the construction sector; Kalliopi Fouseki on how heritage contributes to sustainable development; Yolande Barnes on why the fifth age of cities will be a lot like the

first age; Julia Tomei on the lessons that can be learned from Colombia's approach to energy access; Sarah Bell makes the case for applying co-design methods to infrastructure; Andrea Rigon and Alexandre Apsan Frediani on the work of the Sierra Leone Urban Research Centre in transforming informal settlements; and Ilias Krystallis reflects on his time working with the UK government's Grand Challenges team.

*“When designing such ambitious policy programmes and goals, we need to acknowledge exogenous uncertainty and embrace flexibility”*

## 08 Fit for the future

### **Tackling the UK government’s four Grand Challenges requires governance structures able to cope with uncertainty over the next three decades.**

It’s been two years since the UK’s Industrial Strategy set out four Grand Challenges: artificial intelligence and data, ageing society, clean growth and the future of mobility. During the first half of 2019, I was seconded to the Grand Challenges team, but it is only recently that I noticed the small print on the cover of the strategy white paper – under the main title it states: “Building a Britain fit for the future”. Those who have expertise in design and construction contracts will be alarmed by the word “fit”. Consultants and contractors are likely to step away from projects, independent of size, if the contract includes this clause, whether it’s a 117-kilometre South-east railway line (Crossrail) or a low-cost rural footbridge in Hull.

Contractors would usually agree to deliver a “fit for purpose” engineering project, by meeting the employer’s demands and design specifications. But a legal obligation to deliver a project that is fit for purpose when completed is a tough commitment. How can the government deliver such an ambitious plan? What governance structures need to be in place to address the Grand Challenges? Given the 30-year-plus year span of the strategy, how will these processes evolve and be optimised to remain fit for the future?

The Grand Challenges programme has developed and grown across government over the past two years and new layers of governance are evolving. To ensure they are optimised for programme delivery, I spent six months working with the team to evaluate where improvements could be made to ensure programme governance is used effectively to streamline and support decision-making.

Recent research suggests that, to successfully deliver policies to meet the Grand Challenges, new governance structures within the public sector are needed. A report by the UCL Institute for Innovation and Public Purpose (IIPP) emphasises that these governance forms should enable cross-sectoral and cross-institutional

co-ordination. Over a 30-year-plus timeline, it is unlikely that the government structure will remain unchanged. That is why a certain degree of flexibility and adaptability is required.

Academic literature asserts that where technological and market uncertainty is very high, organisations are better off adopting governance forms that are reversible and involve a low level of commitment. When uncertainty has decreased, then organisations can shift towards governance forms that are less reversible and more hierarchical.

It is this approach that the team took to support delivery of the Grand Challenges across government. Having a central team based in the Department for Business Energy and Industrial Strategy in the role of asset orchestrator, set the pace for these developments. This role involves identifying the critical assets and investing in them, and then developing a governance form along with a means for their effective use. The team displayed astute decision-making and entrepreneurial capacity by optimising the configuration of the governance forms of the Grand Challenges programme.

The team first initiated discussions within its own department and with cross-governmental departments to identify efficiencies regarding strategic implementation. This resulted in reconfiguration of the existing governance around decision type, instead of hierarchical formation to reach the appropriate actors, such as the Cabinet Office. It then redefined the remit, roles and decision-making abilities of stakeholder boards involved in the programme. It also streamlined interactions with other Industrial Strategy structures internally to enable the possibility for resolution on strategic matters. It established a clear process to engage and seek expertise from non-programme stakeholders, such as UKRI and the Industrial Strategy Council. Finally, it created a Grand Challenges board to provide strategic direction on cross-cutting issues across government. The board would decide how and when to escalate strategic matters through the governance structure, and to oversee the progress of the programme. Ultimately, this governance structure intertwines cross-sectoral and cross-institutional co-ordination effectuating systemic innovation.

When designing such ambitious policy programmes and goals, we need to acknowledge exogenous uncertainty and embrace flexibility. This grants a trade-off between efficiency and effectiveness, yet is necessary for future-proofing and ensuring policy development copes with change of strategic direction. From the outset, the Grand Challenges team shifted away from traditional management functions such as control, supervision, and administration. Instead, the Grand Challenges programme can sustain trade-offs such as flexibility, entrepreneurship, adjustment and adaptation by implementing new combinations and co-alignment of assets. By doing so, it will be able to cope with uncertainty and change and deliver its mission, even if the Grand Challenges alter or evolve in the future.