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NATIONAL GEOGRAPHIC

CITIES

SPECIAL

IDEAS FOR A BRIGHTER FUTURE

ISSUE

DESIGNING
SOLUTIONS

A TEMPORARY REFUGE
BECOMES HOME

WALKING THROUGH
A MEGALOPOLIS

RATS-THEY'LL
ALWAYS BE WITH US

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On the Cover

Completed in 1932, Sydney Harbor Bridge leads the way into the glittering modern downtown of Australia's largest city.

VINCENT LAFORET

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Double Vision

Eight seconds is all it takes to create astounding images that capture the energy of the world's most vibrant cities from more than one angle.

PHOTOGRAPHS BY
NICOLAS RUEL

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THE BIG IDEA

To Live Together, We Must Make Compromises

Urban life inevitably involves trade-offs. We may reap huge benefits in return for suffering enormous disadvantages when we choose between issues such as individual freedom and community interests, and between social ties and anonymity.

BY JARED DIAMOND



ALSO

Smart (Kansas) City
Skiing Copenhagen
Robots and Drones



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INFOGRAPHIC

Cities of the Future

What should cities be like in 2050 when an estimated 6.7 billion people live in them? We asked the architectural and city planning firm SOM to imagine those urban centers; the group created a vision based on 10 principles. Among them: putting ecology first; building an economy that supports the best use of resources; and promoting culture and livability.



NAT
GEO
TV

Listening to *The Story of God* as Told in Many Lands

In his series' third season, Morgan Freeman explores how different faiths regard their central figures, both deities and demons. His journey includes visits to Paris's Notre Dame Cathedral to see what's said to be the crown of thorns worn by Jesus and to Vietnam's Tay Ninh Province for a prayer service at a Cao Dai temple (above). Watch new episodes of *The Story of God* at 9/8c Tuesdays through April 9 and past episodes on the Nat Geo TV app and on demand.

TELEVISION

How Species Fare on Our Hostile Planet

As Earth's climate becomes more volatile, animals must adapt. See their struggles to survive in a six-part documentary hosted by adventurer Bear Grylls. *Hostile Planet* airs Mondays at 9/8c starting April 1 on National Geographic.

NAT GEO WILD

Go Inside Animal Hospital LIVE

Teams of specialized veterinarians at six animal hospitals across the country work tirelessly through the night handling emergencies in this live broadcast. *Animal Hospital LIVE* airs on Nat Geo WILD Saturdays and Sundays at 9/8c from March 30 through April 21.

BOOKS

Sit. Stay. Read (Our Pet Health Advice)

The *National Geographic Complete Guide to Pet Health, Behavior, and Happiness* brings the vet's office to you. This helpful tome is available at shopng.com/books and where books are sold.



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FEATURES

Walking Tokyo

Tokyo is the world's most populous metropolis. It's also one of the wealthiest, safest, cleanest, and most creative—despite being partly destroyed and rebooted twice in the past hundred years. The best way to understand this modern megacity is on foot.

BY NEIL SHEA
PHOTOGRAPHS BY
DAVID GUTTENFELDER

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Rethinking Communities

What if cities could be built to benefit the environment, residents' fitness, and social connection? City planners foresee dense, walkable, mixed-use communities linked by transit systems, curbing reliance on cars and helping clear the air.

BY ROBERT KUNZIG
PHOTOGRAPHS BY
ANDREW MOORE

P. 70

A City Rises

Can Africa's largest refugee settlement grow into an urban hub?

BY NINA STROCHLIC
PHOTOGRAPHS BY
NORA LOREK

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In Our Shadow

Wherever there are people there are rats, thriving on our trash.

BY EMMA MARRIS
PHOTOS BY CHARLIE
HAMILTON JAMES

P. 126

SPECIAL ISSUE

Cities and Solutions

BY SUSAN GOLDBERG



This engraving appears in *Civitates Orbis Terrarum* (*Cities of the World*), an atlas of city maps that was published in six volumes between 1572 and 1617. It depicts the northeastern Italian city of Palmanova, founded in 1593 and built in a "star fort" configuration that studded thick walls with multiple bastions to improve the city's defenses.

IN 1925 LE CORBUSIER, the Swiss-French architect and pioneer of modernism, suggested razing the homes, statues, and streets of much of Paris's Right Bank. In their place, he proposed erecting 18 identical glass towers some 650 feet high, a quarter of a mile apart, divided by lawns for pedestrians and elevated highways for cars.

Le Corbusier contended that "lovers of antiques" and progressive thinkers were at war about how humans should live. A quote attributed to him leaves no doubt as to which side he was on: "Progress is achieved through experimentation; the decision will be awarded on the field of battle of the 'new.'"

This battle has long raged in and about cities, which are thought to have first formed some 6,000 years ago in what is now Iraq. We question how best to live en masse, how to coexist. The answers change with our need for security, with passing fad and fancy, and with advances in technology.

Should we live in dense urban areas with public transit and walkable amenities? In sprawling suburbs created by

our infatuation with the car? In high-rises similar to those envisioned by Le Corbusier, now dotting urban districts across China? *National Geographic* has spent the past year exploring those questions for this month's special coverage of cities. We sent photographers and writers across the globe to document how cities work, and don't; from Tokyo—the planet's largest metropolis with more than 37 million inhabitants—to Bidibidi, Uganda, essentially an instant city of more than a quarter million people, formed by refugees who've arrived since August 2016.

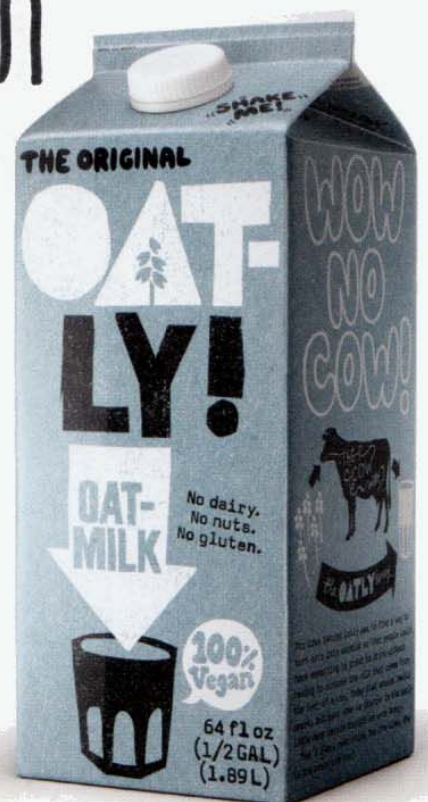
We partnered with architectural firm SOM to create a detailed representation of the city of the future. And because we are *National Geographic*, we also covered an urban creature that follows us no matter what city we live in: rats.

What does the future hold for cities and for the two-thirds of us who'll live in them by 2050? While reporting our story "Rethinking Cities," writer Robert Kunzig spent time with Jan Gehl, a Copenhagen urban designer who, Kunzig says, is "revered for his simple insights." Let's end with one: Gehl's advice to be thoughtful about shaping cities, because we're building a legacy.

"Waking up every morning and knowing that the city is a little bit better than it was yesterday—that's very nice when you have children," Gehl says. "Think about that...your children have a better place to live, and your grandchildren have a better place to grow up than you could when you were young. I think that's what it should be like."

We hope you enjoy this special issue about cities and our extended coverage on *NationalGeographic.com*. □

WHAT WAS IT AGAIN THAT YOU WERE THINKING ABOUT BEFORE YOU READ THIS AD FOR OATMILK? WHATEVER IT WAS I AM PRETTY SURE IT CAN WAIT A SECOND SO THAT YOU CAN READ THE END OF THIS SENTENCE WHICH REALLY ONLY WANTS TO TELL YOU THAT OATMILK IS WHAT YOU WERE THINKING ABOUT, OATMILK IS WHAT YOU WILL ALWAYS BE THINKING ABOUT BECAUSE NOW THIS SENTENCE SHIFTED TENSE AND YOU ARE ALREADY IN THE FUTURE THINKING ABOUT OATMILK.




PROOF

NATIONAL GEOGRAPHIC



PHOTOGRAPHS BY NICOLAS RUEL

LOOKING AT THE EARTH FROM EVERY POSSIBLE ANGLE

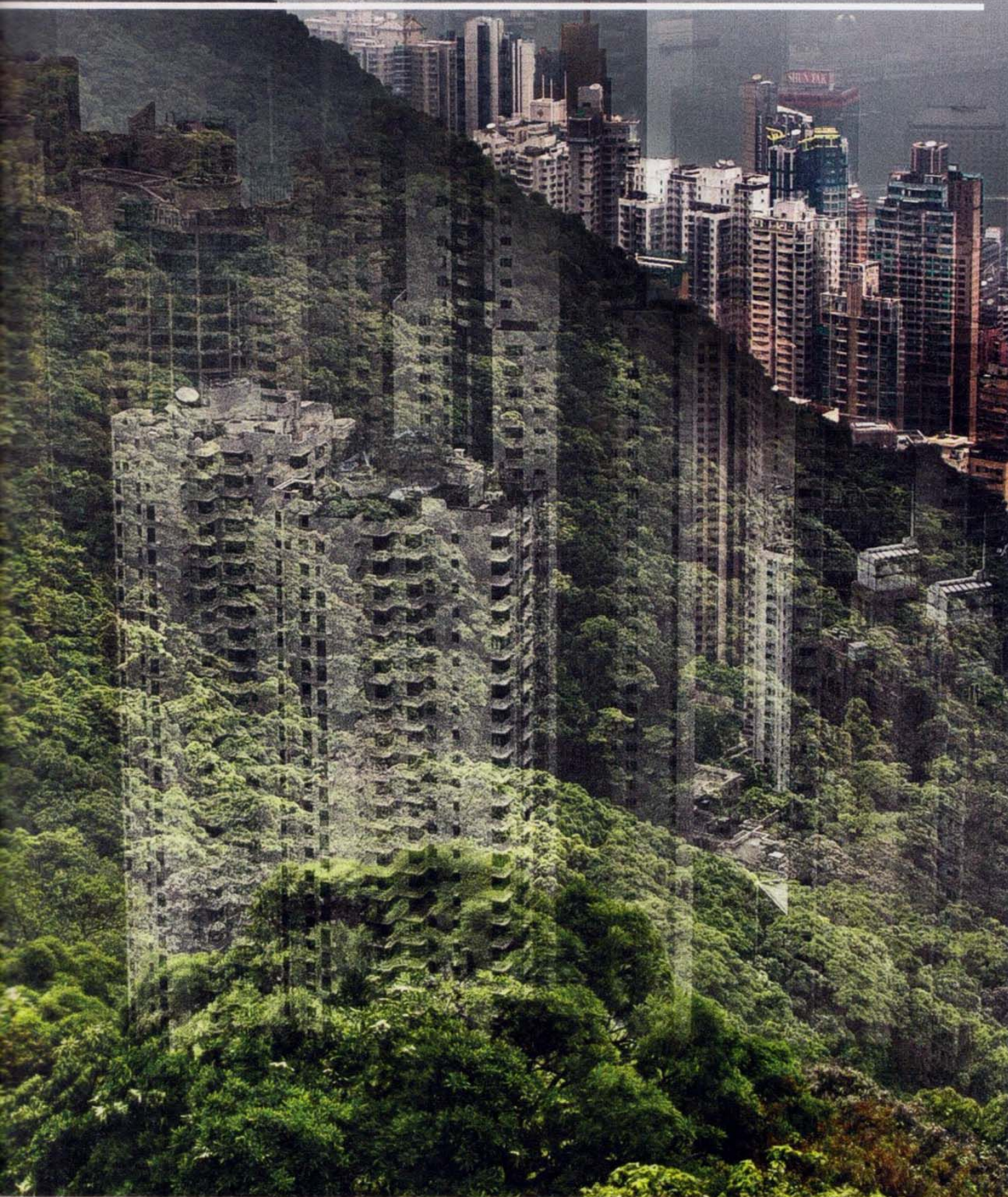
A large, high-angle photograph showing a dense, lush green forest in the foreground. In the background, several tall, modern skyscrapers of Hong Kong are visible, partially obscured by the foliage. The image is a double exposure, showing the same scene twice, creating a layered effect that connects the natural landscape with the urban environment.

Verdant Victoria Peak
overlooks high-rise
towers in densely pop-
ulated Hong Kong.
Photographer Nicolas
Ruel connects both
views in one image.

DOUBLE VISION

Eight seconds is all it takes to create astounding images of the world's busiest places.

VOL. 235 NO. 4







By the canals of Amsterdam's famed red-light district, Ruel used a double exposure to capture the neighborhood's layers—a metaphor for what goes on behind closed doors.



Under the dome of Berlin's Reichstag, where one branch of the German parliament meets, visitors appear to explore the space in different dimensions.

