

## Inspired by nature



27<sup>th</sup> June 2017

### Research gaps

At this meeting the three speakers discussed different ways of reimagining and reinvigorating our relationship with the natural environment. This was considered through the incorporation of creative green spaces into urban settings, optimising the benefits obtained from different types of green spaces and improving our understanding the way the natural environment interacts with different aspects of wellbeing.

[Andrew Grant](#) stated that the challenge of creating green spaces in our future cities involves a fusion of our creative energy with our understanding of science and nature. Influenced by David Hockney's idea of 'New Ways of Seeing, New Ways of Feeling' he suggests we relook at the common world and our ways of doing things to create infrastructure that both showcases new technologies and brings a sense of wonder through nature. He has four headlines from his time in landscape architecture, particularly the 'supertrees' project in Singapore. First, everything must be turned on its head; in Singapore the idea of the 'city in a garden' informs everything from education to roads, and this can be done in other cities. Second we must 'rewire' our city aesthetics so that cities give us surprises and a diversity of natural experience whilst fulfilling their function. Third, a new vocabulary and language needs to be created that bridges the divide between engineering and aesthetic. Finally how can we communicate these ideas to children and allow them to reconnect with nature through visionary propositions of green spaces.

[Dr Ross Cameron](#) considered the question of how the quality and functionality of green spaces can be optimised, while recognising that quality would mean different things to different people. It is accepted that green spaces promote health and wellbeing but they are not equally effective or accessible for all members of society. Similarly, not all green spaces are equally restorative. Research is needed into why this is and how to encourage engagement with nature. Green spaces must also be multifunctional and must provide ecosystem services such as mitigating heat island events, capturing flood water, reducing energy usage of buildings through passive cooling and enhancing urban biodiversity. A key challenge is our approach in obtaining all these benefits: should there be a blend of different landscape topologies across the city spectrum or an attempt to create one all-encompassing space?

[Professor Felicia Huppert](#) focused on a definition of wellbeing as eudaimonic (which focuses on meaning and self-realization and defines well-being in terms of the degree to which a person is fully functioning ) rather than hedonistic (which focuses on happiness and defines well-being in terms of pleasure attainment and pain avoidance). She suggested five broad categories make up this holistic view of wellbeing: engagement and interest in the world; a sense of competence and self-esteem; optimism and autonomy; resilience and emotional management; and, crucially, relationships and connectedness. Policy should target the areas that of wellbeing that need improvement as it varies from population to population. This is demonstrated by the biannual European Social Survey, which shows that different country profiles can still have identical measures of life satisfaction. To understand how the natural environment interacts with these different aspects of wellbeing multi-dimensional and mixed-methods approaches with appropriate and robust controls are crucial, and in this way researchers can make a case for the cost-effectiveness of preserving the natural environment.

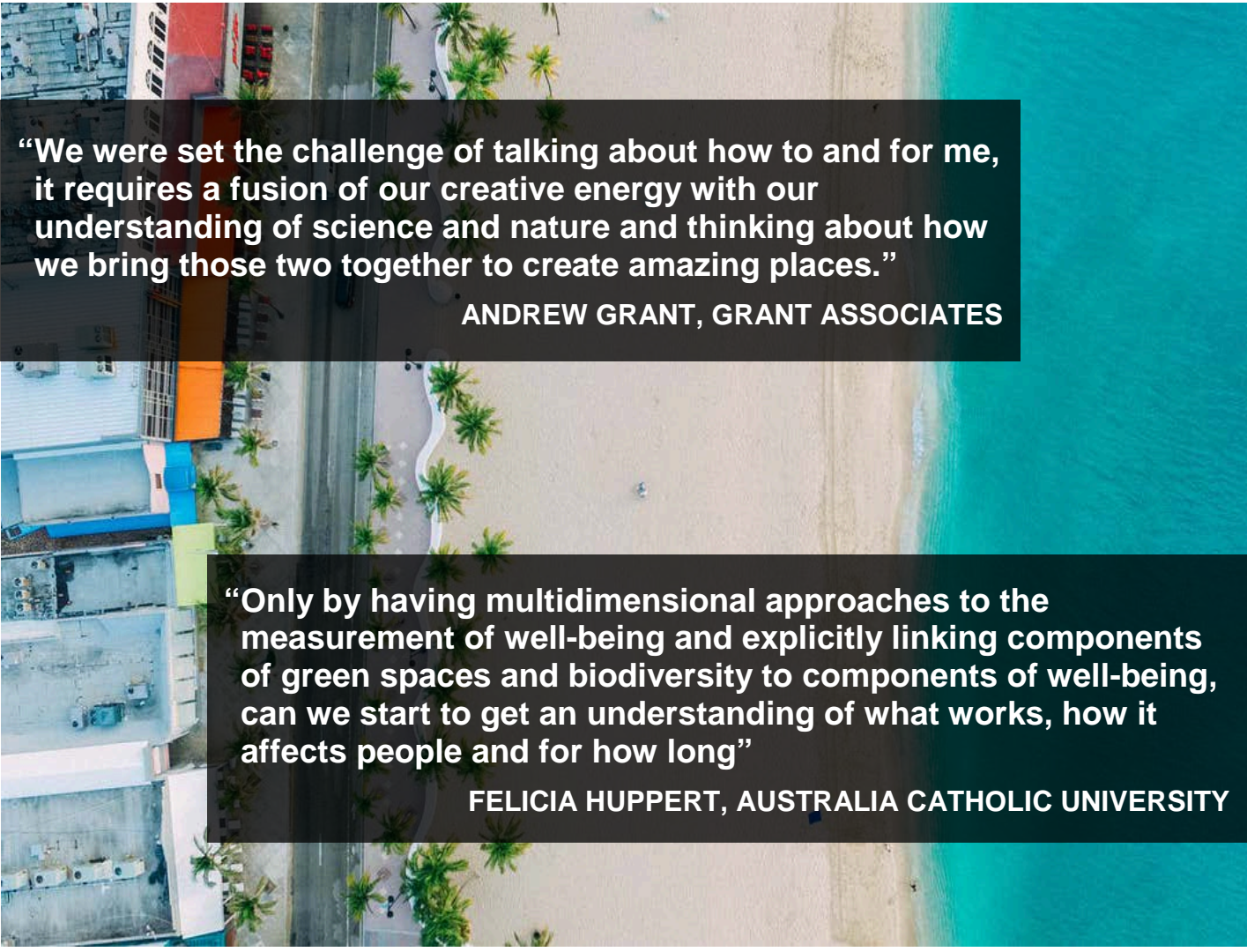
## Wicked problems and questions generated by the open discussion

**How can we encourage engagement with green spaces in the general public?** There are a number of different forms of engagement, whether that is through activism, creating scenarios where local councils communicate more effectively with people or changing the culture whereby management of green spaces is considered as someone else's problem. People have strong concern about protecting green spaces around their local area, but a limited ability or desire to actively participate in that process.

**How can we create educational systems that encourage children to interact with nature?** In some senses we should focus not on rewilding nature, but rewilding people and relearning to engage with natural phenomena on an instinctive level is something that must happen at childhood and continued through adulthood. Getting children to interact with nature can be problematic in an increasingly risk-averse society, and educational facilities need to be empowered with the resources, and an understanding of the benefits, to educate children in natural environments. Researchers need to make the case for accepting any risks by countering with evidence concerning Strategies for children now will also help to create long-term leadership on the issue in the future.

**How do we reconcile the conflict between aesthetic appeal and functional requirements of urban green spaces?** Currently green spaces in cities tend to focus on the aesthetic rather than an evidence-based idea of what is needed for that particular area of a city. It is important to factor into design the significance of things that we do not directly perceive such as air, noise and light pollution or the beneficial effects of microbes on our wellbeing.

**Which is more important, protected areas of wilderness outside cities that can be visited or green spaces within an urban setting?** Whilst the day-to-day benefit of green spaces should not be underplayed, as it effects your daily quality of life, this does not mean we should assume that we can do without completely natural areas. We do not want to risk our culture becoming completely divorced from our natural habitat as there has never been a species that does not need this to survive.



**“We were set the challenge of talking about how to and for me, it requires a fusion of our creative energy with our understanding of science and nature and thinking about how we bring those two together to create amazing places.”**

**ANDREW GRANT, GRANT ASSOCIATES**

**“Only by having multidimensional approaches to the measurement of well-being and explicitly linking components of green spaces and biodiversity to components of well-being, can we start to get an understanding of what works, how it affects people and for how long”**

**FELICIA HUPPERT, AUSTRALIA CATHOLIC UNIVERSITY**

**Who takes leadership on these issues?** It is important to remember that politicians do not design buildings, designers design buildings. Thus, the constituency of who chooses the design of buildings is very small, and we need to find ways of encouraging the new generation of designers to expand our aesthetic viewpoint. The same can be said for management of urban plant ecology. Wild gardens were previously considered weeds, but this understanding shifted quickly once their importance for biodiversity was understood.

**Is it more important to design new spaces or rework existing spaces?** Both pose challenges. The former requires a high level of investment to deliver the required quality, and the latter has to confront certain ideological attachments. However, it was suggested that one of the biggest opportunities in the UK is that of reinventing streets in every city so that they work for health, wellbeing and ecosystem services.

**What kind of green space is most appropriate?** The key response to this is that a diversity of spaces is required, and the challenge is offering enough different types of spaces to each population catchment, so that people have the opportunity to derive different benefits from different areas.

**How can we generate more evidence about the exact benefits of different types of green spaces on different populations?** We need to use multi-method approaches rather than hope for a optimised evidence gathering process. Controlled experiments, social survey data, serendipitous data collection exercises and so on should all be considered. It is incumbent on researchers to present evidence that policymakers and individuals can use to create better green spaces.

## Witness profiles

### Andrew Grant

Founding Director, Grant Associates

Andrew formed Grant Associates in 1997 to explore the emerging frontiers of landscape architecture within sustainable development. He has a fascination with creative ecology and the promotion of quality and innovation in landscape design. Each of his projects responds to the place, its inherent ecology and its people. In 2012 Andrew was awarded the title of Royal Designer for Industry (RDI) in recognition of his pioneering global work in Landscape Architecture and is also a Visiting Professor for the Department of Landscape, University of Sheffield, UK. Andrew led the design team on the £500 million Gardens by the Bay project at Bay South in Singapore. The 54 hectare park explores the technical boundaries of landscape and horticulture in an Asian city and won the Building Project of the Year Award at the 2012 World Architecture Festival.



### Dr Ross Cameron

Senior Lecturer in Landscape Management, Ecology & Design at the Department of Landscape, University of Sheffield

Ross is a landscape horticulturalist specializing in the use and value of landscape plants. His current research interests centre around green infrastructure and climate change mitigation, with a strong emphasis on providing recommendations on plant species choice with respect to eco-system function (city cooling, thermal insulation, flood tolerance, biodiversity enhancement, etc.). He is also interested in the impacts of climate change on urban plantings and in identifying those plant species robust enough to tolerate urban conditions (both current and future), whilst meeting their specifications for performance. He recently published a book with James Hitchmough reviewing the pros and cons of different management approaches for public green spaces entitled *Environmental Horticulture – Science and Management of Green Landscapes*.



### Professor Felicia Huppert

Emeritus Professor of Psychology and Director of the Well-being Institute at the University of Cambridge; Professor at the Institute for Positive Psychology and Education at Australian Catholic University

Felicia is internationally renowned for her work on the science of wellbeing and the promotion of human flourishing. Her work is unusual in that it brings together traditional approaches from cognitive psychology and neuropsychology with a population perspective derived from epidemiology. Working with outstanding colleagues across a variety of disciplines she has been able to integrate her work on wellbeing with an understanding of underlying physiological mechanisms, gene-environment interactions, and the role of the social context. Felicia also advises governments and international bodies on the measurement of and policies to enhance wellbeing. Her research examines the causes and consequences of wellbeing, using data from large population samples, longitudinal cohorts, and intervention programs.

