

Sir Terry Farrell's Banister Fletcher lecture

Sir Terry Farrell has allowed us to transcribe his London Society Banister Fletcher Lecture which we illustrate with a small selection of his slides

When I was at University many years ago, the Banister Fletcher book was very precious to me and I still have my copy – what was most interesting was that it was a visual record of history catalogued and prepared, page after page of illustrations and diagrams and great buildings. I have always been interested in Urban Planning, Architecture as well as in perfect illustrations of great buildings. I like to go beyond that and think of Architecture as being linked to city making and planning. I am going to concentrate mostly on two books I have written:

"Shaping London" – my comparative method is to take the layers, natural typologies, the rivers and tributaries, the woodlands and so on, and the shapes of the contours, and look at the infrastructure of roads, bridges, rail and canals, and in my mind, that's the order of things – you have to look at the landscape to lead you through these layers.

I've described it in the other book I'm going to refer to, "The City as a Tangled Bank" – the city is an organised complexity, a self-ordering system. Urban Design versus Urban Evolution, and in that sense I believe that city making is an evolutionary thing,

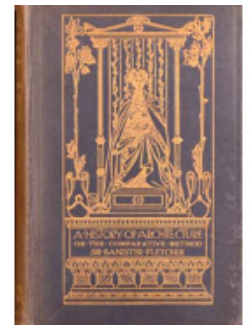
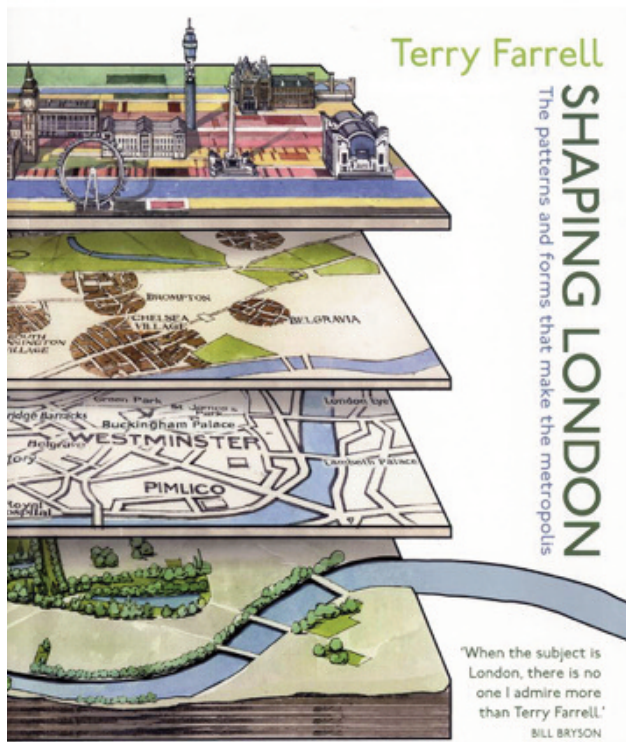
city nature more than a design thing, and I'll come back to that in a minute.

I like giving talks: mainly because it helps me to organise my own thoughts. I write a lot and I organise my thoughts through articles and books; giving presentations like today also helps me to organise them pictorially, looking for patterns and how to see order in the vast complexity that we see before us, whether it's cultural complexity such as architecture or whether it's a broader culture – I have written various articles and books over the years – In 1976 I gave a lecture titled "Buildings as a Resource" that focused on the re-use of buildings and how to do more with less. This was then published in the RIBA Journal in May 1976.

I have learned a lot through voluntary projects that I call "place as client" – one of my teachers in my architectural education was Louis Khan, who famously said, "What does the building want to be?" – I paraphrased this and said, "What does the place want to be? – place as client." Invariably when you are doing planning/master planning, or a large building project you have a client, whether private or public, or it could be a lobby group, and I really think there is a case for saying how do you separate your- >>>



Sir Terry Farrell, principal of Farrells
Photo ©Richard Gleed



Sir Banister Fletcher Memorial Lecture
8th November 2016
Sir Terry Farrell



THE LONDON SOCIETY

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>>> self from the client base and look at it and see what is going on, what the forces are, and make up your own mind about what the place really wants to be, and in that sense I looked at the Royal Parks and the River Thames and the Marylebone and Euston Roads which I will come back to, and Mansion House which I will also come back to.

In that category, I helped with the Thames Gateway study initially, I thought that Prescott's statement that it was all about housing shortage was completely wrong, and I looked at it, and put forward my own ideas for the Thames Gateway and I've done the same in many other instances. First I looked at Old Oak Common, as an independent place as client with two major rail stations coming together, that is an extraordinary thing and with these amazing connections it becomes more than about just trains and railway lines. I think a lot is connected up with practice. I have to survive through working, I enjoy my work, I have done many masterplans and buildings, public commissions, I always look to go beyond the red line, by that I mean, when an architect gets a commission there is a local authority or an owner with a site in mind, and has the jurisdiction of land ownership – but I am aware that everything we do has a ripple effect and goes beyond the red line – at Newcastle Quayside and at Brindley Place masterplan for example, we looked at what goes on beyond and try to influence it and form and shape it. At Newcastle Quayside we placed a position that was a key focus because we knew there was a possibility of a bridge (The Wilkinson Eyre bridge) the Millennium Bridge, and we looked at Gateshead and so much of Newcastle, we looked at Brindley Place, we did the masterplan and we looked at Birmingham which was emerging post-industrially at that time.

One of the most interesting ones was university campuses, which was my last project. Newcastle and Kent both go way beyond the red line to include future plans and the role of the

university within the wider civic context; in Canterbury we have met up with city leaders in relation to housing shortage and we met leaders in order to plan beyond the red line.

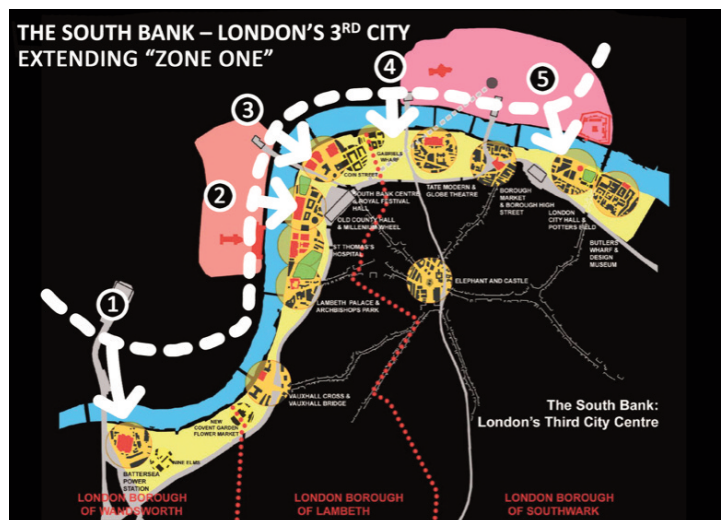
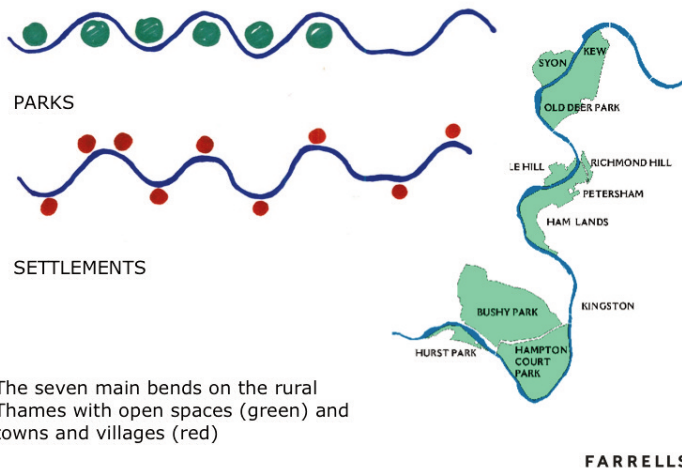
Similarly in the private sector, whether it's Earsl Court or Charing Cross, we looked beyond the red line. At Earsl Court I became fascinated by Chelsea Creek and the way it goes up to Old Oak Common, and down to Lots Rd.

Rivers are taken as dividers between boroughs, you have two boroughs on either side of the stream, and that continues all the way up because that is the nature of how they work. At Charing Cross we looked at the Embankment and the front entrance and it became a masterplan. I have always enjoyed working with public bodies and have had the opportunity to be design champion in many towns, particularly in Edinburgh which I stuck with for a long time, and helped with their tram system. Although its called Design Champion, I took it to be about design in a bigger sense.

I have been a member of many bodies, particularly English Heritage, I was there at the beginning after the demise of the GLC, as it was then, and began to be active on committees and became a commissioner and I learned from that and this fed back to my work and I was able to influence things. In a way I was a practical person, I like projects and doing real things, eg: English Heritage resisted strenuously the idea that HS1 and the Channel Tunnel railway should come in to St Pancras.

I ended up walking round the site with British Rail's chief architect and looked at St Pancras and I said if you come off the springing line arch you could extend the high speed train out from there and that's exactly what happened, and it's the small things about the detail design about how to put a roof on St Pancras that unlocks quite big things, and that was an entirely voluntary part as a commissioner for English Heritage.

I think one of the big things about city making – I have been



involved with the South Bank and many other projects over time and you come back and find that the narrative and story telling goes on and the other people layer on to it and the complexity of layering, the bit you contributed is slightly reinterpreted, adopted maybe but it then becomes part of the story telling and cumulative project. I get great pleasure from that: if you make a contribution to a great city like London or indeed any other great city, I think an architect planner is in a great position to debate and dialogue to make suggestions that others can then take up, and invariable claim as their own!

I'll rattle through – this is called Shaping London, and I have woven in some other projects. I divided up my own study of London as being landscape led, then infrastructure, then communities then buildings – if you take landscape their complexity, finding patterns that you can then draw a diagram of, which aids understanding and becomes something that we can translate in to other situations, and what I realised, and I am sure any Geographer would say was obvious, was I look at how the Thames flows, the outside bend is the deeper channel because the river is pushed against that side and a river swings from one side to the other, a river bend is not symmetrical, it swings on the outside channel and then the other side gets silted up and has a low profile to the water. Because all places grew from navigable use of the river, the deeper channel on the outside bend became where the towns grew, and if you look at the Upper Thames, Kingston, Richmond, and so on, the other sides are where the parks are, and this is a pattern that reproduces itself throughout London.

If you take the urban Thames, its got one very big bend, the one that goes from the City of London right round to Westminster. So if you look at why London is where it is, its got very simple forces, the original lowest bridging point that was navigable to Romans, as it was a very wide river, so you have got

a bridge position with a long bend facing south, you have a bridging point and a long long bend for settlements and over time, the City Of London and Westminster grew up on that long bend where you could access the river at low tide, but the opposite side was very shallow and muddy and required long jetties so it was therefore low value, and why the South Bank is how it is. I'm fascinated by railways and I did another diagram showing where the railways cut across the city and they severed off part of the South Bank which I have called London's third city – so there is a whole pattern, an ordering that goes back to the river and simple principles that dictate all kinds of things that we see today. The railways tried to get across the river and deliver people.

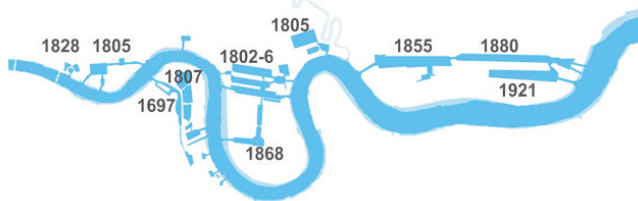
This is our building in Charing Cross – you can just see the original river bank, this is Bazalgette's sewage pipes and circle line and original Charing Cross and all of that helps us understand what shape and form and that building, and how we responded to it – that's layering understanding shape and form, and the building becomes an expression of all their forces.

The M16 building is on a long mudbank...where ships had to pull in on the riverbank, and this is secondary occupation. I look for patterns in all things and I was fascinated by the bridges – all in the centre are flat level bridges for views and simple practicality: London, Southwark, Blackfriars, Waterloo, Westminster, Lambeth, Vauxhall etc.. yet upstream you have all suspension bridges. This is from The Evening Standard last night, The Illumination of the bridges, very interesting interpretation. That's what I find particularly fascinating as diagrams help to explain the complexity.

Next up we have Docklands, the effect of the river scouring out a deeper channel is extraordinary in the docklands – Greenwich, Stepney, Canning Town, Woolwich are on the outside bends and the inside is where all the docks are, they all sit in low >>>

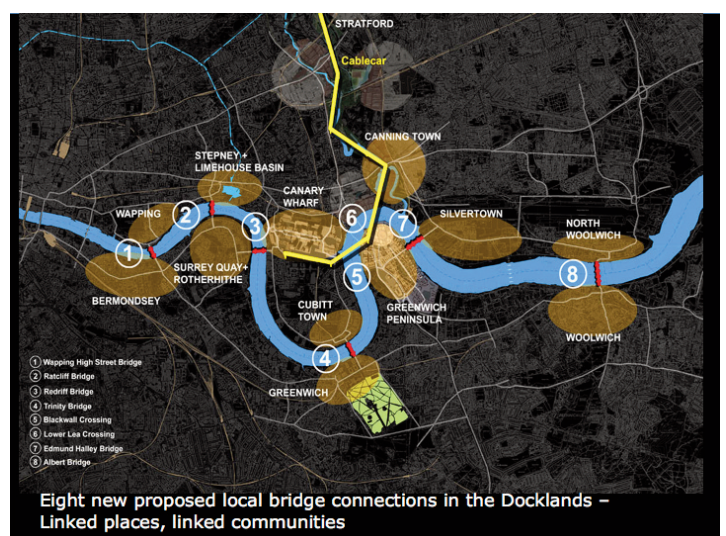


N Reveley's historic vision to straighten the Thames, 1796



Between the 18th and 20th centuries the realisation of the docklands epitomised the age of Imperial trade

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Eight new proposed local bridge connections in the Docklands – Linked places, linked communities

>>> value lands.

At one point someone came up with the bright idea of straightening the river out (plan shown), the British had an incremental organic approach, so the early docks were upstream then they grew outwards – but this has achieved the straightening of the river Thames, because they were all built on the docks inside the low value land that was on the inside bend. With the docks now being empty the Port of London still believe, as their revenues come from charges for landing, that the docks are full of boats which they are not!

And we here in Britain are sometimes slow to react, we have to recognize infrastructure to get connections between the sides of the Thames is intrinsic to city making – lack of bridges downstream (plus tunnels), the real thing about city making is low level bridges because you need to cross over spontaneously: its imperative to cycle or walk or drive over. I was the job architect on the Blackwall Tunnel, the tunnel approach is a motorway infrastructure, its a bypass, it kills all that is underneath the bridge and its surrounds. But if you have a low level lifting bridge (such as on the Rhine) it encourages growth and does not cause the disruption of the high bridges. We are wrongly treating the river as something to be bypassed.

I am a passionate advocate for spontaneous low level bridges which are perfectly attainable. The answer is urban connectivity. The Thames Gateway: I drew this plan which shows very many landscape initiatives and I likened it to showing the picture on the jigsaw box, showing what the project was all about and gave it some cohesion. I am still involved in this, my version of the Gateway was that it wasn't just about housing or jobs, it was too big: I saw it as a landscape project which, if we got it right, would be able to sustain housing and jobs within itself.

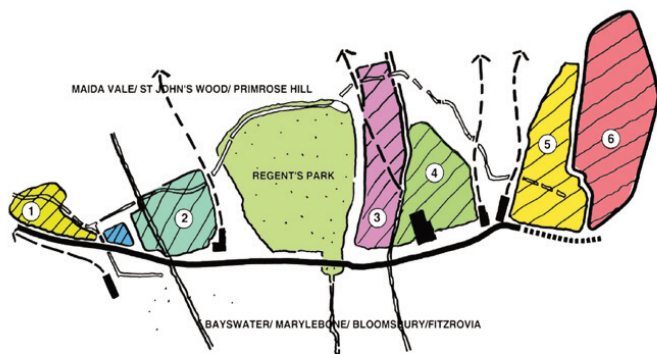
As a result, after six or seven years, it was then with a

Labour government that I persuaded Yvette Cooper to go with the project, and subsequently Boris Johnson took it up. In total around £70 million was spent on landscape projects: I am not a landscaper but it needed a big picture view and place as client. The tributaries are interesting: The Tyburn from Regent's Park Lane down to Marylebone , and then crossing Piccadilly, its called a lost river but you can see it on the contours, I point it out to people; they are not lost as the contours are clearly there.

This is my pattern of the tributaries of the Lea and the Brent which are still flowing, which are big and open and were industrial up until relatively recent times: one in the middle which is the Fleet which divided the city of Westminster from the city of London: not until Holborn viaduct was built was it satisfactorily resolved.

Bigger diagram showing tributary rivers that are by Chelsea Creek that are highly industrialised: once someone upstream starts to dump in the river it becomes industrial and because these industries need to be close to housing because of horse and cart etc, you get alternating between Chelsea Creek, then the Westbourne, then the Tyburn, then Fleet and Walbrook ,and either side the big industrial rivers of the Brent and the Lea. Desirable residential areas alongside rivers such as the Westbourne and the Tyburn alternate with industrial uses. You've got the Westbourne which goes through posh places like Knightsbridge, gas stations, railway yards, cemeteries and football stadiums are all dumped alongside the industrial rivers, and there is a clear pattern there.

The canals – my diagram shows locks, rivers and canals are all joined, not to do with lochs, but rather a system of connectivity where water could go uphill; a network. Richard Trevithick's first railway line – I love this juxtaposition: it failed because he hadn't really thought about the railway line.



Mainline stations: The New Road: patterns of social housing

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Metropolitan Landscapes and Integrated Connectivity



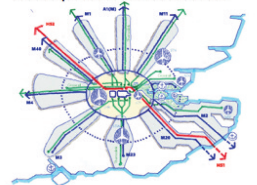
GROWTH OF SOUTH EAST REGION: Landscape and Infrastructure Radial Patterns

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Balanced Metropolitan Growth



Metropolitan Infrastructure



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I am fascinated by England, by the shape that it is: from the north of England came all the industry, coal, bricks, beer, stone, and that was the original idea of the railways, they all stop north of the Marylebone and Euston roads. Not much industry from the south of London, these trains only bring in people, but people wanted to get to the north bank, they have to get over the Thames, that is why you have high level viaducts in South London, Victoria, Charing Cross, Blackfriars, Cannon Street.

As to the pattern of mainline stations, when they divided up boroughs they did it north to south, but in reality it should have been east to west – that could have been the biggest accumulation of social housing. Look at High Speed and the railway connection: once Old Oak Common gets up and going HS2 is 30 minutes to Birmingham airport, it becomes a viable option. I proposed a concept of developing lots of airports around London, a constellation that would connect them.

I looked at the south east and its patterns, I came to the conclusion that the green belt is the wrong shape, it should be a linear corridor, transport breaks through the green belt in spikes; we should have corridors between our transport infrastructure.

The tube is fascinating, diagrams are everything, the first tubes were a problem to build, once Brunel had built the Rotherhithe tunnel and then the tube was born, an underground system came in to being, extraordinary and three dimensional, independent of the streets and the mental map. Tube diagrams became a brand and a navigation tool, you associate the linearity of Farringdon and Paddington. The circle line evolved, it never started out as it is now, it became a circle with that street map, then the brand could coalesce.

The way we navigate our own personal devices today, iPhones and iPads, is very much informed by Harry Beck's mental maps all those years ago. There's one road that goes from Buckinghamshire to Essex, and it goes down the Bayswater Road

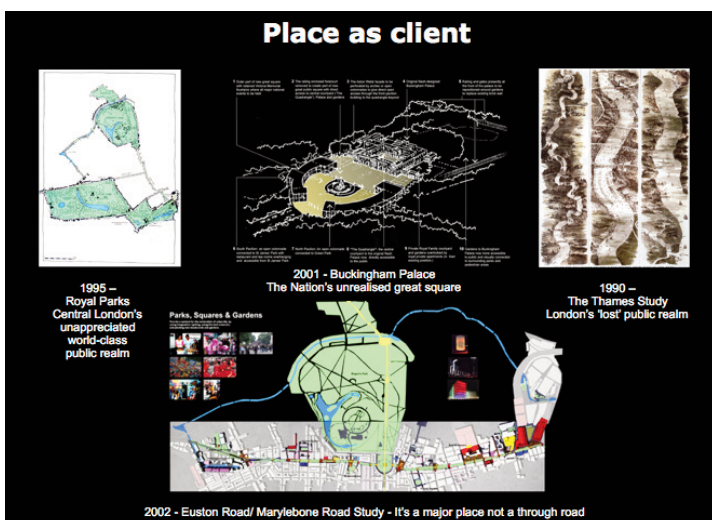
to Cheapside and out, the Marylebone and Euston Road. I calculated that there were ten times more people walking along this road than cars: I want to work on the Euston Road the traffic lights and pedestrian crossings, everything is wrongly prioritised, so I have argued for new crossings at Paddington, Edgware Road, Regent's Place: my biggest argument and success is the pedestrian crossings at Park lane, Hyde Park Corner and Marble Arch. Before it was all underpasses.

I proposed this back in 1992/3, it has been carried out by others subsequently. Euston Circus is now more about the pedestrian than it was previously. 3.5 km of balustrading on the Marylebone and Euston Road, much of which are now being taken out all along Madame Tussaud's, so people aren't held in pens.

My favourite crossing, believe it or not, is in LA, a shopping centre either side of the road and it joins two Malls. When people cross the whole thing lights up and music starts to play. An extraordinary celebration of a pedestrian crossing.

You know you're in a town centre when there's a gyratory, and these have destroyed the very centres that existed there. Underpasses were designed to keep traffic flowing, by traffic engineers, Aldgate, Gower St, Tottenham Court Road, Vauxhall Bridge, Hammersmith, to get rid of pedestrians. I have been on about getting rid of underpasses all over London and re-prioritise for the people. I've had numerous discussions on this subject with both Ken Livingstone and Boris.

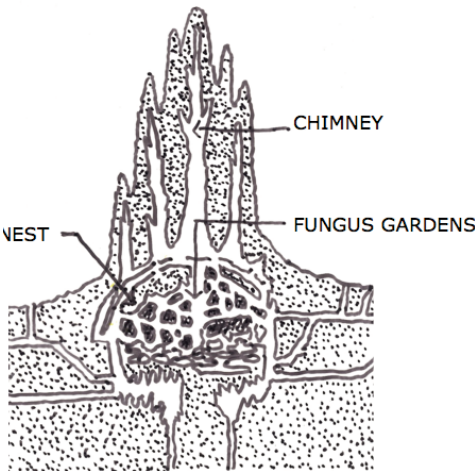
Royal Parks drawing: drawn in 1973, so people could walk or cycle round between the parks and to connect all the parks. I am fascinated by the Nash mile, and argued for it to be pedestrianised. I have lobbied for the area outside Buckingham Palace to be opened up – it used to be a roundabout, for the road to be pushed to the outside – the compromise was to do a triangle. it used to be a roundabout, the biggest tourist attraction in Britain! >>>



Euston Circus – a new place



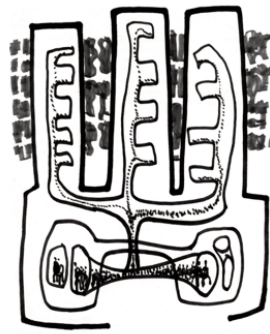
From: The City As A Tangled Bank



Farrell, Cross-section sketch of a termite mound, 2013

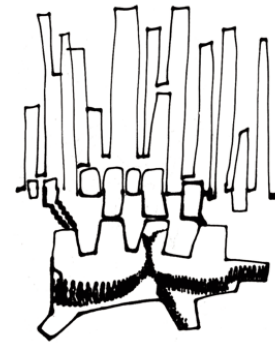
The natural, self-organised of the termite – which is thought to have been around, adapting and forming, for some 30 million years – has been much studied by biologists and habitat experts. The ingenuity, cleverness and engineering design that contribute to this phenomenon, which is nevertheless created by a collection of brains working by instinct, is extraordinary. The mounds themselves can be viewed as huge stomachs, acting as a sort of compost heap and fungus garden to feed the resident instincts.

From: The City As A Tangled Bank



Farrell, Student drawings, 1963-4

Drawings done whilst a student at University of Pennsylvania, these drawings show the intricate internal organs of the city and how people occupy it – from deep down,



Occupy it – from deep down, travelling in subway/Tube systems up to ground level and the office block. There are many parallels with the activity of termites in a termite mound.

>>> Repton's Red book: showed before and after landscapes, of parkland unimproved and then improved an organic way of seeing landscape change, whereas Haussman had big boulevards in Paris, he worked out a British way, Urbanisation – The National Park City initiative does not preclude landscape. There are 3.8 million back gardens in London, which are the richest diversity in the whole of the south of England, but we would not have them without houses and streets.- urbanisation and ecological diversity are not mutually exclusive.

Theres no written constitution, as Theresa May now knows, I am fascinated by the way the city is divided up and these diagrams show the hierarchy: the Treasury and Foreign Office right next to Parliament and Downing Street, and the palace relate

to the parade ground and to The MOD. No need for a written constitution, just a map of London!

In my book, *City as a Tangled Bank*, I discuss Darwin's idea that at first there appears to be no apparent order in nature, but there is. All architects and planners like to make or to impose an order, from patterns that you have a visual pattern of, but as Nash knew, there is a much greater natural order that should not be ignored.

Most great cities and London particularly leads because it is very habitable, a large metropolis, and big as it is, because it has grown organically and naturally, its planned in bits and opportunistically planned, but always through a holistic piece of planning and there is tremendous order, and a grandeur. ■

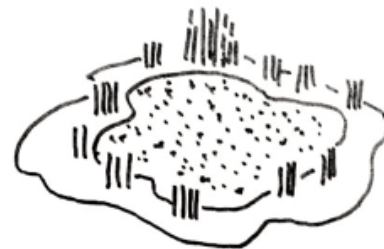
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NEW YORK: 2 x the density of London.
High rise centre: low rise outer boroughs



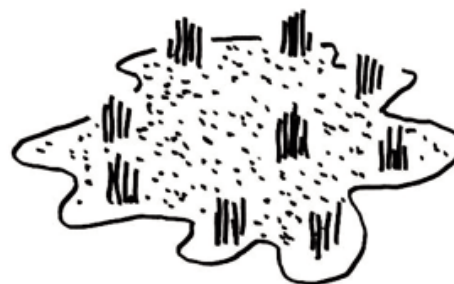
The outer boroughs are "non-plan"

PARIS: 2 x the density of London.
Low rise centre: high rise periphery



The historic core becomes a museum?

LONDON: Dispersed centres. High rise within low rise general pattern



Better integration of growth, preservation and green space

DIFFERENT CITY STRATEGIES FOR GROWTH & CHANGE

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