Con structs
Yale Ar ch i te c t u re

Fall 2002
Cecil Balmond, chairman of the Europe and Building Division of Arup, will be returning to Yale to teach as the Euro Saxenien visiting professor in September. He will give a lecture entitled “Informal Networks” on Thursday, October 28, 2002. This fall Professor Balmond has a book coming out, The Informal (Prentel, 2002). He discussed his approach to engineering architecture in a conversation with Nina Rappaport this summer:

Nina Rappaport: During the past few years we have been discussing your collaborative work with architects in a role that often has gone unrecognized. This no longer seems to be the case. Your book discusses your projects with Rem Koolhaas, Daniel Libeskind, Foreign Office Architects, and UN Studio. It seems that you are now focusing your energies on the total process of making the building. So, as I have asked other engineers in this issue of Constructs, how do you collaborate with architects, and how does your work merge with that of the architect?

Cecil Balmond: I actually work as an architect in terms of the way I engage the space. So although I am trained as an engineer, I engage space with the sensibilities of an architect. When I am working with an architect—and this is where the recognition comes in—it is difficult because the engineering work is absorbed as architecture. But a building has obvious structural overtones that people think, “Well maybe this is a collaboration”—which during the last two years has become clearer, in a way, as I become better known. And now when people see that I have been involved in a project, they know that the space has been influenced by my interventions, whereas usually the architect does the design and the engineer makes it work.

NR: How did you and Toyo Ito recently collaborate on the project at the Serpentine Gallery in London?

CB: Last year at the Serpentine I worked with Daniel Libeskind on the project Eighteen Turnus. People saw that it was obviously about structure, and equally it was about space. This year they asked me to work with Ito. We have similar ideas about space. We want to make it interesting, flexible, novel, innovative, and yet functional. So we did a simple box that is an algorithm and a beautiful pattern, so that one is not sure if it is all about pattern or all about structure. This pavilion was a joint venture of design intent: it is his architecture, our structure, our design. And ito has championed my idea of the informal by saying that is where he thinks his architecture is going.

NR: What do you mean by informal—the title of your book and a term which you’ve said you would like to copyright as it relates to your work? How would the informal differ from what other engineers might call intuition? Is intuition more going with the gut?

CB: I think intuition is something that has to be sharpened. I have been working on honing my intuition with experiments in form-finding, which is sharpening one’s gut. The gut is still paramount, and it is what you go on in the end. There comes a moment when you are faced with the facts, but intuition tells you that maybe it can still be done even though the facts don’t. And that is true in life. But what I mean by informal is an actual approach to design. I use my Eastern intuition to look in and be able to come out with an answer. Nano-thick design is a body of work that would be called informal, that is based on nonclassical ideas, so there are no fixed centers in the work. A center can move, and adjacency matters. It is more absolute than contemporary ideas such as relativity, simultaneity, or working symmetry. It is something that I do more as an exercise in the nonlinear world, the world of curving shapes and morphing. You need some kind of rigor; I am trying to build up a methodology and rigor. So it is an approach to design that I am trying to classify and label, and tie into my book. With the non-Cartesian spaces it would be helpful to have a debate and lay down a theoretical approach. One approach is to say, “Okay, I want a museum, I will draw a square and put in a door and work from a plan inward.” My design methods are from an idea outward.

NR: So the informal approach is in contrast to that of architects, who work from the outside in and then engineer structure afterward, as even Frank Gehry works. Does the informal relate to your interest in concealing the structure to make it a subtle part of the building?

CB: Yes, so for example the Serpentine Gallery pavilion started with a simple line in space that was repeated in a certain way. We got what was needed. The project in Antwerp with Ben van Berkel began as a line flowing by hand that turned into something. The Chemnitz Stadium roof with Kulka & Konigs was one arch that repeated itself and came to what it became better known. So I have a very different stand from the structural engineer who works on a great piece of structure that you can completely understand. That is great. There is no harm in that; I like that too. But it is more fun if you have a piece of work—a building or a bridge—that is like the Chemnitz stadium, which is ambiguous, and you start to wonder what is the structure. Or the Kunsthal, where the best compliment I received was from someone who said to Kim, “I don’t know what this is about—it feels like it is all structure but you can’t see it.” The building is what people enjoy, and as a consequence they might see that it is about engineering.

NR: So have you basically rejected the macho technology that shows off the structure? Your engineering is more organic and internal.

CB: I am interested in releasing architecture from structure, whereas other engineers trap the architecture through the structure. I would like to create something more subtle, as you said, so that it has a slight ambiguity and can be structure, architecture, or pattern—but I like it structurally ambiguous. It is why a piece of coral is intriguing: it is that piece of structure. Of course it is. Is that a piece of architectural delight? Yes, it is. A piece of coral is a spatial map, a kind of growth form, and those sorts of things interest me.

NR: So it is this nonlinear architecture that you feel is appropriate to your approach of the informal. Why is there such a synergy for you with this type of work?

CB: In the area of “blob” architecture,
Why Glenn Murcutt Matters

Pritzker Prize–winner Glenn Murcutt will return to Yale this fall as the Bishop visiting professor and will give a lecture on Thursday, November 7, 2002.

“Europe has architecture; Australia has landscape.” It’s an obvious comment from an unlikely source: Tim Winton, a contemporary Australian author who explored Australian identity in the space of his novel (Jilt Music: Flying into Sydney, it is a city—or zone accur-ately, sprawling suburb—of four million people. It is obvious to even casual observers that after 200 years of European construction, the mountains, the harbor, and the beaches remain its most formidable organizing feature. Although Sydney has a popula-
tion density rivaled that of Chicago, it is not organized around a grand civic space but around the harbor. Public life is lived outside. And this outside is a place that’s experienced in movement. It is a transi-
tional space. It’s satisfactory that the most significant political speech of Murcutt’s era was made outside, on the steps of the parliament house. By Gough Whitlam, who was elected prime minister after he had been sacked by the Queen of England’s representative.

Glenn Murcutt, this year’s Pritzker laureate, is the architect of the Australian outside. He builds nowhere else. Murcutt steadfastly refuses lucrative commissions from Europe and the United States. Fiercely regionalist, he has not built much beyond a 200-mile radius of Sydney, where he lives and works. From the seem-
ingly limited position, Murcutt’s influence has reached far. In terms of defining Australian cultural identity, there is arguably no one who has made a larger contribution. Architecture is well qualified for defining identity, but Murcutt’s work in particular harbors a precise articulation of the Australian romance with the wilder-
ness. Whether in the country or in Sydney, his architecture suggests that habitat is an understanding and appreciation of living with the ecologies of the wilderness.

Murcutt’s architectural education started with remarks he made about the idiosyncrasies of the Australian landscape, showing him the subtleties of the ground, climate, and flora that are the result of this landscape’s most significant attribute: low rainfall. With no underground aquifers to provide a supply of water, this landscape extends beyond simply attempting to collect and use rain-
water. With a population the size of Texas (20 million) and a landmass the size of North America—drier than any in the world—emptiness, scarcity, and conserv-
ing resources are integral to the cultural characteristic of Australia.

Murcutt’s first form of his Modernist architectural heroes in California came from this cultural attitude. The amount of energy required to heat and cool the glassy architecture of Craig Ellwood, Richard Neutra, and Neutra’s disciple Rohn appalled him. He realized that this aesthetic of transparency could never be sustained in Australia, not because it wasn’t beautiful or hadn’t been tried before but because such an extravagant use of energy would never be tolerated. “Australians are window openers,” Murcutt says. If you’ve traveled in a car with an Australian on a hot day, chances are you’ll understand what he’s talking about. So Murcutt’s buildings open up. His architec-
ture poses the following question: How do the buildings close down? Transpare-
cy in his work is a sliding scale that is regulated by the users for the weather conditions. Just as a yacht must be constantly trimmed, Murcutt’s architecture demands participation. For more than two decades he has claimed that his buildings do not need mechanical heating and cooling, and it’s his pragmatic and ethically driven atti-
date toward scarcity that has culturally positioned his work.

The skins of Murcutt’s buildings are specific, articulate, and as seasonally pro-
grammed as the anglerfish (Murray’s example), which sheds its skin in a colorful display each year. These skins are more varied than the forms and planning of his domestic pavilions and are instrumental in activating the relationship between the occupants and the natural environment. In the Moree Short House (1975), a combina-
tion of mesh view screen, glass, and metal adjustable louvers wrap the double pavilions to manipulate the circulation of the slight breezes. For the northern side of the Riverl House (2001), he uses roof over-
hangs sparsely to modulate the transition between inside and out. The house’s skin is expanded to become part of the interior circulation, and the roof slides down as a windbreak for the house. One of the least understood reasons for Murcutt’s frequent use of corrugated zinc (formerly called galvanized iron) is that the material sheat has an edge that allows the roof to “feather down” to a single line against the sky, reinforcing the changing transparency he saw in the native dry sclerophyll forest. The material is also familiar to the con-
struction industry—it’s common in the ver-
cular buildings of rural areas—as many of his details. Part of Murcutt’s abi-
ity to succeed in Australia, a country gener-
ally ambivalent to architectural innovation, was his acceptance of standard building techniques and a talent for tweaking them to his purposes.

When the Warka-Alberton House (1994) is closed down it is never sealed. Located in the top of the far northwest of Australia for an Aboriginal client, the house has one side with open slats that continually allow it to breathe. In working closely with the community on an Aboriginal Alcoholic Rehabilitation Center ten years earlier, Murcutt found a correlation between his reading of the landscape and their occup-
ation of it. There is an Aboriginal desire to view the horizon from within a dwelling and to imagine the flows of natural forces and fauna continuing unimpeded through the space. This basing in the interior of programmed space is familiar in Murcutt’s plans, where circulation along the west axis of the pavilions is often continuous and punctuated only by sleeping and eating zones. His interest in Aboriginal habi-
atation of the land has coincided with a growing public interest, through the land-rights issues in the plight of the Aboriginal peo-
ples. This led to the 1985 Aboriginal own-
ership of perhaps the most symbolic land-
scape form, the red rock in the northern Australia, and the resumption of its native name, Uluru.

If Murcutt’s work is a cultural barometer of developing attitudes within Australian life, then his career is a testament to the pugilistic character of Australian politics, as a result of a perhaps overindulged indi-
vidualism. He once opened a lecture at the Royal Australian Institute of Architects by announcing that he would gladly return his drawer full of awards for the smooth pas-
sage of his projects through the local building authorities. The approval system, which allows neighbors’ opinions to over-
ride any architectural argument, has con-
sistently denied building permits to inven-
tive projects. Along with Harry Seidler, Murcutt has repeatedly challenged the decisions of city councils. Eleven of his projects only won building approval after he went to the Land and Environment Court, the highest possible legal appeal. (Only once did he lose in this process.) Ironically the council’s most common reason for rejecting Murcutt’s plans was that his designs did not harmonize with the nat-
ural setting or blend with the natural envi-
ronment. If for nothing else, Murcutt and Seidler are Australian architectural pio-
nears for legally hacking out a political cli-
ning for architecture. After many bat-
tles and awards, Murcutt now generally only gets delayed in court and is able to negotiate a settlement without compro-
mising his work.

That Murcutt has provided a precedent and strategy for younger architectural practices to navigate the pitfalls of the pro-
tession might be contribution enough, but his influence extends well beyond build-
ing-department approvals. He has taught in Sydney since 1975 and has helped many former students start their own prac-
tices. Although Murcutt has always prac-
ticed on his own, he has been amenable to anyone who has called him for advice, and often volunteers details and information on his building projects. His pavilion house form has become so ubiquitous that it is considered the antecedent of the “Sydney school.” Moreover, while the pavilion (in Murcutt’s case between 15 and 20 feet deep) is a nostalgic reference to the agricultural tradition of Australia, it now also represents an idea of occupying the landscape in an ecological way.

To the Pritzker jury, Murcutt’s unique practice is in contrast to that of “most of the highly visible architects of the day.” It’s solitary, modest, and does not participate in the usual forms of self-promotion. Recognizing a serial practice that makes low-rise work with lofty aspirations may be a response in part to the events of the past year, in which architecture played some part. However, the decision also highlights the relationship of architectural practice to the expanding global culture of architecture.

Habitation for Murcutt, no matter where, means allowing nature to invade domestic life through architecture. Nature is instru-
mental. By focusing on movements and cycles of the ecology, Murcutt situates his architecture within an ecosystem, where it becomes part of the landscape, is responsi-
ble to it, and does not dominate it. Substitute the sun, wind, and water pat-
terna for urban infrastructural forces and one starts to understand Murcutt’s ideas as an engagement of existing complex systems that transfer to larger scales and forms. Thus, as the commissions have become larger, Murcutt has elongated his pavilion. The horizontal forms, sometimes as long as 265 feet, are now of a scale that substantially mark the landscape and sug-
est an architectural extra-vasation within a culture of scarcity. His work has been understood outside Australia as an envi-
ronmentally sensitive domestic approach, but it is more. To occupy the Australian landscape with the boldness often promised by Australian culture is to realize architecture’s potential to collude with nature while simultaneously fulfilling soci-
ety’s desires.

—Jeremy Edmiston
Edmiston, who studied architecture in Australia, is a principal of System Architects in New York and teaches at City College.