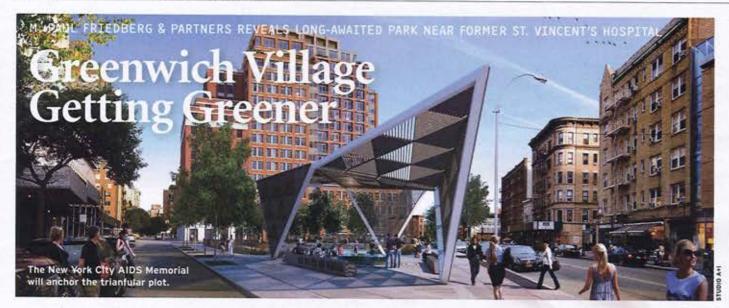
## ARCHITECTSNEWSPAPER

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As the FXFOWLE-designed Greenwich Lane luxury residential complex nears completion on the former site of St. Vincent's Hospital in Greenwich Village, a long-awaited public

park is starting to take shape directly across the street. Designed by New York Citybased M. Paul Friedberg & Partners, the 16,000-square-foot green space has been

promised to the community since 2011, when Rudin Management Company was granted permission to transform the site of the bankrupt hospital into continued on page 18

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PRODUCT> LIGHTING

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THREE EICHLER-DEVELOPED MIDCENTURY MODERN HOUSES BROUGHT CALIFORNIA LIVING EAST, BUT SUFFERED IN THE BITTER CLIMATE

## West Coast in Rockland County

Eichler homes in Ramapo, New York? The California communities of modern redwood and glass homes practically invented what is now called "midcentury modern," but it

turns out that you do not have to travel to Palo Alto or Orange County to see similar examples

A news story in

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New York, NY 10007 21 Murray St., 5th Floor The Architect's Newspaper



Step by step, New York City Mayor Bill de Blasio's Vision Zero campaign to promote pedestrian safety is going into effect across the city's five boroughs. In February the mayor signed a measure to reduce the citywide speed limit from 30 to 25 mph. Now the city's Department of Transportation (NYCDOT) has released the most detailed plans yet to address the issue, calling for targeted approaches to redesign the city's most dangerous streets-high-traffic

corridors and intersections.

"We know arterial streets are the most dangerous in New York City," Caroline Samponaro, deputy director at Transportation Alternatives, a street safety advocacy group, told AN. "They make up about 15 percent of city streets. What they did in the reports is look at the most dangerous of the dangerous and identified 154 corridors total across five boroughs." For instance, 127 miles of priority corridors in Queens continued on page 6

A DECADES-OLD TAX PROGRAM HAS BECOME A FLASHPOINT IN THE NEW YORK CITY HOUSING DEBATE

## WHO'S TAXING

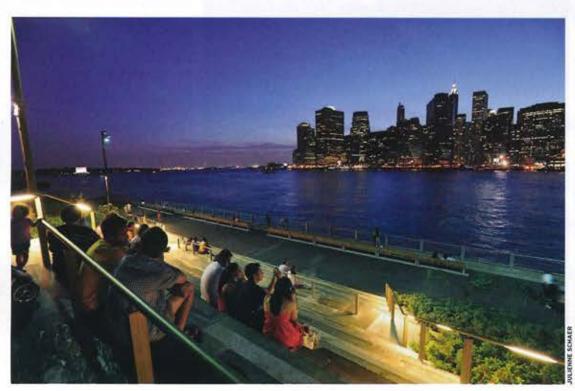
The renewal of an arcane piece of housing policy with an esoteric name like 421-a seems like something that should fly pretty safely under the radar. But in New York City tenant advocates have taken to the streets to protest a 44-year-old continued on page 9





## DARKER, SAFER

The old canard that more night lighting means safer streets has led to the over-illumination of our cities, washing out the night sky and creating health, environmental, and aesthetic problems. John Gendall investigates new research that is leading many designers to raise the call for less light.



In 1909, just 30 years after Thomas Edison made electric light commercially viable, the Italian writer Filippo Tommaso Marinetti came up with an audacious idea: "let's murder the moonlight!," he declared in a manifesto titled by that phrase. Just a little over a century later, his idea, once the stuff of early modernist fantasy, seems truer than visibility persists (sorry, Marinetti), but stars are a different story. Unless you're reading this on a camping trip in a remote part of Montana, go outside at night, look up, and, depending on cloud cover, you'll very likely see a monochrome canopy of muted light grey to almost-butnot-quite-black, dotted, depending on the size of your city, with a dim handful of stars.

Moving architecture and design to keep the night sky darkened might come off as quaint-something for poets to contemplate-but, as researchers study the effects of

nighttime lighting, their findings point to critical public health and safety consequences, along with a bevy of ecological concerns. "It's a problem with many layers to it, including the aesthetic and poetic problem resulting from the loss of stars," said Linnaea Tillett, the principal of Tillett Lighting Design, a New York City-based firm. "But it's not just a he may have expected. The moon's matter of poetry. There are very real ecological consequences."

Those very real consequences also include some serious medical conditions-cancer, obesity, diabetes, and depression-linked to light exposure (by way of melatonin, the hormone that light modulates). That is just one layer. Astronomers can't see stars through the haze of light, migratory patterns have changed, and the cost-environmental and economic-of keeping the night turned on continues to rise.

Over the last 15 years, as glass technologies have improved, the design community has done much "Sleeping in the dark is every bit as important as experiencing light during the day," cautioned Travis Longcore, an associate professor of research at the University of Southern California, and the author of Ecological Consequences of Artificial Night Lighting. "We shouldn't want the outside at night to look like the day."

"We are constrained by our evolutionary history," he explained. "We are used to bright days and dark nights, but now we get dim days and dim nights." Drawing a parallel between the emerging research about night lighting and the path of medical science in confronting smoking and sun tanning, he said, "one will, in 30 years, look back and think the same thing."

To avoid a tobacco industry-scale problem, designers are taking a new approach to night lighting. For many projects, this change begins with a basic question: Is light even needed? "Whenever you call for a light, ask if it's truly needed," said Longcore. At the Menil Collection, in Houston, where Tillett is overseeing the lighting for a campus designed by Michael Van Valkenburgh Associates (MVVA). she considered each light source. "Wherever we could, we limited light," she said. "There are no light fixtures we haven't justified."

This does not mean that museum visitors spend their evenings fumbling around in the dark. Physiologists now understand that human sense perception is far more finely tuned to contrast between light and dark than to what had seemed to be the prevailing approach to light: more of it. The trick is to illuminate change-steps, doors, paths-rather than entire landscapes. So, at Menil, Tillett called for path lighting that would render the space easily navigable without blanketing it with light. "We preserved the campus atmosphere, using a play of light and shadow, to enhance wayfinding," she explained.

To get to this level of specificity, designers are rethinking the fixtures themselves, equipping them to control the direction of light to eliminate trespass beyond property lines or municipal borders. Acorn lamps, for example, were perfectly suitable for a kerosene wick in a 19th





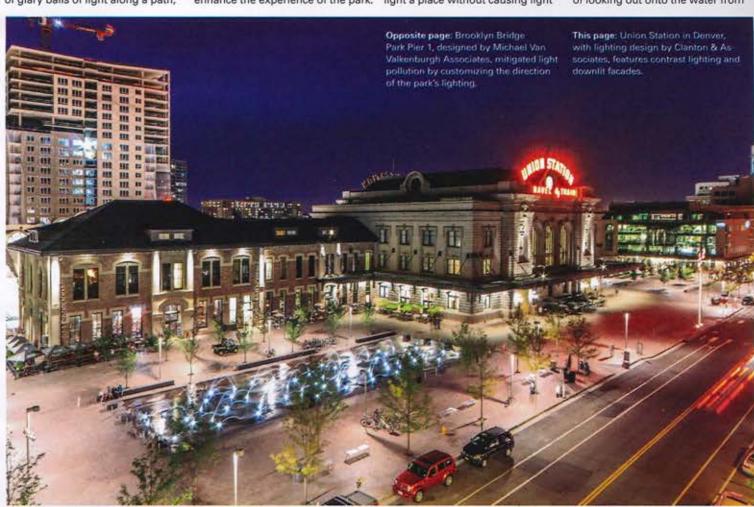


century city, but using them with incandescent bulbs now is a stubborn grasp for historicism to the point of irresponsibility. "Oftentimes parks are lit by acorn lights, derived from gas lamps, so the result is a bunch of glary balls of light along a path,

but everything else is pitch dark," said Matthew Urbanski, a principal of MVVA. With its design for Brooklyn Bridge Park, MVVA carefully tailored the directionality of light to cut down on light pollution and to enhance the experience of the park.

Tucked beneath Brooklyn Heights, any uplighting in the new park would disturb the neighbors above. "By putting light in the right place—high, distributed, and pointed down—we were able to adequately light a place without causing light

pollution," said Urbanski. "When you're on the promenade [in Brooklyn Heights, above], you can look down and be unwittingly staring at a light bulb." For visitors to the park, the firm appreciated the value of looking out onto the water from



VAN DRAWITZ





the shore, so it avoided perimeter lighting that would have interrupted that view, opting, instead, to light from behind with shielded, side-baffled lighting.

One of the canards that has kept outdoor spaces overly illuminated has been the knee-jerk tendency to equate more light with less crime. For decades, cities and property owners held outdoor lights as tonic to illicit or criminal behavior. A 1921 editorial in Grand Rapid News said it plainly: "Good lighting of streets lessens, and almost eliminates crime." Reasoning the city could cut its police budget by shifting public funds to outdoor lighting, it went on to say, "It is easy to prove that the best paying investment the city can make is one in

That argument, it turns out, is less easy to prove than the writer allowed. As Longcore asserted, "there is no universally applicable conclusion that comes out of criminology research that shows that more light means

than dimly lit spaces for several reasons, beginning with the risk of glare. As Longcore put it, "If you have bright lights, the shadows become much darker."

So, in what might seem a counterintuitive twist, improving visibility at night seems to start with turning the lights down. Nancy Clanton, a Boulder, Colorado-based lighting designer and an author of the International Dark-Sky Association's technical guidelines, has researched this effect in several American cities. "We have studied areas and have gone from full light levels down to 50 percent, then down to 25 percent, and we ask the public to tell the difference, and no one can perceive any change," she said. "Vision is logarithmic, so in lighting, our linear metric is completely wrong," she continued, backing up the fact that lighting can be cut to a quarter of current levels without anyone noticing.

In her lighting design for Union Station, in Denver, Clanton applied her research findings, less crime." Overlighting, in fact, can be worse keeping light levels low, emphasizing contrast, gigantic wheels were hoisted, and turbines

and downlighting facades (she has found, people feel safer when they can see a horizontal surface more than they would with a generally illuminated ground plane).

Research is also suggesting the light spectrum as something that needs to be carefully considered for nighttime lighting. On this, astronomers, physicians, and ecologists agree: blue light is bad. "The more we introduce blue light in the nighttime environment, the more we send out the signal that it's daytime," said Longcore. This applies not only to human physiologymelatonin is suppressed by blue light-but also to ecology and astronomy. "Blue light harms the environment and it's the worst kind of light for sky glow," said Clanton. She recommends lights at the low end of the spectrum. "The moon is 4,000 Kelvins, and we really shouldn't need more than that."

Try telling that to Marinetti. To the patriarch of Futurism, when the moon gave out its 4,000 Kelvins, he "ran to nearby waterfalls;

transformed the velocity of the waters into electromagnetic spasms that climbed up wires suspended on high poles, until they reached luminous, humming globes. So it was that three hundred electric moons, with rays of blinding chalky whiteness, canceled the old green gueen of love affairs."

There is much to be said for that old green queen. There is the melatonin, yes, and real public safety implications, true, but there is also the issue of getting a nightly reminder of our place in the universe. The night sky has long been the muse of architects and designers, evidenced by cities across the world and over the millennia that have been laid out in response to constellations. Rather than drawing from the past by screwing light bulbs into acorn lamps, it seems that celestial awareness would be a better lesson, designing spaces that don't wash out the fact that we are, as Marinetti puts it. "all of us enwrapped in the immense madness of the Milky Way."

JOHN GENDALL IS A FREQUENT CONTRIBUTOR TO AM.

