

The Globalisation of Modern Architecture

The Globalisation of Modern Architecture:
The Impact of Politics, Economics
and Social Change on Architecture
and Urban Design since 1990

By

Robert Adam

CAMBRIDGE
SCHOLARS

P U B L I S H I N G

The Globalisation of Modern Architecture:
The Impact of Politics, Economics and Social Change on Architecture
and Urban Design since 1990,
by Robert Adam

This book first published 2012

Cambridge Scholars Publishing

12 Back Chapman Street, Newcastle upon Tyne, NE6 2XX, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Copyright © 2012 by Robert Adam

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-4438-3905-1, ISBN (13): 978-1-4438-3905-1

Sarah

TABLE OF CONTENTS

List of Illustrations	xi
Preface	xvii
Where We Are Today	1
Architecture, Urban Design, Politics and Economics	
Part I: Setting the Scene	
A: A Short History of Globalisation and Architecture from 500 BCE to 1939 CE	7
Empires and Birth of Faith-Based Styles.....	7
European Discovery and the Enlightenment	10
Colonisation and the Spread of European Culture	13
The First Great Globalisation	16
Nationalism, Internationalism and the Birth of Modernism	19
B: The New World Order 1945 to 1992: Global Commerce, Politics and the Triumph of Modernism	29
Establishing Global Institutions	29
The Cold War and Victory of Modernism	33
The Golden Age of Capitalism and Heroic Modernism	44
The Breakdown of the Post-War Consensus and a Crisis of Confidence in Architecture	49
Western Recovery and the Fragmentation of Architecture	57
Setting the Stage for the Global Economy	66
Part II: The New Global Era and the Global Elite	
The End of the Cold War and the Dawn of the New Global Era	75
The Social and Cultural Impacts of Globalisation	80

The Supremacy of the North-Atlantic Economies.....	87
Architectural Practice and the Response to Global Opportunities ..	89
Architects and the Transnational Capitalist Class	97
Cities and the Global Elite.....	100

Part III: How Globalisation Makes Things the Same

The New Structure of Global Trade	109
A Transformed Political Landscape and the Global City	116
The Universal Trading City	121
Reflexive Modernism.....	123
The Symbolism of the Global City	129
The Global Suburb	133
Deterritorialisation and the Non-Place.....	138
Consumerism, the Globalisation of Markets and Branding	144
Tourism Redefined and the Branding of Cities	153
The Birth of the Iconic Building and the Bilbao Effect.....	159
Iconic Architecture: Practice and Theory.....	166
Star Architects	177
Global Architects.....	183

Part IV: How Globalisation Keeps Things Different

The Breakdown of the Nation State and Revived Identities	195
Cultural Rights and the International Response	200
Identity Politics and the Complexity of the Global Condition.....	203
Personal and Social Identity	206
‘Glocalisation’ and New Trading Conditions	211
The Local and the Global in Environmentalism	214
Critical Regionalism: the Modernist Response to Localism	218
Sustainability and Locality	224
Identity and Reflexive Modernism	233
Contextual Urbanism	240
Traditional Architecture	256

Conclusion: The End of the Era, What Now?

The Present and the Future	277
The 2008 Bank Crash and End of North Atlantic Supremacy	278
Power Moves East	283
Changing Global Priorities	287
Urban Crisis in the Emerging Economies.....	293
Iconic Architecture Reassessed	299
Indigenisation and Hybridised Returns.....	305
The Next Modernism?	315
Index	323

LIST OF ILLUSTRATIONS

1. Roman Doric Column York, Northern England
Photograph Jamie Adam
2. Roman Doric Column, Leptis Magna, Libya
Photograph author
3. Convento de São Francisco, Olinda, Brazil
Photograph author
4. Drayton Hall, South Carolina
Photograph author
5. Gateway of India, Mumbai
Photograph author
6. Technical College Building; Leningrad
7. Musée d'Art Moderne de la Ville de Paris
8. Luftgaukommando, Dresden
9. Crown Hall, Illinois Institute of Technology, Chicago
Photograph © Jeremy Atherton 2006
10. Opera House, Leipzig
Photograph author
11. US Embassy, Athens
Printed with permission of Sotiris N Papadopoulos OMADA 80
12. Conrad Hilton in front of model of Istanbul Hilton
Printed with permission of the Hilton Hotel Group
13. Legislative Assembly Building, Chandigarh, India
Photograph Ananya Banerejee
14. Apartment Buildings, Ulitsa Zhukovskogo, St Petersburg, Russia
Photograph Anton Glikin
15. PanAm building, (now the MetLife Building), New York
Photograph Elizabeth Stanley
16. Boston City Hall, Boston
Photograph Michael Wennberg
17. Children's' Home and Tripolis Office Complex, Amsterdam
Photograph Peter Drijver
18. Pacific Design Center, West Hollywood, California
Photograph author
19. House VI, Cornwall, Connecticut
Photograph Dick Frank, courtesy Eisenman Architects

20. Place de la Republique, Troyes, France
Photograph author
21. Center for Theological Inquiry, Princeton Theological Seminary,
Princeton, New Jersey
Photograph John Blatteau
22. Portland Building, Portland, Oregon
Photograph courtesy Michael Graves & Associates
23. Lloyds Building, London
Photograph author
24. Parc la Villette, Paris
Photograph Alessandro Venerandi
25. Canary Wharf, London
Photograph author
26. View of Hong Kong
Photograph author
27. Indian Institute of Management, Ahmedabad, India
Photograph courtesy HCP Design and Project Management PVT Ltd
28. Museum of Fine Arts, Leipzig
Photograph author
29. “Where the World Comes to Bank”
Courtesy Emirates Bank
30. View of West Bay, Doha, Qatar
Photograph author
31. World Trade Center, Central Business District, Beijing
Photograph author
32. View of Dubai suburb
Photograph author
33. Poster advertising a new suburb, Kerala, India
Photograph author
34. Suburban villa, Guangzhou, Canton, China
Photograph author
35. View of the City of London
Photograph author
36. International Terminal, Dubai airport
Photograph author
37. Palace of the Arts Reina Sofia, Valencia
Photograph author
38. Beijing National Stadium (Bird’s Nest)
Photograph Pjk
39. Opera House, Guangzhou, China
Photograph Hufton+Crow
40. Capital Gate Hotel, Abu Dhabi
Photograph courtesy RMJM

41. Burj Khalifa, Dubai
Photograph author
42. Imperial War Museum North, Manchester, England
Photograph Abigail Benouaich
43. Project for Gazprom Building, St Petersburg, Russia
Illustration courtesy RMJM
44. Section of CITIC HQ project, Hangzhou, China
Illustration courtesy Foster+Partners
45. Apartment tower, 8 Spruce Street, New York
Photograph Jasmin Stanley
46. Torre Velasca, Milan
Photograph Marco Bove
47. Menara Mesiniaga Tower, Kuala Lumpur
Photograph courtesy T.R. Hamzah and Yeang
48. Indian Parliament Library, New Delhi
Photograph Architectural Research Cell
49. Bank of America Tower, 1 Bryant Park, New York
Photograph Jasmin Stanley
50. 30 St Mary Axe (“the Gherkin”), London
Photograph author
51. John Lewis Store, Leicester, England
Photograph Satoru Mishima
52. Apartment building, Johannisstrasse in Mitte, Berlin
Photograph Ludger Paffrath
53. View of Seaside, Florida
Photograph author
54. View of Centre, Poundbury, Dorset, England
Photograph Stephen Hardy
55. View of Vauban district, Freiburg, Germany
Photograph John Thompson
56. South Street Seaport, Fulton Street, New York
Photograph Jasmin Stanley
57. Souq Waqif, Doha, Qatar
Photograph author
58. Yu Garden Bazaar, Old City, Shanghai, China
Photograph author
59. Rue de Laeken, Brussels
Photograph courtesy Gabriele Tagliaventi
60. New House, Cooperstown, New York State
Photograph Durston Saylor
61. Shriram Junior High School, Mawana, Uttar Pradesh, India
Photograph Deependra Prashad
62. Favela, Caxias do Sul, Brazil
Photograph Tetraktys

63. Museum of Liverpool, Liverpool, England
Photograph Philip Handforth, courtesy 3XN
64. 1WTC, New York
Image © SOM
65. Burj al Arab, Dubai
Photograph author
66. Rajbari, North Calcutta, India
Photograph Ananya Banerjee
67. Lakeside villa, Huangzhou, China
Photograph author
68. Temple of Olympian Zeus, Athens
Photograph author
69. Telefunken-Hochhaus, Berlin
Photograph Roger Wollstadt

Colour Illustrations

- A. Helmond City Library, Helmond, Netherlands
Photograph Christian Richters
- B. Berlier Industrial Hotel, Paris
Photograph courtesy Dominique Perrault Architecture
- C. View towards Guggenheim Museum, Bilbao, Spain
Photograph author
- D. Suitcase House Hotel, Beijing, China
Photograph Gary Chang
- E. Scottish Parliament, Edinburgh
Photograph courtesy Miralles Tagliabue EMBT
- F. View of Pudong, Shanghai, China
Photograph author
- G. View of Dharavi, Mumbai, India
Photograph Arne de Knecht for Artefacting
- H. View of Västra Hamnen district, Malmö, Sweden
Photograph author
- I. Borgo Città Nuova, Alessandria, Italy
Photograph Gabriele Tagliaventi

Charts

- 1. Outward Foreign Direct Investment 1990–2006
- 2. Nationalities of Global Architectural Firms 2006
- 3. Cumulative Totals of Architectural Branch Offices in Different Global Regions 1990–2006
- 4. Numbers of Transnational Corporations 1992–2008
- 5. Numbers of Internet Hosts 1993–2006
- 6. National Debt as a Percentage of GDP 2006–2011
- 7. Comparative Real National Growth Rate GDP 2006–2010
- 8. Comparative Projected National GDP to 2050
- 9. World Cities Survey 2009
- 10. Projected Top Ten Cities by 2025
- 11. Projected Top Ten Cities for Middle Class Growth by 2025

PREFACE

This project began with the idea that any study of architecture and urban design today must begin with an understanding of how these activities sit in the modern world. This much is so obvious that it barely needs to be said. So, what is it that characterises the modern world? Today, most discussions of architecture in particular start with an arts-based, technological or philosophical view of the modern world. These are, of course, legitimate in their own terms but these things are not the way that most people conduct their lives in the modern world—the people who occupy the buildings, the people who commission the architects and urban designers, the people who see the buildings and occupy the new places. Beyond individual experience the modern world is primarily navigated through social interaction, the way society is ordered and the struggle of everyday life—the social, political and economic structure of society. In design terms, this is what society demands of buildings and places, how society demands it and how society provides the resources to make it. These things lie at the core of all activity in the built environment. And yet, very little contemporary architectural description and theory is presented in these terms at any level of detail. I decided that this would be a legitimate framework for a description of recent architecture, at least as relevant as a description of architecture and urban design as an artistic, technological or philosophical pursuit, if not so intellectually attractive.

Examining recent history, I had to ask what it was in the social, political and economic condition that was unique to modern life—“modern” meaning the last few decades. The fashionable word “globalisation” kept emerging in descriptions of the late twentieth century and, indeed, it became clear that there was something

about the way the world had become more connected in this period that seemed to be particular. This led me to a study of some of the huge body of work on globalisation produced in recent decades. I came to see the current phase of globalisation as an aspect of the modern political and economic condition that had a clear beginning and, as my studies stretched to the end of the first decade of the twenty first century, seemed to develop some sort of end. Global interconnectedness was not all that was going on during this period but it was unusually significant. I have, therefore, used globalisation as a summary term and core concept for the recent modern condition.

Exploring sociology and economics in particular led me into both unfamiliar and familiar territory: unfamiliar as areas of academic study but familiar as the stuff of newspapers and current affairs. No field of interest seemed to be excluded and quite soon I came to see architecture and urban design in a different light. Stripped of the primacy they held when seen from the professional perspective, architecture and urban design took their proper place as secondary or more probably tertiary activities in the broader structure of society. This led to me see every design debate as a minor facet of larger forces and, if anything had any significance at all in architecture and urban design, it would have its place in the wider picture. If this was the case, as surely it must be, change in society would be reflected by change in architecture and vice versa. Everything that was happening was therefore in some way relevant and, although I may have disapproved of something that was happening in my own professional field, my approval or disapproval was much less important than the fact that it pointed to the social, political and economic forces that lay behind it. This illuminated architecture and urban design in often surprising ways.

This seemed to me to be a fruitful area for study but dauntingly wide. Everything I have written here is just a point in my studies when I felt I had to put it down in some coherent form. There is always another book to be read, another fact to be discovered and another area to be explored—as so many of my friends and colleagues tell me all the time.

The width of the subject is such that I have so many people to thank for all manner of information and advice that I am almost bound to miss some of them. I can start at the beginning with my father, once a general practitioner, who stimulated in me a restless curiosity, an interest in the role of current affairs in all aspects of life and a reluctance to take anything at face value. I have the privilege of continuing these discussions with my father in his mid-nineties and he was able to correct some of my twentieth century history. Remaining at a general level, throughout my research and while writing this book I have been running a large architectural and urban design practice. My fellow directors have given me passive support and many of my staff have taken an interest and given me active encouragement. Staff in the urban design course at the University of Strathclyde, where I have a visiting professorship, have been an invaluable source of information, debate and encouragement in what has been an otherwise academically lonely pursuit. Fellow members of the international charity, INTBAU, that I helped to set up, have been both friends and valuable informants on events and attitudes around the world. Through them and associated organisations I have been able to travel to Brazil, Russia, India, China, the USA (where I have many friends), Iran, Libya, Israel and most of the European countries. My work and academic activities have also taken me to Canada, Qatar, Dubai and Japan.

Many others have helped me in one aspect or another of a very broad subject area. Tony Chapman of the Royal Institute of British Architects organised a RIBA conference in Barcelona based, or so he told me, on my suggested subject of identity. Paul Finch, an old friend and sometime ideological sparring partner, gave me great encouragement by publishing my first paper on globalisation in the *Architectural Review* and then asked me to speak on the subject at the World Architecture Conference, also in Barcelona. My attendance at these events and the talks given by major global architectural figures gave me invaluable first-hand information on attitudes in the architectural profession. Individuals have helped me in a number of certain subject areas. Ben Bolgar identified useful

sources on urbanism and Hank Ditmar used his personal experience to check the history of New Urbanism. My colleague Mark Hoare checked my account of the sustainability movement. My nephew Jasper Chalcraft and his partner Monica Sassatelli, both sociologists, have guided me on source material from time to time. Calder Loth, formerly the Senior Architectural Historian of the Commonwealth of Virginia, helped me with the history of the conservation movement in the USA. Peter Oborn of Aedas gave me his valuable time to discuss global architectural practice. John Ware, Professor Paul Richens of Bath University and Robin Partington gave me a great deal of information on the development of digital drafting.

The right photographs were important to illustrate the text and provide a parallel narrative. They come from mixed sources—private, professional and archive. Many friends and colleagues took or provided me with photographs of buildings and places around the world. Many architectural practices were generous in their donation of illustrations. I am very grateful but I will not list them here individually as they are credited in the List of Illustrations.

As with any book drawing on a very wide range of sources, I have relied on many authors, papers, articles, events, broadcasts, observations and conversations. The book is synthesis of these sources structured to tell a particular story. I hope that all those whom I quote are content with the context of their material and that readers will refer to the footnotes to identify the many authorities who have unknowingly assisted me.

Robert Adam, March 2012

WHERE WE ARE TODAY

Architecture, Urban Design, Politics and Economics

As I look at the world at the moment of writing, momentous events are unfolding around us. The greatest economic recession since the Great Depression has not yet run its course, the fragility of the European Union has been exposed, and the underpinning of the North Atlantic economies has been shaken to the core, their economic and political systems all undergoing radical reform as they attempt to extricate themselves from a legacy of crippling debt. In the east, the two great emerging economies have grown stronger. India, its growth largely self-generated, has been virtually untouched by the economic crisis. China, which had funded much of the borrowing frenzy that brought down the United States and Europe, experienced a decline in exports but its economy has continued to grow steadily and it has emerged as the world's second-largest economy. At the same time, the USA, from the confidence of its position as the only world superpower after the collapse of the Soviet Union, is seeing its global influence decline as it tries to extricate itself from decline and two inconclusive foreign wars. Meanwhile, the largely Muslim south Mediterranean states are at various stages in a revolution that has swept across the region, toppling dictators and creating the uncertainties of democracy in nations with no democratic history. At such times, we know from experience that cultural and artistic change will follow these major economic and political changes, locked together as they are in an inescapable embrace.

Architects and urban designers are commissioned by commercial and political clients who have no choice but to respond to these

economic and social conditions. Although they are significant participants in cultural and artistic developments, architects and urban designers are first and foremost service industries and minor players in the broad sweep of social and political developments. No major social changes can be traced back to architecture. Even though urban design can change lives it, too, follows political and economic directions. It must be clear that any assessment of architecture and urban design would be inadequate without a full account of how wider changes in society have driven them.

However, when I look at *my* world of architecture and urban design, I see no seismic change to equal the momentous political and economic shifts that the press reveals daily. High Modernism still dominates architectural practice; globally famous architects are still the heroes of the profession and in demand by status-seeking cities; glass tower blocks are still under construction; and great networks of boulevards are planned around iconic buildings and mega-blocks in new developments around the world.

Looking back at other major political and economic revolutions, we can see the direct effect on architectural and urban theory and practice. The end of the Second World War sealed the victory of Modernism; the breakdown of the post-war consensus in the late 1960s and the oil crisis of the 1970s opened the way for the simultaneous—and apparently contradictory—rise of the baroque Modernism of high-tech and the ironic historicism of Postmodernism; and the recession of the early 1990s led to the collapse of Postmodernism and the resurgence of Modernism. This is, of course, hindsight. On the ground, the picture is always more complex. In the 1950s and early 60s much post-war reconstruction was carried out by followers of the classical tradition, while old-school modernists were still practicing in the 1980s and 90s (Oscar Niemeyer is still designing at the time of writing aged 103), and Postmodernism has survived well into the new century.

It is a common observation that the broad patterns of historic change are only clearly observed by looking back. The effects and outcome of even the most dramatic historic events often do not manifest themselves for some time. Our perception of current change is hampered by the fact that, while all aspects of society are linked, all historical events and ideological shifts do not occur in an identical time frame: in particular the inertia of social and cultural change is not matched by the drama of catastrophe, revolution and invention. This has been explained by the concept of “cultural lag,” a term coined by the sociologist William Ogburn in 1922.¹ He identified a time lag between changes in what he called material invention and non-material culture. While Ogburn limited the concept to rapid advances in technology, technology cannot be isolated from fast-moving events in politics and economics. Ogburn’s concept can be expanded with reference to the idea of multi-speed history put forward by the French historian Fernand Braudel, leader of the *Annales* school of historiography.² Braudel believed that “past and present mingle inextricably together,”³ but divided the movement of historical time into three broad categories: *longue durée* [long duration], *moyenne durée* [medium duration] and *événements* [events]. While events came and went and soon became, according to Braudel, “dust,” they were played out against a slower moving and often cyclical history, which in turn occurred within a framework of gradual and geographic change (in which he included culture). This provides a useful framework for understanding how slow-moving cultural change can coexist quite naturally with more rapidly moving events.

But even without reference to the slow movement of cultural change, there are good reasons why changes in architecture and urban design move relatively slowly. At the most elementary level, the real product takes a long time to come to fruition. A major building, from the time of conception to occupation, will rarely take less than five years, and commonly ten. Urban design is even more slow-moving. A major urban design project may take twenty years or more to complete and, indeed, it is highly likely that the original

design will have been overtaken by changing circumstances well before its completion. The complexities, high capital costs and commercial risks in architectural and urban design practice have established the need for a long, informal, post-qualification apprenticeship in the construction-industry design professions. Architects and urban designers rarely reach any position of influence before the age of forty and, indeed, the professional rule-of-thumb definition of a “young architect” is someone below forty years of age. Most designs will, therefore, be under the control of (if not actually designed by) men or women who ended their formal education at least twenty years previously. Add to this the project lead time (noted above) and most practitioners may be well into their fifties before they have a substantial body of work behind them, and major international architects are often beyond formal retirement age.

It has been empirically observed that artists and scientists form their critical creative outlook in their twenties, and recent research by Timothy Salthouse places the peak of cognitive ability at about twenty-seven.⁴ This refines the pioneering work undertaken by Harvey C. Lehman in 1953, who charted the creative peak across different sciences and arts between twenty-six and forty, the maximum “age of achievement” being at around forty.⁵ This seems to indicate that architects and urban designers, whose full-time education is unusually long, will have established their creative outlook at about the time they complete their formal education and will have reached the peak of their ability before most have established their reputations.

Architects pay lip service to the creativity of youth but, for practical reasons, achievement in the profession is largely for the middle-aged and beyond. Major architects are likely to be acting out creative ideas formed some thirty years previously. This is bound to have a restraining influence on progress and change in architecture and urban design.

The slow pace of architectural and urban design culture makes it hard to detect the influence of major political and economic events on these disciplines. This creates a complex picture where an

ideological position that has arisen in response to long-past circumstances is confronted by new conditions as they arise. We also know that social, economic and political developments will affect design, and we know from past observation that, when the appropriate historical distance allows us to see through the confusion, architecture and urban design will change to reflect the new realities on the ground.

Many of the social, political and economic events that affect our way of life at present can be traced back to the Black Monday financial crash of 1987 and the recession of the early 1990s. Until 2008, the period from about 1992 to 2008 had been one of unusual stability in the North Atlantic economies and was named by economists the “Great Moderation.” This was also the period when China, India, the countries of the former Soviet Union, and many other nations, entered into the free-market system which the North Atlantic countries had established after the Second World War. The Great Moderation in the North Atlantic countries was, consequently, part of a more widespread global political and economic condition usually called “globalisation.” Although the world economy had been interdependent for decades, if not centuries, increased communication and political conditions at the end of the twentieth century were quite different from previous periods of partial or total global interaction. The 1992 to 2008 period can therefore be distinguished from these previous versions of globalisation and termed the “New Global Era.”

While the dramatic events following 2008—still playing out at the time of writing—will have a profound effect on our future way of life, our response to these events will be seen in the context of the New Global Era for some time. Some of the ideals of architecture and urban design may well pre-date the New Global Era, but the last two decades will have had a significant impact. To understand what is happening now in society and in architecture and urban design, we

must examine the New Global Era in detail and try to understand how the disciplines of architecture and urban design have responded, and how this will influence their future response.

References

1. William F. Ogburn. *Social Change with Respect to Culture and Original Nature*. New York: B.W. Huebsch, 1922.
2. Fernand Braudel. *La Méditerranée et Le Monde Méditerranéen à l'Epoque de Philippe II*. Paris: A. Colin, 1949.
3. Fernand Braudel. "Personal Testimony." *Journal of Modern History* 44 (4) (1972): 467.
4. Timothy Salthouse. "When Does Age-Related Cognitive Decline Begin?" *Neurobiology of Aging* 30 (4) (2009): 507–14.
5. Harvey C. Lehman. *Age and Achievement*. Princeton: Princeton University Press, 1953.

PART I:

SETTING THE SCENE

A: A Short History of Globalisation and Architecture from 500 BCE to 1939 CE

The New Global Era is only the latest manifestation of a process of global interconnection that has been developing since the dawn of mankind. As with every period of global interaction, there is something very particular about this last stage of globalisation, but some of the underlying forces behind it have their origins in the eighteenth and nineteenth centuries. To understand the present condition, and to see how it differs from previous periods, we must take a brief overview of the history of globalisation.

Empires and Birth of Faith-Based Styles

The process of connecting different parts of the world to one another began 70,000 years ago when *Homo sapiens*, gifted with an intellect that allowed for adaptation to an alien environment, walked out of Africa. The process of connecting the disparate communities created by this first human migration would have to wait more than 60,000 years, until the Neolithic revolution established levels of organisation and a concentration of power that facilitated the creation of empires.



Figure 1. (left) Roman Doric Column, York, Northern England

Figure 2. (right) Roman Doric Column, Leptis Magna, Libya

Ancient empires standardised architecture across continents.

The ancient empires were never global in the strict sense of the word but, between the fifth century BCE and the fifth century CE, the Persian, Roman and Han empires created connections of power and culture over great distances. The Greek historian Polybius, writing in the second century BCE, understood the significance of the emerging Roman Empire: “Formerly the things which happened in the world had no connection among themselves . . . But since then all events are united in a common bundle.”¹ By the second century CE, the Greek philosopher Diogenes of Oenoanda could propose the concept of a global humanity: “In relation to each segment of the earth, different people have different native lands. But in relation to the whole circuit of this world, the entire earth is a single native land for everyone, and the world a single home.”²

While empires were based on conquest and power, trading routes created cultural connections over thousands of miles: Indian sculptures were imported to ancient Rome; from the Han Empire onwards, the Silk Road traded luxury goods over 6,500 kilometres; and in the fifth century BCE, Aramaic was being spoken along the Middle-Eastern trading routes from the Nile to the Indus.

The ancient world saw the establishment of two major globalising forces that are active to this day: the great monotheistic religions of Christianity and Islam. In the first century CE, Saul of Tarsus opened up a Middle-Eastern tribal sect to a universal membership that eventually led to its adoption as the official religion of the Roman Empire around three centuries later. In the seventh century CE a merchant from Mecca, Abu al-Qasim Muhammad, following a mountain-top revelation, transcribed the Quran as the word of God and proclaimed that there was no god but Allah for all mankind.³ As the Prophet Muhammad, he and his followers set in motion a wave of conquest and conversion that, a century after his death, spanned from Spain to India.

With power and religion came culture. One expression of that culture was architecture. The Roman Empire spread classical architecture and the temple form from North Africa to England. Christianity spread the use of the Roman hall or basilica for religious

assembly, and reproduced more or less literal copies of major centres of worship throughout Europe in the succeeding centuries. Muslim Mughal rulers introduced a Persian architectural style throughout the Indian subcontinent in the sixteenth century CE. The architectural styles of the two monotheistic religions are derived from the types already prevalent at the time and place of their first wave of expansion. The symbolic association of religion with its architecture has spread geographically specific styles around the globe as Christianity and Islam, to this day, continue their expansion.

European Discovery and the Enlightenment

It was the European voyages of discovery from the fifteenth to the seventeenth centuries that finally connected all human settlements across the world, creating a condition that can properly be called “global.” The discovery of the Americas and Australia by Europeans from 1492 to 1606 created for the first time a condition whereby all humans on earth could, in principle at least, know of one another.

As European exploration, occupation and trade expanded, the two major powers in the East, China and Japan, were entering long periods of self-imposed trading isolation. The Japanese policy of isolation, or *kaikin*, was unbroken from 1641 to 1853. The Chinese policy of *hai jin*, or “sea ban,” was first instituted by the Ming dynasty, and trading restrictions continued intermittently during the Qing dynasty from the seventeenth century onwards. In 1793 the Emperor Qianlong rebuffed a British trading overture by King George III, pointing out that “we possess all things. I set no value on objects strange or ingenious, and have no use for your country's manufactures.”⁴ The advanced civilisations of the Indian subcontinent had never constituted a nation, and their continuous power struggles left them open to organised and competing European campaigns for trading dominance backed by force. The newly discovered continents of America and Australia, on the other hand, were at a significantly lower level of material development and their populations quickly succumbed to European diseases, conquest and colonisation.