

One December 10, 2009, Gehry Partners began the conversation with the UTS Business faculty that will lead to a design concept for the university's new Business School on the site of the old Dairy Farmer's warehouse in Ultimo Street.



WORKING

Roy Green, Dean, UTS Business interviewed Craig Webb, Frank Gehry's chief designer, about the conversation process and how the firm works.

GREEN: When Frank first saw the Dairy Farmers' site he was intrigued, and rather silent, so our Vice Chancellor asked him, [with great trepidation,] 'Frank do you like the site?' And Frank said, 'I like the problem.' [Laughs] What is it about the problem you like?

WEBB: It wasn't like giving us the site of The Sydney Opera House, which is the easy way to do it. Basically, that building sits with a full 360-degree view and the sculptural parts of it are easy to see. The site for the new UTS Business School is right in the middle of a bunch of existing buildings, and it has to become a neighbour to those buildings, relate to them and create a dialogue with them. Some of those buildings are pretty tough and urban, which is a good kind of problem for us. We like those kind of sites. [Frank Gehry] was describing tentacles reaching out and touching the other buildings and creating paths, engaging with the community.

GREEN: It was interesting the way he saw the problem: that it was a matter of not only designing something that would suit the business school, but would be transformative in its surroundings. How do you see that process of evolving?

WEBB: We like very urban sites because they force us out of our usual mould. The things that make buildings different have to do with the cities they sit in and the way they respond to what's across the street. In every part of the world, there are different materials. There's a lot of brick in this area, and interesting local stone. The response to the city is going to make this a unique building. The cardinal

rule: if we've already done it, we're not going to do that. That's going to contribute to making this a really unique, interesting building.

GREEN: An interesting feature of the design process for Frank Gehry and his team is the engagement with the client, which in our case is the Business Faculty and the University. Other architects say, 'Here's my building, take it or leave it,' but you build up through the functioning of the building internally to its external form. Take us through that process.

WEBB: We design buildings from the inside to the outside. So if it's a concert hall or a theatre it's about the interaction between the audience and the performers. And the core of the building, the real value of it, is about human interaction. What's interesting about your school is the way you teach. The building is only there to support that, so we have to climb inside your head, figure out how you do what you do, and then try create the best environment to make that happen so it fosters interaction between students and teachers, and between researchers.

The beginning of our process is a lot of dialogue. Through talking about how you do what you do – what your goals, visions and aspirations are – gradually we start to put together functional relationships, then components of the building (individual rooms etc) and build it up. Finally after going through that long process of understanding what you're about, there's a kind of body language that starts to develop out of which comes the architecture of the building. →

TOGETHER



GREEN: Our vision encompasses the breaking down of boundaries within the faculty, within our organisation, to overcome silos of disciplines and schools. It is also about breaking down boundaries with the community, business and the city in general. One of the phrases that Frank Geary has used is the process of 'liquid into crystal' where things can change and then, at a certain point, take physical shape and be decided on. How do you see that process evolving in our case?

WEBB: We are starting to understand your relationship with the business community, so we absolutely want to make a building that invites the business community in. I don't know exactly how that's going to work yet, but they need to feel comfortable when they come in. So figuring out the materials – the level of finish; right down to the furniture and how the spaces are arranged – can be really important. The creation of the environment that encourages intellectual interaction [is also important]. I was talking to one of the teachers and he was talking about the kind of environment that he needs: a space where he can read, or he can think; where he can write. That environment needs to be quiet; needs privacy. So we need to create those spaces. When you come out of that very private space of contemplation and thought, then you want to meet people and share the ideas. Our experience is that happens around food usually, or a drink. You come out and get a cup of coffee. The social spaces that you come out from and go to [need to be] in the right proximity so that it happens easily.

GREEN: In a journey of great length and complexity, things can go wrong. Are there problems and impediments you've struck which created challenges that were not accessible to resolution?

WEBB: Most breaking points happen around money, about project budget. Over the years we've developed a tighter and more disciplined process, because we know it's a tricky balance between putting out the object of desire, which makes people get excited and brings people together around the design – and overshooting the means of the project. So we try and keep very close tabs on the areas of the building: the floor area which drives the price; the way the building is put together; and the way the cladding and structure are.

GREEN: You have Gehry Partners, which is the design firm, and Gehry Technologies, which is a joint venture with Dassault [Systemes] an aerospace company that has developed a lot of your digital modelling software. What is the relationship between these two entities?

WEBB: When we first started doing 3-D computer modelling we got software from Dassault. We were using aerospace software, which was very powerful but not very suited to architectural projects. Frank's idea was to take that software and make it a better tool for architects. Of course, if we can do that, it's a product, and then it can become a business. So Geary Partners shifted from developing to being a customer, and being a customer, we can make demands on product and services. So it's been an interesting transition and the tool that's developed is essential to the buildings that we make. We couldn't do what we're doing without it. The building we did in Chelsea Manhattan has about 1,400 individual panels of glass on the façade, of which 1,200 are absolutely unique parts. Each of those panels has an insulating glass unit, which has three layers of glass. From the computer model, the glass is cut in a trapezoidal shape and laminated together, and then they're put together into units. Then the frames, which are coming in at angles, are cut by computer-driven equipment so that the mitres all join together. When they broke quite a few pieces of glass installing them, because the computer model was there, we were able to bring new pieces of glass within three or four weeks to the jobsite and put them back in the building. Without that [computer] tool we wouldn't be able to make the buildings.

GREEN: The elements of creativity and artistry are interesting to us at UTS because of the work we do in business education, as well as design, information technology and the humanities. How do you see the relationship between architecture and art? Could architecture, in fact, be a work of art?

WEBB: Very loaded question. [Laughing.] We've got into a lot of trouble on that issue in the past. I would say for one thing Frank and I both love painting. Painting takes the three-dimensional world and flattens it into two dimensions and puts it on a surface. What we do is kind of the reverse of that. We take images – of kind of perceptions of the world that are interpreted through art as two-dimensional – and exploit them back into three dimensions. We borrow pretty heavily from Renaissance painting, and from all different eras. The composition of buildings and the colour and ideas: a lot of that flows out of art. So for us, those things are very related to each other. It's kind of the same thing but some people say, 'Buildings have plumbing so that separates them from art.'

GREEN: Well we hope to draw on a deep well of artistry and technology for our building. So thank you Webb. **E21C**

‘A building is alive, like a man. Its integrity is to follow its own truth, its one single theme, and to serve its own single purpose.’

The Fountainhead, Ayn Rand.

At a glance, architect Frank Gehry may not seem to have that much in common with Howard Roark, Ayn Rand’s uncompromising hero architect from *The Fountainhead*. Apart from being a high modernist, Roark’s prescriptive design is the antithesis to Gehry’s collaborative post-structuralism. What they do share is a futuristic vision and artistic purity that is usually lacking in flesh and blood designers. Gehry’s most famous buildings such as ‘The Guggenheim Museum’ in Bilbao have revolutionised architecture while maintaining the singular integrity of purpose for which they were built – just as Roark would have wanted. The irony is that (thus far at least), Gehry has never needed to blow up one of his own buildings because a client wanted to make changes. Instead, he invites change as an integral part of his design process, and thereby achieves architectural integrity through conversation rather than conflict, and for this, Frank Gehry is singularly outstanding. ‘I tell clients when I start working with them that we’re going to be in a liquid state for a long time,’ Gehry explains. ‘During that period we make a lot of study models, and some of them are pretty scary looking. I do that so clients can follow the trajectory of my thinking, but it’s not predictable. I push something here, and then I see something. I think of it as an opportunistic process that evolves with the input that I’m getting from the clients and the world around.’

For UTS, having **Frank Gehry** design the new building for UTS Business is more than prestige. It’s about the design thinking that Gehry applies to all his projects and the way this influences business thinking.

UTS Business has engaged Frank Gehry and his company, Gehry Partners, to create a design concept for its business school building. In December 2009, Gehry and his chief designer, Craig Webb, visited UTS to initiate a conversation with faculty and students. ‘At this time, it’s not about the form, which will come later, and will come from these discussions. For now, we’re trying to find out what the building’s body language wants to be.’

For Gehry Partners this process works in two directions: from the outside, where the site, the city, and the surrounding buildings inform the external development; and from inside, which is informed by how the university and its academics work. It’s an abstract process that starts with conversation, followed by the building of physical models where rooms and clusters of rooms gradually grow together to become a building. The relationship of the parts and how they come together is reiterative, or, as Webb puts it, ‘We show you a model, and you say what is and isn’t working until we agree. The architecture comes out of that.’

Although this will be the first building that Gehry has designed in Australia, it’s not his first university building. Through his company, Gehry Partners,

he’s designed the Peter B Lewis Library (2008) at Princeton University, the Ray and Maria Stata Center (2004) at the Massachusetts Institute of Technology (MIT), laboratories at the University of Iowa (1987–92), and the Peter B Lewis Building (2002) for the Weatherhead School of Management in Ohio. Each building brought with it a need to understand the unique character and location of the university, and the individual needs of the different faculties and students.

‘I’ve always thought that businessmen were artists,’ says Gehry at UTS in Sydney. ‘Certainly, the best businessmen are artists, and they work intuitively. That’s how we work. If we knew where we were going, we wouldn’t go there, because someone else had already been there, or we’d have done it already. We’re looking for new terrain, new places. The ideal would be for you to start thinking that way too. They’ve made a lot of money, but no one knows how to go forward with the old models.’

As in any conversation, the flow of information is not confined to one direction. At the completion of the Peter B Lewis Building for the Weatherhead School of Management, Professor of Information Systems Richard Boland Jnr was so impressed with Gehry’s views on ‘design thinking’ that he convened a conference to discuss its ramifications for business thinking. From Gehry’s distinctive work practice came five tangible lessons for business management:

Collaboration

No one person has the wisdom necessary to think about all the interactions that can happen and what can possibly go wrong in any endeavour on the scale of constructing a building. Frank Gehry has a team of 160 people, using bespoke computer assisted design (CAD) software, and even that is not where the collaboration begins. ‘You need a partner when designing a building,’ he says. ‘It can’t be the sound of one hand clapping. The best buildings are done in concert with my clients.’

Taking MIT as an example, Craig Webb describes what UTS can expect over the next few months. ‘At MIT it →

started with a fairly simple exchange. I asked, “How do you work?” and they said, “Here’s my office. Here’s my lab.” I wanted the dialogue to go back and forth, so we proposed some funny questions like: “Is your behaviour like an orang-utan? Are you social on the ground, but solitary in the trees?” That would mean on lower levels they would be interacting socially, and then spend quiet time up in the air. Or, “Would you like a Japanese house with flexible walls?” In which spaces could be opened out for group meetings or closed down for privacy. They were even asked if they were prairie dogs, who spend most of their time underground in a private hole and pop their heads out every now and then. I expect we’ll be asking UTS some funny questions too.’

Liquid Crystal

Roy Green, Dean, UTS Business, likes the method Gehry describes as ‘liquid into crystal’: how the fluidity of ideas slowly takes form in the solidity of a building. Liquidity, serendipity and opportunism are all vital to management practice.

Gehry is not a prescriptive architect. He is not approaching the UTS site with an idea of what he will do. When asked by Kerry O’Brien on the ABC what his vision for the UTS site is, Gehry replied: ‘I don’t have a preconception. I know that the budget is really tight. It’s pretty contained. The site is small. So it’s a constrained project already. The interesting thing about this project is that the brief of the business school is to reach out to the community and have the community able to reach into them, to become part of it.’

Boland Jnr at Weatherhead says: ‘Designing picks up on the fact that it’s a process. The suffix at the end of the word is what matters: “ing”. It’s happening. You go between liquidity and crystallisation. You do it in tandem with other people. If you’re good at fluid thinking, then you need others who are good at solidifying it. Not everyone has to be both but the leaders need to have an understanding of both.’

‘The question is about when the building crystallises,’ Webb says describing the process. ‘It’s a very tricky part of the process because early on we fight to not let people bond too much onto any particular design because if it happens too early it shuts down the process before it marinates and gets to a good solution. In my experience, the longer the design process goes on, the better the building gets. Even if it gets messy and the design gets broken and put back together again, we’ve learned so much. Each time it gets broken apart it gets better.’

Multiple Models

Gehry prepares numerous different models of his buildings using different scales and materials. Boland Jnr explains: ‘If you accept there are never simple solutions for complex phenomena, that there are no ‘right’ models, then a variety of models means it’s not the design but the direction which is important.’

It’s also about the ability to change and be spontaneous. Gehry himself says that it’s very easy to become attached to the models, as though they were jewellery. He changes the scale and the materials in order to free himself from the object that the model, is outside of the building.

Boland Jnr points out that it is a good lesson for a business school, because if you freeze to an idea too quickly, it becomes very hard to keep exploring for something better. ‘Having multiple models says you think you know, but you don’t know for sure. As it is in business also, you have to be comfortable with change or I don’t think you’ll succeed.’

Thrownness

Karl Weick from the University of Michigan observed that from the moment we are born we are ‘thrown’ into pre-existing situations and social structures, which we then struggle to understand. He named this phenomenon ‘thrownness’ and observed that ‘Even Frank Gehry isn’t invited in until there’s been a whole lot of discussion and controversy.’



Weick observed that Gehry’s practice of meeting the people who will ultimately use his buildings, and making an effort to understand the social landscape in which he is designing is reflected in all aspects of business. ‘Every decision we make starts by our being dropped into the middle of a whole lot of agendas and activities and interests that are already under way. The inherited material needs to be understood in order to advance. It’s not ideal, because nothing in life is and we need to work our way through it.’

Legacy

The legacy of Gehry’s work is concrete, glass and burnished steel. Its physical presence stands in the landscape as a monument. But architecture is also a business, and the legacy of business is profitability.

Gehry is proud of the financial impact buildings such as the Guggenheim Museum at Bilbao have on a city. ‘The Guggenheim Museum was built for US\$300 a square foot at the time. This year they brought in £320 million (US\$460 million). Financially, it’s been a great boon for Bilbao. They went from saying in the press, “Kill the American!” to now I can walk down the street and they touch me. I could live there for free probably.’

For now, the conversation between UTS and Frank Gehry has just begun. ‘We have a very exciting opportunity opening up before us,’ says Roy Green. ‘Especially in terms of the process of discussion. When the liquid of discussion turns into crystal we will undoubtedly have something that we can be proud of, and which will undoubtedly add to the programs and the sense of worth and pride we have when we come to work at UTS. I’m looking forward to the next few months.’ **E21C**