

# Jencks's theory of evolution

## *an overview of twentieth-century architecture*

At the start of the twenty-first century, Charles Jencks gives a personal, perceptive and provocative summary of the architecture of the twentieth. Many will disagree with his narratives and emphases, particularly perhaps with his choice of Gaudí as the architect of the century, but now, as Jencks says, 'interpretation begins'.

Now that the century is over it is time to ask what it meant for architecture. This is a harder question than it first appears. Did Modern architecture, as its apologists claim, triumph over other contenders? What was the relationship of commercial practice to quality – did the best architects lead or only influence the profession? Did good architecture trickle-down or was it dumbed-down? Or did a hundred mini-movements tell the real story of the century; or was it like that of the past, one of spec builders, the DIY industry and self-build? In terms of sheer numbers the century has been claimed for the shed building, the factory, warehouse and its cousin, the office. In terms of cost airports have won, in terms of prestige museums, in terms of kitsch it has been shopping and mega-malls, but building-counts like body-counts only tell the background story.

The main narrative does not belong to any building type, movement, individual or sector. Rather, it belongs to a competitive drama, a dynamic and turbulent flow of ideas, social movements, technical forces and individuals all jockeying for position. Sometimes, a movement or an individual may be momentarily in the public eye and enjoy media power, but such notoriety rarely lasts for more than five years and usually for not more than two. It is true that certain architects of the previous century – how strange those words ring for Modernists – were creative forces that lasted for longer. Mies was a power to be reckoned with in the '20s and '60s. Le Corbusier, Frank Lloyd Wright and Aalto, who with Mies made up the big four, were seminal at more times and Kahn, Stirling, Eisenman and Gehry, the little four, each had two small periods of influence. But even these protean characters, in order to stay relevant and on top, had to reinvent themselves about every 10 years.

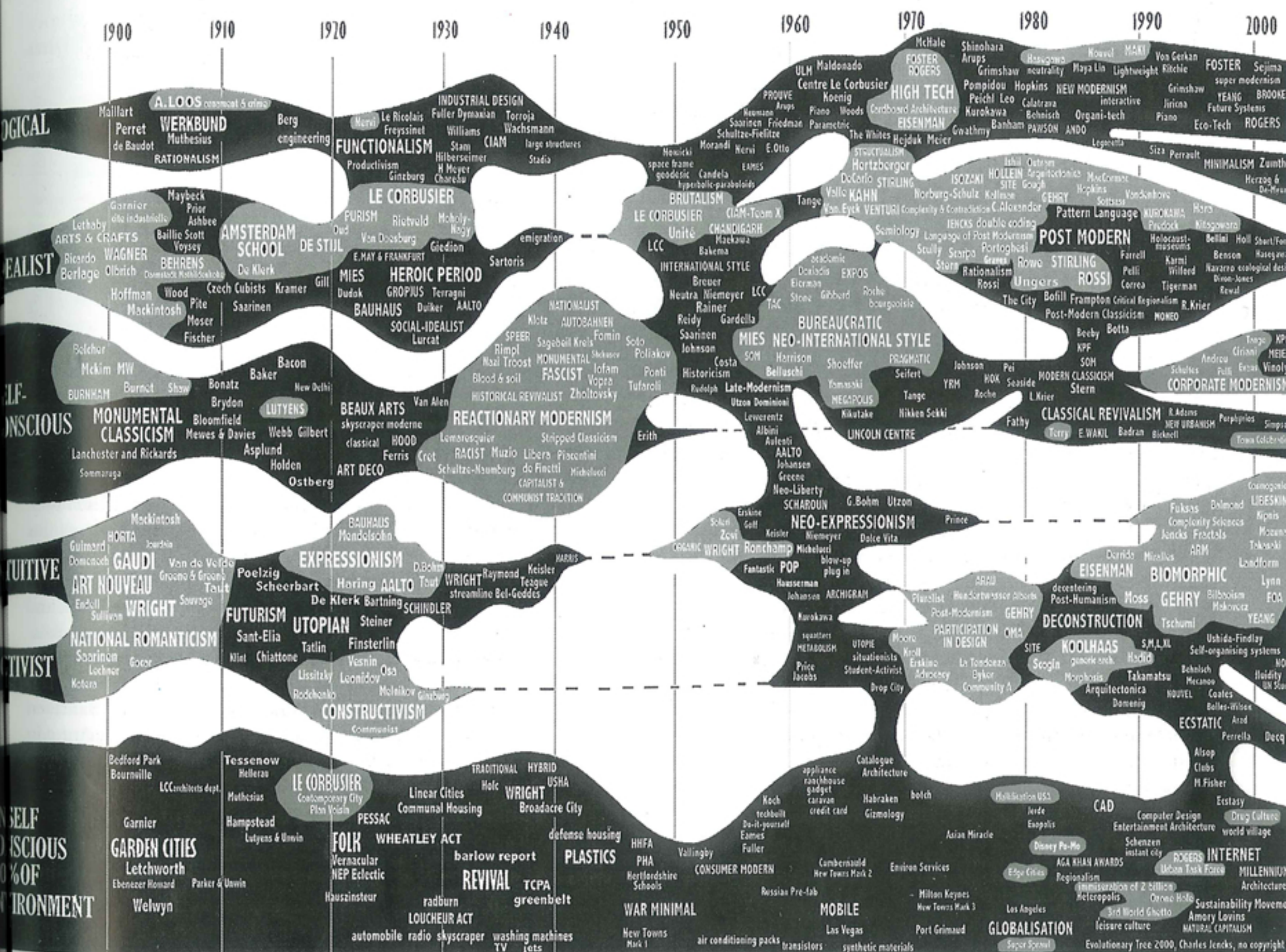
The notion that there is a '10-year rule' of reinvention for the creative genius in the twentieth century has been well argued by the Harvard cognitive scientist Howard Gardner in his book *Creating Minds*, 1993. Subtitled *An anatomy of creativity seen through the lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham and Gandhi*, it is a detailed study of these, the big seven Modernists, and it shows how they often made breakthroughs or underwent creative shifts every 10 years. In a recently finished book, *Le Corbusier and the Continual Revolution in Architecture*, I have found the same pattern in this the Proteus of design. As the Hayward Gallery put it, polemically, in the title of a 1987 retrospective Le Corbusier was 'The Architect of the Century'. Well, could this be possible – even before the century was over and Frank Gehry given a shot at the title? I

think the answer is 'yes', as I argue at length and as the accompanying evolutionary tree, or diagram, shows. One will find Corbu's presence on this chart at five different points: as the leader of 'the Heroic Period' of the 1920s; as a leading thinker of a new (and rather unfortunate) urbanism; as the leader of CIAM and mass housing after the war; as a harbinger of Post-Modernism with Ronchamp and the symbolic architecture of Chandigarh; and, just at the end of his life, with his Brussels and Zurich pavilions, the forerunner of the High-Tech movement. No other architect was as creative in different traditions; not for nothing was he seen as 'the Picasso of architecture'.

But the point of my argument is slightly different than Howard Gardner's. While agreeing with his analysis, I think one of the important reasons for the demonic creativity of these seven 'geniuses' is that the last century was uncommonly turbulent. My diagram, and its tortuous blobs, captures this continual revolution. At any one time the twentieth century architect has had to face three or four competing movements of architecture, respond to changes in technology, social forces, style and ideology – not to mention world wars and such large impersonal forces as the Internet. It was an exhausting century. As the Chinese say: 'may you be condemned to live in interesting times'.

However beneficent this may be for architectural creativity this has not been healthy or good for the environment. For one thing it has been Gardner's message – the revolutionary period has been dominated by men, there are very few women among the 400 protean creators I have gathered from other writers. An urbanism both more feminine and coherent would have been far superior to the over-rationalized and badly related boxes that have formed our cities. For another thing continual revolution, or the constant change of fashion, business cycles, technical innovation and social transformation has meant that architecture, like the other arts, lacks depth and perfection. It is hard to master an art when surfing a waterfall. Nonetheless, that is what the old century has been, a turbulent motion of whirls and eddies; sometime even the whirlpool of Fascist and Nazi architecture going nowhere but down. There are about 100 trends and technical forces shown, and 60 movements, many of them 'isms' – Futurism, Purism, Expressionism, Brutalism or Metabolism – that became 'wasms'. Riding these waves as a leader is exhilarating, until the Neo-follower surfs on by.

I don't mean to be disparaging so much as realistic. The twentieth century produced great architecture but, as Lewis Mumford



Jencks's 'The Century is Over, Evolutionary Tree of Twentieth-Century Architecture' with its attractor basins.

often noted, with great faults. A critical Modernism, or Post-Modern perspective, must acknowledge these deep problems and face the horrors of the century as much as the triumphs.

### The evolutionary tree and its surprising conclusions

Usually when historians look at the recent past they do so with the eyes and taste that rigidly exclude the variety, contradictions, mess and creative wealth of a period, and we applaud them for so doing. All history writing is selective and based on theories of what really matters, and there is no way around this limitation. But there are ways to compensate for perspectival distortion and over the last 30 years I have devised a method, the evolutionary tree, which if it is not completely inclusive is at least balanced in its selective effects. As can be seen in the classifiers to the extreme left of the diagram, it is based on the assumption that there are coherent traditions that tend to self-organize around underlying structures.<sup>1</sup> These deep structures, often opposed to each other psychologically and cultur-

ally, act like what are called, in the esoteric science of nonlinear dynamics, 'attractor basins': they attract architects to one line of development rather than another.<sup>2</sup> Why? Not only because of taste, training, education and friendships, but because of type-casting and the way the market forces architects to have an identifiable style and skill. In a word, specialization.

Of course, architects dislike being pigeon-holed as much as do politicians and writers – they too like to claim universality, freedom and openness. But it is the rare architect, such as Le Corbusier or Gehry, who can be found in several different traditions and often they are pilloried for leaving one fold for another. Enough forces conspire to keep the architect 'on message', even when they seek, like Post-Modernists, to be pluralists.

What stories does this turbulent blob-diagram tell? In crude terms it reveals some surprises. Most architecture – 80 per cent? – is by non-architects, or at least the result of larger processes that are, artistically speaking, unselfconscious: building regulations,



governmental acts, the vernacular, planning laws, mass housing, the mallification of the suburbs, and inventions in the technical/industrial sphere. Le Corbusier in the 1920s, Russian disurbanists in the 1930s and Richard Rogers today try to affect this inchoate area, but like globalization it is mostly beyond anyone's control. This high proportion of non-architectural creativity is likely to lessen in the future as more and more of the environment is forced into governmental and planning control, the result of economic and ecological forces. But the ironic truth remains that, in terms of control and mega-planning, the Disney corporation has been more effective than the former Soviet Union and, architecturally-speaking, its results are unselfconscious vernacular pastiche (all-too-consciously applied).

Another surprise is that a polemical movement may not be the preserve of just one tradition. One would have thought the ecological imperative might have been monopolized by the Activist tradition, but it has been taken up by all of them in different ways. For instance, the Classicists, following Leon Krier, have created an ecological movement known as the New Urbanism. It is based on the tight village planning of a previous area, and it is mostly Classical and Vernacular in style; its green credentials are presented with historicist wrappers. Then there are Post-Modern versions of green architecture, with SITE, Ralph Erskine and Lucien Kroll; High-Tech versions usually called Eco-Tech (or Organi-tech); the Biomorph versions of Ken Yeang. And there is the madly optimistic corporate-governmental version of the Sustainability Movement led by Amory Lovins. His notion is summarized in the oxymoron 'Natural Capitalism'. Nature and capitalism can walk together in the twenty-first century. He argues, counter to stereotypes, that so many efficiencies and savings can be made that economic and ecological growth can occur at the same time – at four times their current rate! – if only we can think through all systems from the start. As Oscar Wilde put it: 'being natural is such a difficult pose to keep up' – and reconciling these heretofore opposed forces is going to take more than a pose, that is, a raft of tax incentives. In any case, the point is that green architectures, in the plural, are coming from everywhere while we might have thought the ecological issue would be taken over by just one or two movements.

A third surprise is that we can see the strange alliances within the self-conscious tradition, usually the mainstream, or what Sigfried Giedion called the 'ruling style' of architecture. Up through the 1940s this was mostly a version of Classicism: Edwardian Baroque, Beaux-Arts Classicism, monumental stripped Classicism, or the fundamental Classicism of Gunnar Asplund. When the Fascists in Italy and Spain, and the leaders of Nazi Germany and Stalinist Russia self-consciously imposed their version as a state style it squeezed out contending approaches. The diaspora of Modern architects and the waning of other approaches are clear from the diagram: like evolutionary species whose habitat is destroyed they went virtually extinct (or emigrated from Europe and the USSR).

Following sociologists such as David Harvey and David Herf, there is another surprise: I have called these Classical or monumental folk architects 'Reactionary Modernists'. Like Albert Speer they were just as wedded to technology, economic progress, instrumental reason and the *Zeitgeist* as Mies, Le Corbusier and Gropius.

The fact that they persecuted Functionalists and creative Modernists and adopted reactionary styles and attitudes has obscured the deeper point that they all shared some common assumptions about power, mass culture and mass production. They were, in effect, disputing some common territory, a point that the diagram reveals especially when Modernism triumphs after the Second World War. The true inheritors of the mainstream were the big corporate Modernists, and they have been so ever since. They only appear small in my diagram because their creativity and influence has not been excessive. In terms of volume of work they have overshadowed the four other traditions.

The evolutionary tree also shows a minor surprise: the way this dominant is constantly attracted back to stripped Classicism, or degree-zero Modernism. Although they are very different, Lincoln Center in New York, and 20 other cultural centres in America during the '60s, are in this blood line, as is the Modern Classicism of Robert Stern and Demetri Porphyrios. The Corporate Modernism of Berlin, and even Richard Meier, is not too far away from this 'strange attractor'. Why? The corporate forces of production and patronage favour an impersonal, abstract, semi-Classical sobriety. Giedion's notion of the 'ruling taste' is usually pulled towards this attractor basin.

But mainstream culture is not always located on this axis. Several important exceptions were when Expressionism, the Bauhaus, and the Heroic Period dominated for a few years in the '20s, or Post-Modernism did in the early '80s, or Art Nouveau and National Romanticism did at the start of the century. Hector Guimard in Paris, Horta in Belgium, Mackintosh in Glasgow, Eliel Saarinen and Lars Sonck in Helsinki, and my favourite architect, Antonio Gaudí, in Barcelona – all became momentary leaders of a major public architecture, if only for three or four years.

#### Gaudí a standard

Here is a point where my bias shows through the evolutionary tree. Nikolaus Pevsner dismissed most of these movements as 'transitory fashions' and for Giedion, except for the Heroic Period, they were not 'constituent facts'. One remembers how Modernist historians, like revisionist Communists air-brushing Trotsky out of photographs, liked to clean up uncomfortable facts. Interpretation and judgement obviously distort all historical selection. My argument for placing Antonio Gaudí the best architect of the century, even ahead of Le Corbusier, does not rest on his influence, city planning or theoretical contribution. Rather, it concerns his creative brilliance at turning city building and structure into a high art. No other architect managed to get craftsmen, artists and even patrons working together on such a large and complete scale. His works remain the standard of integrating all the arts at the highest creative and symbolic level.<sup>3</sup> The reason his work has such creative depth is that he took a long time – which other twentieth-century architects did not allow themselves – to innovate at all levels. His architecture exploits all sorts of new structural types – such as the hyperbolic paraboloid – if not for the very first time, then for the most seminal time. He makes such form-types his own by giving them a forceful and poetic expression. Moreover he bends structural rationalism to expressive ends. For instance, where the Italian engineer Nervi makes an ordered art from showing the isostatic lines of force in his concrete ceiling, Gaudí takes the same forces



Gaudí's Casa Batlló, technology for symbolic ends.



Casa Milà: continuous innovation, and new visual languages at all levels.

and makes them dynamic – like the straining muscles of an athlete – pushing against each other. Concrete becomes animated, humorous, related to our body and moods. Beyond this, in buildings such as the Casa Batlló, he uses technological and structural innovations for symbolic, and political, ends – to present the sufferings of the Catalans under the dragon of Castile.<sup>4</sup> Structural and material invention are always means to a larger intention, and it is this overall meaning that gives his work the greatest symbolic depth. It communicates up and down the scales, from the everyday and local to the cosmic. By comparison the work of Mies and Aalto is too abstract, Le Corbusier and Wright too cut off from the language of the street, Eisenman too cerebral, Gehry too formalist.

To say Gaudí was the architect of the century, however, reveals my partiality towards artistic and symbolic architecture, values that other critics, such as Ken Frampton, do not necessarily share. In an Art Net lecture in London of 1974, I was shocked to hear him dismiss Gaudí as 'kitsch' – but then Philip Johnson used to dismiss Frank Lloyd Wright as the 'greatest architect of the nineteenth century'. The evolutionary tree is meant to make such egregious dismissals, as Pevsner, Giedion, Frampton and Johnson are happy to commit, more difficult. Or at least make them feel uncomfortable.

I realize, however, the high placement of Gaudí is a contentious claim that needs more defence than I can offer here. Those who value the perfecting of architectural technique might proffer Mies, Kahn or Norman Foster as the architect of the century. Those who value theory and education might favour Gropius at the Bauhaus or Eisenman because of his design and writing; those who prefer an understated humanism might put Aalto in this role. Many contenders for the top positions are apparent in the weighting I have given the 400 'best' architects.

But my idiosyncrasy of proffering Gaudí actually raises another surprise. In spite of a few disagreements over 'transitory facts', most critics and historians of twentieth-century architecture would accept this list of the 400 and most of the relative weighting. They would argue over the details but, because it is constructed as a composite portrait of what they have written, it is not very contentious. Perhaps I have exaggerated the recent Biomorph School (because I think it will be important) but a provocative aspect of this diagram is how conventional it is. We are surprised to find such a tumultuous century so full of stereotype and consensus. Was Modernism really

invented to mass-produce opinion and culture on a global scale – what ever happened to its creativity and individuality?

When we look back at the nineteenth century, with superiority, we laugh at the Salon and the conformity of an Academy and taste that could elevate Bougureau and Lord Leighton to such heights. Will the twenty-first century be any kinder to the Brit Pack of Damien Hirst and other sensations sanctioned by the Royal Academy; or the 10 000 followers of Andy Warhol? One of the more pleasant aspects of a change in century, and millennium, is that it forces such thoughts of quality and perspective into view. On 1 January 2000 all the most avant-garde artists and Modernists became old hat. The twentieth century is over; interpretation begins!

1 The Century is Over, Evolutionary Tree of Twentieth-Century Architecture. This simplified diagram is based on six major traditions of architecture (far left) that oscillate with respect to each other, like species. About 60 explicit movements, or schools, emerged in the twentieth century and 100 or so social trends, new technologies and building types. In general the evaluation of an architect's significance – 400 of them – is based on consensus, although there some judgements that are arguable, such as the supreme importance of Gaudí, and the presence of historians and critics who have formed opinion or theory.

It shows creative, conscious movements rather than amount of buildings. Furthermore, it should be in three dimensions showing how all the traditions related simultaneously. The fact it is collapsed in two dimensions sometimes creates two kinds of anomaly. For instance, Eisenman and Cardboard Architecture, are next to Foster, Rogers and High-Tech, 1973, because these different approaches are variants of the Logical tradition. Second, sometimes architects are in more than one tradition, such as Mackintosh and Le Corbusier, either because they move around or cut across many categories. All diagrams produce some distortions.

2 Structural diagram or semantic space that generates the evolutionary tree. The structuralist method of analysis, derived from Claude Lévi-Strauss and others, is based on the notion of underlying types and 'strange attractors'. Any architect may operate in several opposed traditions at once – eg Intuitive/Logical – but on the whole is attracted to consistent semantic centres. The reason is that training, friendships, the marketplace, specialization, ideology and taste form 'basins of attraction', centres of gravity. The semantic space is based on a curious truth: the specific words to which these attractors refer are not as important as the fact that they are as opposite as possible. Such opposition keeps fields of discourse open and from collapsing their axes onto other fields.

3 Antonio Gaudí, Casa Milà, Barcelona, 1905–10. The complete architect. Not only did Gaudí continuously innovate, here using a new parabolic structure of different widths to make the roof rise and fall and interior space pulsate, but he created new visual languages at all levels, from the detail to the whole. His social, symbolic and artistic commitments were just as strong. While Le Corbusier, Wright, Mies, Aalto, or Kahn, Stirling, Eisenman and Gehry have made great contributions to twentieth-century architecture, their work has usually been built more quickly, without as much depth and multivalence as Gaudí's.

4) Antonio Gaudí, Casa Batlló, Barcelona 1905–07. Bones at the base, balconies as masks, metaphors of the dead – surround an undulating polychromatic skin of water and seaweed – image of the Mediterranean. At the top a three-dimensional cross penetrates the orange-red tiles of the roof, the sword of St George, patron saint of Barcelona, slaying the dragon of the Spain that had preyed on the citizens of Catalonia. The meanings while local and specific are also part of other urban frameworks thus becoming more general and less insistent.