

Structure and Architecture

Lecture 10

B3 Offices, Stockley Park

The first look of the building, this is how it looks and if I am going to tell you that this is an office building, many of you might reject the whole idea in the first place because the first thing that will pop in our minds is denial, "this cannot be an office, this looks like a factory, a warehouse, an industry, not an office building" but yes, that is where the architect Norman Foster has broken all the norms of an office and has tried to create a new kind of an office system. Let's look at the building in detail. Stockley Park was Britain's first architecturally driven business park. Master planned in the 1980s on a site strategically located close to the Heathrow Airport and within forty minutes' drive of central London, it includes buildings by leading British architects. The idea of improving the workplace either by providing better amenities or by eliminating barriers between management and the workforce, was seen as unnecessary if not subversive. Traditionally it has always been in the idea that an industry need not be very comfortable to the workmen, the office space needn't cater to the comforts of the employees, the office rather be comfortable only as much as it needs to be, so that the productivity goes up. People were very happy with that kind of model, they were not very happy with removing the barriers between the management and the employees but this project at this particular point of time, eliminated all those barriers. The first thing they decided was that the barrier between the management and the workforce must be dissolved. Next thing, they decided was to provide amenities and improve the ambience of the workplace in general. Stockley Park demonstrated just how radically ideas had changed over the intervening twenty years. This is another look at the building. Now, if you see here, it is the same roof structure, look at the interlacing of glass and steel structures, look at how much visual output the architect is trying to provide from the building. The entire view of the exterior is thrown into the interior and the interior is completely based with the light of the exterior. Set at the southern end of the site, overlooking a lake, the building provides 12,000 sqm of office space and was designed to house a single tenant but can be subdivided to suit multiple occupancy. The formal design has to fit within certain aesthetic parameters set by Stockley Park's management, which specified pitched roofs, white cladding and sun screening. As a result, each of the building's three stepped bays are fronted by V-shaped steel 'butterfly' frames, pinned at the ridges, supported on tapering columns. Here if we see that, the management themselves have given specifications for three important things. If you take a look at what are the three important things they had given certain aesthetic rules for designing the building, they had specified pitched roofs, white cladding and sun screening. All that you see in the building, you see the pitched roofs, the white cladding and sun screening on the building but traditionally what Stockley Park management was for a very traditional structure but what Norman Foster

designed for them is completely different but serves the purpose within the same constraints that Stockley Park management had provided them. The frames support the roof over each three-storey bay and extend 3 meters over the long elevations to support louvered sunscreens. Between the bays into triple-height atria run the length of the building and carry the primary circulation. Oriented to maximize views across the lake to the east, the main entrance to the building is located in the middle of the three halls on the northern facade, shaded by an overhanging canopy. Plant and services are stacked at the southern side of the building where they block the heat of the sun. On the front is the lake that they were talking about. The long east and west elevations are made up of double-glazed units. To reduce solar gain, the internal face of the units is stove-enamelled with white 'frits' - using technology transferred from the automotive industry which vary in concentration from almost opaque at floor level to clear at seated eye level, thus maintaining visual contact with the gardens. The usage of white frits is clearly seen in this picture, if you see in this picture, at the bottom, at the ground level it is opaque and near the eye level it is almost transparent and goes back to being opaque again. Here, there is a floor slab for the next floor and on the top again, the bottom portion is opaque and goes on to become transparent at the eye level where people can look at the outside of the building from the inside and then it again becomes opaque. The process repeats for all the three storeys. This is the concept which Norman Foster had taken from the automotive industry and has tried to connect it with architecture. Look at how a concept can be transferred from one field to another, this is creativity. If you don't have the knowledge of automotive industry frits, you would never be able to design such kind of thing into architecture. The cross pollination of ideas between two fields is what modern day creativity is, which Foster has achieved really creatively in this building. There are attias and these maintain the primary circulation paths, this is the section across the building. At Stockley Park what could have been a highly restrictive developer's brief, became a starting point for elegant, innovative architecture. If you take a look at the developer's brief earlier, they had specified three very clear aspects. They had specified pitched roof, white cladding, specified sunscreens, this kind of a brief with a lot of other restrictions too. Any architect would have struggled really hard to get a good composition but Norman Foster achieves this effortlessly and he gets all the right things out of the brief. In Foster's hands, the developers' brief becomes a boon not a bane. Stockley Park B3 is a masterpiece of modern architectural ingenuity. Nothing in it is wasted, nothing is ugly, yet everything is new. If you want to see an English building that can stand up to *vorsprung Durch Technik*, this is it. Some other views of Stockley Park. This time we are looking at the building from the interiors to the exterior. The amount of glass used for the building is not worthy because this is the amount of view Foster is allowing the people inside the building to enjoy. This is the amount of light Foster is allowing the people to get from the exterior. Remember the sharp angles, the right angle, the perfect way in which the members meet at the junctions. This is Norman Foster at his best.

Sainsbury Center for visual Art

This is a building that is a genius in the making. This is how the building looks, an extra large portal frame with a huge glass facade on one side with a completely blank wall faces on either sides, except for a few door openings here and there, this was Sainsbury centre for Visual art. With the donation in 1973 of their collection of ethnographic and twentieth-century art to the university of East Anglia, together with an endowment for a new building, Sir Robert and Lady Sainsburg sought to establish the Sainsbury centre as an academic and social focus within the campus. The Sainsbury's shared a belief that the study of art should not be formal but a pleasurable experience, not bound by the traditional enclosure of object and viewer. Few places of work, the interiors of the building. Again in this building too, look at the amount of glass that is used here and the volume of light which he is allowing into the interiors. As a result, the Sainsbury centre is much more than a conventional gallery, the emphasis is on art in isolation. Instead, it integrates a number of related activities within a single, light-filled space. Usually art galleries are made in such a way that there is this big box and there are individual pieces of art lined up along the walls, properly lit, some light on the objects, there is a place where the viewer must stand perceive the art and hopefully, he enjoys it. Foster broke this traditional way of looking at art galleries. He says that the emphasis is on art and isolation. Here, art is not related. Here it integrates related activities into one large light filled space. The building brought a new level of refinement to the practice's early explorations into lightweight, flexible enclosures. Norman Foster and partners were experimenting with lightweight, flexible enclosure systems for a long time now and they have been experimenting this system for a very long time now, this is one such experiment that turned out into a very successful project. They have brought a new level of refinement ot their study. Structural and service elements are contained within the double-layer walls and roof. You can see the double layered walls and roof, all the structural and service systems are completely contained within this to give a very clear space for the activity itself. Nothing related to services or structures will ever disturb the function in this project. If you see here, one big space is completely available for art. All your service installations, structural elements, everything goes inside this, this entire space is column free and without any disturbance of any structural or service elements.

Within this shell is a sequence of spaces that incorporate galleries, a reception area, the Faculty of Fine art, senior common room and a restaurant. Full-height windows at each end, opened the space up to the surrounding landscape, while louvres line the interior to provide a highly flexible system for the control of natural and artificial light. Large enough to display Sainsbury's extraordinary collection, yet designed to the intimate and inviting the main gallery - or living area - evokes the spirit of the collection's originally domestic setting. Sainsbury was a very passionate collector, he never did call himself a collector, rather a person who is passionate

about gathering other objects. Initially the museum was at his own residence and he wanted to convert the whole setup into a much bigger building and hence the Sainsbury centre was born. The essence of the Sainsbury centre is the fact that the whole visual artistic elements were all represented in his house. This Sainsbury design, designed by Foster incorporates the same substance because he calls the main gallery as the living area and that is where all the items, the collections, everything were kept. Even though it is large enough to display the extraordinary collection he had, the scale is also a very intimate scale which is a requirement of any passionate collector.

Here is the building, you can see its reflection, in the background of a night sky. A new gift from the Sainsburys in 1988 allowed the building to be extended to provide space for the display of the reserve collection, together with curatorial and conservation facilities and a space for exhibitions and conferences, giving the centre greater flexibility in its programming. The new wing extends the building below ground level, exploring the contours of the site to emerge in the form of a glazed crescent incised in the landscape. The original building was already there, the new extension to the Sainsbury centre was required because they had a lot of reserved collection which could not be put in the main Sainsbury centre. So, they added an extension to the building. Instead of extending it on the sides of the plot, they decided to go deeper underground and in the underground level, they designed the additional centre. The site was a contour site, there were beautiful incisions that were present in the landscape, thereby creating a wonderful landscape element which exploits the contour of the site and gives the best design for the given site. Here it is, the Sainsbury centre, the lake on the front and the way you go inside for the new or later addition. The closer look at the structural system of the Sainsbury centre is on the right corner here.

In 2006, a further programme of improvements was completed which provides an internal link between the main and Crescent Wing galleries, a new education centre, additional display space and improved shop, cafe and other visitor amenities. These were added in addition to the original programme. Moving on to the interiors of the space, this space has display areas for a few seating, people can sit, discuss, watch and can also work. Look at the simple way in which Foster had detailed the interiors. Simple furniture, nothing like how art takes up space and attention everywhere you turn which is the primary for an art gallery. Other sections of the Sainsbury centre where in here, the section across the building, you can clearly see the portal frames crawling here. You can see the structural systems and you can see all the services running through it. You can see the air condition systems and all the other systems running through the middle of these things. This grand spiral staircase that goes all the way to the basement is a new addition, giving a complete column free, service free space for the visual art sensor itself. Some of the sketches, conceptual sketches which were designed by Norman

Foster wherein you can see the structural systems on the sides conceptually sketched this structural system on and he also sketched a few pipelines here and there just to indicate to us all the services and everything in here and here the art form is located with views through the landscape. He has given one entire art its space in order to be able to see the landscape through the building.

Norman Foster said this about his building "Given the brief, you could have produced separate pavilions. Assuming a strong link between the collection, in terms of works of art, and a school teaching the history of art, you could fuse those two elements together; add to that a restaurant, a senior common room, and a special exhibition pavilion and you have a potential total of four buildings. On the other hand, you could make the leap and say that the linkage between all those elements was so strong that the case for making one building from them was overwhelming." This was what Norman Foster said even though he had the potential to build four separate structures, four separate pavilions and a series of structures on the side, he denied that instinct and he developed one big building that serves all the functions.

The scale of the building on top, you see how the portal frame is working here and here are a couple of pictures taken during construction. Norman Foster also said "I said that I was interested as a spectator in seeing works of art; I was not really interested in catalogues, though I enjoyed them in their own right. I was unhappy in a building that was monumental or pompous. I felt that the experience was all-important: the building should be a nice place to be in. It seemed that a certain common cause emerged as the discussions proceeded." Some more photographs during the phase of construction, the picture on the left top corner is from when they were laying the roof, the one on the right was from the cladding system on the exterior, Panelling on the top and the final panel was on the top.

Graham Vickers said that "The louvers become translucent, celebrating the openness and lightness of the trusses and allowing views up and through the length of the roof. The effect is one of the remarkable finesse, the layers of louvre, truss structure, catwalk grille and balustrade combining to create weightless architectural abstractions, constantly changing and suffused by daylight." Sir Robert Sainsbury said "It is certainly true that the Norman's building has aroused extraordinary passions among architects, writers and art historians. My personal prize goes to the description of the building as 'fetishist expressionism'.

Here is a long list of awards which this building has received - LABC East Anglia Built-in Quality Award, Museum of the year award, Ambrose Congreve Award, 6th International prize for architecture, British Tourist board award, R.S. Reynolds Memorial award, Structural steel finniston award, Royal institute of British Architects award and a lot more.