

ALL THE WOOD'S A STAGE

|
Words Herbert Wright

Timber is enjoying a renaissance as a contemporary building material, but the USA has been slow to catch up on innovations in Europe and Japan. Enter Studio Gang, one of the United States' leading practices. At the new Writers Theatre in a small town in Illinois, it has given timber a stage and pushed its performance to new levels



1 (previous page) – The Lobby and Gallery (left) are connected by a book-lined passage to the Black Box Theatre (right)

2 (opposite page) – The Gallery offers an experience almost like a canopy walk – and brings you close to the off-vertical batons in its screens

The Glencoe that's not in the Scottish Highlands lies 30km north of Chicago, on the same side of Lake Michigan. It's a town of 9,000 whose mock-Tudor facades and leafiness would suggest a British suburb if the streets weren't so wide and on grids. Chicago-based Studio Gang Architects' principal Jeanne Gang describes it as 'a very quaint village', yet it draws cultural sophisticates from the big city to take a train or drive up Interstate 94 for something rather special. Since it was founded in 1992, The Writers Theatre has delivered just that – quality drama that brings the audience right up close to the performers. The Washington Post named it as one of the six best regional theatres in the whole USA.

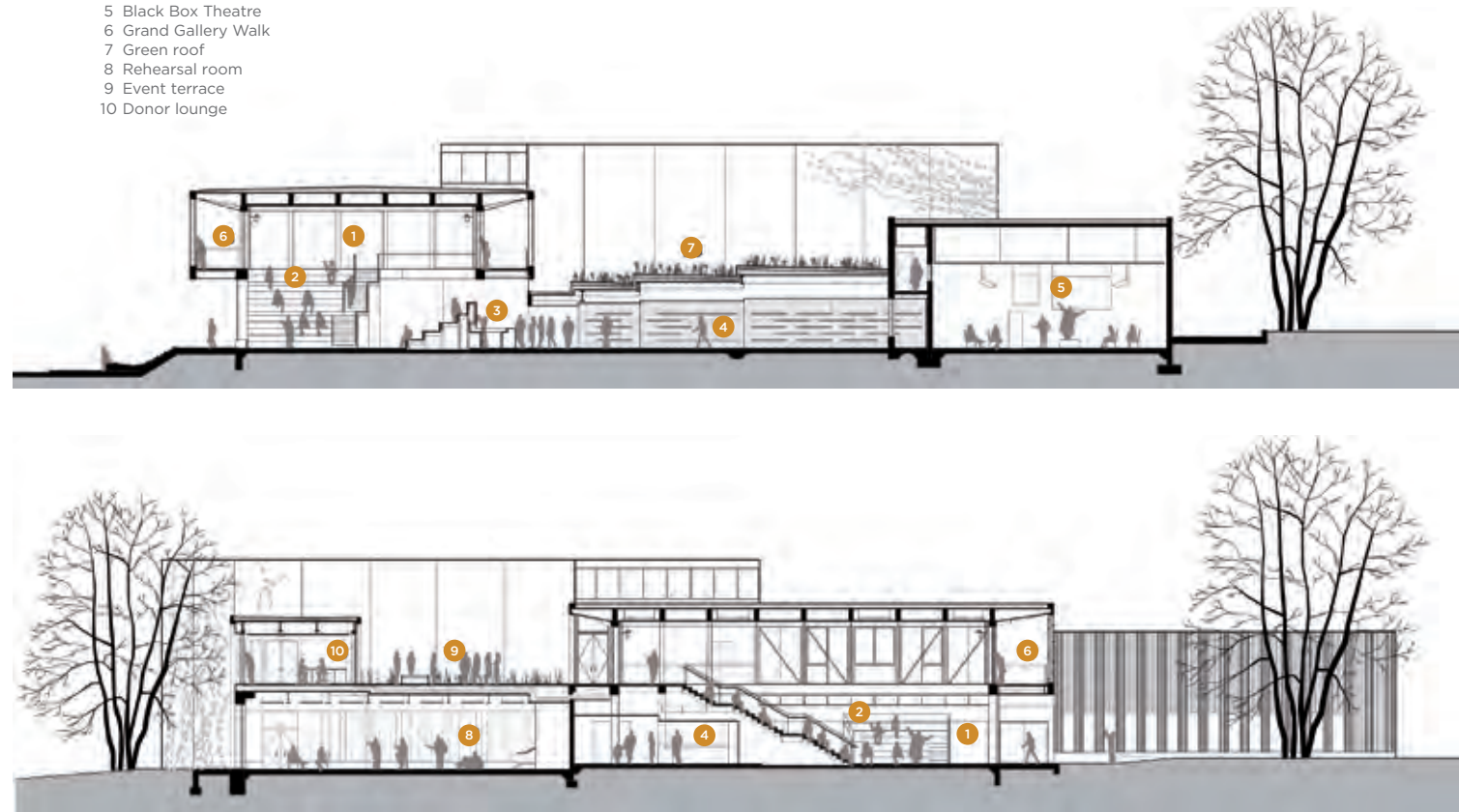
This February, the company moved into its new \$28m Studio Gang-designed 3,345 sq m building. From a competition field of 30, the practice was commissioned in 2012 and construction started in 2014. 'After all the long effort, it's so nice to have it finally built!' says Gang. The audience should feel the same way, too, and not just about the drama – there's the distinctly contemporary new theatre complex itself. It's tailored to its audience and locale, but it tells the whole of the USA that timber is back.

The theatre building is box volumes that include two

dedicated theatre spaces and a green-roofed rehearsal room, which mass together and rise discreetly to no higher than 10.7m, about as high as anything in Glencoe goes. The most striking element is the signature upper-level gallery. It not only looks down through glass to the transparent lobby below, but also commands views out across the town through an extraordinary open screen. The gallery's square passage is cantilevered out from the ground floor, as far as 3m on one side. The structure is defined by a timber Vierendeel truss, but the exterior screen is far lighter. Between the horizontal frame beams are tension-strung, thin, full-height batons of stained Port Orford cedar at varying angles to the vertical, which end with 'cat's paws' that grip into the beams. No bolts were used. The screen has two layers, offset to improve lateral stability. Port Orford cedar, also used in pencils, was chosen because of its performance and resistance to rot, and although not FSC certified it is required by American laws to be replanted after harvesting.

'I really wanted this screen to be working structurally,' says Gang. To overcome scepticism about its viability, she called France-based, British lightweight-structure engineer Peter Heppel, who has worked with masters from Frei Otto to Renzo Piano: 'I thought he was the perfect person to give everyone

- 1 Lobby
- 2 Lobby seating
- 3 Concessions
- 4 Library
- 5 Black Box Theatre
- 6 Grand Gallery Walk
- 7 Green roof
- 8 Rehearsal room
- 9 Event terrace
- 10 Donor lounge



1 & 2 STEVE HALL © HEDRICH BLESSING



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RODINA WOOD & FARLEY
ARCHITECTS



confidence and come in to this specific thing. He worked with me on the [tensioned] marble curtains I did early on [for a show in 2004 at the National Building Museum, Washington DC], and the opening roof of the Bengt Sjostrom Starlight Theatre' (in Rockford, Illinois – see Blueprint November 2003). A section of Glencoe's screen was tested at Trillium Dell Timberworks, in a rig that literally tried to pull it apart.

The gallery has something of Cristián Undurraga's diagrid-sided open passages of pine around Chile's pavilion at the Milan Expo (Blueprint 340), although his elements were far thicker and regular, and the varying baton angles even echo the trend for apparently random angles of exterior elements in, say, OMA's CCTV HQ or Herzog & de Meuron's Beijing Olympic Bird's Nest stadium. Of course, in Glencoe the scale is modest to match the setting, and the more charming for it. After sunset, the gallery shines light out through the batons, and by day the experience of being on it is like walking on air, or perhaps a canopy walk.

The lobby below, a few steps up from the street, is an airy double-height space that fills with daylight. It is the Writers Theatre's hub and offers a choice of directions to go – to the cloakroom and lift, or the doors to the main theatre, or a corridor leading to the smaller theatre. All of those involve ticketing, but

the lobby itself has free offerings. Two banks of terraced seating sit on the floor, providing for performance in the lobby itself (the plans illustrate that with a piano), or maybe meeting or just hanging out. It should draw the community in.

The main auditorium holds 250 and is a steel structure with a concrete back wall. It is lined with bricks, reused from the 1938 building previously on site, the Women's Library Club, where the Writers Theatre had performed to packed houses but with only 108 seats. The bricks form zigzags, partially latticed with alternative brick gaps, and they play an acoustic role.

Intimacy with the performance was the driving design objective with this space. The artistic director and co-founder is Michael Halberstam (Nottingham-born, which probably explains why this is 'theatre' rather than 'theater'), and he insisted on intimacy. Three banks of seats draw around a thrust stage, bringing the performance virtually into the audience. The spatial strategy brings to mind Hans Scharoun's pioneering Berlin Philharmonie (1963), but Gang talks rather of the Guthrie Theater in Minneapolis opened the same year, designed by Ralph Rapson and its thrust stage by Tanya Moiseiwitsch. A Guthrie designed by Jean Nouvel has since replaced it.

From the lobby, a wood-clad corridor extends, lined with

Ground Floor

- 1 Entry
- 2 Lobby seating
- 3 Lobby seating
- 4 Box Office
- 5 Concessions
- 6 Coat Check
- 7 Library
- 8 250-seat theatre
- 9 Black Box Theatre
- 10 Rehearsal room
- 11 Theatre back-of-house
- 12 Green roof
- 13 Performer's suite
- 14 Loading



3 (previous spread) – The Gallery and entrance have a pastoral setting but actually face the townscape on this side

4 – The main theatre seats 250 and brings the audience up close to the performance

5 – They might be talking about roles – those bricks behind them play acoustic and aesthetic ones

6 – Below the Gallery Walk and behind the tribune in the lobby the corridor cuts between the rehearsal room and main theatre



books and with windows on one side, half-suggesting a colonnade. It leads to the smaller, 99-capacity performance space, fittingly referred to as the Black Box Theatre. This is a more experimental space within black hanging panels that can be moved to make it smaller. A rehearsal room by the lobby potentially offers yet another performance space. And there is also a room for Writers Theatre's donors (in Europe, that would be the Members' Room).

The exterior around and behind the lobby and gallery are of wood or concrete, according to the different volumes that form the whole. The rectangular site fits snugly into parkland but faces the town, and a corner is left as open green space beside the lobby. Jeanne Gang says Glencoe 'needed more pedestrian activities, people to walk and get out of their cars, and something that would activate the park and the streetscape'. This theatre in the park, by also speaking to the townscape, does just that.

Studio Gang includes the Writers Theatre among its 'bird-friendly' projects. Gang herself may seem bird-obsessed – the unbuilt Ford Calumet Environmental Center for a nature reserve took nest-making as its model. It included open observation decks that shared the openness and tensile screens

of the Writers Theatre, although not with wooden batons. Birds are a serious issue when a billion are killed annually by buildings in the USA. 'In cities by water we have migratory birds. We have to understand how birds see,' says Gang. 'We have to think about our biodiversity.' Studio Gang's most famous project yet, the 262m-high, 84-storey Aqua Tower (2010), put the practice at the top level of those defining Chicago's exhilarating skyline, along with the likes of SOM and Adrian Smith – but it was also the first bird-friendly skyscraper.

As for wood, the USA has begun to follow Europe and Japan in bringing it into contemporary architecture. The reappraisal of this ancient building medium was boosted by its appearance at the 2015 Chicago Architectural Biennial (Blueprint 343) with Ultramoderne's low and exposed Miesian lakeside canopy, and David Adjaye's contemplative Horizons installation at his show at the Chicago Art Institute. 'I like working with wood,' says Gang. 'It embodies carbon, it looks rustic.' Along with her starting point of research and effort to reach out to communities (whether human or avian), she says that one of the common threads in her work is that 'I try to bring out the quality of the material'. At the Writers Theatre, the Gallery Walk brings it out from the building. The achievement should be marvelled at far beyond Glencoe. ▶

First Floor

- 1 Lobby seating
- 2 250-seat Theatre
- 3 Black Box Theatre below
- 4 Gallery
- 5 Grand Gallery Walk
- 6 Event terrace
- 7 Donor lounge
- 8 Offices
- 9 Green roof



7 (previous spread) – Two tribunes are placed in the lobby, creating a third but less formal performance space

8 (opposite page) – The Gallery Walk cantilevers from the entrance volume. The 'cat's paw' joinery of its batons is visible

9 (following spread) – The way light shines through the gallery at night has been compared to a lantern





JEANNE GANG

Studio Gang principal and founder Jeanne Gang talked with *Herbert Wright* about wood, Writers Theatre ... and what's coming up in New York



Blueprint: Has the USA been slow to take up wood as a contemporary construction material, compared to Europe and Japan?

JG: We probably have more wooden structures in this country than anywhere else on the planet. There was huge progress early on, with ideas like the balloon frame and that kind of construction, especially in Chicago where that was developed. The steel industry came along and because it's located in places like Chicago and the Midwest that became such a dominant mode of building, because it was made right here. I've always been a huge fan of wood because of its renewable qualities, the fact that it is so good in texture, and the possibilities. When we started to introduce wood in structures, it was challenging because the [building] codes don't even allow for it any more, except in certain residential constructions... It was hard to get the data for structures, so we were forced to prove in tests that the wood could actually perform.

Blueprint: Why was the Port Orford cedar chosen at the Writers Theatre?

JG: It's structural and performance-driven because Port Orford cedar has good resistance to rot and it weathers; you don't have to seal in any way. There's very few knots, it has good structural qualities and it's long-lasting.

Blueprint: It was American-sourced, but some

embedded energy is from transporting it...

JG: Not only that, but there are many industrial processes that go into it. [But] it was low-carbon.

With the Arcus Center, Kalamazoo College [Michigan] that we did last year, we figured that [wood] took more carbon out of the atmosphere than it put in. A tree is always absorbing carbon in its lifetime, and in this particular application, very little work is done to the wood – it dries naturally – and we put it directly into the wall. It was abundant and nearby. It was white cedar.

Blueprint: How did the Writers Theatre approach the issue of audience intimacy?

JG: The 99-seat space is really a black box, and the intimacy is however you decide to stage that particular space. Where we really designed in the intimacy was in the 250-seat space. In the old theatre, people sat literally with their feet on the stage, and they felt so connected to the performers. The artistic director Michael Halberstam really wanted to maintain that; it was crucial to the success of the product to maintain intimacy.

Blueprint: Did any other theatre spaces inform your thinking about the Writers Theatre?

JG: Yes, the thrust stage. The first one was really the Guthrie [Theater, Minneapolis] and that's a touchstone. But of course we wanted to make it more particular to the Writers Theatre, so the

dimensions are a lot smaller. It allows the performance to be three-dimensional.

In terms of connecting to the community, Michael Halbersam and I were thinking of the Old Vic in London. It has a new library and cafe and people really use it as a gathering space. We wanted to capture that kind of energy at Writers. We would be calling each other from all over the world during the design process.

We did a full-scale mock-up using string and tape in this gymnasium that we borrowed for the day. That was pivotal, because we ended up shortening the tongue of thrust after that.

Blueprint: *Blueprint* covered your Bengt Sjostrom Starlight Theatre in 2003. Did anything echo down the years from it to the Writers Theatre?

JG: The thing that I feel strongly about the Starlight Theatre is the connection to the community. They needed something that would create a regional draw and something spectacular. It's a very car-orientated condition there, the people needed something to bring them together, to create community life. Live performance is perfect for that. We wanted the theatre to be a draw in itself. The roof opens up kinetically. People still come out early to see the roof open, then the director closes it when they begin the performance. So when I was doing the Writers Theatre I tried to understand the community and what was needed there.

Blueprint: What up-coming Studio Gang project is exciting you most?

JG: Well, I'm excited about all of our projects! The project with so many dimensions to it is the Gilder Center for Science and Education at the American Museum of Natural History [in New York]. It's fascinating because it's a campus of 25 existing buildings – some historic, some not – where we're iterating a new wing into the campus, but at the same time clarifying the circulation. It also connects with nature and science and art and education.

Blueprint: Will we see a Studio Gang project in Europe, maybe even the UK?

JG: I certainly hope so! Some of our work connects with nature in urban areas, and we've been doing tall buildings and buildings that are sensitive to their site. London being at the forefront, it would be the perfect place to do something. ■

STUDIO GANG PROJECTS



2003 - The Bengt Sjostrom Theatre in Rockford, Illinois has a roof that opens like an origami piece



2010 - Chicago's sublimely terraced Aqua Tower is the first bird-friendly skyscraper. Studio Gang's Vista Tower will soon rise nearby



2014 - The Arcus Center for Social Justice Leadership at Kalamazoo College in Michigan has carbon-negative walls



The shape of things to come - The Gilder Center at New York's Museum of Natural History, like the Aqua Tower, has forms inspired by geology