The cities everyone wants to live in should be clean and safe, possess efficient public services, be supported by a dynamic economy, provide cultural stimulation, and also do their best to heal society’s divisions of race, class, and ethnicity. These are not the cities we live in. Cities fail on all these counts due to government policy, irreparable social ills, and economic forces beyond local control. The city is not its own master. Still, something has gone wrong, radically wrong, in our conception of what a city itself should be. We need to imagine just what a clean, safe, efficient, dynamic, stimulating, just city would look like concretely – we need those images to confront critically our masters with what they should be doing – and just this critical imagination of the city is weak. This weakness is a particularly modern problem: the art of designing cities declined drastically in the middle of the twentieth century. In saying this, I am propounding a paradox, for today’s planner has an arsenal of technological tools – from lighting to bridging and tunnelling to materials for buildings – which urbanists even a hundred years ago could not begin to imagine: we have more resources to use than in the past, but resources we don’t use very creatively.

This paradox can be traced to one big fault. That fault is over-determination, both of the city’s visual forms and its social functions. The technologies, which make experiment possible, have been subordinated to a regime of power that wants order and control. Urbanists, globally, anticipated the ‘control freakery’ of New Labour by a good half-century; in the grip of rigid images, precise delineations, the urban imagination lost vitality. In particular, what’s missing in modern urbanism is a sense of time – not time looking backwards nostalgically but forward-looking time, the city understood as process, its imagery changing through use, an urban imagination image formed by anticipation, friendly to surprise. A portent of the freezing of the imagination of cities appeared in Le Corbusier’s ‘Plan Voisin’ for Paris in the mid 1920s. The architect conceived of replacing a large swath of the historic centre of Paris with uniform, X shaped buildings; public life on the ground plane of the street would be eliminated; the use of all buildings would be coordinated by a single master-plan. Not only is Le Corbusier’s architecture a kind of industrial manufacture of buildings, he has in the ‘Plan Voisin’ tried to destroy just those social elements of the city which produce change in time, by eliminating unregulated life on the ground plane; people live and work, in isolation, higher up.

This dystopia became reality in various ways. The Plan’s building-type shaped public housing from Chicago to Moscow, housing estates which came to resemble warehouses for the poor. Le Corbusier’s intended destruction of vibrant street life was realised in suburban growth for the middles classes, with the replacement of high streets by mono-function shopping malls, by gated communities, by schools and hospitals built as isolated campuses. The proliferation of zoning regulations in the twentieth century is unprecedented in the history of urban design, and this proliferation of rules and bureaucratic regulations has disabled local innovation and growth, frozen the city in time.

The result of over-determination is what could be called the Brittle City. Modern urban environments decay much more quickly than urban fabric inherited from the past. As uses change, buildings are now destroyed rather than adapted; indeed, the over-specification of form and function makes the modern urban environment peculiarly susceptible to decay. The average lifespan of new public housing in Britain is now forty years; the average lifespan of new skyscrapers in New York is thirty-five years.

It might seem that the Brittle City would in fact stimulate urban growth, the new now more rapidly sweeping away the old, but again the facts argue against this view. In the United States, people flee decaying suburbs rather than re-invest in them: in Britain and on the European continent, as in America, ‘renewing’ the inner city most often means displacing the people who have lived there thus far. ‘Growth’ in an urban environment is a more complicated phenomenon than simple replacement of what existed before; growth requires a dialogue between past and present, it is a matter of evolution rather than erasure. This principle is as true socially as it is architecturally. The bonds of
community cannot be conjured up in an instant, with a stroke of the planner's pen; they too require time to develop. Today's ways of building cities – segregating functions, homogenising population, pre-empting through zoning and regulation the meaning of place – fail to provide communities the time and space needed for growth. The Brittle City is a symptom. It represents a view of society itself as a closed system. The closed system is a conception that dogged state socialism throughout the twentieth century as much as it shaped bureaucratic capitalism. This view of society has two essential attributes: equilibrium and integration.

The closed system ruled by equilibrium derives from a pre-Keynesian idea of how markets work. It supposes something like a bottom line in which income and expenses balance. In state planning, information feedback loops and internal markets are meant to ensure that programmes do not 'over-commit', do not 'suck resources into a black hole' – such is the language of recent reforms of the health service, familiar again to urban planners in the ways infrastructure resources for transport get allocated. The limits on doing any one thing really well are set by the fear of neglecting other tasks. In a closed system, a little bit of everything happens all at once. Second, a closed system is meant to be an integrated system. Ideally, every part of the system has a place in an overall design; the consequence of that ideal is to reject, to eject, experiences that stick out because they contest or are disorienting; things that 'don't fit' are diminished in value. The emphasis on integration puts an obvious bar on experiment; as the inventor of the computer icon, John Seely Brown, once remarked: every technological advance poses at the moment of its birth a threat of disruption and dysfunction to a larger system. The same threatening exceptions occur in the urban environment, threats which modern city planning has tried to forestall by accumulating a mountain of rules defining historical, architectural, economic, and social context – 'context' being a polite but potent word in repressing anything that doesn't fit in, context ensuring that nothing sticks out, offends, or challenges. Thus, the sins of equilibrium and integration bedevil coherence, for planners of education as much as planners of cities, as planning sins have crossed the line between state capitalism and state socialism. The closed system thus betrays the twentieth-century bureaucrat's horror of disorder.

The social contrast to the closed system is not the free market, nor is a place ruled by developers the alternative to the Brittle City. That opposition is in fact not what it seems. The cunning of neo-liberalism in general, and of Thatcherism in particular, was to speak the language of freedom whilst manipulating closed bureaucratic systems for private gain by an elite. Equally, in my experience as a planner, those developers in London, as in New York, who complain most loudly about zoning restrictions are all too adept in using these rules at the expense of communities. The contrast to the closed system lies in a different kind of social system, not in brute private enterprise, a social system that is open rather than closed. The characteristics of such an open system and its realisation in an open city are what I wish to explore in this essay.

**THE OPEN SYSTEM**

The idea of an open city is not my own: credit for it belongs to the great urbanist Jane Jacobs in the course of arguing against the urban vision of Le Corbusier. She tried to understand what results when places become both dense and diverse, as in packed streets or squares, their functions both public and private; out of such conditions comes the unexpected encounter, the chance discovery, the innovation. Her view, reflected in the *bon mot* of William Empson, was that 'the arts result from over-crowding'. Jacobs sought to define particular strategies for urban development, once a city is freed of the constraints of either equilibrium or integration. These include encouraging quirky, jerry-built adaptations or additions to existing buildings; encouraging uses of public spaces which don't fit neatly together, such as putting an AIDS hospice square in the middle of a shopping street. In her view, big capitalism and powerful developers tend to favour homogeneity: determinate, predictable, and balanced in form. The role of the radical planner therefore is to champion dissonance. In her famous declaration: 'if density and diversity give life, the life they breed is disorderly'. The open city feels like Naples, the closed city feels like Frankfurt.

For a long time, I dwelt in my own work happily in Jacobs' shadow – both her enmity to the closed system (though the formal concept is mine, not hers) and her advocacy of complexity, diversity, and dissonance. Recently, in re-reading her work, I've detected glints of something lurking beneath this stark contrast. If Jane Jacobs is the urban anarchist she is often said to be, then she is an anarchist of a peculiar sort, her spiritual ties closer to Edmund Burke than to Emma Goldman. She believes that in an open city, as in the natural world, social and visual forms mutate through chance variation; people can best absorb, participate, and adapt to change if it happens step-by-lived-step. This is evolutionary urban time, the slow time needed...
for an urban culture to take root, then to foster, then to absorb change and change. It is why Naples, Cairo, or New York’s lower East Side, though resource-poor, still ‘work’ in the sense that people care deeply about where they live. People live into these places, like nesting. Time breeds that attachment to place. In my own thinking, I’ve wondered what kinds of visual forms might promote this experience of time. Can these attachments be designed by architects? Which designs might abet social relationships that endure, just because they can evolve and mutate? The visual structuring of evolutionary time is a systematic property of the open city. To make this statement more concrete, I’d like to describe three systematic elements of an open city: 1. passage territories; 2. incomplete form; 3. development narratives.

1. PASSAGE TERRITORIES
I’d like to describe in some detail the experience of passing through different territories of the city, both because that act of passage is how we know the city as a whole, and also because planners and architects have such difficulties designing the experience of passage from place to place. I’ll start with walls, which seem to be structures inhibiting passage, and then explore some of the ways edges of urban territory function like walls. 

a. Walls: The wall would seem an unlikely choice; it is an urban construction which literally closes in a city. Until the invention of artillery, people sheltered behind walls when attacked; the gates in walls also served to regulate commerce coming into cities, often being the place in which taxes were collected. Massive medieval walls, such as those surviving in Aix-en-Provence or in Rome, furnish a perhaps misleading general picture; ancient Greek walls were lower and thinner. But we also misimagine how those medieval walls themselves functioned. Though they shut closed, they also served as sites for unregulated development in the city; houses were built on both sides of medieval town walls; informal markets selling black-market or untaxed goods sprung up nestled against them; the zone of the wall was where heretics, foreign exiles, and other misfits tended to gravitate towards, again far from the controls of the centre. They were spaces that would have attracted the anarchic Jane Jacobs.

But they were also sites that might have suited her organic temperament. These walls functioned much like cell membranes, both porous and resistant. That dual quality of the membrane is, I believe, an important principle for visualising more modern living urban forms. Whenever we construct a barrier, we have to equally make the barrier porous; the distinction between inside and outside has to be breachable, if not ambiguous.

The usual contemporary use of plate-glass for walls doesn’t do this; true, on the ground plane you see what’s inside the building, but you can’t touch, smell, or hear anything within. The plates are usually rigidly fixed so that there is only one, regulated, entrance within. The result is that nothing much develops on either side of these transparent walls, as in Mies van der Rohe’s Seagram Building in New York or Norman Foster’s new London City Hall: you have dead space on both sides of the wall; life in the building does accumulate here. By contrast, the nineteenth-century architect Louis Sullivan used much more primitive forms of plate glass more flexibly, as invitations to gather, to enter a building or to dwell at its edge; his plate glass panels function as porous walls. This contrast in plate glass design brings out one current failure of imagination in using a modern material so that it has a sociable effect. The idea of a cellular wall, which is both resistant and porous, can be extended from single buildings to the zones in which the different communities of a city meet.

2. INCOMPLETE FORM
This discussion of walls and borders leads logically to a second systematic characteristic of the open city: incomplete form. Incompleteness may seem the enemy of structure, but this is not the case. The designer needs to create physical forms of a particular sort, ‘incomplete’ in a special way. When we design a street, for instance, so that buildings are set back from a street wall, the space left open in front is not truly public space; instead the building has been withdrawn from the street. We know the practical consequences; people walking on a street tend to avoid these recessed spaces. It’s better planning if the building is brought forward, into the context of other buildings; though the building will become part of the urban fabric, some of its volumetric elements will now be incompletely disclosed. There is incompleteness in the perception of what the object is. Incompleteness of form extends to the very context of buildings themselves. In classical Rome, Hadrian’s Pantheon co-existed with the less distinguished buildings that surrounded it in the urban fabric, though Hadrian’s architects conceived the Pantheon as a self-referential object. We find the same co-existence in many other architectural monuments: St. Paul’s in London, Rockefeller Center in New York, the Maison Arabe in Paris – all great works of architecture which stimulate building around themselves. It’s the fact of that stimulation, rather than the fact the buildings are of lesser quality, which counts in urban terms: the
existence of one building sited in such a way that it encourages the growth of other buildings around it. And now the buildings acquire their specifically urban value by their relationship to each other; they become in time incomplete forms if considered alone, by themselves.

Incomplete form is most of all a kind of creative credo. In the plastic arts it is conveyed in sculpture purposely left unfinished; in poetry it is conveyed in, to use Wallace Steven’s phrase, the ‘engineering of the fragment’. The architect Peter Eisenman has sought to evoke something of the same credo in the term ‘light architecture’, meaning an architecture planned so that it can be added to, or more importantly, revised internally in the course of time as the needs of habitation change. This credo opposes the simple idea of replacement of form which characterises the Brittle City, but it is a demanding opposition. When we try to convert office blocks to residential use, for instance,

3. NARRATIVES OF DEVELOPMENT
Our work as urbanists aims first of all to shape the narratives of urban development. By that, we mean that we focus on the stages in which a particular project unfolds. Specifically, we try to understand what elements should happen first, what then are the consequences of this initial move. Rather than a lock-step march towards achieving a single end, we look at the different and conflicting possibilities which each stage of the design process should open up; keeping these possibilities intact, leaving conflict elements in play, opens up the design system. We claim no originality for this approach. If a novelist were to announce at the beginning of a story, here’s what will happen, what the characters will become, and what the story means, we would immediately close the book. All good narrative has the property of exploring the unforeseen, of discovery; the novelist’s art is to shape the process of that exploration. The urban designer’s art is akin. In sum, we can define an open system as one in which growth admits conflict and dissonance. This definition is at the heart of Darwin’s understanding of evolution; rather than the survival of the fittest (or the most beautiful), he emphasised the process of growth as a continual struggle between equilibrium and disequilibrium; an environment rigid in form, static in programme, is doomed in time; bio-diversity instead gives the natural world the resources to provision change. That ecological vision makes equal sense of human settlements, but it is not the vision that guided twentieth-century state planning. Neither state capitalism, nor state socialism embraced growth in the sense Darwin understood it in the natural world, in environments which permitted interaction among organisms with different functions, endowed with different powers.

4. DEMOCRATIC SPACE
When the city operates as an open system – incorporating principles of porosity of territory, narrative indeterminacy and incomplete form – it becomes democratic not in a legal sense, but as physical experience. In the past, thinking about democracy focused on issues of formal governance, today it focuses on citizenship and issues of participation. Participation is an issue that has everything to do with the physical city and its design. For example, in the ancient polis, the Athenians put the semi-circular theatre to political use; this architectural form provided good acoustics and a clear view and of speakers in debates; moreover, it made the perception of other people’s responses during debates possible. In modern times, we have no similar model of democratic space – certainly no clear imagination of an urban democratic space. John Locke defined democracy in terms of a body of laws which could be practiced anywhere. Democracy in the eyes of Thomas Jefferson was inimical to life in cities; he thought the spaces it required could be no larger than a village. His view has persisted. Throughout the nineteenth and twentieth centuries, champions of democratic practices have identified them will small, local communities, face-to-face relationships. Today’s city is big, filled with migrants and ethnic diversities, in which people belong to many different kinds of community at the same time – through their work, families, consumption habits and leisure pursuits. For cities like London and New York becoming global in scale, the problem of citizen participation is how people can feel connected to others, when, necessarily, they cannot know them. Democratic space means creating a forum for these strangers to interact.

In London, a good example of how this can occur is the creation of a corridor connection between St. Paul’s Cathedral and the Tate Modern Gallery, spanned by the new Millennium Bridge. Though highly defined, the corridor is not a closed form; along both the south and north bank of the Thames it is generating regeneration of lateral buildings unrelated to its own purposes and design. And almost immediately upon opening, this corridor has stimulated informal mixings and connections among people walking the span within its confines, and has prompted an ease among strangers, which is the foundation for a truly modern sense of ‘us’. This is democratic space. The problem participation cities face today is how to create, in less ceremonial
spaces, some of the same sense of relatedness among strangers. It is a problem in the design of public spaces in hospitals, in the making of urban schools, in big office complexes, in the renewal of high streets, and most particularly in the places where the work of government gets done. How can such places be opened up? How can the divide between inside and outside be bridged? How can design generate new growth? How can visual form invite engagement and identification? These are the pressing questions which urban design must address in the Urban Age.