

Moshe Safdie

Thoughts on Biophilia

THINKING OF PLANT

life as an integral part of human habitation, and conversely thinking of buildings and landscape as integrated experiences, came to me early in life, a circumstance of my place of birth. I was born in Haifa (at that time in Palestine, now Israel), a mostly white-plastered, modernist, medium-density city climbing up the hills of Mount Carmel. We lived close to the ridge before the area had been totally urbanized — a three-story building in which each floor was accessed independently by bridges from the surrounding topography. Ancient, stone retaining walls shaped the open landscape into fertile terraces. It was the ideal setting, particularly at a time of austerity, to grow vegetables, have a chicken pen, keep bees, and to top it all,



THOMAS COLE (1801-1848), THE GARDEN OF EDEN, 1828.

have a goat and donkey. Here we were living within a city growing some of our food surrounded by the woods of pine and the extraordinary view of the Haifa Bay, and beyond, Galilee and the mountains of Lebanon. Some 1,000 feet to the east were the gates into the Bahá'í Gardens, the burial place of the founder of the Bahá'í religion, set within an extraordinarily beautiful, manicured Persian garden extending from the crest of Mt. Carmel down to the German colony and the Haifa Port. In my youth, the monumental scale of the grand baroque-like stairs descending the mountain had not yet been built. Rather a series of discrete terraces hugging the landscape as in Delphi, with two shrines, one domed and one overtly classical, were set within the rich plant life.



MOSHE SAFDIE IN HIS OFFICE STUDIO.

It would not be an exaggeration to say that these were playgrounds for me and my friends: gardens to roam within, paths paved with river pebbles and terracotta chips, gilded bronze peacocks adorning pavilions, bougainvillea gone wild with a backdrop of dark cypress trees, and sculptural olive trees in the foreground. If you were to write a specification for a city today requiring some cultivating land for its residents and beautiful gardens as a place of communal escape, you would have built, by default, what Haifa was then.

Ten years later, I found myself in frigid Montreal. Traveling across Canada and the United States as a student of architecture studying housing, I was repulsed by acres of high-rise public housing. Balcony-less, depressing small windows, with the land in between the towers designated to be parks, but in reality mostly parking lots. I returned to Montreal determined for my thesis to offer an alternative. Reflecting on my life in Haifa and reinforced by youthful idealism, my motto was, "for everyone a garden." I would rethink high-rise housing so that each apartment would be likened to a house with a garden, open streets, and communal spaces integrated with plant life. The outcome was Habitat 67, about which much has been written, criticized, discussed, praised, and embraced. Fifty years later, it can be generalized into a principle: tall buildings have the potential, by fractalizing their mass and surface, to create multiple outdoor spaces of private and communal scale. They can be oriented to sunlight and views with adequate measures for soil and irrigation; plant life can thrive, transforming the urban high-density environment and enriching city life.

I do not think it is an accident that most architectural renderings for housing, office buildings, apartment structures, and other mixed-use projects today are covered with greenery. Whether it is likely to be there upon the implementation of the project varies. But the intent is called out in the renderings; an acknowledgment that the presence of plant life in the human environment touches on every fundamental aspect of well-being — of tying us with our primeval roots when as a species we roamed the savannah surrounded by nature and plant life.

Fast forward 30 years: Safdie Architects have expanded this utopian ideal of "for everyone a garden" from the domestic scale to the public realm. At Marina Bay Sands in Singapore, a high-density, mixed-use, tourist-based development, we began by embracing the Urban Redevelopment Authority's guidelines for landscaping all roofs. The dense massing and the



HABITAT 67 UNDER CONSTRUCTION, MONTREAL, CANADA, C. 1967.



HABITAT 67 AFTER COMPLETION.

WRIGHT ON THE FUTURE OF ARCHITECTURE

"As for the future — the work shall grow more truly simple; more expressive with fewer lines, fewer forms; more articulate with less labor; more plastic; more fluent, although more coherent; more organic."

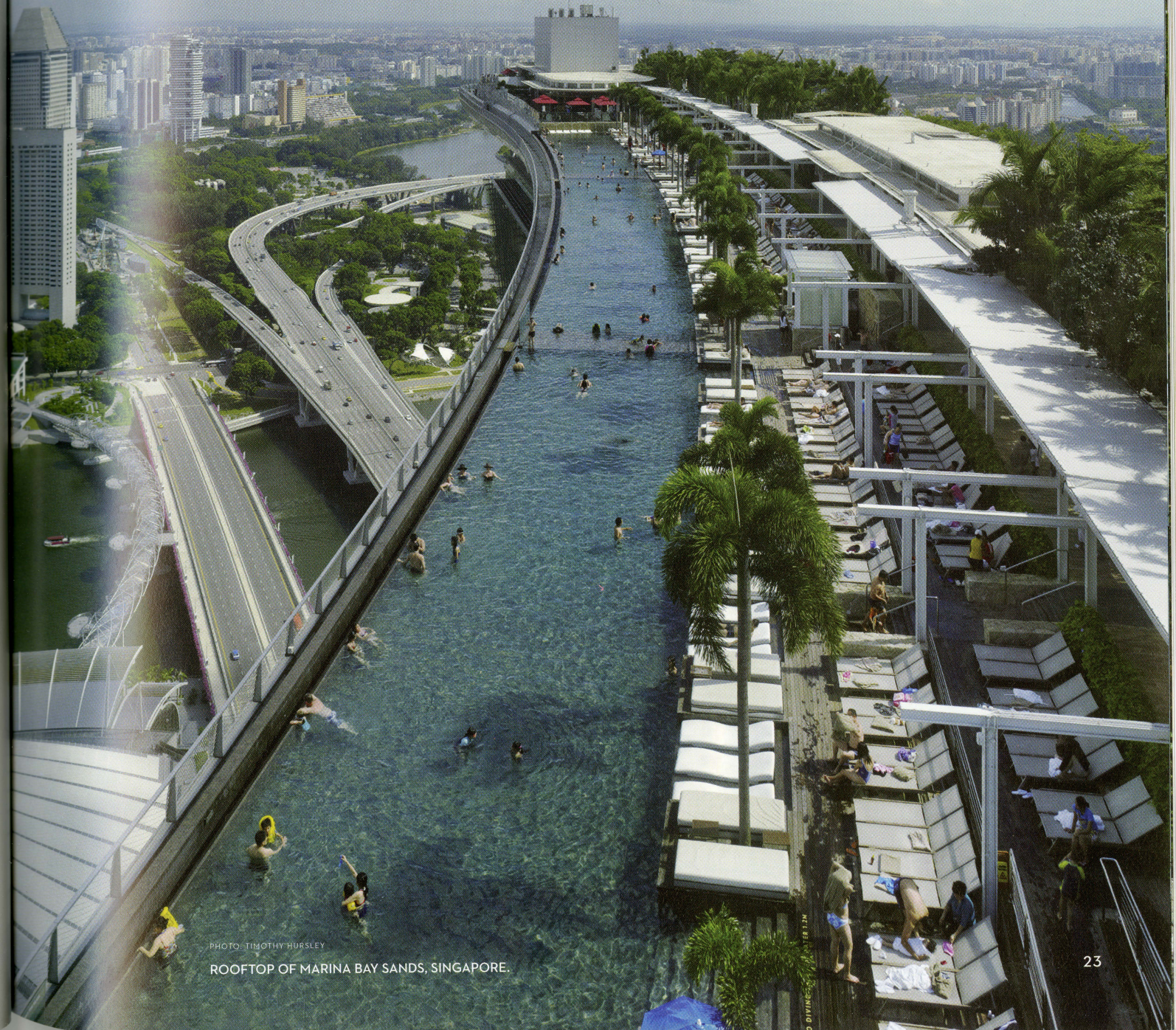


PHOTO: TIMOTHY HURSLEY

ROOFTOP OF MARINA BAY SANDS, SINGAPORE.

need to provide resort-like parks, gardens, swimming pools, etc. led to an invention: the Skypark, a three-acre platform hovering along the 57th floor of the three hotel towers, serving as a park for the project as well as the public at large. The extraordinary reception that the project has received endorses the concept that in the high-density, high-rise city, the public realm can and should be extended to higher levels of high-rise construction, extending the ground plain skyward. Marina Bay Sands Skypark was proof that providing quality space for experiencing nature and plant life can transform the experience of living in the city.

With Jewel at Changi Airport came the opportunity to demonstrate that the marketplace, the center of commercial and urban hustle bustle, could be integrated with the experience of nature in a park-like setting. In Jewel, one million square feet of retail, and other public facilities, have been intertwined with a major multilevel park. It is enjoyed by hundreds of thousands of people weekly, millions annually. The Jewel marketplace cohabits with the multilevel park, each its own entity resonating and synergizing with the other.

Garden as inspiration continues in many of our newest projects, as we seek to center and provide a pastoral spirit to the institutions and developments that we build. In Raffles City Chongqing, a ten-million square-foot mixed-use project, the entire podium roof has been designed as a lushly landscaped park, providing a much-needed public space in the densest part of a city of 35 million. Atop the 50th floor, the glass-enclosed Conservatory spans more than 1,000 feet across four towers, accommodating many public and recreational functions — each infused with landscape.

In the Serena Del Mar Hospital in Cartagena, Colombia, a bamboo garden creates a linear spine of circulation along which each of the building's five wings project outward toward the lake, forming gardens in between that are available to both patients and staff. For the Albert Einstein Education and Research Center in Sao Paulo, Brazil, we conceived of the building as an urban oasis, with the educational and laboratory facilities organized around a series of garden courtyards featuring native Brazilian flora. The vaulting glass roof, with an inventive shading system, evokes the feeling of congregating in a garden under a leafy tree.

With the emergence of the modern movement — megacities, high-density urbanism at the beginning of the 20th century — utopian schemes like Le Corbusier's Ville Radieuse and Ludwig Hilberseimer's Ideal City





project (1923) envisioned a dispersed urbanism of towers set in parkland. Intuitively, it was felt that as the city becomes denser, towers should be dispersed so that they are set in park-like environments. (Frank Lloyd Wright came to a similar conclusion with his own Broadacre City.) Theoretically, this is a sound idea. Its origin is in the Garden City movement extended from low-rise, low-density communities. The reality — which unfortunately took several decades to discover — was disappointing — neither a vital urbanism nor integration with parks. By then whole cities had been constructed following the model and they were not, to say the least, inspiring. “Green” might have been there on the plans, but the reality was asphalt and parking lots.

Today there is a clear trend, a recognition (apart from the constraints of global warming and the urgent need for sustainable development) that dense urban development must be integrated with nature in such a way that the old dividing line between city and countryside becomes blurred. In the long run, this will demand reopening the question of what optimal density really is. Is it the massive concentration of Midtown Manhattan, downtown Shanghai, and Hong Kong? Or is it somewhere in-between? Think of a New York with Central Park extended from the Battery all the way to the Bronx. It would make each and every zone in the city accessible to park space of the scale in which the presence of plant life in the city begins to feel omnipresent.

We seem to have come full circle. The most ancient story, the Garden of Eden, of Paradise — and the equivalent in every other culture — establishes the garden as the ideal place of well-being. Society has recognized the indispensable need to bring back that garden into our urban life. ■

Moshe Safdie is an architect, urban planner, educator, theorist, and author. Over a celebrated 50-year career, Safdie has explored the essential principles of socially responsible design through a comprehensive and humane design philosophy. His projects include cultural, educational, and civic institutions; neighborhoods and public parks; housing; mixed-use urban centers and airports; and master plans throughout North and South America, the Middle East and Asia.

