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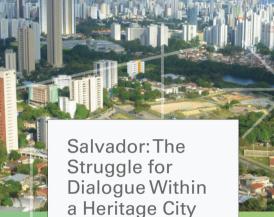
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Inside front cover: Parisópolis São Paulo 2011. © Tuca Vieira

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EDITORIAL

HELEN CASTLE

A country on the eve of the Olympic and Paralympic Games is a country on the brink: most often on the threshold of resounding success or failure. An international event like no other, the Olympic Games makes the host nation the sole focus of the world's media attention for its brief duration. The global broadcasting of luscious images of the host country, its cities and its sporting venues can make it the magnet for international commerce and tourism for years to come, or it can make a government the subject of ridicule at home and abroad; as with Athens 2004, where the billions spent on the Games is widely attributed to having added to national debt and Greece's mounting financial troubles.

Though the jury is still out at the time of writing for Rio 2016, the Games has provided the vital opportunity for Δ to take the barometer to Brazil and to reflect on the widespread phenomenon of urban transformation that has taken place across the country in the run up to the Olympics and the 2014 FIFA World Cup. Hattie Hartman, Sustainability Editor of the Architects' Journal, is uniquely placed to guest-edit this issue. With a background in urban design, she spent two years early on in her career working in Brasília. Continuing close family ties with Brazil has afforded her not only a mastery of the language, but ongoing contact with the architectural community. For this issue, she assiduously sought out Brazil-based contributors who coherently cover the theme. The spotlight is on significant aspects such as urban planning, landscape design and sustainable development, but also on different cities in turn: Rio de Janeiro, São Paulo, Brasília, Recife, Salvador and Curitiba. Articles highlight the distinct characteristics of each city, which vary greatly according to their cultural, climatic, political and social make-up. This pieces together a variegated picture of Brazil city to city, in terms of treatment of public space and the approach to housing provision and the upgrading of the favelas – with municipal authorities' handling of planning and development ranging from the exemplary, as at Curitiba, to the often muddled and inconsistent.

As highlighted by Hattie in her introduction to the issue, the image that emerges of Brazil in 2016 is not the optimistic vision that was anticipated five years ago when the country worldwide was being touted as a booming economy with its burgeoning market of middle-class consumers. For the last two years the economy has contracted and there have been popular protests that have sharpened the public's appetite for an urban agenda that delivers greater social equality. What is apparent at the beginning of this Olympic year is that there is much to learn from Brazil's moment on the world stage, from both the most innovative urban initiatives and lost opportunities alike. \triangle

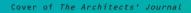
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London 2012: Sustainable Design
- Delivering a Games Legacy

John Wiley & Sons

2012

This comprehensive assessment of the sustainable design platform that informed the London Olympic and Paralympic Games examines the masterplanning and landscape of the Olympic Park as well as the detail design of the permanent and temporary venues to draw out best practice lessons from London's Olympic experience.



22 March 2007

The restoration of Oscar Niemeyer's 1958 Palácio da Alvorada (Palace of Dawn), the official residence of the Brazilian president in Brasilia, was the subject of a building study in *The Architects' Journal* by Hattie Hartman.

Cover of The Architects' Journal

28 February 2013

Edited by Hattie Hartman, this is the AJ's annual issue dedicated to green design. The cover features John McAslan + Partners' Olympic Energy Centre in the Queen Elizabeth Olympic Park, London, 2012.

Atelier Ten

Invisible Architecture

Laurence King

2015

Edited by Hattie Hartman, AtelierTen's 25th-anniversary publication is a thought leadership primer in environmental engineering.



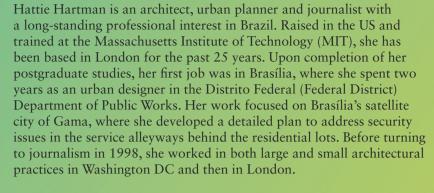






ABOUT THE GUEST-EDITOR

HATTIE HARTMAN



Over the years, Hattie has made numerous trips to Brazil, interviewing Oscar Niemeyer in 1998 when he received the RIBA Gold Medal, and Paulo Mendes da Rocha in 2006 when he was awarded the Pritzker Prize. In 2007, she visited Niemeyer's 1958 presidential Palácio da Alvorada (Palace of Dawn) shortly after it had been refurbished, which she documented in a building study for the *Architects' Journal (AJ)*.

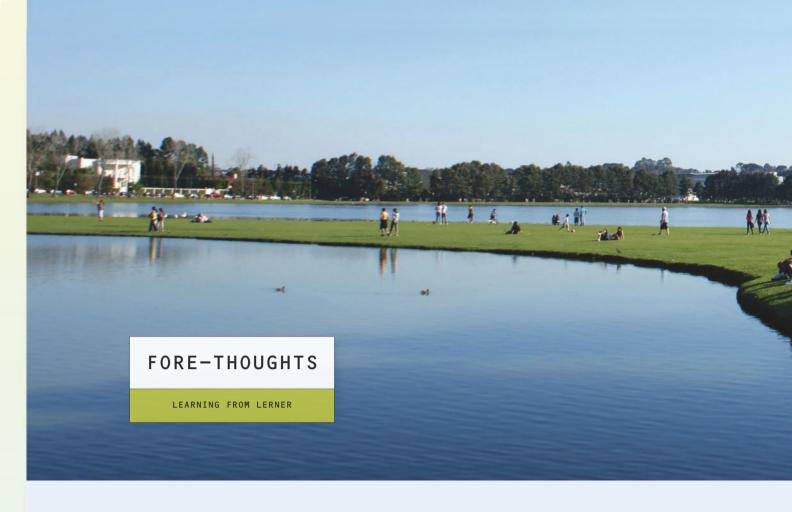
Hattie is sustainability editor at the AJ, a position she created in 2008 after joining the journal's editorial team 10 years ago. She is responsible for its dedicated coverage of sustainable design in the built environment and maintains close relationships with leading practitioners in this area both in the UK and abroad. She lectures widely on mainstreaming green design and various technical aspects of sustainability, and brings this perspective to this issue of Δ D devoted to Brazilian cities.

Hattie's work at the AJ led to a commission to author an insider account of the sustainable design approach that underpinned the London 2012 Olympic and Paralympic Games. Prior to the Games, when there was a strict press embargo, she interviewed more than 50 architects, designers and Olympic Development Authority staff for her book London 2012: Sustainable Design (John Wiley & Sons, 2012).

Most recently, Hattie has edited environmental engineers Atelier Ten's 25th-anniversary monograph, *Invisible Architecture* (Laurence King, 2015). Her forthcoming book *Energy, People, Buildings* for RIBA Publishing, co-authored with Judit Kimpian and Sofie Pelsmakers, is due to be published later this year. In addition to her ongoing role at the *AJ*, her work has been published in the *Financial Times*, *New York Times*, *Architectural Review*, *Architectural Record*, DOCOMO and *Building Design*.

With this title of \triangle , prompted by Rio de Janeiro's hosting of the Olympic and Paralympic Games this year, Hattie set out to explore the notion of the public realm in Brazilian cities, a concern often brushed aside in metropolises faced with urgent issues such as housing, sanitation and transport. Brazil's challenging economic context and recent 'right to the city' street demonstrations make this issue of \triangle particularly timely. \triangle





Brazil is often portrayed as 'the country of the future'. This constant refrain, initially penned by the Austrian writer Stephan Zweig in the 1940s, has reverberated in the country's imagination for decades and was even cited by President Obama during his official visit in 2011.

With its sheer size, mosaic of cultures united under one national identity and abundance of natural resources, Brazil has so often seemed poised to succeed. It is the fifth largest country on the planet and as the largest exporter of agricultural products behind the US and the European Union, its seventh largest economy. A history that merges indigenous peoples, Portuguese colonisers, African slaves and successive waves of immigrants from many parts of the world makes for a rich cultural mix.

Earlier in this decade, it seemed like the future had arrived after all. From a peak inflation rate of almost 2500 per cent in 1993, Brazil experienced single-digit annual inflation for most of the next two decades, underpinning a period of strong economic growth and income distribution. The country's GDP increased from around US\$550 billion in 1994 to U\$\$2.4 trillion in 2014. Brazil seemed poised for these potentials to flourish and translate themselves into quality of life for its population. Hosting global events such as the 2014 FIFA World Cup and the 2016 Olympic and Paralympic Games seemed like the consolidation of this new status.

And what about our cities? Despite having roots in colonial times, urbanisation in Brazil only started to really gain momentum in the 1950s and followed a very steep curve. We experienced several decades of rapid population increase that was channelled into cities. In 1950, only 36 per cent of the roughly 52 million Brazilians lived in cities. By 2014, 85.43 per cent of the more than 202 million of us are urban dwellers.

Initiatives to manage this growth through public policies were captained by all levels of government (federal, state, municipal), but it was, more often than not, an overwhelming task. Brazil's metropolitan areas expanded without any guiding structure, accumulating deficits in basic infrastructure, public transportation, social housing and public spaces, often to the detriment of environmentally fragile areas. New legislation such as the federal Estatuto da Cidade (2001) reinforced the 'toolkit' municipalities had at their disposal to implement planning policies, but legislation alone did not effect much change.

In this context, Curitiba is a city that stood out, demonstrating since the late 1960s that simple solutions and the political will to implement them could translate into important gains in quality of life. Giving pride of place to people over cars, Curitiba transformed the main commercial street in its historical centre into a pedestrian zone. Also, with the creation of dedicated bus lanes, which evolved to become what over 200 cities worldwide nowadays know as bus rapid



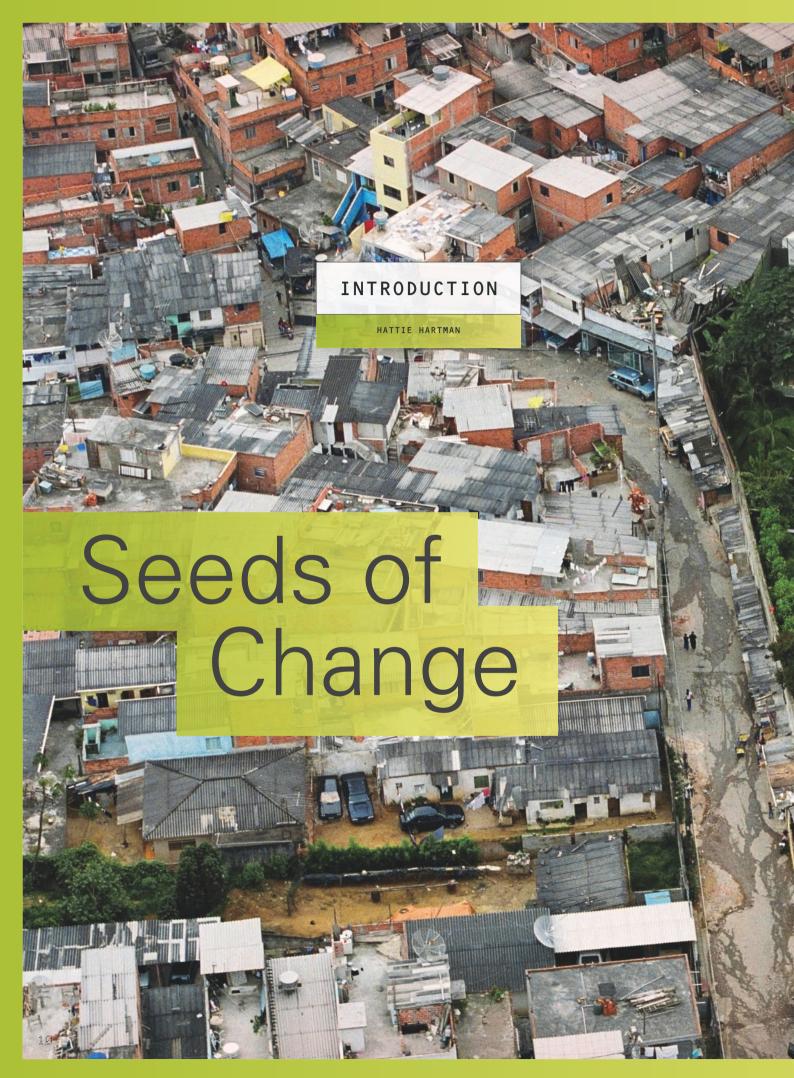
transit (BRT), Curitiba put in place an integrated transport infrastructure, unique among Brazilian cities. The city also pioneered environmental solutions that worked with nature, not against it, preserving rivers and their margins as elements of its drainage systems and cherishing natural areas as public parks. Having had the fortune to be mayor of Curitiba three times (1971–5, 1979–84 and 1989–92), I had the honour of participating in these processes.

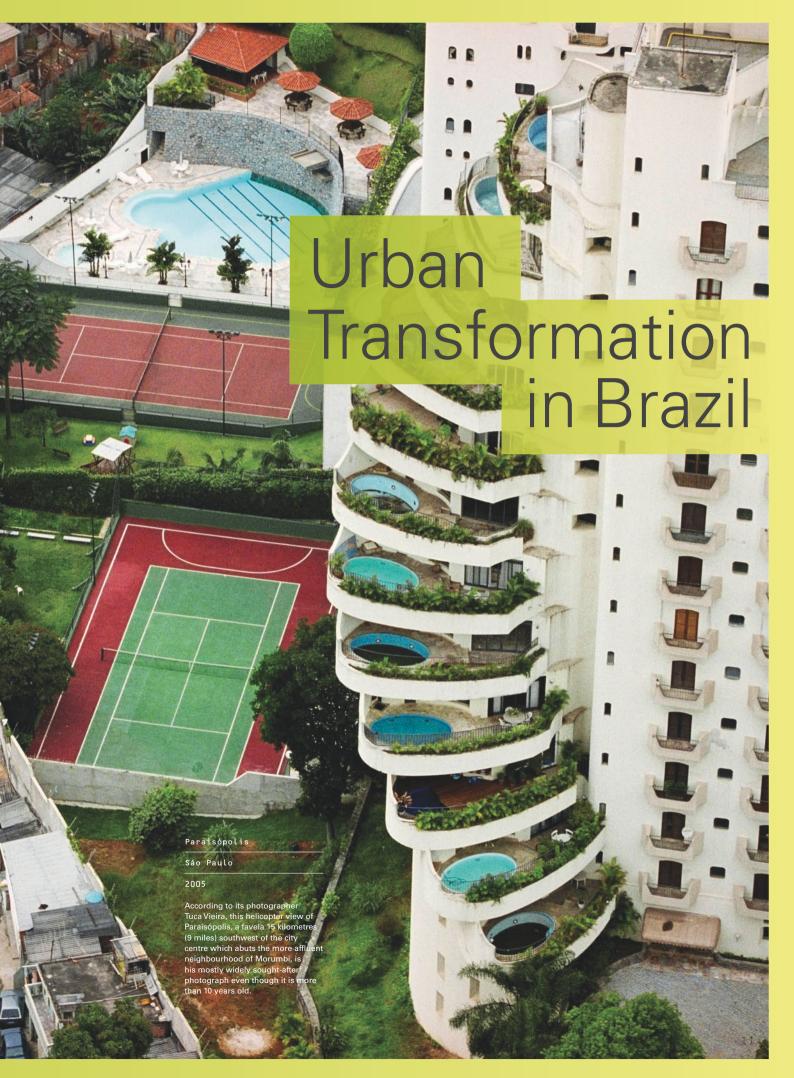
Despite its tremendous potential, Brazil is also a country of missed opportunities. The positive economic trajectory peaked in 2010 and the anticipated legacy for the 12 FIFA World Cup host cities did not bear fruit. City management, overall, is having a hard time establishing scenarios capable of directing society's efforts towards better urban environments. Time and effort is focused on extensive diagnoses and we still fail to correctly identify the problems and act upon them. Mobility issues are not solved by widening roads. Social housing provision is not solved by creating isolated, single-use projects on the urban periphery detached from city life. Safety is not addressed by gated communities with high walls and armed security. Drainage and water quality are not improved by channelling rivers. Misguided initiatives, such as the Minha Casa Minha Vida (MCMV – My House, My Life) housing programme, addressed the critical issue of housing availability, but more often than not delivered projects that were disconnected from jobs, public transit, leisure and cultural activities. A city is – or should be – an integrated structure of life, work and movement.

Lack of leadership and increased bureaucracy are fed by the illusion that consensus is needed (or even possible) every step of the way before action. One could argue that democracy is the good administration of conflicts, of differences, of diversity. This combination of factors has caused a state of near paralysis in many of our cities. And in the lack of a clear development structure for a city, things happen according to other (il)logics. Mobility is an ever-increasing problem.

Yet Brazil's city dwellers – as recent demonstrations across the country show – are starting to pay more attention to politics and the quality of city life. And happily, some cities are rising to the many challenges they face. Rio de Janeiro is reclaiming its harbour by tunnelling a 7-kilometre (4-mile) long elevated highway to make way for pedestrians and public transit, and it is improving its mobility network with new BRT corridors. Cities are becoming more aware of the importance of the human scale and creating more spaces for pedestrians and bicycles, as can be seen in São Paulo's pocket parks and cycle lanes. Recife has developed an ambitious proposal to recover its Capibaribe River.

I am, thus, an optimist, and I believe that cities are not problems – they are solutions. $m{\varpi}$





An aerial view of São Paulo favela Paraisópolis by photographer Tuca Vieira has been repeatedly reproduced for more than a decade to convey the inequalities of Brazilian – and global – cities. It generated more than 360 comments on Facebook (initially unbeknownst to the photographer) and featured on a banner in Tate Modern's Turbine Hall during a 2007 exhibition on 'Global Cities'.

Vieira's plunging aerial view of swimming pools and tennis courts separated by a thin wall from the adjacent favela has been widely published because it epitomises the stark inequality of Brazil's cities. It is impossible to write about Brazil – or its cities – without tackling inequality. This issue of \triangle explores the public realm in Brazilian cities, places which – like the beaches that line its coastline of over 8,000 kilometres (5,000 miles) – are accessible to all.

This focus on urban design is distinct from the country's exceptional tradition of modern architecture, about which countless tomes have already been written. Brazil's architectural discourse has been largely dominated by its two Pritzker Prize winners – Oscar Niemeyer and Paulo Mendes da Rocha. However one exception is the recent resurgence of interest in Lina Bo Bardi, sparked by the centenary of her birth in 2014 and marked by several publications and exhibitions. Yet surprisingly little – until the last five years – has been written in English about Brazil's other established or younger emerging architects. Likewise, much has been written about Brazil's favelas, but little of a more general nature about Brazilian urbanism and public space.

The historical centres of many Brazilian cities – from the backstreets of Rio's Glória and Santa Teresa neighbourhoods to Belém's mango-tree-lined avenues, and even some of Brasília's residential *superquadras* – have a strong sense of place. That civic sense, places where Brazilians from every walk of life experience the city, is the subject of this issue.

Why Brazilian Urbanism Now?

This issue of \triangle was conceived five years ago in the frenetic run-up to London's own Olympic and Paralympic Games. Brazil was experiencing a period of rapid growth driven by a surge in commodity exports to Asia and following the discovery of offshore oil in the Santos basin 260 kilometres (160 miles) off the coast of Rio de Janeiro. The spotlight was on Brazil as the next host country for both the FIFA World Cup in 2014 and the 2016 Olympic and Paralympic Games, which will run from 5 to 21 August and from 7 to 18 September respectively.

Upon being named to host the next Olympics in 2009, Rio embarked on a multitude of transformative construction projects unseen in the city since Brazil's capital was relocated to Brasília in the 1960s. Simultaneously, many of the World Cup host cities undertook the restructuring of their stadia, airports and transport connections to accommodate international visitors. It is these transformations that this issue of \triangle sets out to explore.

The combination of sporting mega-events and economic boom (and post-2008 recession in Europe and America) suddenly made Brazil, and Rio in particular, a magnet for international architects and students. The UK Trade & Investment (UKTI) government department led trade missions to Brazil with a specific focus on the construction sector, and the September 2012 delegation led to £140 million in contracts for UK companies related to the World Cup and Rio 2016.²

In Rio, the opaquely named Museum of Tomorrow (Museu do Amanhã) by Santiago Calatrava was completed in 2015, and Diller Scofidio + Renfro's Museum of Image and Sound (Museu da Imagem e do Som) will be this year. Foster + Partners and Perkins + Will established offices in São Paulo in 2012, and both are undertaking projects as part of the regeneration of Rio's Porta Maravilha.

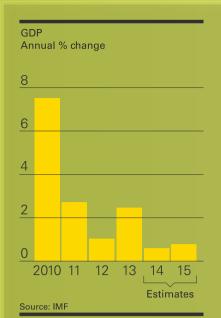


Chart of annual percentage change in Brazil's GDP

2009-15

Since 2009 when Rio was announced as the host city for the Olympic and Paralympic Games 2016, Brazil's economy has experienced a severe decline. Source: International Monetary Fund: http://data.imf.org/?sk=dac5755f-a3bb-438a-b64f-67c687e2cfd5&sld=1390030109571.

Exchange rate of Brazilian Real to US Dollar as of 1 October (Annually)

8



Source: Federal Reserve System, USA.

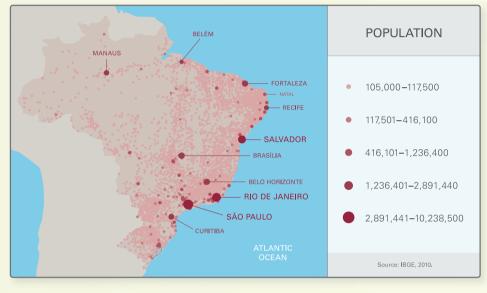
Chart of Brazilian real to US dollar exchange rate

2009-15

The value of the Brazilian real has dropped year on year against the dollar since 2009. Source: Board of Governors of the Federal Reserve: www.federalreserve.gov/releases/h10/hist/dat00_bz.htm.







Perimetral (Perimeter Road)

Porto Maravilha

Rio de Janeiro

2014

above: The Perimetral, an elevated highway in the city's port area regeneration zone, is being replaced by tunnels in order to link an area of 19th-century warehouses to the waterfront. The staging of a carnival celebration on the remaining segment of the Perimetral prior to demolition conveys the project's symbolic significance.

Map of Brazil's urban settlement pattern left: Brazil's largest cities and the majority of its population of over 203 million people are concentrated in the coastal region. The transfer of the capital from Rio de Janeiro to Brasilia in the 1960s was a deliberate attempt to populate the country's interior, and Brasilia is today the country's third largest metropolitan area.

New York's Columbia University established Studio X in Rio – Praça Tiradentes in the city centre – in 2011 as a forum for professionals, academics, policy makers and students to debate the city's most urgent issues, and universities including Harvard, ETH Zurich, the Architectural Association (AA) and London Metropolitan took groups of students to both Rio and São Paulo, often to study the informal city.

This influx of international architects has caused tension with Brazil's own talented designers and has resulted in iconic projects that contribute little to addressing social inequity in the city and have a questionable impact on the public realm. Rio's Olympic story, as documented in the pages of this issue, is not a happy one. The explosion of projects and international interest in the city has not resulted in interventions on a par with Roberto Burle Marx's Aterro do Flamengo (Flamengo Embankment) (1965), a linear park built on landfill that remains a heavily used sports and recreational area to this day.³

A Country of City Dwellers

Despite Brazil's vast size, over 85 per cent of its population today lives in cities and almost half of those live in 22 metropolises of over a million people.⁴ Whereas previously urban growth had been ad hoc (with the significant exceptions of Brasília and Curitiba – more on both of these cities later),

preparation for the World Cup in 12 cities across the country in 2014 and for the Olympic and Paralympic Games in Rio in 2016 changed that.

A new appreciation of the public realm focused attention on enhancing existing monuments and heritage buildings and addressing the needs of the country's burgeoning middle class. Ambitious favela upgrade programmes were launched, including the high-profile Morar Carioca (Carioca Living) competition supported by Rio's Institute of Brazilian Architects. Projects by Herzog & de Meuron, Santiago Calatrava, Diller Scofidio + Renfro and Foster + Partners have brought an external perspective to Brazil's urban challenges and heightened interest in the country from architects and urban practitioners abroad.

The main focus of this issue of \triangle , though, is on urban design interventions and architectural projects that represent a distinctly Brazilian approach and contribute to a strong sense of place in their respective cities: Salvador is as different from São Paulo as they are both different from Brasília. Other themes highlighted include the integration of landscape design in urban planning, a nascent interest in sustainable design, and community interventions that seek to address the enormous disparity between the lives of the country's rich and poor.