

Foster has long designed to achieve a more humanely social work environment ... While conventional real estate wisdom might deem the lightwells as frill, they are integral, in Foster's hands, to a strategy that addresses criticisms of tall buildings as work environments: that the big pancakes of space neither offer the amenities staff want nor encourage collaborative work. For Swiss Re, Foster offset each level of the lightwells to offer terrace overlooks. The advantage is simple, if a bit abstract: if you see people on other floors of a tall building, you are much more likely to feel they are part of your group, and that you are in this business endeavour together. James S Russell, *Architectural Record*, June 2004

[Swiss Re] reverses the cliché about London merchant banks, that to understand them would be to 'let daylight in upon the magic'. Here the magic comes with the daylight, illuminating and increasing the value of what would otherwise be deep space. Jeremy Melvin, *RIBA Journal*, July 2004

1. Looking up from the base of one of the atria on Level 10. The six-storey atria are the building's 'lungs', driving a system of natural ventilation, and they allow daylight deep into the plan. But they also provide spatial drama, something rarely found in high-rise office buildings.



Environmentally, the lightwells that spiral up the building help to regulate the internal climate. But they play a less definable role too, adding a little spatial drama to the mix.

Norman Foster

Made up only of the triangular mullions – spaced at 10 degrees of rotation, thus omitting every alternate mullion from below – and trapezoidal transoms, all in welded steel, this delicate dome encloses the last three levels of the tower. At this point all the double-glazed units are triangular, except for the central circular domed unit, and the units in the uppermost ring, which are icosahedral. The circular domed unit is the only element of curved glass in the building. Around it is a ring of insulated aluminium panels, which house air and smoke extracts and recessed lighting.

To control the sun and glare within the dome, the outer layer of the double-glazing is body coated grey with a high-performance coating on its inner face to exclude 83 per cent of incident light and sun. Outside, some glazing bars have cover strips matching the dark ones below while others have silver projecting cover strips that, for visual continuity and as helical wind stops, continue the upward sweep of those that highlight the structural grid below.

As with any energy-efficient building, the design is heavily influenced by the systems that control its internal environmental conditions. Especially critical is to maximise use of natural light and ventilation, and minimise the use of the artificial lighting and air-conditioning that complement them in a 'mixed-mode' building such as this. The solution chosen, where air for both natural and mechanical ventilation is drawn in from all parts of the building's exterior, is only feasible on an exceptional urban site such as this where the bounding streets are lightly trafficked and the air relatively clean.

This allows the air-conditioning plant to be distributed throughout the building: on each floor every 'spoke' of office space has its own air-handling unit. Thus it is possible to air-condition only those parts of the building that require it at any moment (such as the upper floors on a windy day) while the rest of the building remains naturally ventilated. Moreover, this solution frees up space in the core, which accommodates risers but no large air ducts.



Left: The building has been used as a location in a number of recent films, including Woody Allen's *Match Point* and more memorably in *Basic Instinct II*, featuring Sharon Stone, seen here on set.

What Foster has done with extraordinary skill and clearheadedness is to identify the characteristics of different building types, isolate the best and combine them. Tall buildings have the potential to become landmarks and to combine activities in beneficial ways, whereas low rises, combined with atria, can improve daylight and ventilation. **St Mary Axe attempts a synthesis.** Jeremy Melvin, *RIBA Journal*, July 2004



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2. The view down from the atrium balcony on Level 15. The balconies at the edges of the atria provide strong visual connections between floors and create a natural focus for communal office facilities. Standing at the edge of the atrium on one of the upper floors is an exhilarating experience and the views out are extraordinary.

3. Constantly changing patterns of light and shade animate the atrium spaces.

We are in the reinsurance business. For us, sustainability makes excellent business sense because we pay claims on behalf of clients for floods, heat waves, droughts. To the extent that these claims are related to global climate warming, it is only prudent for us to contribute to it as little as possible. Sara Fox, Building Director, 30 St Mary Axe, quoted in *Architectural Record*, June 2004

For me the real architects are those who commission wisely. To achieve great architecture you need more than just a great architect – you also need a great client. Patronage can be a spur to be bolder, to fulfil more challenging visions, to set new standards. Swiss Re really pushed us to explore new ground – structurally, environmentally and socially – virtually to reinvent the office tower. Look into the history of architecture and you find that it has been shaped not just by the masters, whose buildings survive them, but also by the great figures who supported those visions. Norman Foster, interview with *Archidom*, July 2004

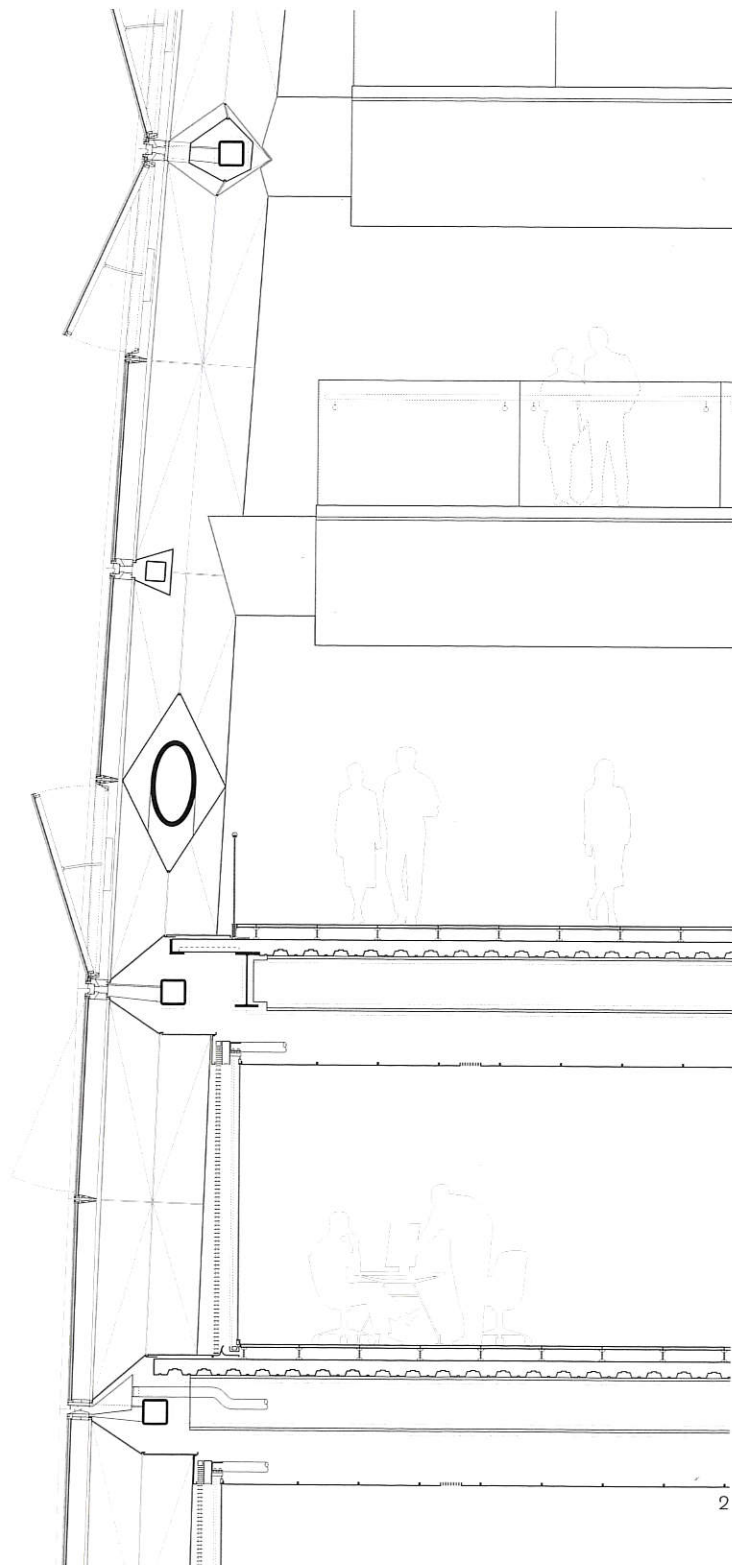
Generally, the stack effect is very weak; the biggest energy transfer for a building is cross-ventilation. Unfiltered though, it swoops through a room, rips glass off windows and dumps papers to the floor so we had to find a way to tap into a little of this energy source but to damp it down. We then hit upon the idea of rotating each floor by five degrees vertically so that the atrium was wound across and up the face of the building. As soon as we did that we tapped into the pressure difference and could move lots of air through the building. Robin Partington, formerly of Foster + Partners, in conversation with the editor, 2008



1. Detail of one of the opening panels in the atria. The double-glazed panels have body-tinted glass with a high-performance coating to reduce solar penetration.

2. Detailed section through three floors of a typical atrium, showing the alternating arrangement of bottom-hinged and top-hinged ventilation panels.

3. Opening panels are arranged in the atria in groups – four top-hung and four bottom-hung – at two-floor intervals up the height of the building. They open selectively, depending on the prevailing wind conditions, and when seen from below give the smooth form of the building a serrated edge – like the emerging petals of a tightly wound flower bud.



The wells play two important environmental roles, bringing light deep into the office floors, thus lessening the need for artificial light, and introducing fresh air, thus reducing the need for air-conditioning. Fresh air enters the well, and stale air escapes, through triangular opening windows in the perimeter. Each six-floor high segment of the wells spirals through 30 degrees of rotation around the facade as it rises. The difference in air pressure around the perimeter of the building has the effect of bringing air in through some of the openings and drawing it out through others. In some wells, there is a large enough external pressure differential to generate strong vertical air movement, though in most cases the greatest air movement is from a windward atrium in towards the core before the air exits through the neighbouring wells.

This natural system operates except when external conditions are too hot or cold, too windy or wet. In such conditions the intelligent building management system (BMS) closes the windows (each is driven by a pair of electric motors, so there is a back up against failure) and turns on the air-conditioning; all this is done only where necessary, and progressively as required.

Air-conditioning is provided by an air-handling unit above the ceiling of each 'spoke' of offices. This draws air through the slits in the glazing transoms into three plenums and distributes it to seven fan coil units, placed above the ceiling to allow flexibility of office layout below. These units can heat or cool the air as required. Stale air is exhausted through a pair of outlets behind the transom slit. Although the spokes of office floors within each six-storey stack are not sealed from one another, nor from floors above or below, the air-conditioning system has been designed so that only one or some of the spokes can be air-conditioned if required, while the rest of the floor remains naturally ventilated. Even the windows in the lightwells adjacent to the air-conditioned spoke may remain open.



The Swiss Re Headquarters is a clear example of what can be achieved with building design if given a clear environmental statement from the client. This building should continue to have low energy rating in years to come, which in a market of climate change levies, future EU energy labelling and the new energy white paper must improve the longevity of the building and maintain a high future market value. Matthew Kitson, of Hilson Moran Partnership, *Architecture +*, June 2004

Left: At an early stage in the design process, the team experimented with an external shading system for the atria, which was mocked up in model form, as seen here. It was rejected in favour of solar-tinted glass.

For the first two and a half years, the windows were not opened. We had to wait a year to get the weather data and then write software to respond to it, and a bit longer while some of the glass was replaced. Now everything works perfectly. But because of the delay we were criticised for the claims we made. The counter argument was that although the windows were not open, the building was still using the ventilated facade, cooling the building during the summer and keeping it warm in the winter, and so we were still making huge energy savings even before the building's systems were utilised to their full potential. Rob Harrison, of Foster + Partners, in conversation with the editor, 2006

Not all plant, such as the boilers and chillers that provide the hot and chilled water for the fan coil units, can be distributed locally in this fashion. Central plant of this sort is distributed in three main places. Most is in the basement where there are chillers, sprinkler pumps and electrical rooms. The boilers are located on the top two floors of the Bury Street building where the projecting flues they require are inconspicuous. On the three floors between offices and dome is mainly the plant required for ejecting heat and stale air through the louvred cladding, the cooling towers for the air-conditioning and extract vents for toilets and kitchens. Also up here are electrical switch rooms, duplicating those in the basement, to ensure an uninterrupted electricity supply if the latter should fail.

It is possible to air-condition only those parts of the building that require it at any moment, while the rest of the building stays naturally ventilated.

The floor-to-ceiling glass of the cladding maximises the daylight entering the offices. But without external sun control devices, or the tinted glass that protects the atria, this could present problems with heat admission from the sun that, especially in summer, falls on much of the building's circular perimeter. The solution is the motorised blinds and mechanical ventilation in the cavity between the outer cladding and inner glazed screen.

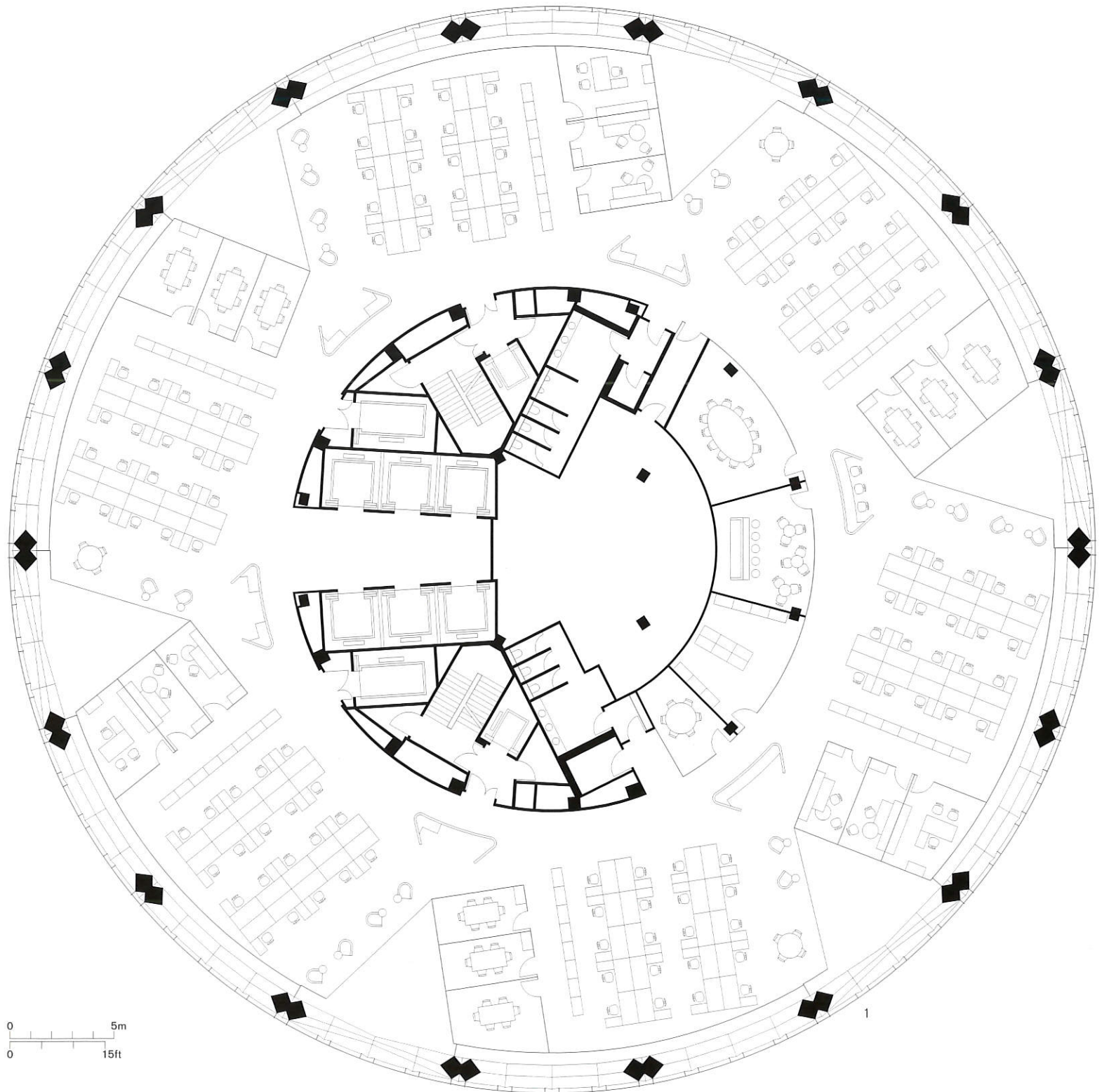
When sensors detect it is necessary, the BMS lowers the blinds into the cavity and adjusts the blades to one of four settings: closed, a third open, two-thirds open and horizontal. (Only when not essential for solar control can the occupants rather than the BMS operate the blinds.) These blinds exclude all direct sun at angles above 22 degrees and overall eliminate 85 per cent of potential solar gain while admitting 50 per cent of the light.



Technical innovation, design quality, thoughtful urban infill. These are the things that matter when designing big buildings, the core virtues. But these giants are, increasingly, vertical landmarks. Swiss Re's holistic specifications for their new headquarters are certainly admirable; but the spin-off in terms of a heightened and rather exclusive corporate identity cannot be underestimated. Swiss Re joins a club whose membership requires the ownership of architecture that edges into the realms of super-science, or modern sculpture. Jay Merrick, *The Independent*, 28 April 2004



Everyone's conscious that the balcony edges are the best spaces in the building, with great views up and down the lightwells. These areas are reserved for coffee bars, copy centres, and other informal gathering functions, rather than devoted to departments. We spent a lot of time with staff talking about the interconnectivity this makes possible. As people move into the building, they come up to me and say, 'Oh, now I get it!' Sara Fox, Building Director, 30 St Mary Axe, quoted in *Architectural Record*, June 2004
 Left: Sara Fox, presenting the project to the media, 27 April 2004.



The completed open workspaces are spatially extraordinarily rich. It is possible, looking back from the perimeter of the building, to view almost half of one floor over the tops of the assemblies of Swiss Re's standard pale grey Haller cabinets. In an experience characteristic of Manhattan, the windows beyond these supply views of and between the nearby tall buildings and of the City's distant nemesis: the inexorably rising stacks of broad floor plates at Canary Wharf. Christopher Woodward, *Building Design*, 30 April 2004



We shaped the building for aerodynamic reasons and made a series of spiralling atria – the lungs of the building – that allow sunlight to penetrate deep into the office floors and have opening windows that open out like leaves to draw in fresh air. These spiralling spaces are very dynamic and provide a completely different way of looking out at the city, and relating the workspace to views.

Norman Foster, interviewed for BBC TV, 27 April 2004
 Left: Norman Foster, being filmed by the BBC at the open day held for the media on Level 17, 27 April 2004.



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The heat of the blinds is extracted by air drawn through the office floor into the bottom of the cavity and then up between the blinds and the inner glazing by a fan in the ceiling, to be returned to the air-handling unit and its heat exchanger. The temperature in the outer cavity might rise as high as 45 degrees Celsius, but that behind the blind will not effectively exceed 33 degrees, while that in the offices remains a comfortable 22 degrees. Hilson Moran contributed considerably to the development of this deep facade using computational fluid dynamics and dynamic thermal modelling to assess some fourteen different facade options.

Swiss Re expects its entire staff to enjoy external views, with nobody seated in a 'back room' area.

By exploiting the potential of the building's environmental systems to the full, it can be naturally ventilated without any back-up heating or cooling when the external air temperature is between 12 and 25 degrees Celsius. In these conditions, internal temperatures stay between 20 and 26 degrees, the rate of air change ensuring that even the top of this range is experienced as comfortable. If the sensors in each spoke of offices detect the temperature rising above 26 degrees in any of them, the air-conditioning will come on in those spokes while the windows remain open. Only when external temperatures exceed 28 degrees does the BMS seal the building and air-condition the whole of it.

In winter, when external temperatures are between 5 and 12 degrees it can remain naturally ventilated, but may need some heating. Below 5 degrees the building is sealed (partly because there might otherwise be some local condensation), and mechanically ventilated and heated.

Used in this optimal fashion, the building can be naturally ventilated without heating or cooling for an anticipated 40 per cent of the year, so achieving 50 per cent energy savings over a typical 'prestige' air-conditioned office. Whether or not that is achieved depends on how the occupants use these systems. (Interestingly, the Commerzbank, which was expected to be naturally ventilated for 50 per cent of the year is in practice naturally ventilated for 80 per cent, so this figure may rise.) Generally, owner-occupiers tend to make more complete use of such energy-saving systems than tenants. So while Swiss Re is likely to achieve such efficiencies on the floors it occupies, it remains to be seen if the tenants on the other floors do so too.

The architectural team had wanted also to naturally ventilate even the top three floors under the dome and suggested exhausting the air through the central domed glass element, which might be raised and lowered as required. However, Matthew Kitson considered it probable that the strong winds at this height would cause unpredictable inward gusts and loud whistling or howling sounds. Hence these upper floors are air-conditioned from plant in the floors below.

1. A typical mid-level floor plate, showing how the 'fingers' can be planned in a variety of configurations.

2-4. Swiss Re occupies the first fourteen storeys of the building. The fit-out on these floors is not by Foster + Partners, but it is essentially in the spirit of the building and demonstrates the inherent flexibility of the office floors. The only significant omission is the atrium planting, which could still be incorporated in the future.

Overleaf: Room at the top: the bar space at Level 40 – the highest occupied floor in the capital. Attention focuses immediately on the spectacular view. Furniture and fittings are kept simple and discreet to avoid competing visually with the panorama outside.





At night, in Swiss Re's club room you get the most amazing kaleidoscopic effects as images are fractured and reflected in the nose cone glazing. It's one of those things that are completely unforeseen by the designer, the kind of thing that happens as the building leaves the drawing board and takes on a life of its own. It is quite magical.

Norman Foster, in conversation with the editor, 2006

Right, far right: On 21 September 2004 Foster + Partners held a party in the club room at the top of the Swiss Re building. The party marked the publication of *Norman Foster Works 1* and *Norman Foster Works 4*, and celebrated the completion of the building itself, some five months earlier.



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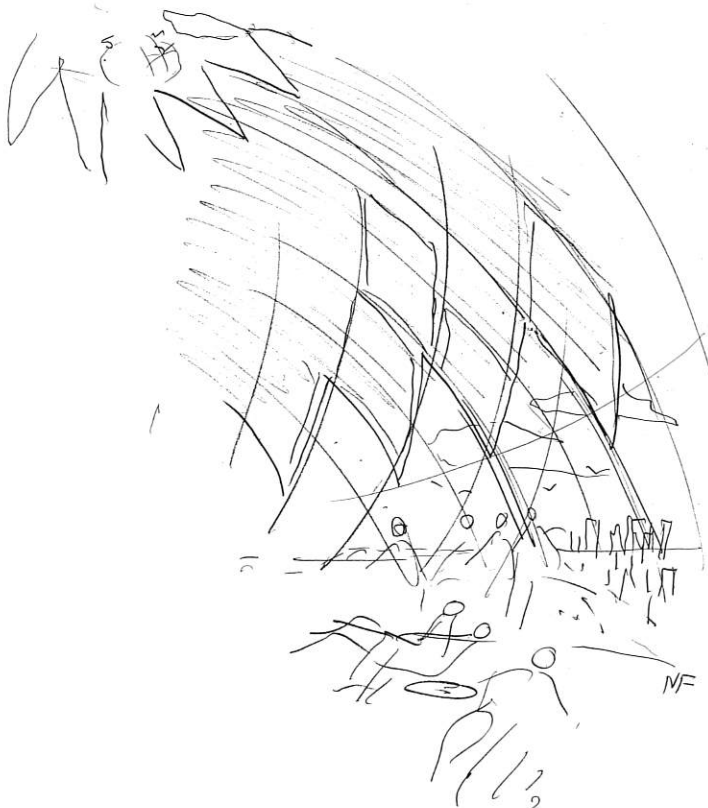
For energy efficiency, on the uppermost floor this displacement system only keeps the three metres or so immediately above floor level comfortable, allowing the air above that to become considerably warmer before being extracted by the fans in the ring cowl around the central glass lens. Lest it should have proved necessary, provision was made to add a computer-controlled tracking sunshade later, somewhat like that in the dome of the Reichstag, to shade even the diminished direct sun that penetrates the heavily tinted glazing of the dome.

The Swiss Re building looks very much its best when the sun shines on it so that the white cladding of the structure inside is clearly visible through the glass, giving considerable depth to the facade and a larger-scale rhythm than that of the smaller glazing bars. When overcast it can seem a bit gloomy and glacial without this depth – the silver cover strips marking the lines of the columns behind not emphatic enough to fully compensate.

Once you have negotiated the stone clad benches, which both guide pedestrian movement and prevent vehicles getting too close to the building, the facade's apparent depth also disappears as you approach, the glazing seen at an oblique angle, becoming more reflective. It is a pity that recessing the glazing of the lightwells behind the horizontal sunshades proved economically impractical. The dark spiralling glass does, however, give a definite dynamism to the exterior, drawing you towards it as you approach either from Bury Street or from the south along St Mary Axe.

The bar up in the dome is one of London's finest new spaces, soaring up to offer you the sky as well as the city spread below.

To bring a sleekly self-contained form such as this to the ground and create a suitably pronounced entrance within it was no doubt a design challenge. The solution achieves this with some delicacy and poise while also revealing key aspects of the building's organisation. A recessed arcade rings the base of the tower and extends up, like the lobby inside, through a double-height structural bay. In front of this the outer cladding extends down towards the ground in inverted triangles leaving the other triangles between the sloping columns open. In front of the entrance, the arcade widens and extends up through four levels, clearly exposing the primary structural frame and giving a view up through one of the spiralling lightwells. Thus, even before you enter, the building exposes and makes to some degree comprehensible key aspects of structure, outer skin and the spatial organisation that its environmental systems exploit. To stop people banging their heads on the sloping columns ringing the arcade, a system of water features and rails keeps people away from where they meet as Vs at their bases.



[In the top floor bar] you are in a Jacobsen chair, at the City's highest occupied viewpoint. The primly Miesian Aviva Tower, which from the ground looks as tall as Swiss Re, seems so short from up here that one hardly notices it. The astonishing fact is that one can see right across London, from Alexandra Palace to the north to Crystal Palace to the south. One sees how green London is. The BT Tower looks like a pin stuck into a map; St Paul's is an ornament, a crouching lion; and the huge housing estates of Hackney and Tower Hamlets are so much Lego. Timothy Brittain-Catlin, *The World of Interiors*, October 2004

Far from reserving the top of the tower for an opulent boardroom for City fat cats, Swiss Re took the egalitarian approach of designating it as an everyday restaurant and bar for all staff. Foster responded by pinching in the top of the tower to a narrow point. If this suggests a cramped attic chamber, however, the reality is just the opposite: it is a huge, lofty dome, uncluttered by internal walls or columns – breathtakingly exhilarating. And as the dome is fully glazed, the heavy diagonal frame having been discarded up here, the interior is radiant with daylight and offers a mesmerising panorama all around greater London and the green hills beyond. Martin Spring, *Building*, 30 April 2004

The best space in the building, the summit, the pinnacle, is given over to the people who work here. People come first. Norman Foster, quoted in *The World of Interiors*, October 2004



1. The restaurant on Level 39 offers unrivalled views west over London; tables by the window are naturally the most coveted. The glass in the restaurant and bar is body tinted – like the glazing in the atria – to reduce glare and solar gain.

2. An early sketch by Norman Foster drawn at a time when Swiss Re remained to be convinced that the top of the building could have a social role. In the end though, the business case was overwhelming and Swiss Re embraced the idea wholeheartedly. The restaurant is used by Swiss Re staff and their guests at lunchtime and in the evening it is let out for private functions. Significantly, the bar and restaurant have become commercially highly successful, in use every evening, and the bar on Level 40 has become one of London's 'must see' destinations.

3. Like the lobby, the materials in the restaurant are restrained but luxurious – polished black granite floor, dark grey silk walls – and the colour palette is a deliberate monochrome. One variable is the tablecloths, which are changed – white in the daytime, dark blue in the evening – to reduce reflections on the glass.

Sitting up here in the nose cone of the Gherkin, you can look at it in two ways. It is almost like Norman's flying saucer. You can imagine him flitting around the world in this thing or you could flip it on to its side and think: 'hang on, suddenly we are in the nose cone of an airship'. There are a lot of references to planes and flying machines in his architecture. I think it is that efficiency of design – the fact that in an ideal world, a building would be like a plane. It would be like a Boeing 747. It could leave the ground. It could go somewhere else and touch down. In a way it is that 1950/60s dream coming through in the architecture. Hugh Pearman, 'Front Row', BBC Radio 4, 28 December 2007

Whether you like or loathe tall buildings, the Gherkin is a supremely skilful addition to London's skyline. It is one of those buildings that even the most philistine, the sort who normally bridle at the idea of anything 'modern', have come to love. Walk along the South Bank of the Thames from the Design Museum to the Royal Festival Hall or drive into the City along Mile End Road, particularly at night, and the Gherkin's curving form constantly entertains and enlivens. Giles Worsley, *The Daily Telegraph*, 28 April 2004
 Right: The building as used in a poster campaign in support of London's bid for the 2012 Olympics.



1. The bar on Level 40 is reached from the restaurant level below, either by stair or by a circular glass-enclosed lift.

Opposite: Looking up into the 'nose cone' of the building from the bar on Level 40. The ring in the centre of the soffit around the glass lens contains lighting and air extractors for the space.

Overleaf: The building at dusk, viewed from the south bank of the Thames, just above Tower Bridge. To the right is the Tower of London, the oldest surviving structure in the capital, dating from the eleventh century, which commands this stretch of the river. To the far left is one of the City's most recent buildings – Tower Place, by Foster + Partners, completed in 2003.

Aptly enough, as they are the building's raison d'être, the interiors are a triumphant success, or could have been if Foster had fitted out all of them, and even more so if that had included planting one edge of each well as a mini sky garden, as originally intended. Foster has fitted out only the top seven floors of offices as open-plan areas for a tenant other than Swiss Re. Here, the absence of partitions has allowed the ceiling layout to depart from the 1.5 metre square module of the floor to instead intersperse rectilinear areas with tapering areas accommodating lights and air outlets, thus reasserting the radial.

The office floors are very far from the horizontal slice of space – each identical to, but isolated from, those above and below – that characterises the typical office tower. As well as facilitating natural ventilation and daylight penetration into the interior, the wells give views of the floors above and below. Perhaps even more importantly, they bring deep into the interior views up towards the sky and down towards the street, giving an enhanced sense of contact with the outside, and also the illusion that artificially lit areas towards the core receive more natural light than they in fact do.

Standing on the exposed edge of a lightwell, with views up and down the dynamically spiralling space as well as to city and sky outside, is an exhilaratingly expansive experience quite unlike the usual feeling of being compressed between the flat expanses of floor and ceiling. These office floors fulfil a prime promise of the green agenda in not only being energy efficient but also offering in every way a more pleasant, even exciting, place to be than a conventional building ever could.

Many have commented that the bar up in the dome looks like the lair of a James Bond villain, and it is true: it has that sense of the futuristic and spectacular. It is one of London's finest new spaces, soaring up to bring you the sky as well as London spread below, the delicacy of the glazing bar structure emphasised rather than marred by the chunky ring cowl. When there, it seems to offer the perfect combination of location and height, giving distant views of all of London yet also a sense of connection with the Thames and City landmarks such as the Tower of London. Sunsets can be awesome up there, while at night the facets of glazing create a myriad kaleidoscope reflections of those picked out by the bright lights in the ring cowl.

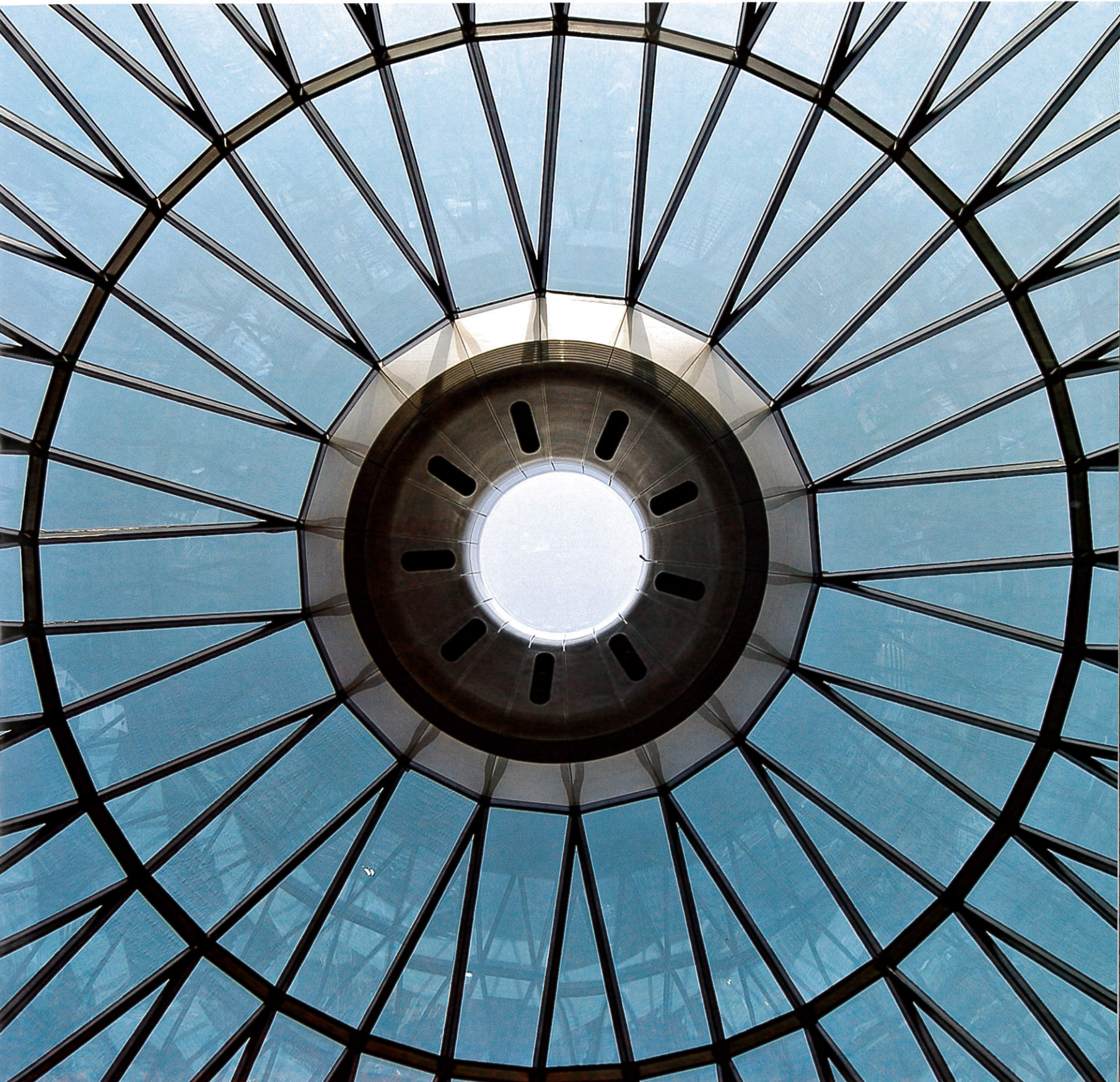
Starting with the Hongkong and Shanghai Bank, Foster has created a series of landmark tower designs. But because of the mounting global environmental crisis, Commerzbank and Swiss Re are the most significant for the future. They push the design of 'green' office towers further than any other architect has done and offer generic concepts and devices that can be adapted to other designs. Most importantly, they show how the green agenda must extend beyond improved energy efficiency also to provide better social and working conditions. Even more than diminished running costs, it is these 'quality of life' benefits that make green buildings such a sound economic investment as they usually result in a happier, more stable and productive workforce. It is these same factors, and buildings such as Swiss Re as exciting exemplars, that will accelerate the increasingly urgent embrace of the green agenda.

Peter Buchanan

At forty storeys, 30 St Mary Axe would not be regarded a large tower in most of America's downtowns, but in the low-rise, finely grained cityscape of London, its 500,000 square feet looks gargantuan. How could a tower so unconventional in nearly every respect look like a big, friendly alien rather than an intruder. James S Russell, *Architectural Record*, June 2004

In the nose cone of this baby, this chubby but almost ballistic presence in St Mary Axe, you just know that the twenty-first century has arrived; or rather, how it will continue to arrive in one of the world's three great financial centres. Jay Merrick, *The Independent*, 28 April 2004

It's not really a gherkin. It's a pine-cone, or perhaps a poplar. Anyway, Norman Foster and Partners' Swiss Re building is, as well as defiantly modern, resonantly classical. All that nonsense with Prince Charles and neo-Georgian conservatism, which has been getting away with opposing the classical to the modern distracts from the formal beauty of the skyscraper that, rightly so, won the RIBA Stirling Prize. Jonathan Jones, *The Guardian*, 18 October 2004



[From the top of Swiss Re] there is no other view like it. No other British building can deliver such a stunning panoptical experience. Swiss Re's glittering Zeppelin – droll 'gherkin' to millions of Londoners, 'fishnet condom' to the capital's author-cum-urban magus, Iain Sinclair – is special. Jay Merrick, *The Independent*, 28 April 2004

This building will be, since St Paul's Cathedral, the most important curved landmark, or 'dome', in London. Because it's so provocative and well done it will become a secular symbol and here its cosmic and ecological meanings are important. They provide fitting orientations for the twenty-first century. The sun, the wind, the spectacular view, the cosmos become the protagonists and, let's say, *sotto voce*, that this orientation is what the Church used to be about. This is the answer to St Paul's dome – a cosmic dome. Charles Jencks, *The Iconic Building*, 2005

This is a structure that has single-handedly changed the perception of tall buildings in London. Swiss Re didn't set out to build an icon, but it's become a symbol of London. It's rebranded Swiss Re, the reinsurance business and the City of London – quite an achievement. Peter Wynne Rees, City Planning Officer, Corporation of London, in conversation with Kenneth Powell, 2005



St Mary Axe is, to borrow the great nineteenth-century historian Jacob Burckhardt's comment about Renaissance statecraft, the tall building as a work of art. But art, at least as Burckhardt meant it, is more a process than a product. And with its open-ended propositions, St Mary Axe is a marker for more tall buildings. It sets not just a standard but an agenda for the future, when we might all be living and working in sky cities, breathing fresh air and swooshing up and down like the angels on Jacob's Ladder. And like those debates about angels and heads of pins, its propositions could run and run. Jeremy Melvin, *RIBA Journal*, July 2004

You don't get ponderous architecture out of Foster's office and that goes back to discussions he had way back in the 1960s with legends like Buckminster Fuller whose question was: 'how much does a building weigh?' It was the notion that a building could almost be like a bubble sitting in the landscape. If you look at some of the buildings from the earliest to the latest – from the Sainsbury Centre to the new Beijing airport terminal – they are just extraordinary enclosures of space, now almost becoming capable of having whole towns inside them, one could argue. I think Foster is moving towards that Buckminster Fuller vision of the city beneath a bubble. Hugh Pearman, 'Front Row', BBC Radio 4, 28 December 2007

If Foster and Partners' newly occupied Swiss Re Tower was any more revolutionary it would rotate. Martin Spring, *Building*, 30 April 2004

