

A renowned Rotary alum affirms her commitment to environmentally sustainable architecture

JEANNE GANG

THE CONVERSATION

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ROWING UP in Belvidere, Illinois, a city 70 miles northwest of Chicago, Jeanne Gang didn't have to go far to glimpse her future. Her father, James, was a civil engineer and highway superintendent in Boone County, and on Saturday mornings, the girl who would one day become a world-renowned architect would visit his office and sit at the drafters' drawing boards or clamber onto the heavy equipment used in road construction

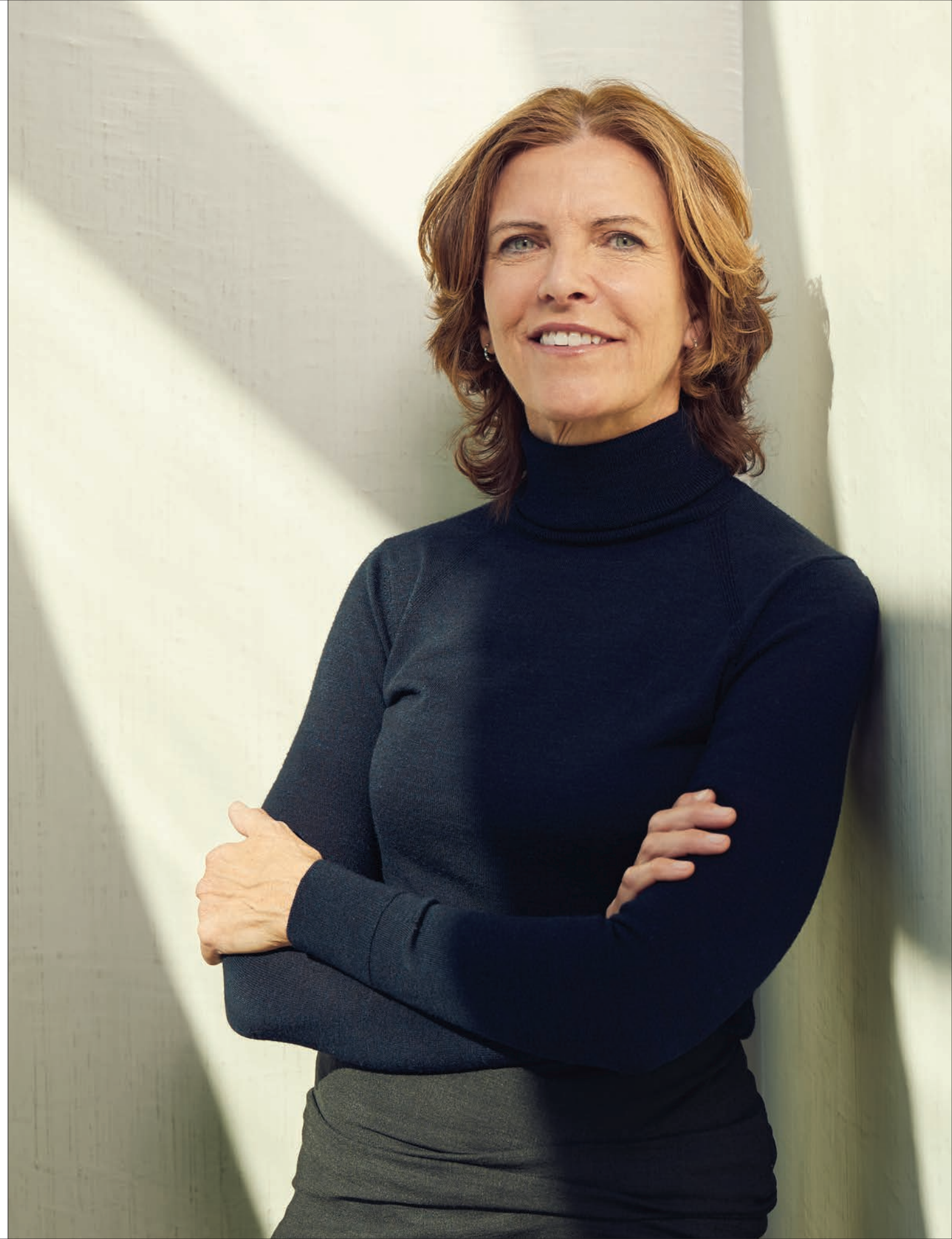
that sat idle in the county garage. On family vacations, James would pack his wife, Marjorie, and their four daughters into the family station wagon to drive around and look at bridges. "I really loved that," recalls Gang. "We traveled to almost all the states, and I developed a love for the great landscapes that we have in this country."

Gang's education continued at the University of Illinois, where she graduated with a degree in architecture in 1986. The recipient of a Rotary Ambassadorial Scholarship, she traveled to Switzerland to study at ETH Zurich (Swiss Federal University of Technical Studies). "I gained exposure to an international faculty and students that brought depth to my understanding of urban design," she says. "Being able to do that really expanded my horizons." She went on to earn her master's degree at the Harvard Graduate School of Design — where she now serves as a Professor in Practice — and spent two years working with Dutch architect Rem Koolhaas.

In 1995, Gang took a job in Chicago, a city with arguably the greatest collection of buildings in the United States — or at least, as Gang has asserted, the city with "the highest architecture IQ in the country." Two years later, she started her own firm there; known today as Studio Gang, it also has offices in New York, San Francisco, and Paris.

In 2010, Gang established herself as Chicago's most prominent and creative architect with her 82-story Aqua Tower, a sensuously undulating building whose curved concrete overhangs evoke rippling water while also diffusing the Windy City winds. A structure both profoundly beautiful and eminently practical, Aqua earned Gang a slew of accolades and awards: Emporis, a global building-data research company, anointed it the best new skyscraper of the year, and PETA chimed in

Saverio Truglia/courtesy of Studio Gang





“WE’RE WORKING COLLABORATIVELY AND COLLECTIVELY ON PROJECTS THAT CONNECT PEOPLE TO EACH OTHER AND TO THEIR ENVIRONMENT.”

with a Progy Award for the building’s bird-friendly design (also a characteristic of other Gang works). The following year she won a MacArthur Foundation “genius grant”; the foundation praised her “unusual optical poetry ... and integrative approach to contemporary building.”

There was, for Gang, one galling aspect to Aqua: It was often identified as the tallest building in the world designed by a woman. (“It would be better to be known as a great architect without the qualifier,” she says.) Aqua has since been eclipsed in height by another Chicago skyscraper: Gang’s 101-story Vista Tower, which is expected to open this year. And in June, the publisher Phaidon released *Studio Gang: Architecture*, a lavishly illustrated retrospective of the firm’s accomplishments over two decades. “The new book is about what ties all of our projects together, the ideas that cohere across different categories,” Gang says.

In typical Gang fashion, the book also looks toward the future. “How might we leverage and expand on the creative, collaborative nature of the profession to together shift societal values toward a more balanced and thriving planet?” Gang asks. “Our first 20 years of answers are collected in this book.”

Recently, Paul Engleman, a frequent contributor to *Rotary* magazine, talked with Gang about a number of topics, including her commitment to sustainability, her office’s green roof, and the civic and ecological ambitions of Studio Gang.

How would you describe the work you do and your approach to it?

The way I sum up the practice is that we’re like-minded professionals working collaboratively and collectively on projects that connect people to each other and to their environment. In urban settings, that means bringing biodiverse nature back into cities so people can experience it. I’m passionate about the environment, and I want others to be too. Not everyone can get into the technical details of how we make our buildings greener. But they can get into developing a stronger connection to their environment. If you can make a space so compelling that people go out of their way to be there, that’s a great way to start building a good relationship between people and the environment, while also building stronger communities. We’re living in a time that is so polarizing that we’re losing our connections to one another. At Studio Gang, we want to connect people to each other. We design buildings, neighborhoods,

Courtesy of Studio Gang

and cities, and we use different media to express our ideas and the ideas of our clients and collaborators: books, exhibitions, and drawings and handmade models.

For an architect, what are the major elements of sustainability?

At the most basic level, it’s about reducing carbon emissions. Buildings are responsible for about 39 percent of all greenhouse gas emissions, so we have to work to make them less polluting in their construction and operation. But sustainability is also about social justice, equal rights, and reducing poverty. It’s about supporting nature and bringing it into the city so people can appreciate the ecosystem services that nature provides. We installed a green roof at our own headquarters in Chicago — and not just any green roof. It has more than 50 different plant species that support wildlife in the city: birds, insects, even bats. It’s a big experiment, and every year we measure the success or failure of it in a “bio-blitz.” We try to bring these sensibilities to all of our projects.

How do you incorporate the goals of sustainability into projects?

You look at what you have to work with and how you can shift available energy around to make the most use of it. You look at what assets and needs the client has, based on their location and climate. Then you work with engineers to incorporate those assets into the architecture. In Michigan, where we did the Arcus Center for Social Justice Leadership at Kalama-

Courtesy of Studio Gang



VISTA TOWER

At 101 stories, this three-tiered building is Chicago’s third-tallest skyscraper; to improve stability, its 83rd floor has been left vacant and without windows so the wind can blow through.



zoo College, there happens to be a tree type, white cedar, that is sustainably deployed. We modernized an old technique using the cedar as cordwood masonry, which uses all parts of the tree. It actually sequesters carbon. That went well with the center’s personality and its site. It’s visible, exciting, and beautiful.

How far have architects come in terms of working toward sustainability?

When I was an undergraduate, a lot of my teachers were former hippies. They were into solar power, living off the grid, that kind of thing. When I started practicing, that conversation was almost non-existent. By starting my own practice, I was able to get back into that and adopt new approaches to making green buildings. These days, many of our clients are actually looking for these kinds of ideas and starting to ask for better-performing buildings. We’re designing a new global terminal at O’Hare airport in Chicago. The mayor wants to make it the world’s greenest airport. That’s a big advancement from when I started the firm.

Does having local governments as clients add a degree of difficulty in terms of resistance to innovation?

You can encounter resistance in the private sector too. A problem I’m concerned with right now is the reuse of old heritage buildings. There seems to be a conflict between historical preservation and making a building sustainable. There shouldn’t be. Those goals should go hand in hand. You shouldn’t



ARCUS CENTER FOR SOCIAL JUSTICE LEADERSHIP

Completed in 2014 at Kalamazoo College in Michigan, the light-infused structure employs cordwood masonry made from sustainably deployed white cedar that sequesters carbon.

“SUSTAINABILITY IS ALSO ABOUT SOCIAL JUSTICE, EQUAL RIGHTS, AND REDUCING POVERTY.”



have to install single-pane windows because they existed in the original. That is literally what you're asked to do to maintain the historic preservation label. I think that's a problem we have to address soon. I think reuse should be more aligned with efficiency than with pure historical preservation.

Is a net-zero carbon footprint a feasible goal in building construction?

It's not a question of whether it's feasible. We have to do it. It's an urgent thing, but it's not easy to get there. We have two projects that are striving for that. At the California College of the Arts, we're using a microgrid as part of the solution. They have activities like glass blowing, which produces excess heat. So one could use that heat to create energy to produce hot water in the residence halls. I like working at different scales and on different types of buildings and not specializing. We can innovate a lot that way, because we find strategies that work in one building type and can apply them in other building types.

Tell me about Polis Station, Studio Gang's contribution to the Chicago Architecture Biennial in 2015.

That was an attempt to present a concept as an open-source idea for other people to adopt. A lot of people are thinking about the problem between police and community members — the fear that police put into members of the community that they should be trying to protect. We wanted to explore what public safety might look like in these publicly owned buildings. We wanted to see if the design could start to positively impact those relationships. We recently completed a fire-rescue training facility in Brooklyn. It's interesting that everyone loves rescue workers and firefighters, and that firehouses are often open buildings, completely different from police stations. For the Polis Station exhibit, we took policy guidelines that had been developed by experts on ways to improve the relationships between police and community members and tried to think about how they could be expressed in a physical structure.

How does that align with the work you did with the Neighborhood Activation Study in New York?

We were hired by the Mayor's Office of Criminal Justice to do an urban design study aimed at creating safe spaces in two neighborhoods. It's about improving relationships on a community scale, but not necessarily by way of a building. We were defining what the projects could be, and

Courtesy of Studio Gang and MIR

CAREER HIGHLIGHTS

1997

Jeanne Gang opens her own architecture firm, known today as **Studio Gang**.

2003

Gang unveils her first public building, the renovated **Starlight Theater** in Rockford, Illinois.

2010

Emporis names Aqua, Gang's 82-story Chicago high-rise, its **best new skyscraper of the year**.

2011

Gang wins a **MacArthur Foundation "genius grant."**

2012

The Art Institute of Chicago stages *Building: Inside Studio Gang*, the firm's first **solo exhibition**.

2017

Jeanne Gang is elected to the **American Academy of Arts and Sciences**.

2019

An architectural team led by Studio Gang wins an international competition to design a **new global terminal** at Chicago's O'Hare airport.

2020

Chicago's **Vista Tower** and the publication of **Studio Gang: Architecture** cap the firm's first 20-plus years.



Tom Harris/courtesy of Studio Gang

the city will then hire architects to design the projects. Doing a design study is a different way of having an impact.

Is there a type of structure or project that you haven't done yet but would really like to do? A prison? A bridge?

I definitely don't want to do a prison. Bridges are good metaphorically. We are doing a bridge — a pedestrian bridge — in Wisconsin at the Beloit College Powerhouse, which repurposes a former coal-burning power plant as a student union centered on wellness and recreation. I'm really interested in the hybridization of different types of buildings. If you have a hotel that is also a community center, something that happens casually now could be much stronger. There are a lot of interesting combinations that could happen. I want to bring different programs together into buildings. At the American Museum of Natural History in New York [where the Studio Gang-designed Richard Gilder Center for Science, Education, and Innovation is slated for a 2022 opening], they're bringing together their technical programs and the arts — and different kinds of media are being adopted in the arts. It's exciting for us as designers. We're mixing classroom and exhibit spaces, and we're thinking of it as an institution that has a strong educational focus at all levels, from kids to teachers to PhD students. It's a research institution that's also focused on education for visitors.

FDNY RESCUE COMPANY 2

Beneath its green roof, this fire-rescue training facility in Brooklyn provides the opportunity to **stage emergency situations** in, on, and around the building.

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RICHARD GILDER CENTER FOR SCIENCE, EDUCATION, AND INNOVATION

When completed in 2022, this 190,000-square-foot addition to New York's American Museum of Natural History will add **innovative spaces for exhibits and education** while improving connections between buildings.

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Are energy-efficient innovations for buildings unaffordable luxuries for some people?

That's a difficult question, because there are so many different ways to do affordable housing. A lot of affordable housing already uses wood construction. Surely there is less of a carbon footprint in a modest-size apartment built with wood than in a large, elaborate, high-end home. When you look at carbon footprint per household, it wouldn't be an equal calculation. Sometimes it's required that affordable housing be woven into a project. We are finishing up a high-rise in San Francisco, called Mira, that's very high performing, and yet 40 percent of the homes there are being sold below market rate.

When Rotarians travel internationally, how should they think about architecture?

It's good to see architecture in different places, because it's always informed by the culture that's there. Some interesting projects that are happening now involve designers thinking about mitigating natural disaster. Rotarians could think about how design could improve places that they travel to. There's a flow of people on the move because of natural disasters or wars. I think there's probably a good project in thinking about how to accommodate people who are displaced. ■