

# ARCHITECTURE OF ORGANISM

ECOEDGE : NORMAN DAY : 2008





# **WORLD POPULATION 2050**

- **URBAN**
- **6,500,000,000.**
- **RURAL**
- **3,500,000,000**
- **(PEAKED IN 2019)**

# URBAN POPULATION

- **1920**
- **270,000,000**
- **2008**
- **3,400,000,000**

**Table 4: URBAN AREAS BY POPULATION**  
**Ranking Threshold: 500,000 Population**

#	Nation	Urban Area	Population	Mi2	Density	Km2	Density	Year
1	Japan	Tokyo-Yokohama	34,250,000	3,025	11,300	7,835	4,350	2005
2	United States	New York	19,712,000	4,349	4,500	11,264	1,750	2000
3	South Korea	Seoul-Incheon	19,500,000	750	26,000	1,943	10,050	2002
4	Indonesia	Jakarta	18,200,000	1,200	15,200	3,108	5,850	2005
5	Mexico	Mexico City	18,100,000	975	18,600	2,525	7,150	2005
6	Brazil	Sao Paulo	17,800,000	1,075	16,600	2,784	6,400	2005
7	Japan	Osaka-Kobe-Kyoto	17,250,000	1,350	12,800	3,497	4,950	2005
8	India	Mumbai, MAH	17,000,000	250	68,000	648	26,250	2001
9	Philippines	Manila	16,750,000	515	32,500	1,334	12,550	2005
10	Egypt	Cairo	15,750,000	600	26,300	1,554	10,150	2006
11	India	Delhi, DEL	15,250,000	525	29,000	1,360	11,200	2001
12	Russia	Moscow	14,000,000	1,500	9,300	3,885	3,600	2005
13	United States	Los Angeles	13,829,000	2,244	6,200	5,812	2,400	2000
14	China	Shanghai, SH	13,600,000	1,150	11,800	2,979	4,550	2004
15	India	Kolkata, WB	13,217,000	380	34,800	984	13,450	2001
16	Argentina	Buenos Aires	12,740,000	1,150	11,100	2,979	4,300	2001
17	China	Beijing, BJ	11,250,000	1,175	9,600	3,043	3,700	2004
18	China	Shenzhen, GD	11,000,000	500	22,000	1,295	8,500	2005
19	Brazil	Rio de Janeiro	10,900,000	610	17,900	1,580	6,900	2005
20	Turkey	Istanbul	10,500,000	485	21,600	1,256	8,350	2004
21	France	Paris	10,400,000	1,175	8,900	3,043	3,400	2005
22	Nigeria	Lagos	9,250,000	305	30,300	790	11,700	2006
23	Japan	Nagoya	9,175,000	1,800	5,100	4,662	1,950	2005
24	Pakistan	Karachi	8,700,000	290	30,000	751	11,600	2005
25	United States	Chicago, IL-IN	8,646,000	2,298	3,800	5,952	1,450	2000
26	United Kingdom	London	8,278,000	627	13,200	1,623	5,100	2001
27	Thailand	Bangkok	8,000,000	600	13,300	1,554	5,150	2005
28	Germany	Essen-Dusseldorf	7,350,000	1,020	7,200	2,642	2,800	2001
29	Iran	Tehran	7,250,000	265	27,400	686	10,550	2004
30	Colombia	Bogota	7,150,000	185	38,600	479	14,900	2005
31	China	Guangzhou, GD	7,000,000	650	10,800	1,684	4,150	2001
31	Congo (Dem. Rep.)	Kinshasa	7,000,000	150	46,700	389	18,000	2004
31	Peru	Lima	7,000,000	230	30,400	596	11,750	2000
34	China: Taiwan	Taipei	6,500,000	170	38,200	440	14,750	2004
35	China	Hong Kong, HKSAR	6,475,000	85	76,200	220	29,400	2001
36	India	Chennai, TN	6,425,000	160	40,200	414	15,500	2001
37	Pakistan	Lahore	6,300,000	180	35,000	466	13,500	2005
38	Viet Nam	Ho Chi Minh City	6,250,000	270	23,100	699	8,950	1999
39	Bangladesh	Dhaka	6,000,000	120	50,000	311	19,300	2001
39	China	Dongguan, GD	6,000,000	425	14,100	1,101	5,450	2005
39	South Africa	Johannesburg-East Rand	6,000,000	925	6,500	2,396	2,500	2001
42	India	Hyderabad, AP	5,724,000	225	25,400	583	9,800	2001
43	India	Bangalore, KAR	5,701,000	205	27,800	531	10,750	2001
44	Iraq	Baghdad	5,500,000	230	23,900	596	9,250	2003
45	Chile	Santiago	5,425,000	250	21,700	648	8,400	2002
46	United States	San Francisco-San Jose	5,320,000	964	5,500	2,497	2,150	2000
47	Russia	St. Petersburg	5,300,000	460	11,500	1,191	4,450	2005
48	Canada	Toronto-Hamilton, ON	5,221,000	831	6,300	2,152	2,450	2001
49	United States	Philadelphia, PA-NJ-DE-MD	5,149,000	1,799	2,900	4,661	1,100	2000
50	Italy	Milan	5,000,000	1,175	4,300	3,043	1,650	2001

<b>Melbourne Population by year</b>		
1836	177	
1851	29,000	
1854	123,000	(gold rush)
1860	140,000	
1880	280,000	(property boom)
1890	490,000	
1956	1,500,000	
1981	2,806,000	
1991	3,156,700	(economic slump)
2001	3,366,542	
2004	3,592,975	
2006	3,744,373	
2021	4,500,000	(projected)
2030	> 5,000,000	(projected)

# **STRATEGIES FOR GROWTH**

**20 POINTS  
OF  
DEPARTURE**

**1. HERITAGE -  
RESERVE BEST OF THE PAST/MAINTAIN OUR HISTORY**

**2. RECYCLE -  
UNGLAMOROUS CITY PARTS (LANES/ALLEYS/ARCADES)**

**3. REPLACE -  
THE WORST OF MODERNITY**

#### **4. CONTAIN GROWTH**

**LIMIT THE EXPANSE OF THE CITY FOOTPRINT**

#### **5. CITY LIVING**

#### **6. 24HOUR - 7DAY TRADING**

#### **7. MIXED USE LIVING**

**- REMOVES 'DEAD' PARTS OF CITY**

**8. LICENSING LAWS RELAXED**

**- ALLOWS SMALL BARS/CAFES**

**9. CULTURAL OUTLETS**

**- GALLERIES, MUSEUMS, THEATRES**

**10. EDUCATION IN THE CITY**

**- STUDENT STREET LIFE ENLIVENS PRECINCTS**

**11. PEDESTRIANISE SOME STREETS + PLAZAS**

**12. PROVIDE PUBLIC FACILITIES**

**-TRAM STOPS, PUBLIC TOILETS, INFORMATION + TOURIST BOOTHS**

**13. STREET AND CITY CLEANING**

**14. REASSURANCE OF LAW ENFORCEMENT**

**- QUIET, DISCRETE, WELCOMING**

## **15. PUBLIC TRANSPORT**

- COORDINATED + AFFORDABLE**

## **16. CONNECTIONS OF CITY SECTIONS**

- CITY TO RIVER**
- CITY TO PARKS**
- CITY TO PORT**

## **17. PUBLIC EVENTS**

**-(PEOPLE SHARING THEIR CITY)**

- STREET WALKS, MARATHONS, BICYCLE RIDES,**
- CHARITY EVENTS**
- CELEBRATIONS, TICKERTAPES, MOOMBA PARADES,**
- CROSS CULTURAL PARADES**  
**(IE. CHINESE NEW YEAR)**
- SANTA WELCOMES**
- MORATORIUMS,**
- PROTEST MARCHES**

**18. ARCHITECTURE + URBAN DESIGN  
ENCOURAGE CHALLENGE  
DESIGN FOR HISTORY  
(NOT A 30/40 YEAR LIFE CYCLE)**

**19. SUSTAINABLE OUTCOMES AS BASIC**

**20. CITY AS A DESIGN LABORATORY**

DUCHY OF CORNWALL

HRH PRINCE CHARLES

..” BUILDINGS SHOULD BE BUILT TO

LAST 100 YEARS

RATHER THAN 20

AND HAVE FLEXIBLE USE.

THE PROPORTIONS, LAYOUT, MATERIAL

AND BUILDING

PRACTICES USED SHOULD FIT

THE LOCATION.”



## About the Duchy

### Function

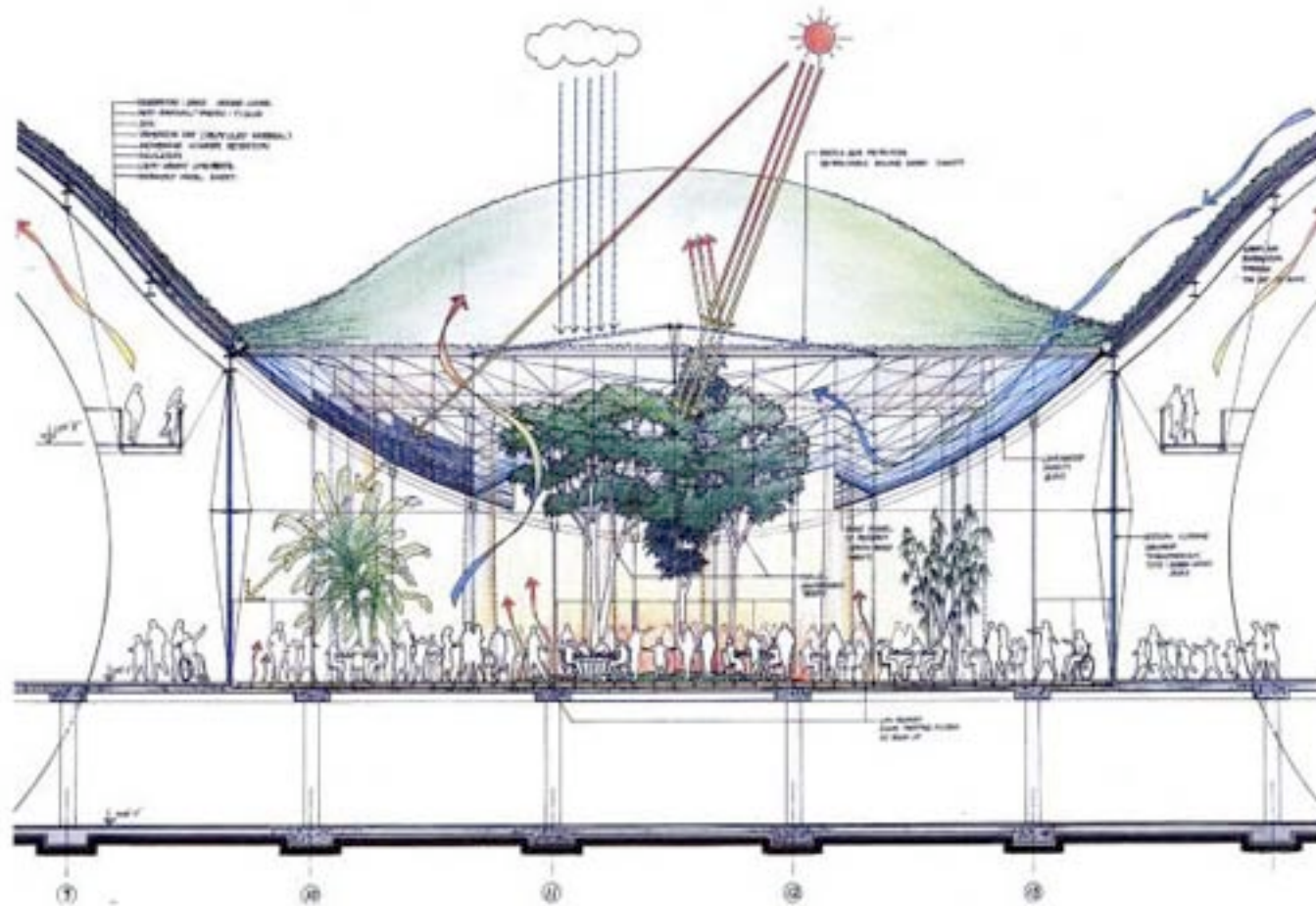
The Duchy estate was created in 1337 by Edward III for his son and heir, Prince Edward (later known as The Black Prince) who became the first Duke of Cornwall. The Duchy's primary function is to provide an income from its assets for The Prince of Wales.



**PREDICTION  
ARCHITECTURE OF ORGANISM**

**GROWING ARCHITECTURE  
ORGANIC MATERIAL  
INTERACTION WITH NATURE**

+ California Academy of Sciences New Academy Building



RENZO PIANO - CALIFORNIA

## CALIFORNIA ACADEMY OF SCIENCES GREEN ROOF

by Emily Pilloton

July 28, 2007







RICHARD MEIER - ROME

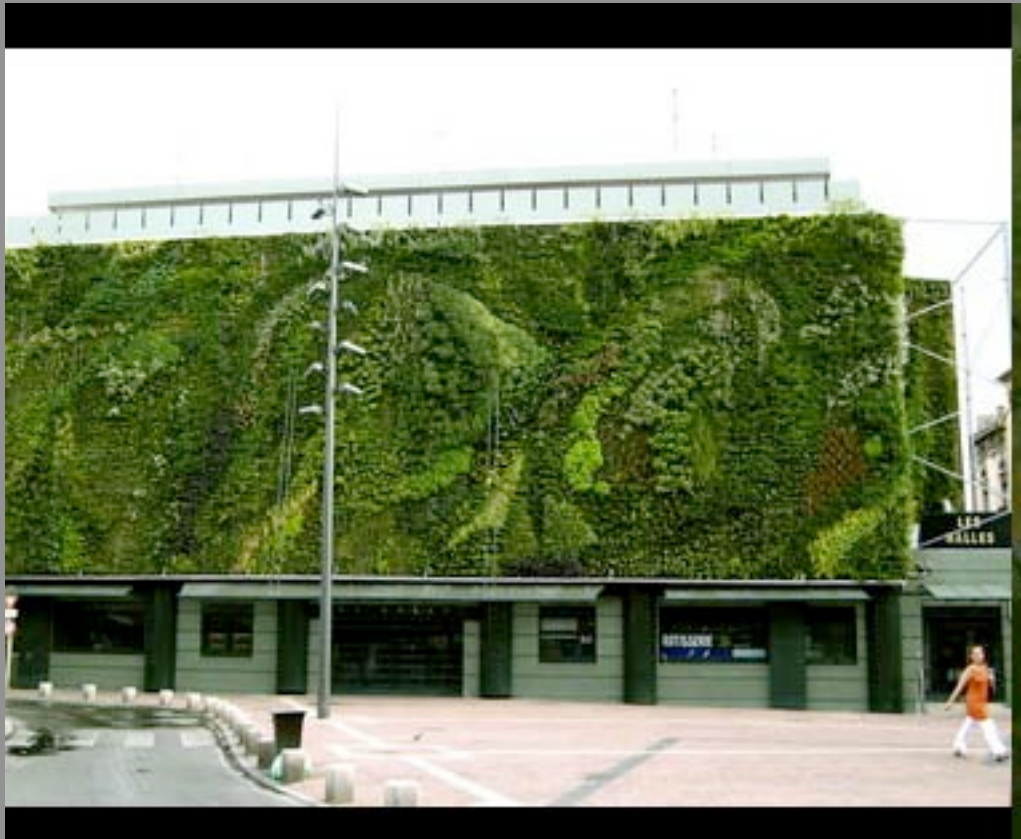


PATRICK BLANC - PARIS





© Paris-Photos.org

















TERUNOBI FUJIMORI + ROJO - JAPAN

