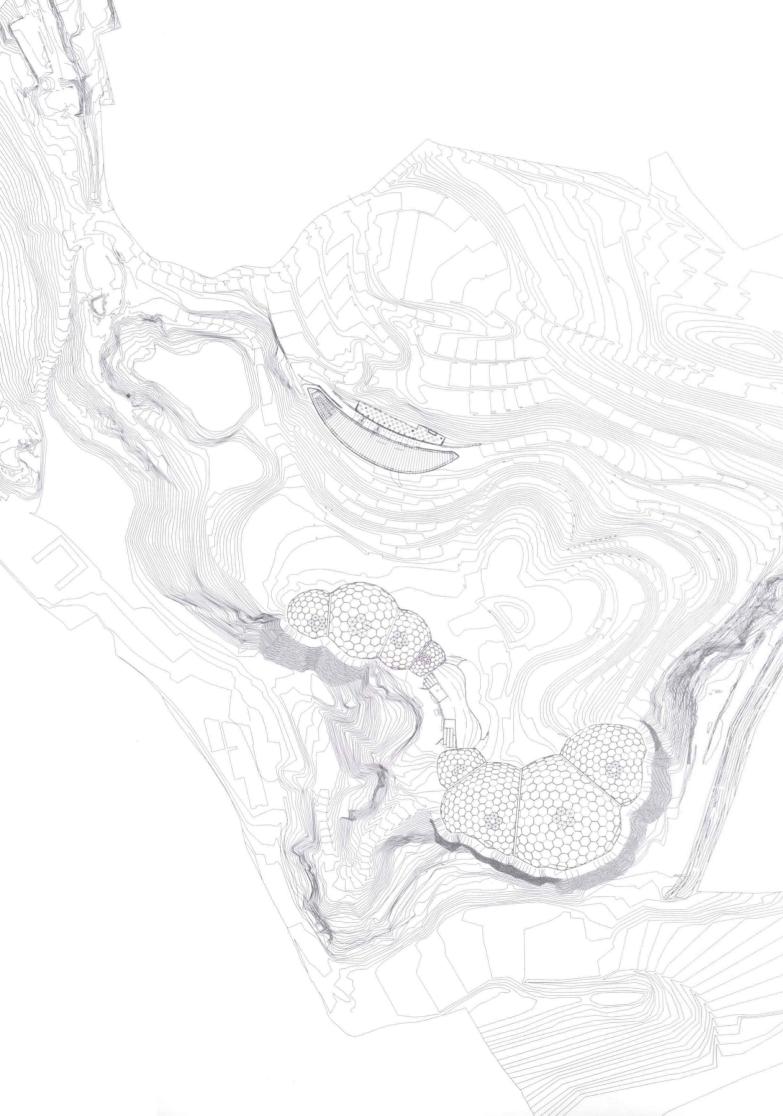
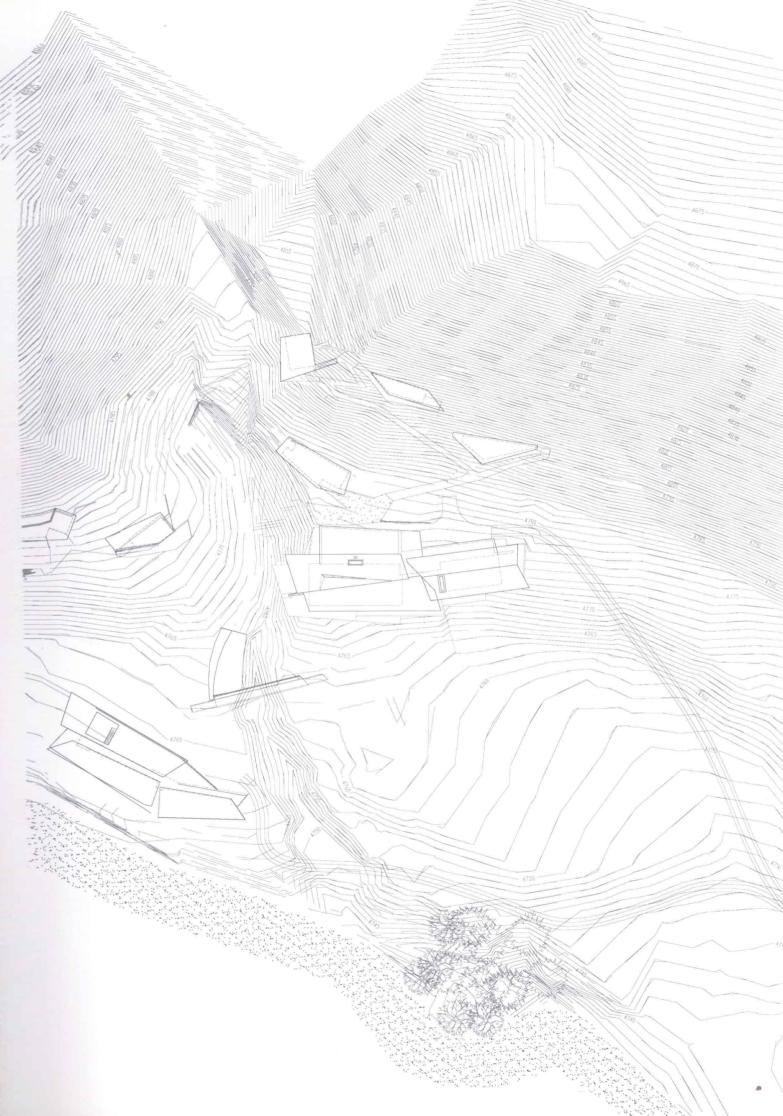


# THE PHAIDON ATLAS

OF CONTEMPORARY
WORLD
ARCHITECTURE

COMPREHENSIVE EDITION





### Foreword

The Phaidon Atlas of Contemporary World Architecture is a comprehensive portrayal of the best contemporary architecture from around the globe. It presents a thorough overview of buildings completed since January 1998, and also offers an opportunity to understand both the similarities and the incredible diversity which characterize today's practice. No other publication has ever before attempted to bring together such a comprehensive and detailed collection of contemporary architecture.

Many years in the making, the project has drawn on the expert knowledge and commitment of numerous individuals and organizations. In the earliest stages of the research process, academics, historians, curators, journalists, writers and practitioners from around the world were asked to nominate projects which they felt represented the best of international practice. In addition, an exhaustive survey of international architectural journals and other publications was undertaken. Following the preparation of a preliminary list of over 4,000 buildings, an editorial panel was formed. The process of selection consciously avoided the rigid application of absolute criteria. Instead, each project was reviewed in the context of its contribution to the art and science of architecture, regardless of differences in material, structure, budget, size, location and client. Following extended analysis and debate, a final list of some 1,100 of the very best buildings was compiled, this list forming the basis of *The Phaidon Atlas of Contemporary World Architecture*.

The final selection of buildings is extraordinarily diverse. It includes work from countries as geographically, climatically, economically and culturally diverse as Argentina, Botswana, Denmark, Egypt, Guinea, Israel, Jordan, Lithuania, Mozambique, Perú, Turkey, the USA and Yugoslavia. It includes building types that range from the super-scale, such as the Kuala Lumpur Airport by Kisho Kurokawa in Malaysia (1998) and the Potsdamer Platz in Germany by Renzo Piano (2000), to the delicate minutiae of Jae Cha's timber and polycarbonate church in Bolivia (2000) and the competition-winning scheme for Alvar Aalto's Boathouse in Säynätsalo, Finland by Krolmark & Schultz (1999).

A fundamental aim of the *Atlas* is to provide, in a compact and concentrated form, a mass of useful information for a wide range of users, including of course professional architects. Every effort has been made, by careful choice of illustrations, to ensure that each building's form can be visualized and understood from more than one angle, and elevations, cross sections and plans are included for the same reason. The accompanying texts incorporate essential background information as well as an appreciation of the work's qualities, and accurate details of architect, client, location and cost are given systematically. In addition, a comprehensive world data section illustrates the global economic and demographic context of the practice of architecture, and provides a broad overview of some of the crucial factors that shape our built environment.

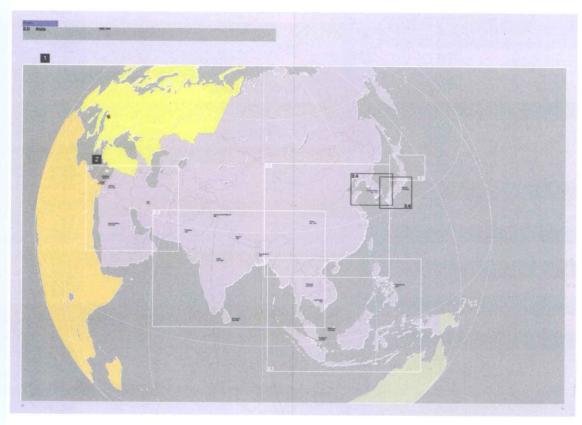
The colour coding by region, the classification by building type and the colour-coded system of cross-referencing likewise are designed to maximize the *Atlas*'s utility, and the comprehensive series of indexes not only provide quick access to the main entries, but also serve as a reference tool in their own right.

The scope and extent of *The Phaidon Atlas of Contemporary World Architecture* will make it an invaluable tool in understanding the state of contemporary architecture at the beginning of the new millennium. It is also the publisher's hope that, as a celebration of some of the finest achievements of our time, it will serve as a source of pleasure and inspiration for all those who appreciate the importance of our built heritage, past, present and future.

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The Phaidon Atlas of Contemporary World Architecture divides the world into six regions – Oceania, Asia, Europe, Africa, North America and South America – each with its specific colour code. Each region is introduced by a colour-coded map with a key to indicate the more detailed sub-regional maps of countries or groups of countries to follow. These sub-regional maps, interspersed throughout each region according to the density of architectural projects to be illustrated, indicate the location of each building in the section that follows, and also incorporate a mini globe to place the country and the buildings in a global geographical context (see next page, no. [1]).



Colour-coded regional map
Map key for sub-regions

# NOTES

### Place Names

Local name forms are used throughout the book, where these pre-exist in the Roman alphabet, and are recognized by the country concerned. For places in languages that do not use the Roman alphabet, The Times Atlas of the World transliteration or transcription has been used. In some exceptional cases, old-established and familiar English-language conventional names are used instead of the local forms.

# Map Projections

As the only way to accurately represent the arrangement of continents is on a globe, all two-dimensional map projections are necessarily compromises. In order to minimise distortion and reduce scale errors, orthographic globe projections have been used for the introductory regional maps and mini globes. This is a natural earth view, in which the globe is used as the correct representation of the earth and all the land masses are shown in their relative true shape, size and position. The point of each projection is selected specifically for the area and scale of each map.

# Scale

the book, introductory regional maps are presented at the same scale, relative to one another, except in the case of Europe where the relatively small area and a high density of buildings warranted a larger, and therefore more detailed scale. The need to map areas with a higher occurrence of contemporary architecture within the main geographic areas, as well as the need to fit homogeneous physical regions into the area defined by the page format, means that sub-regional maps are presented at a variety of map scales as appropriate.

# Currency

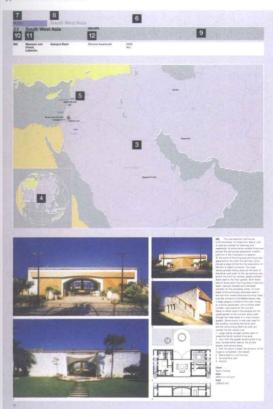
Unless otherwise stated, currency values used throughout the book are in United States Dollars for the purpose of comparison. Where the currency values that accompany the presentation of the buildings have not been supplied in United States Dollars, the conversion rate used is that given by the international currency converter service, xe.com. The rate used for the conversion is the closing rate on 15 June of the year in which the building was completed.

# rea

In all cases, area values are supplied in both metric and imperial, typically as square metres (m<sup>3</sup>) followed by square feet (sq ft) and also, where appropriate, in hectares/acres, kilometres/miles, centimetres/inches and millimetres/inches.

Each project page is colour-coded to help orientate the reader to the relevant region. In addition, the top of each page indicates the region and the sub-region name. Following this, a system of data-bars, for both maps and buildings, provide more detailed information. Map data-bars include the map number, the name of the sub-region and the range of buildings, indicated by building numbers, illustrated within that sub-region. Building data-bars include the building number (each building in the book is sequentially numbered), the location, including town or city, state or territory where applicable, and country, the name of the building, the name of the architect, the year in which the building was completed, a three-letter building-type abbreviation (for example CUL for cultural buildings and RES for residential buildings), and finally colourcoded cross-reference blocks to indicate other buildings in The Phaidon Atlas by the same architect. Each cross-reference block indicates the region (by colour), building number, building-

Projects are presented on single or half pages, or occasionally on a double-page spread. The building data-bars that accompany each building and the map data-bars that accompany each map are located at the top of the page for easy reference and comparison. All of the buildings are presented in geographical sequence throughout the book, so that buildings in the same location are grouped together. There is a descriptive text and details of client, area and cost for each building.





3 Sub-regional map
4 Mini globe to place the map in a global

geographical context

6 Colour-coded backgrounds to indicate

8 Sub-region name

9 Map data-bar

Map number

Map name

Building number range Building data-bars

14 Building number

15 Building location 16 Building name

Architect

Three-letter building-type abbreviation
Colour-coded cross-reference blocks to indicate other buildings in The Atlas by the same architect

Descriptive text about the building
Details of client, area and cost

# **ABBREVIATIONS**

**Building Type Abbreviations** 

Each building has been allocated a three-letter building-type code for comparative purposes. The abbreviations listed are those used in building data-bars, in

Includes apartment buildings, multiple housing developments, social housing and

CUL Cultural Buildings Includes art galleries, artists' studios, arts centres, band stands, concert halls, cultural centres, glass houses, libraries, lookout towers, media centres, memorials, mus studios and theatres COM Commercial Buildings

Includes banks, conference centres exhibition centres, factories, nightclubs, offices, research facilities, restaurants, shops

**EDU** Educational Buildings cludes colleges, research fac student housing and universities GOV Government Buildings Includes embassies, government facilities (such as border controls, coastal authorities)

law courts, parliament buildings and town halls

REL Religious Buildings Includes bell towers, cathedrals, cemeteries, chapels, churches, crematoria, pilgrim synagogues and temples

TRA Transport Buildings Includes airports, boat piers, bus stations, canal facilities, port facilities and railway

PUB Public Buildings Includes community centres, fire stations. vatories and medical facilities PO Sports Facilities

Includes stadia, gymnasia, swimming pools

Tourism Buildings Includes hotels and tourist attractions
REC Recreation Buildings Includes entertainment centres, parks, zoos, recreation facilities (such as golf clubs, saunas, camping cabins and pop music venues)

INF Public Infrastructure
Includes bridges, motorway structures, power stations, water pumping stations, stairs and

The abbreviations listed below are those used in place names in building data-bars, in cross-reference boxes, on sub-regional maps and within the index

ACT Australian Capital Territory Alabama

AL Alaska Arizona

AR Arkansas British Columbia CA California

Colorado Connecticut

Delaware District Of Columbia FL Florida GA

Georgia Indiana lowa Kansas Kentucky

Louisiana Maine MB Manitoba

Minnesota MS Mississippi

Missouri MN Montana Nebraska Nevada

NB New Brunswick NH New Jersey NS Nova Scotia

NM New Mexico NY New York

North Carolina ND North Dakota

NT Northwest Territories if used in the context of Canada, or Northern Territory if

used in the context of Australia OH Ohio Oklahoma ON Ontario

South Dakota

Oregon PA Pennsylvania Québec Queensland SA South Australia TN Tennessee Texas

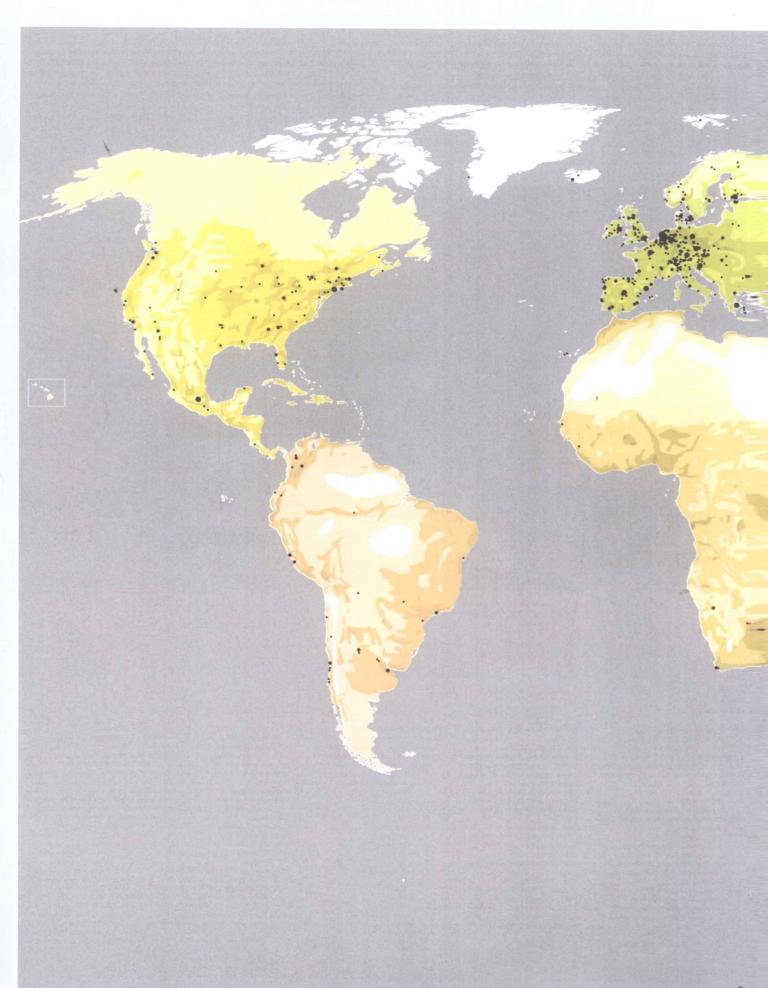
United Kingdom United States of America USA

Utah

VA Virginia

WA Washington if used in the context of the United States of America, or Western Australia if used in the context of Australia West Virginia

Wisconsin Wyoming



Asia 184 projects 065-248 Europe 588 projects 249-836 Africa 24 projects 837-860 North America 147 projects 861-1007 South America 45 projects 108-1052



This table, ordered by the 2003 population figure, illustrates current and projected population phenomena across the regions of the world. Historically, these have been influenced by the migration of people from rural to urban areas that began in Europe and North America in the nineteenth century, dramatically reshaping the world's cities. This culminated in the emergence in the twentieth century of 'megacities' with a population in excess of 10 million, These cities, whose number rose from five to sixteen between 1975 and 2000, currently pose major logistical challenges that will continue to shape urban design and architecture over the coming decades.

Region		AreaA			Population <sup>8</sup>			Popul	ation density			Urbar	population
	(million km²)	(million sq miles)	Population 2003 (millions)	Projected population change 2003-2050 (%)	Projected population 2050 (millions)	Population density 2003 (number of people per km²)	Population density 2003 (number of people per sq mile)	Projected population density 2050 (number of people per km²)	Projected population density 2050 (number of people per sq mile)	Urban population 2003 (%) <sup>C</sup>	Urban population 2003 (millions)	Projected urban population 2030 (%)c	Projected urban population 2030 (millions)
Asia	45.0	17.4	3,830	40	5,353	85.1	220.1	119.0	307.6	37	1, 390.1	53	2,445.5
Africa	30.3	11.7	861	119	1,882	28.4	73.6	62.1	160.9	38	325.6	52	752.6
Europe	9.9	3.8	728	-9	663	73.5	191.6	67.0	174.5	73	530.7	80	531.2
North America	24.7	9.5	505	47	740	20.4	53.2	30.0	77.9	74	374.3	83	530.1
South America	17.8	6.9	358	42	507	20.1	51.9	28.5	73.5	81	290.4	89	396.7
Oceania	8.8	3.4	32	56	50	3.6	9.4	5.7	14.7	70	23.1	78	32.3

Megacities 1975: Mexico City, New York, São Paulo, Shanghai, T

1975: Mexico City, New York, Sao Paulo, Shanghai, Tokyo. 2000: Beijing, Buenos Aires, Calcutta, Delhi, Dhaka, Jakarta, Karachi, Los Angeles, Mexico City, Mumbai, New York Ceaka, Bio de Janiero, São Paulo, Shanghai, Tokyo.

### 03

# Population and Urbanization Trends by Country

This table, ordered by the 2003 population figure, illustrates the demographic context in which architecture occurs. Given that architecture occurs. Given the architecture is predominantly an urban phenomenon, it is interesting to note that of the more than 70 countries represented in this book, six currently have an urban population of 90 per cent or over (UK, Italy, Belgium, Israel Singapore and Luxembourg), while some countries are still very much agrarian societies with urban populations of under 25 per cent (for example Bangladesh, Ethiopia, Tanzania, Nepal and Cambodia). While this does not appear to have a direct impact on the quantity or quality of contemporary architecture, it none the less portrays a picture of human settlement at the beginning of the second millennium that could be taken into account in order to understand the broader context in which architecture occurs. Over the past half century the world population has increased faster than it has ever done before, and, according to United Nations projections, will ever do again. While world population did not reach one billion until 1804, and took another 123 years to reach two billion, another four billion people were added in just 72 years, culminating in a total population of six billion in 1999. It is expected that an additional three billion will be added by the year 2050, although this actually represents a downturn in growth rates, with the average year increase peaking in 1990 at 87 million per year, and an expectation that the rate will fall to below 50 million per year by the 2040s. By far the major contributors to this growth are the less developed regions of the world, which between 1950 and 2003 sustained a massive 89 per cent increase in their populations Asia in particular contributed two-thirds of the increase, while Africa saw the largest growth rate of all the continents with a staggering increase of 285 per cent, vastly higher than Europe at only 33 per cent. These trends in population growth continue to emphasize the contrasts betw the more and less developed parts of the world, which are reflected in the type and prevalence of architecture across the continents. For example, many countries in Latin America, Africa and Southeast Asia continue to suffer lower than average life expectancy and high infant mortality rates, both good indicators of general standards of development. This suggests that basic levels of shelter, health and education have yet to be achieved for large numbers of the population in these regions. By contrast, much of the developed world has reduced its fertility rate to well below the 'replacem rate' (a notable exception being

Country Capital		Area <sup>A</sup>		Projected	Population <sup>8</sup>	Population	Population	Projected	Projected population			Projected	Projected
			Population 2003	population change 2003-2050	population 2050	Population density 2003 (number of people per km²)	(number of people per	density 2050 (number of people per km²)	density 2050 (number of people per sq mile)	Urban population 2003	Urban population 2003	population 2030	population 2030
China Beijing	9,584,492	(sq miles) 3,700,593	(millions) 1,288.70	(%)	(millions) 1,393.60	134.5	348.2	145.4	376.6	(%)°	(millions) 433.8	(%) <sup>C</sup> 50	(millions) 681.9
India New Delhi	3,064,898	1,183,364	1,068.60	52	1,628	348.7	903.0	531.2	1,375.7	30	316.9	46	653.0
USA Washington	9,826,635	3,794,085	291.5	45	421.8	29.7	76.8	42.9	111.2	78	227.1	85	316.6
Brazil Brasilia	8,514,879	3,287,613	176.5	25	221.4	20.7	53.7	26.0	67.3	83	145.8	89	182.4
Pakistan Islamabad	803,940	310,403	149.1	134	348.6	185.5	480.3	433.6	1,123.1	39	57.9	56	154.5
Bangladesh Dhaka	143,998	55,598	146.7	73	254.6	1,018.8	2,638.6	1,768.1	4,579.3	26	38.6	44	94.4
Russian Federation Moscow	17,075,400	6,592,849	145.5	-18	119.1	8.5	22.1	7.0	18.1	79	114.5	85	109.6
Japan Tokyo	377,727	145,841	127.5	-21	100.6	337.6	874.2	266.3	689.8	79	101.1	85	93.6
Mexico Mexico City	1,972,545	761,604	104.9	46	153.2	53.2	137.7	77.7	201.2	75	78.7	82	111.2
Germany Berlin	357,022	137,849	82.6	-18	67.7	231.4	599.2	189.6	491.1	88	72.8	92	67.0
Philippines Manila	300,000	115,831	81.6	63	132.8	272.0	704.5	442.7	1,146.5	61	49.7	74	84.3
Egypt Cairo	1,000,250	386,199	72.1	77	127.4	72.1	186.7	127.4	329.9	46	33.2	60	64.3
Turkey Ankara	779,452	300,948	71.2	37	97.5	91.4	236.6	125.1	324.0	78	55.5	87	76.8
Ethiopia Adis Abeba	1,133,880	437,794	70.7	145	173.3	62.4	161.5	152.8	395.9	19	13.5	35	48.0
Iran Tehran	1,648,000	636,296	66.6	45	96.5	40.4	104.7	58.6	151.7	63	42.0	75	63.9
Thailand Bangkok	513,115	198,115	63.1	15	72.8	123.0	318.5	141.9	367.5	23	14.4	39	27.1
France Paris	543,965	210,026	59.8	7	64.0	109.9	284.7	117.7	304.7	76	45.6	83	52.0
UK London	243,609	94,058	59.2	8	63.7	243.0	629.4	261.5	677.2	70	41.2	77	47.5
Italy Roma	301,245	116,311	57.2	-9	52.3	189.9	491.8	173.6	449.7	67	38.6	76	41.2
South Korea Seoul	99,274	38,330	47.9	-8	44.3	482.5	1,249.7	446.2	1,155.8	84	40.0	91	41.3
Colombia Bogotá	1,141,748	440,831	44.2	52	67.3	38.7	100.3	58.9	152.7	75	33.2	83	48.9
South Africa Pretoria/Cape Town	1,219,090	470,693	44.0	-26	32.5	36.1	93.5	26.7	69.1	51	22.6	64	23.6
Spain Madrid	504,782	194,897	41.3	0	41.3	81.8	211.9	81.8	211.9	78	32.3	85	35.0
Poland Warsaw	312,683	120,728	38.6	-12	33.9	123.5	319.7	108.4	280.8	67	25.8	77	27.3
Argentina Buenos Aires	2,766,889	1,068,302	36.9	48	54.5	13.3	34.5	19.7	51.0	91	33.4	94	45.2
Tanzania Dodoma	945,087	364,900	35.4	109	73.8	37.5	97.0	78.1	202.3	36	12.8	55	33.2
Canada Ottawa	9,984,670	3,855,103	31.6	16	36.6	3.2	8.2	3.7	9.5	78	24.5	84	29.1
Perù Lima	1,285,216	496,225	27.1	58	42.8	21.1	54.6	33.3	86.3	74	20.0	.82	30.4
Nepal Kathmandu	147,181	56,827	25.2	102	50.8	171.2	443.5	345.2	893.9	13	3.3	26	11.0
Malaysia Kuala Lumpur	332,965	128,559	25.1	86	46.6	75.4	195.2	140.0	362.5	59	14.9	73	28.2
Saudi Arabia Riyadh	2,200,000	849,425	24.1	208	74.2	11.0	28.4	33.7	87.4	87	20.9	92	51.3
Taiwan Taipei	36,179	13,969	22.6	-2	22.1	624.7	1,617.9	610.9	1,582.1	0	0.0	1170	0.0
Romania Bucharest	237,500	91,699	21.6	-21	17.1	91.0	235.6	72.0	186.5	57	12.3	69	12.9
Australia Canberra	7,692,024	2,969,907	19.9	48	29.5	2.6	6.7	3.8	9.9	85	16.9	89	23.0
Sri Lanka Sri Jayewardenepura Kotte	65,610	25,332	19.3	11	21.4	294.2	761.9	326.2	844.8	25	4.8	42	8.6
Mozambique Maputo	799,380	308,642	17.5	9	19.0	21.9	56.7	23.8	61.6	43	7.6	60	11.1
Netherlands Amsterdam/s-Gravenhage	41,526	16,033	16.2	11	18.0	390.1	1,010.4	433.5	1,122.7	90	14.5	92	16.0
Chile Santiago	756,945	292,258	15.8	41	22.2	20.9	54.1	29.3	76.0	86	13.6	91	18.0
Jammu & Kashmir Srinagar	222,236	85,806	13.0		1353	58.5	151.5		200	0	0.0		0.0
Cambodia Phnum Pénh	181,000	69,884	12.6	94	24.4	69.6	180.3	134.8	349.2	17	2.2	32	6.4

the US, with a projected population increase of 45 per cent between 2003 and 2050). The developed world enjoys a high degree of wealth and literacy and a considerably larger proportion of investment in sophisticated methods and types of building. In these regions, individual houses continue to be outstanding examples of architectural innovation, while institutional, commercial and cultural organizations have come to the fore as the commissioners of contemporary architecture in an environment of relative social stability, economic growth and cultural investment.

Country Capital		Area <sup>A</sup>			Population <sup>8</sup>			Popul	ation density			Urba	n population
Capital				Projected population	Projected	Population density 2003 (number of	Population density 2003	Projected population density 2050	Projected population density 2050	Urban	Urban	Projected urban	Projected urban
	(km²)	(sq miles)	Population 2003 (millions)	change 2003-2050 (%)	population 2050 (millions)	(number of people per km²)	(number of people per sq mile)	(number of people per km²)	(number of people per sq mile)	population 2003 (%)C	population 2003 (millions)	population 2030 (%)c	population 2030 (millions)
Ecuador	272,045	105,037	12.6	73	21.7	46.3	120.0	79.8	206.6	68	8.6	81	14.8
Greece Athens	131,957	50,949	11.0	-12	9.7	83.4	215.9	73.5	190.4	61	6.7	72	7.3
Yugoslavia Belgrade	102,173	39,449	10.7	-4	10.2	103.8	268.7	99.8	258.6	53	5.6	65	6.8
Senegal Dakar	196,720	75,954	10.6	132	24.6	53.9	139.6	125.1	323.9	50	5.3	65	12.7
Belgium Bruxelles	30,520	11,784	10.4	6	11.0	340.8	882.6	360.4	933.5	97	10.1	98	10.6
Portugal Lisboa	88,940	34,340	10.4	-10	9.4	116.9	302.9	105.7	273.7	68	7.1	82	8.0
Czech Republic Prague	78,864	30,450	10.2	-10	9.2	129.3	335.0	116.7	302.1	75	7.7	82	7.8
Hungary Budapest	93,030	35,919	10.1	-25	7.6	108.6	281.2	81.7	211.6	65	6.5	74	6.3
Guinea Conakry	245,857	94,926	9.0	239	30.6	36.6	94.8	124.5	322.4	51	4.6	69	15.6
Sweden Stockholm	449,964	173,732	9.0	11	10.0	20.0	51.8	22.2	57.6	84	7.5	88	8.5
Bolivia La Paz/Sucre	1,098,581	424,164	8.6	79	15.4	7.8	20.3	14.0	36.3	64	5.5	76	9.8
Austria Vienna	83,855	32,377	8.2	1	8.2	97.8	253.3	97.8	253.3	65	5.3	74	6.1
Switzerland Berne	41,293	15,943	7.3	0	7.4	176.8	457.9	179.2	464.2	68	5.0	76	5.6
Israel Jerusalem	20,770	8,019	6.7	64	11.0	322.6	835.5	529.6	1,371.7	91	6.1	94	8.9
Jordan Amman	89,206	34,443	5.5	115	11.8	61.7	159.7	132.3	342.6	76	4.2	84	8.0
Denmark Kobenhavn	43,075	16,631	5.4	8	5.8	125.4	324.7	134.7	348.8	86	4.6	89	5.0
Slovakia Bratislava	49,035	18,933	5.4	-12	4.7	110.1	285.2	95.9	248.2	58	3.1	69	3.4
Finland Helsinki	338,145	130,559	5.2	-8	4.8	15.4	39.8	14.2	36.8	69	3.6	79	3.9
Norway Oslo	323,878	125,050	4.6	22	5.6	14.2	36.8	17.3	44.8	76	3.5	84	4.4
Croatia Zagreb	56,538	21,829	4.3	-1	4.3	76.1	197.0	76.1	197.0	59	2.5	71	3.1
Costa Rica San José	51,100	19,730	4.2	51	6.3	82.2	212.9	123.3	319.3	49	2.0	61	3.4
Lebanon Beirut	10,452	4,036	4.2	35	5.7	401.8	1,040.6	545.4	1,412.3	91	3.8	94	4.8
Singapore Singapore	639	247	4.2	6	4.4	6,572.8	17,004.1	6,885.8	17,813.8	100	4.2	100	4.3
New Zealand Wellington	270,534	104,454	4.0	27	5.1	14.8	38.3	18.9	48.8	86	3.4	90	4.2
Republic of Ireland	70,282	27,136	4.0	18	4.7	56.9	147.4	66.9	173.2	60	2.4	71	3.1
Lithuania Vinius	65,200	25,174	3.5	-10	3.1	53.7	139.0	47.6	123.1	69	2.4	77	2.5
Slovenia Ljubljana	20,251	7,819	2.0	-15	1.7	98.8	255.8	84.0	217.4	51	1.0	63	1.1
Namibia Windhoek	824,292	318,261	1.9	37	2.6	2.3	6.0	3.2	8.2	32	0.6	49	1.2
Botswana Gaborone	581,370	224,468	1.6	-43	0.9	2.8	7.1	1.6	4.0	52	0.8	66	0.8
Estonia Tallinn	45,200	17,452	1.4	-35	0.9	31.0	80.2	19.9	51.6	69	1.0	75	0.8
Cyprus Nicosia	9,251	3,572	0.9	9	1.0	97.3	252.0	108.1	280.0	58	0.5	71	0.7
Luxembourg Luxembourg	2,586	998	0.5	31	0.6	193.4	501.0	232.0	601.2	92	0.5	96	0.5
Iceland Reykjavík	102,820	39,699	0.3	31	0.4	2.9	7.6	3.9	10.1	93	0.3	95	0.3
New Caledonia Nouméa	19,058	7,358	0.2	67	0.4	10.5	27.2	21.0	54.4	80	0.2	90	0.3
Greenland Nuuk	2,175,600	840,004	0.05	20	-	0.03	0.7	-	-	83	0.0	88	0.1
Liechtenstein Vaduz	160	62	0.04	11	0.04	250.0	645.2	250.0	645.2	24	0.0	41	0.0
X02													

Notes
A The Times Comprehensive Atlas of the World, Eleventh Edition, 2003
B 2003 World Population Data Sheet, Population Reference Bureau, Washington, DC, USA
United Nations, Habitat (HSDB4), Human Settlement Programme

# Economy, Environmental Sustainability, Human Development Indicators and Architecture

Gross Domestic Product (total domestic output divided by population), illustrates the relative wealth available to each individual in the relevant countries, from the wealthiest to the poorest. In addition, typical human development indicators such as literacy levels and population age, place the incidence of architecture in a broader economical and social context. As illustrated, world economic wealth is marked by sharp inequalities between nations, with extreme wealth occurring predominantly in Europe and North America, and relative poverty marking out many of the countries in Asia and Africa. Within this context, the numbers of registered architects architecture schools and architecture students contribute to an understanding of the high incidence of contemporary architecture in some countries as evidenced by the large number of practising architects – for example in the USA, Japan and Germany - indicating that, as a profession, architecture in these countries is flourishing. On the other hand, countries such as other hand, countries such as China, India and Egypt have a relatively high number of architects, yet produce fewer works of contemporary architecture. To a certain degree, this can be explained by the differing systems of architectural education in different countries, as well as by levels of government funding and general social attitudes towards the development of the arts and sciences. In the broader context, though, the phenomenon of an impact on the way all services and products are produced, sold and delivered. This includes the practice of architecture, in the practice of architecture, in which more and more architects are operating as international concerns, with clients and occasionally offices in more than one continent, and sophisticated buildings that take advantage developments. Nevertheless. many architects continue to practise in a relatively confined geographic area, producing small, crafted buildings relying on local materials and building techniques.

Country		Economy	E	nvironmental Su	stainability <sup>8</sup>		LiteracyA		Pop	pulation Age <sup>c</sup>				Architecture
		Annual							Percentana	Parcentana				
	Per capita s	construction spend (million USD)P		Index	Ranking		Literacy level percentage		Percentage of population under the age of 15	of population over the age of 65		Number of registered architects <sup>E</sup>	Number of architecture schools <sup>E</sup>	Number of architecture students <sup>E</sup>
Luxembourg	48,900	NA		NA	NA		100		19	14		600	NA	NA
USA	36,300	686,766		53.2	45		97		21	13		110,000	116	40,406
Norway	33,000	6,625		73	2		100		20	15		3,800	3	840
Switzerland	32,000	4,046		66.5	5		99		17	16		5,000	4	2,500
Iceland	30,200	772		63.9	8		99.9		23	12		314	1	36
Canada	29,300	13,172		70.6	4		97		18	13		8,000	10	NA
Republic of Ireland	29,300	15,717		54.8	37		98		21	11		2,000	2	650
Belgium	29,200	NA		39.1	125		98		18	17		6,000	2	2,000
Denmark	28,900	5,838		56.2	31		100		19	15		11,165	19	6,900
Japan	28,700	281,992		48.6	78		99		14	19		290,000	NA	NA
Austria	27,900	5,580		64.2	7		98		16	16		3,104	3	6,700
Netherlands	27,200	23,280		55.4	34		99		19	14		8,000	8	5,100
Germany	26,200	179,121		52.5	50		99		15	17		109,461	72	45,000
Australia	26,000	60,276		60.3	16		100		20	13.		9,500	16	5,250
France	26,000	142,622		55.5	33		99		19	16		26,500	22	19,000
Sweden	26,000	11,978		72.6	3		99		18	17		4,500	3	900
Finland	25,800	5,216		73.9	1		100		18	15		3,000	3	1,400
UK	25,500	38,948		46.1	91		99		19	16		30,600	43	8,000
Singapore	25,200	31,691		NA	NA		93.2		21	7		1,392	1	554
Italy	25,100	105,694		47.2	84		98.6		14	19		99,344	17	76,000
Liechtenstein	25,000	303		NA	NA		100		18	10		100	1	120
Spain	21,200	NA		54.1	44		97.9		15	17		35,496	10	21,200
New Zealand	20,100	2,924		59.9	19		99		22	12		1,460	3	1,044
Greenland	20,100	NA		NA	NA		NA		NA	NA		NA	NA	NA
South Korea	19,600	23,322		35.9	135		98.1		21	8		NA.	NA	NA
Israel	19,500	NA		50.9	60		95.4		28	10		15,775	2	2,000
Portugal	19,400	2,409		57,1	28		93.3		16	16		1,200	1	600
Slovenia	19,200	NA		58.8	23		99.7		16	14		10,373	16	5,000
Greece	19,100	NA		50.4	63		97.5		14	19		6,700	.4	1,500
Taiwan	18,000	10,663		NA	NA		86		20	9		NA	NA	NA
Czech Republic	15,300	10,888		50.2	64		99.9		16	14		2,787	3	1,700
New Caledonia	14,000	NA.		NA	NA		91		30	5		NA	NA	NA
Hungary	13,300	2,099		82.7	11		99.4		16	15		8,800	5	2,370
Slovakia	12,400	1,818		61.6	14		NA.		19	11		1,350	NA	NA
Saudi Arabia	11,400	NA		34.2	138		78.8		43	3		NA	NA	NA
Estonia	11,000	974		60	18		99.8		17	16	May make	NA	1	320
Argentina	10,500	NA		61.5	15		97.1		31	9		42,000	17	NA
Chile	10,100	7,263		55.1	35		96.2		26	7		9,000	29	NA
South Africa	10,000	NA NA		48.7	77		86.4		34	5		2,689	13	2,300
Croatia	9,800	4,454		62.5	12		98.5		17	16		3,000	13	900
Poland	9,700	15,520		46.7	87		99.8		18	13		10,000	9	10,000
Mexico	8,900	5,572		45.9	92		99.8		33	13		58,000	NA NA	10,000 NA
	8,800	NA		49.5	68		88.9		34					
Malaysia						-340	1	5.2347		4		1,600	NA	NA
Russian Federation	8,800	NA		49.1	72		99.6		18	13		11,782	NA	NA
Botswana	8,500	335		61.8	13		79.8		40	4		NA .	NA	NA
Lithuania	8,400	1,049		57.2	27		99.6		19	14		996	4	733
Costa Rica	8,300	846		63.2	9		96		30	6		1,300	9	NA
Brazil	7,600	NA		59.6	20		86.4		30	6		80,000	135	NA
Romania	7,600	3,795		50	66		98.4		18	14		3,500	NA	NA
Turkey	7,300	NA		50.8	62		86.5		30	5		26,700	28	NA
Thailand	7,000	NA		51.6	54		96	THE REAL PROPERTY.	23	7	17 14	NA	NA	NA
Namibia	6,900	NA		57.4	26		84		43	4		85	NA	11
Iran	6,800	1,144		44.5	104		79.4		33	5		NA	NA	NA
Colombia	6,100	NA		59.1	22		92.5		33	5		33,300	35	NA

Country	Economy	Environmental Sustainability®	LiteracyA	Population Age <sup>C</sup>	Architecture
	Annual construction Per capita spend (million GDPA USD)p	Index Ranking	Literacy level percentage	Percentage of population of population under the age of 15 of 65	Number of Number of Number of registered architecture architecture architectuse schools sudents
Cyprus	6,000 1,061	NA NA	97.6	22 11	600 NA NA
Perú	5,000 NA	56.5 29	90.9	34 5	NA NA NA
Lebanon	4,800 NA	43.8 106	87.4	28 7	NA NA NA
China	4,700 NA	38.5 129	86	22 7	30,000 NA NA
Philippines	4,600 NA	41.6 117	95.9	37 4	16,000 NA NA
Jordan	4,300 NA	NA NA	91.3	40 5	NA NA NA
Egypt	4,000 NA	48.8 74	57.7	36 4	15,450 NA NA
Sri Lanka	3,700 NA	51.3 55	92.3	27 7	485 2 325
Ecuador	3,200 NA	54.3 41	92.5	36 4	NA NA NA
India	2,600 NA	41.6 116	59.5	36 4	25,000 106 21,600
Bolivia	2,500 288	59,4 21	87.2	39 5	2,580 14 NA
Yugoslavia	2,370 NA	NA NA	NA	20 14	8,000 5 3,500
Pakistan	2,000 NA	42.1 112	45.7	42 4	NA NA NA
Bangladesh	1,800 NA	NA NA	43.1	40 3	NA NA NA
Cambodia	1,600 NA	45.6 97	69.9	43 4	NA NA NA
Senegal	1,500 NA	47.6 81	40.2	44 3	NA NA NA
Nepal	1,400 NA	45.2 99	45.2	41 4	NA 4 620
Mozambique	1,100 NA	51.1 59	47.8	45 3	NA NA NA
Ethiopia	700 NA	41.8 113	42.7	44 3	NA NA NA
Guinea	700 NA	45.3 98	35.9	45 3	NA NA NA
Tanzania	600 NA	NA NA	78.2	45 3	NA NA NA

### Notes

All figures not provided originally in USD are based on the xe.com currency conversion

A CIA World Factbook 2003

2002 Environmental sustainability index (ESI) sourced from the Yale Centre for Environmental Law and Police

C 2003 World Population Data Sheet, Population Reference Bureau, Washington, DC, USA

D. Figures compiled from information supplied by government agencies of the individual countries.

E. Figures compiled from information supplied by the national institutes and associations of architects of the individual countries.

