'Embedded Intelligence'

In conversation with IA&B, Sir Nicholas Grimshaw of GRIMSHAW ARCHITECTS LLP discusses his fears about the direction in which contemporary architecture is headed, and his hopes of what architecture should be like, through a glimpse into his personal journey within the field.

Image: *courtesy Ben Johnson*

Sir Nicholas Grimshaw graduated with Honours from the Architectural Association in 1965. He immediately started his own practice and won many architectural awards for his buildings in the 1960s and 1970s. These buildings were noted for their innovative approach to construction and detailing. In 1980, Nicholas Grimshaw and Partners Ltd was formed continuing this tradition, winning much acclaim for its architecture and civic design. The practice is now recognised as GRIMSHAW ARCHITECTS LLP and operates internationally with offices in London, New York, Melbourne and Sydney.

Sir Nicholas was elected a Royal Academician in 1994 and in the same year, he was elected an Honorary Fellow of the AIA. He was knighted by Her Majesty Queen Elizabeth II in 2002 and in December 2004 was elected President of the Royal Academy of Arts. In 2008, he was conferred as Visiting Professor at the University of the Arts London. Sir Nicholas Grimshaw continues to actively lead GRIMSHAW ARCHITECTS LLP as the Chairman of the Board.

IA&B: An interest in architecture came to you as a legacy from your great-grandfathers. What, according to you, are your roots in architecture?

NG: My great-grandfathers - one built dams on the Nile and the other put sewers in Dublin - so they were more civil engineers than architects. But I think the interest in construction and the way things went together was somewhere in my genes. I did, even as a kid, build a lot of tree-houses and things like that; I was always constructing things. But it was when I went to Edinburgh and visited the Art College there that I walked into the architecture studio and saw students building models, drawing using their hands, it seemed clear to me that this was it; this was my future. That was really the moment of revelation. I didn't know much about architecture then. My school certainly hadn't encouraged interest in many creative activities. So that was the point where, I suppose, my great interest in architecture began.

IA&B: In 'Architecture, Industry and Innovation: the early work of Nicholas Grimshaw & Partners', Colin Amery recounts an episode from your student days when the use of grids in Greek town planning earned you a warning against being too 'mechanistic at the expense of architectural factors' (from tutor Maxwell Fry). Can you tell us more about your personal journey?

NG: I was extremely rebellious as a student. For some reason, I always seemed to manage to object to the programme put forward and tried to rewrite it or reinvent it myself. I wrote my own programme for my final thesis in 1965 at the Architectural Association. It was for an Urban University in the middle of London, which, in those days, was a fairly run-down area of 135 acres ready to be pulled down for redevelopment. People weren't so worried about conservation in those days. As a student, I saw this site as being an incredible, potentially exciting, focal point in London. I designed the university like an organic system where the buildings could grow and shrink and the routes between them could grow and shrink depending on the intensity of use and so on, all with the background of the public domain flowing across the site. I put all this on a film. I think I was

the first person to do a film for my diploma at the Architectural Association. I evolved a building model on the ground shooting a few frames of the film and then moving everything fractionally to shoot a few more frames. If I recall correctly, this took about 36 hours to do. I had a few back-up drawings, but the film was the central feature of the thesis. Going back to the question, in a sense it was mechanistic, but it was more an organic humane machine which responded to the influences on it. When I did my history thesis on the Greek towns, on Hippodamus of Miletos, I traced the grid from that town right through to New York. What I thought was interesting, and wished to explore, was the use of a grid as a background or framework for living, and that wasn't mechanistic, it neither determined the way people lived nor forced them particularly to do anything. As a contrast to other romantic approaches to higgledy-piggledy towns and rebuilding of London, you could have order but use it organically.

IA&B: Your architecture is known for its structure, order, details and flexibility. If you had to distil your decades of practice down to a tangible philosophy, how would you describe the idea of your practice?

NG: I believe that this practice is very much based on thinking, on an intellectual approach to problem-solving. We ask a lot of questions of our clients and the people we work with, probably annoy them quite often, but certainly get into great dialogues about why they want to do what they are doing and what we can contribute. Usually, it builds in some way re-writing the brief and sorting issues out till a point where you are really working together, participating together. Good buildings and really good buildings grow out of participation and involvement with the clients, the users and the consultants involved. Buildings should not be approached as pieces of sculpture as some architects do. They want to do what they want to do with no regard to its users and I think our practice is completely the reverse of that. It gives me huge satisfaction to think of all the people who use our buildings. We have done a lot of buildings that you could consider as public, like the Eden Project, the International Terminal at London's Waterloo Station, National Space Centre at Leicester, and most recently the Cutty Sark, which hundreds of thousands of people flow through every year. So, many of our works are 'people' buildings, if you like. I think, if we can be considered to be, ever, a strong technological base, it is 'technology in service of man, in service of people' and not 'technology for its own sake'.

IA&B: You have previously written that your buildings must be able to shed their skin. Can you elaborate?

NG: I have always observed the structure in buildings and I feel that if you get the structure right, it is possible to re-configure a building, to re-fit it and to re-skin it. The extreme of that thought was the idea I put forward for the Eden Project. The framework could actually support a skin which was alive, perhaps some genetically modified plant-type with a transparent leaf or something could be developed, and could engulf the building providing filtered light to the diverse jungle atmosphere underneath. It is not totally impossible a thought, that you could grow the skin of a building or use organic or natural materials for skinning it. I would like to see, more than anything else, a building that can respond to its environment. The skin of the building should be able to react to the context that it finds itself in or around the world, in terms of light and shade, in terms of shelter and in terms of dealing with extreme weather conditions. I think it would be really inspiring to see more buildings going up, where you can simply look and say "I can see why that building is like that". I think the climate can and should very much control the look of a building. And there are other things also, like sustainability, like the issues in sunlight-deprived climates. These things should be done and should be evident to the public when they look at the building, so they are not just seeing a perky image; they are seeing something which means something.

IA&B: The architectural balance today tilts unabashedly towards representation and highly stylised expression. Do you think this is how architecture should progress? What are your views on contemporary architecture?

NG: This question of style is, I think, confusing people quite a lot in contemporary architecture. I think that even if you were building in the Royal Crescent of Bath, infilling damage from the World War II, you shouldn't ape the past. You should be able to build a contemporary building, which mirrors the wonderful rhythm, materials, the light and shade, the scale, the humanity of those wonderful honey-coloured buildings in Bath, without copying the previous style. For the Thermae Spa in Bath, we have especially tried to develop a contemporary building amongst the historic stone buildings and it really works. This really does prove a point. As far as contemporary styles are concerned, I feel extremely critical of buildings which take geometry and sloping planes to create sculptural form which does not reflect the climate or the influences on the site and can be done anywhere in the world.

IA&B: Whose aspirations do your built environments represent? Do you find a middle ground between what you want as an architect and what your clients/users want?

NG: I think it is absolutely essential that a client and an architect agree on what they are trying to do. I think if they are in opposition to each other, you can see it in the building. The whole 'raison d'être' of a building should emerge out of a dialogue with the client and to satisfy that dialogue. Cutting of costs is an area where sometimes things get difficult. The answer is to try

and agree on the budget in the first place. You can design a good building with any budget, right down to the absolute bare minimum, if you know what you have to do in the first place. You can do it with incredibly cut-price recycled materials and still always get a significant element of contribution from design. I think the most trying thing for an architect is agreeing with a client-brief and setting about to achieve it only to find that the client has changed his mind and does not feel that those parameters are what the design really ought to be based on anymore. So what we do is, agree on the brief with the client and write it down. I have been known in the past even to get a client to sign on the brief! Because people forget, even why they are doing a building sometimes, and that can be very frustrating for an architect.

IA&B: You have served as the President of the Royal Academy of Arts in the UK for seven years. What would you say is the relevance of art in architecture? Do you see a profound connection between art and architecture?

NG: Whatever else it is, architecture is always to be considered as an art; in fact, some people call it the 'mother of the arts'. Architecture incorporates so many aspects of art that it is difficult to separate it off really. However, I personally feel that if it comes down to a piece of sculpture or a painting, it is very difficult to work in collaboration with art. I think in many ways, it is much better for one thing or the other to come first and, in principle, I think the most successful collaborations have been, say, where an artist sees a building, understands what is intended and makes something complementary to it. Or you simply choose something of a particular artist's work because it seems empathetic to the building. I think most other collaborations are very difficult and often fail or end up in disaster. There have, of course, been some wonderful examples, for instance, Mies Van der Rohe's Barcelona Pavilion with the lovely sculpted figure against the marble wall or Corbusier's use of colour in Chandigarh. Maybe things are drifting away from that now, which is a great pity. If you look at the recent infusion of people building art galleries or art buildings, I think, a vast majority of them are almost disastrous because the architect is so insistent on his work being seen as a piece of art in its own right that the things you put in it, often cannot hold their own against it at all. Contemporary times have produced art galleries which the curators actually cannot even use because they have no real flat surfaces to put paintings on! So, I think the relationship between art and architecture is quite complicated, but there is absolutely no doubt that architecture should only be a background for art in an art gallery, retiring and modest so that the art within can be seen in its own right and not in conflict with the architecture.

IA&B: Your practice is considered as a prolific landmark at the junction between architecture and engineering. What, as a veteran architect, would you like to see as the future of Grimshaw Architects?

NG: I am not very keen on the idea of being seen as a veteran architect yet (laughs). Architecture is like one of those things. Being an architect is like being a writer or a painter. You keep going till you drop. You do not stop. I think the issue of the future for our firm is very fascinating because we have a very diverse portfolio and I think that is what sustains us in many ways; from the Miami Science Museum in the fierce climate of Florida and the Cutty Sark Museum to railway stations, university campus buildings, the Eden Project and practically everything in between. We have recently completed a big housing project in New York which breaks a lot of new ground, in the sense that it is a very sustainable scheme, incredibly cheap, uses recycled materials and has a wonderful green contribution to the city. I hope that this might lead to all kinds of interesting housing work which reflects the country it is done in. We really do cover pretty well all the aspects of architecture around the world and what I hope will continue through all this is our intellectual drive and our questioning of why we are doing things, what we are doing them for, are we using the right materials, are we asking the right questions, are we dealing with people we like? So as a future thought, I think the first criteria should be that we get on well with the people we work with and the questions we work on and it is a human, decent and fair relationship.

IA&B: Your architecture has always displayed certain sensitivity to the planet's resources. In the context of sustainable architecture then, what is your major hope and prime concern for the future?

NG: I think, very slowly, people are coming around to the idea that we cannot waste money on energy and on building materials the way we have done up to now. We know that we have advanced technology, we know very good ways of building cheaply and using recycled materials, we know good ways of saving energy either in heating or in cooling, we know how expensive it is to build high-density tall buildings compared to low, ground-hugging buildings. We know all these things, incidentally many of which were put forward by Buckminster Fuller about 50 years ago. The point is, we know all these things and I really hope that since we have this knowledge, we will utilise it in a bigger and bigger way. A lot of firms, like ours, feel that we can contribute, because of our knowledge or what a critic called our 'embedded intelligence', bringing it to a situation and trying to solve it rather than seeing it as a commercial opportunity. I am hopeful that we will be playing quite a big role in the sustainable future of the planet. ■

The work of GRIMSHAW ARCHITECTS LLP is chronicled in this issue in the article titled 'Rise of the Phoenix' on page 88.