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Author

Tung, Gregory

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Streetlights and Civic Imagery

Gregory Tung

“Standards” is a regular feature of Places that examines the origins of and rationales for practices, regulations and standards for design and building, and explores ways of developing standards that allow individual places to flourish. Readers are encouraged to submit ideas and articles.

Prince Feisal: In the Arab city of Cordoba were two miles of public lighting in the streets when London was a village ...

T.E. Lawrence: Yes, you were great.

Feisal: ...nine centuries ago.

Lawrence: Time to be great again, my lord.

— *Alec Guinness as Feisal and Peter O’Toole as Lawrence in Lawrence of Arabia, 1962*¹

In myth, fact and metaphor, street lighting is taken as a sign of civilization. Along with department stores, train stations and other metropolitan archetypes, electric street lighting is an essential part of the contemporary city’s image of urbanity and modernity.

In the early years of electric lighting, the spectacle of urban streetlights was a popular fascination, a focus of City Beautiful planning and a motif of modernist literature, art and architecture. Today, it seems we take streetlights for granted, paying scant attention to these omnipresent fixtures of streets, parks, plazas and other public spaces. This is a lost opportunity, for streetlights are one of the scaffolds upon which we hang an architecture of the public realm.

My childhood impressions of streetlights in and around the New York City area were divided between “old” and “new.” “Old” meant the aging, ornate cast iron standards, “bishop’s crook” and others, along the city’s avenues and the bracketed, hewn-timber poles along the parkways to Jones Beach. “New” meant the streamlined cobraheads of the 1964 World’s Fair in Flushing Meadows, the orb-on-a-stick lighting of Modern plazas in Manhattan and the futuristically angled highway mast lights at Kennedy Airport. In the space race

world of the 1960s, the old seemed fussy and worn to me while the new radiated technical prowess and confidence in the future.

In recent decades, technology, urban contexts and popular appreciation for streetlights and public space have changed. The American night has become brighter and peach colored as efficient, high-pressure sodium lamps replace mercury-vapor and incandescent lamps. Standards for the level of illumination have increased and engineers have sought economy by calling for taller light poles spaced farther apart.

In the suburban sprawl world of back-office business parks, “superstore” malls and residential planned unit developments, the types of streets and urban fabric have mutated and multiplied; yet most are being illuminated by widely spaced, look-alike cobrahead and shoebox streetlights. In reaction to this sameness, cities have started to designate (and sometimes have completely invented) historic neighborhoods and districts, creating a market for reproductions of “old time” streetlight fixtures.

Sometimes the mix of old (ornamental) and new (minimalist) city fabrics and furnishings creates strange juxtapositions. Where neo-Victorian streetlights line the paths of ribbon-windowed, high-tech office campuses, the sprawl world seems to collide with Main Street USA. Conversely, highway-grade cobraheads line the streets of some of our most pedestrian-oriented central cities. Looking at the range of streetlight designs and the contexts in which they are used, one might conclude that street designers are torn between evoking small-town nostalgia and bowing, in artless functionalism, to traffic and crime-fighting agendas.

Style and Public Character

Streetlights, as publicly furnished elements in the built environment, represent and connote civic purpose. A century ago, Beaux-Arts streetlight designs asserted classical, civic ideals for the public realm (even if it was an omnidirectional, ever-expanding city grid). But postwar planning and public works have been characterized by minimalist and functional design. At best, this has served as a neutral frame for private development; at worst, it seems to have induced an anomie that cedes decisions about the public realm to considerations of cost and engineering efficiency.

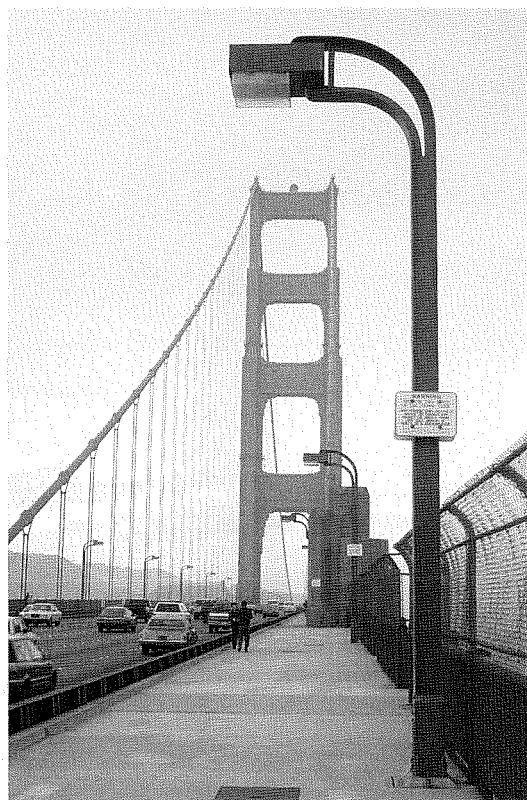
That a civic character should be manifest in the design of public works does not imply that streetlights should all be Doric columns. Moreover, considering the many cultures and classes that make up the U.S. today, the idea that urban design should be derived from a singular neoclassical or Victorian image of civility seems anachronistic and limited.

Civic form must, by definition, employ images of public settings that have been collectively understood for generations, and American designers have many histories, cultural idioms and collective images from which to select, compose and blend. Though the most resonant idiom for a civic-minded redesign of a place might be drawn from hundred-year-old photographs, we might choose to inflect that stylistic heritage with references to what has come to pass and whom we have become in the interim.

Problems arise with a return to “figurative” form in civic furnishings. Historicist elements, such as Victorian reproduction streetlights, stand out against the backdrop of blandly designed public space. Also, they often are criticized as designs that represent the preferences of an elite or of the

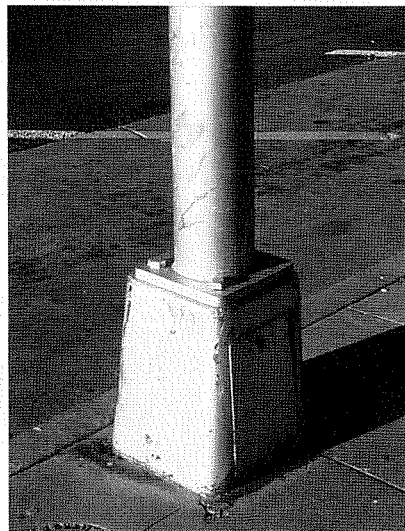
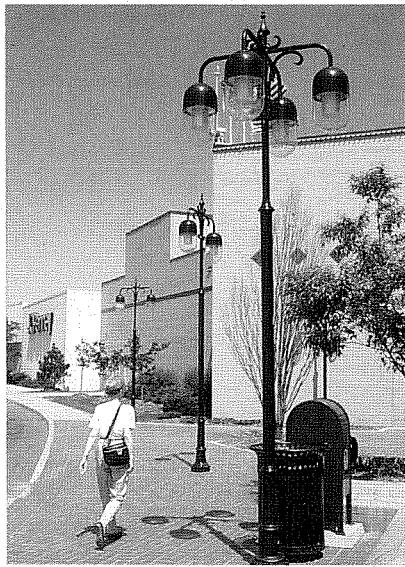


Top: Streetlights, Castro Street, Mountain View, CA.
Photo by Gregory Tung.



Bottom: Golden Gate Bridge roadway light standards, San Francisco.
Photo by Gregory Tung.

Clockwise, from top left: Neo-Victorian streetlight, shopping mall, Rochester, NY (photo by Gregory Tung); streetlight with pedestrian- and roadway-height luminaires, Tiergarten, Berlin (photo by Michael Freedman); ornamental street-light base, Battery Park City, Manhattan (photo by Michael Freedman); typical cobrahead base (photo by Gregory Tung).



middle class and are intended to encourage increased consumption and gentrification.

On balance, the popularity of reproduction streetlights and similar “old-time” props seems consolatory rather than exclusive; they respond to the rootlessness of Americans and the desire for images of stability in a bewildering landscape of change. Embedded within such nostalgia are legitimate human needs, including that of reflecting human scale and manual craft in built environments, which can engender a sense of being located in a world with familiar images and collective purpose. But the strength of such sen-

timental images, no matter what their style, often obscures their failures in accommodating urban life. This is one issue that fresh and accessible design inquiry can address.

Some Findings

The basic issue is how street lighting supports the livability of cities. The design of streetlights and illumination should be determined by the nature of the environment that is being lit and should take into account the intertwined issues of function, culture and aesthetics. The impact of the streetlight’s presence should be considered as much as the effectiveness of its lighting.

For example, lighting handbooks and manufacturers’ brochures often recommend a one-to-seven or more ratio between the luminaire height and pole spacing of streetlights, for the sake of efficiency.² But on a downtown shopping street of a small- to medium-sized city, 13-foot-high, post-top-mounted streetlights at a shorter 70-foot spacing (as opposed to the textbook 91-foot spacing) produce a less efficient ratio but a more pleasing and supportive pedestrian environment. The pole is short enough to be within the scale of the human body and to create a “ceiling” for the outdoor “room,” yet tall enough to be a substantial presence on the street. This spacing is tight enough to create a boundary between pedestrians and car zones, if the poles are near the curb, or to mark pedestrian space, if they are centered in the walking path.

A taller post would extend above the pedestrian’s close-range visual field and play a less effective spatial role in his immediate environment; such a streetlight would be more appropriate on a wider street, such as a boulevard. If streetlights were spaced farther apart,

they would be less likely to establish the intimate cadence and sequence suitable for a sidewalk along which pedestrians would stroll or linger.

If streetlight spacing is geometrically coordinated with other intervals of the street (such as tree spacing, parking stall spacing, or storefront increments), the resulting order strengthens the subtle perception of the streetscape as an intentional public living room, rather than an ad-hoc accumulation of infrastructure parts.

Ornamental articulations of the pole add richness to the pedestrian realm: Each bump, ring, or layer is a spot on which to tie a shoe or rest an unsteady body. Those features that fix the pole to the earth (a base) or gesture towards the sky (a crown, spindle, or capital) can root a pole in its place and provide a memorable silhouette. If similar articulations were repeated and recomposed in the design of adjacent street furnishings and buildings, the setting would approximate what Kevin Lynch has called a “thematic unit,” in which the streetlights are but one part of a larger, related family of objects in the public realm.³ Such a treatment gives a subtle and pervasive character to the place.

Taller and less ornamental poles, such as cobraheads and shoeboxes, are better suited for highways and locations at which walking speed and pedestrian contact are not issues. But even these poles could be used to create a more powerful civic gesture: They could be given a distinct shape and be placed and repeated so that they define a space or district. The sculpted I-beam design for the lights along the Golden Gate Bridge and its approaches knit the bridge and road spaces into their urban and natural surroundings.

The durability and appeal of the materials in a streetlight contribute to

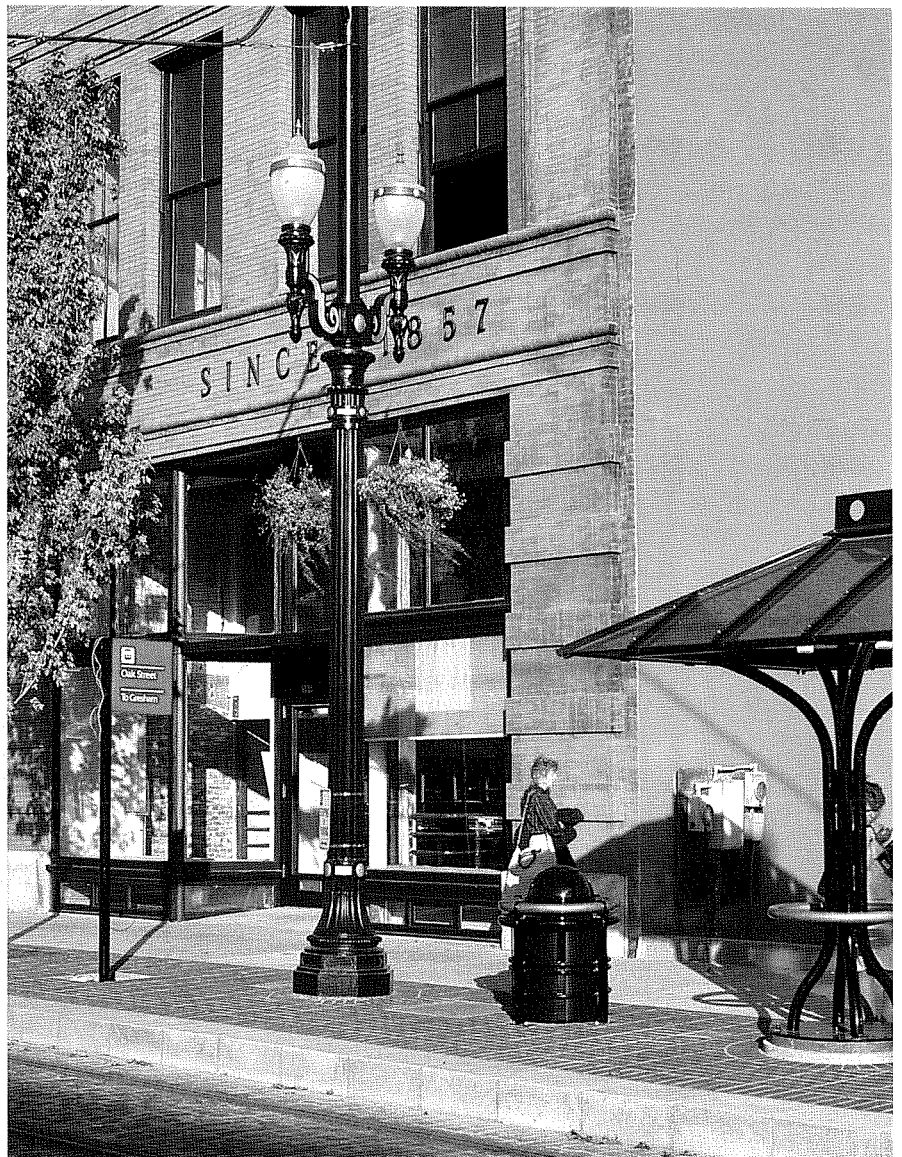
our estimation of the permanence of and commitment to the public environment. If street lighting in an otherwise attractive downtown setting feels like exposed basement plumbing in a living room, it sends a discordant message. If a luminaire globe on Main Street has the plastic texture of a cafeteria salad bowl and yellows after a few years, expectations about the importance of and care for public investment will not remain very high.

Cobraheads and shoeboxes are quite acceptable in some settings, even where changes in use have brought in pedestrians (such as in manufacturing areas that are converting to office, retail

and cultural uses). Areas with neither the budget nor the need for major change can spruce up existing streetlights with simple modifications: a coat of paint, ornamental trim, more attractive luminaire globes or lenses, color-corrected lamps, banner arms, add-on pedestrian-height luminaires along the sidewalk, or brackets for hanging flowers.

A “thematic unit”: Portland, OR, transit mall with streetlight, trash receptacle and transit shelter.

Photo by Michael Freedman.



The Nighttime Public Environment

In the nighttime environment, a hierarchy of lighted spaces is necessary. The lighting of streets and roads should focus the attention of motorists: It should be tightly focused on roadways and constrained from spilling outside the right-of-way. Also, the light source should be shielded from the driver's view.

By contrast, the lighting of pedestrian environments should create intimately scaled spaces. Luminaires should be on poles that are lower and spaced more closely than highway lights. And the brightness of the light source can be subdued enough to make the light source itself a desirable, directly visible feature of the evening landscape.

Baron Georges Eugene Haussmann's Second Empire Parisian street lighting demonstrates how street lighting and architecture can combine to create pedestrian-scale spaces.⁴ His deliberately low gas lamps created intimate, nighttime street rooms that intentionally meshed with the ground-floor

articulation of street-fronting Parisian buildings. By contrast, most American downtowns show no such urbanistic coordination: Design standards rarely relate the height of street lighting directly to the height of streetwalls or building bases along pedestrian-oriented streets.

The aesthetic possibilities of the light source itself have barely been exploited. Luminaire globes or lenses not only diffuse bright light sources but also can create pleasing effects. Prismatic optics can give light sources an attractive sparkle. Fiber optics can "borrow" the lamp's light and create ornamental effects elsewhere on the streetlight. Secondary light sources (such as ornamental lamps) and unusual orientations, (such as tree uplighting) can create an impression of variety and add interest to the streetscape.

The color of light sources also has improved. Incandescent lighting provides the best balance between warm, comfortable color and reasonable

color rendition, but its maintenance and operation costs are high. Mercury vapor and low- and high-pressure sodium are energy-efficient alternatives, but they compromise color rendition, visual comfort and the attractiveness of the color of the light source. People- and environment-flattering light colors have become available in energy-efficient lamp types, such as color-corrected high-pressure sodium, "white" sodium and color-corrected metal halide. These will be used more for street lighting (especially for pedestrian gathering areas) as their engineering improves and costs fall.

Complaints about light pollution (such as glare and excessive brightness) have added to demands for greater precision in lighting. The technical ability to achieve directed and place-specific illumination has improved greatly (and lowered energy use and operating costs) with the introduction of point-source lamp designs and special focusing-diffuser globes and lenses. Bare light bulbs and clear or frosted diffusers may soon be acceptable only for low-brightness accent lighting, not for illuminating large areas.

Present Options

On most street lighting projects, urban designers, planners and public works engineers cannot do more than specify off-the-shelf streetlights; constraints of budget and delivery time reduce the options further. The choice that most lighting catalogs offer is basically between characterless contemporary fixtures and reproduction or imitation Victorian streetlights; the origina-

One-story storefront facades and streetlights, Place Saint-Michel, Paris.

Photo by Michael Freedman.



lity and vigor of these designs pales by comparison to the richness and variety of American streetlight offerings in the early 1900s. Today manufacturers are highly constrained; the limited market for streetlights makes the speculative development of projects risky.

One way to break free of these limitations is for an urban designer to initiate a new design. A manufacturer might introduce a new product without requiring a premium for tooling costs if a designer can advance a new and potentially marketable design in conjunction with a project in which it would be used.⁵

However, only a handful of recent streetlights, such as those commissioned especially for Central Park⁶ and Rochester's main street,⁷ have dealt successfully with the problem of designing a civic, ornamental streetlight compatible with a variety of urban contexts. The recent development of a prismatic borosilicate glass globe (originally for a retrofit of a 1930 Florida streetlight fixture⁸) provides another welcome option.

Another approach to streetlight design is the art of industrial composition, or selecting and adapting off-the-shelf components (occasionally mixed with custom-designed components) to create unique ensembles. This is an unfortunately little-noticed approach, but it can provide an effective return in terms of the effort involved.⁹

We also could look abroad for creative streetlight designs. In Berlin and Munich, many streetlights are composed and scaled to accommodate both pedestrians and motorists, and often display a flair for using bold forms executed with modern materials and shapes. If cars and clothing fashions furnished by the global marketplace are already strong presences in the visual public realm of television as

well as in our streets, why not have Italian or Japanese streetlights? (However, we must be attentive to what parts of the public realm should remain local or regional in character, enough for us to still feel "at home.")

These questions about streetlight design are part of a larger issue about design and public life. At a time when disinvestment and withdrawal are widespread responses to problems of public life, people's interest in design could be channeled into exploring and challenging the norms and standards that shape the public realm. The burden of providing more or better choices does not lie exclusively with manufacturers — the most celebrated designers, after all, traditionally design their own signature elements, rather than order them out of catalogs.

The design of streetlights and street lighting is an esoteric topic to most architects, engineers and city officials, let alone the public. We ought to encourage more awareness from "producers" and "users" alike of the way that common elements, like streetlights, affect the character of the public realm. Perhaps the attention of architectural and industrial design competitions, awards, exhibitions, studio courses, reporting and criticism could be brought to bear on these elements, as they have been for other icons of the modern built environment, such as the skyscraper and the single family home.

Reexamining and redefining our civic images might contribute towards revitalizing public space. Giving recognizably civic form to infrastructure like streetlights manifests a permanent commitment to the public realm, in contrast to the restless uses and reuses of private development. In any case, our extensive investment in infrastructure ought to reward us with some level of visual delight. ●

Notes

1. *Lawrence of Arabia* (Los Angeles: Columbia Pictures, 1962). David Lean, director; Robert Bolt, screenplay.
2. See, for example, *Holophane Unique Solutions' RSL-350 luminaire/pole packages brochure* (1990), page 3.
3. Kevin Lynch, *The Image of the City* (Cambridge, MA: MIT Press, 1960), 67-68.
4. See François Loyer, *Paris — Nineteenth Century: Architecture and Urbanism* (New York: Abbeville Press, 1988), 306-312; also note the description of Paris' Second Empire hierarchy of 78 streetlight types and variants.
5. Phone conversation with Richard Peterson, Holophane Lighting Co., Unique Solutions Division, 21 January 1992.
6. Designed by Kent Bloomer and Gerald Allen. See Kent Bloomer, "Botanical Ornament: The Continuity and Transformation of a Tradition," *Perspecta* 23 (New York: Rizzoli International, 1987), 134-143, for his description of its design philosophy and process.
7. Designed by Johnson, Johnson & Roy, Inc., landscape architects, 1987.
8. Designed and developed by a collaboration of the Coral Gables, Florida, planning department and Holophane Lighting Co., Unique Solutions Division, 1986.
9. For example, it avoids the cost of obtaining certification for electrical safety.

NEW YORK CITY SUBWAY GRILLES

“Public Works” is a new feature of Places that highlights design projects that enhance the public realm. We encourage readers to send reports of projects in their communities. Readers are encouraged to send brief articles along with black-and-white prints or color slides.

New grilles in New York City’s subways.

Photos courtesy New York City Transit Authority, Arts for Transit program.

The New York City Transit Authority’s Arts for Transit program is getting down to the nitty gritty. The sponsor of successful station art projects is now taking aim at the guts of the system — starting with the crusty, grimy fences that separate paid from unpaid sections of subway mezzanines.

When the TA decided to replace the fences as part of a project to automate the subway fare collection system, Arts for Transit Director Wendy Feuer urged that artist Laura Bradley be asked to prepare designs. Bradley already had created special grilles for one station and wanted to design more.

Although engineers already had standard designs on the drawing board, TA officials handed Bradley a stack of technical specifications and gave her three months to work.

Ultimately, two of Bradley’s designs won approval — one for use in streamline modern stations built in the 1930s and the other for use in the Beaux Arts stations built before then. The TA assigned staff architects to work with Bradley in developing technical drawings and ensuring the grilles were in modular form.

“There was a will, and it came from the top,” Feuer explained. It didn’t



hurt that Bradley’s buffed and painted stainless steel grilles could be manufactured for the same price as the polished stainless steel fences that TA engineers had designed.

Through this summer, grilles had been installed in 127 stations. They strike a subtle balance, enlivening the subway’s drab atmosphere yet melding quietly into the worn patina of the stations, just like the mosaics installed when the subway was originally built. Says Feuer: “They’re very modest, but that’s perfect, because they’re in so many places.” — *Todd W. Bressi*



TORONTO PLACES: A Context for Urban Design

*Edited by Marc Baraness
and Larry Richards.*

*Photographs by Geoffrey James
and Steven Evans.*

*Essays by Barry Callaghan,
Austin Clarke, Katherine Govier,
M. T. Kelly and Josef Skvorecky.
University of Toronto Press,
1992, 108 pp., \$50.*

A few years ago, Toronto city officials began planning an awards program for recent urban design projects. Their first step was to examine places that already had become meaningful to Toronto. What places, the officials asked, are notable for both their aesthetics and their role in democratizing and urbanizing the city? In what way do those places create a context by which recent projects can be judged?

The program organizers convened a jury, which selected 25 such places, and have published photographs, descriptive essays and jury comments about each selection in this book.

Toronto Places reveals the range of places, ideas and energies that comprise a great city; it reminds us of the importance of memories and the persistence of powerful ideas. The jury's selections are divided into four categories: large places, such as the "Front Street Sweep," a composition of neo-classical civic buildings that creates a monumental streetwall; small places, such as the Alexander Muir Memorial Gardens, a transition between Toronto's street grid and its citywide network of natural ravines; and elements, such as the green-copper roof of the Royal York Hotel, which dominated the city's skyline until the 1970s. The jury also recognized two large-scale plans, contrasting the power and boldness of their vision to the unevenness of their execution.

Unfortunately, though, the diversity presented here is misleading. The program organizers solicited nominations from "40 prominent Torontonians" and narrowed those recommendations to 100, from which the jury of "six distinguished professionals" made selections. A more broadly constituted jury, choosing from a wider range of nominations made by a larger group of people, might have made an even broader range of selections.

What *Toronto Places* does not reveal (at least to a nonresident) is a sense of what gives Toronto its specific identity. Many of the selections, such as the neoclassical streetwall and a revitalized waterfront warehouse, are typologies of which examples can be found in countless North American cities. Even unique selections, such as the Sunnyside Bathing Pavilion and O'Keefe Center canopy, do not speak distinctly of Toronto.

Perhaps the jury sensed this lack of connection in suggesting that recognition also be given to Toronto's "inherited civic structures," such as its grid, ravine and streetcar systems, which so strongly establish Toronto's identity. By that measure, one also might recognize architectural and urban forms, such as housing types, that contribute to the civic design language by repeating throughout the city.

This question raises provocative questions for designers. Do the places the jury selected suggest fundamental principles of urban design that, when followed, will result in better (or better-liked) places, regardless of their location? To what extent should a place convey its position in the city, region and world, and how can that be accomplished?

With this project, Toronto has done its citizens and the larger design community a double service. *Toronto Places* will help the city's residents find delight and inspiration in their city, and it urges them toward a greater level of patience, attention and care for their surroundings. Moreover, it will keep debates about city design alive by offering fresh insights into the decisions and assumptions about what gets built and how it affects our lives.

— Todd W. Bressi