

RIGHT NOW

By using a honeycomb-like structural system for a series of towers in New Songdo City, South Korea, instead of the standard approach—in which structural members are forced to twist—HOK was able to use less material and keep costs low.

whose vertical ridges work as a self-shading device—something that would cut down artificial cooling loads in the finished structure.

At a much larger scale, HOK is now designing an 8,000-acre city, Lavasa, in a region of India subject to seasonal flooding from monsoons. The Western Ghats, a mountain range that hems the site on one side, cause storm clouds to empty after their long journey across the plains. Valleys fill up with as much as nine meters of water for three months, but the site remains arid the rest of the year—a condition exacerbated by modern agricultural techniques.

HOK's team determined that the site's original ecosystem was a moist deciduous forest that in recent times had become an arid landscape. In its original state, trees would have maintained soil quality, stored water through the dry season, and provided a canopy to control evaporation. The team took this as the design's point of departure. Working with engineering consultancy Buro Happold, they are designing a building foundation system to store water, as the trees once did. And for the future city's rooftops, the team is borrowing from the unusual morphology of the native banyan fig leaf: its so-called "drip-tip," a pointed spear at the leaf's end that doubles water run-off and cleans its own surface in the process. Using the leaf as a model, HOK is developing a tiled shingle system that will shed water in the same way. During the



COURTESY OF HOK



rainy season, however, there is the problem of where to send overflows; for this, HOK looked to local harvester ants, which divert water away from their nests with multipath, low-grade channels. The site's master plan will adopt this insect strategy to channel water through the city.

Elsewhere, in New Songdo City, South Korea, the developer of a 500-acre business parcel wanted HOK to design a contemporary, iconic skyscraper. Twisting forms have recently become fashionable as twenty-first-century skyline landmarks. "Normally, in these new twisting towers, the supporting columns are expressed on the façade and have to twist unnaturally, which gets expensive and wasteful," explains HOK New York's director of design, Ken Drucker, M.Arch. '87, the design principal on the project. Echoes Knittel, "We know that if we throw enough material at a building, we can make anything stand. We wanted to approach this less wastefully."

Working with the design and engineering firm Arup, the team looked to the con-

figuration of honeycomb, which retains its structural integrity even while twisting. This system, with staggered supporting walls cantilevered from the core, allows each floor-plate to pivot around the center of the building, generating a structurally sound tower based on a honeycomb pattern—and the twisting form the client wanted.

Though this approach is novel, Knittel believes it is sound. Nature has already done 3.8 billion years of research, the thinking goes, so how can architects now say it's wrong? Ultimately, Knittel hopes that buildings, like nature, will react to environmental conditions and support biodiversity. "We don't want merely to imitate the way something looks," he explains. "We are hoping to understand the logic of nature, and how it will perform in buildings." ~JOHN GENDALL

THOMAS KNITTEL E-MAIL ADDRESS:

thomas.knittel@hok.com

HOK WEBSITE:

www.hok.com

THE VIRTUE IN VICE

The Poor Payoff of Pleasure Postponed

FOR ALL THE hand-wringing over their failure to amass savings, Americans may actually be *too* disciplined. So says Harvard Business School assistant professor Anat Keinan.

A need to feel efficient, and a tendency to feel guilty when we do something "just for fun," may be universally human. But the Israeli-born Keinan says productivity-ob-

essed Americans take this to an extreme, viewing pleasurable pastimes as wasteful, irresponsible, and even immoral. Keinan and Columbia Business School professor Ran Kivetz call this *hyperopia*—the habit of overestimating the benefits one will receive in the future from making responsible decisions now. They write that this phenomenon—the name, drawn from

ophthalmology, means "farsightedness"—works to our detriment by driving people "to underconsume precisely those products and experiences that they enjoy the most."

Keinan began thinking about hyperopia after noting a trend among fellow doctoral students at Columbia: she and her friends complained about not having had enough



In her research, Anat Keinan asks people to reflect on their regrets over choices made in the near and distant past.

fun as undergraduates, but they were still staying in on week-ends and passing up travel opportunities in favor of work or studies. She wondered why they seemed stuck in these remorse-inducing behavior patterns.

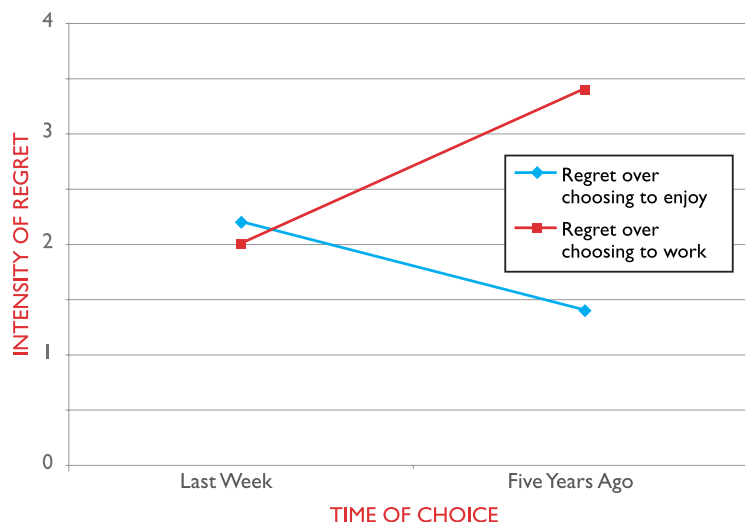
Keinan and Kivetz set out to see if they could observe, in formal studies, people overestimating discipline's payoff and underestimating future feelings of having missed out. Time after time, when subjects were asked to recall situations in which they had to choose between work and pleasure, their responses emulated those of the Columbia doctoral students. More of the subjects who'd chosen play over work *recently* expressed regret, but those numbers reversed for choices made in the distant past. For instance, college students said they'd spent too much time relaxing during a recent winter break, but when they considered the previous year's

break, they said they'd spent too much time studying and working. Whether the choices offered were a week's vacation versus a week of work with extra pay, a drug-store gift certificate versus a subscription to a popular magazine, or chocolate cake versus fruit salad, the free-spirited choice invariably induced more guilt in the near term—but over time, Keinan reports, regrets about pleasures forgone became more salient than satisfaction at having acted responsibly. These results also held true for study participants recruited in airports, bus and train stations, and public parks.

There are indications that we are aware of this psychological process, at some level: the results were the same even when subjects were prompted to consider hypothetical future regrets—or to make actual choices in real time. When offered five dollars in cash versus a box of chocolate truffles as a study-participation reward, subjects cued to think about the distant future were more likely to choose the instant gratification of sweets.

Based on interviews conducted for some of the studies, Keinan suspects that groups at each extreme are exceptions—overachievers so driven that they lose all capacity to take pleasure in leisure activi-

REGRETS ABOUT WORK VERSUS PLEASURE



When people are asked to recall a situation that occurred either last week or at least five years ago, in which they had to choose between work and pleasure, they rate their levels of regret differently. For decisions made within the last week, subjects are more likely to regret having chosen enjoyment over work. But when considering decisions made more than five years ago, the opposite is true: more subjects regret choosing work.

ties, and people leading lives so thoroughly hedonistic that they have no responsible decisions to regret. But “most of us,” she says, “are in the middle. We think it’s important to work and have goals and accomplish them, but also think that other things”—family, friends, physical fitness, hobbies—“are important.”

Keinan teaches marketing, and admits that companies could capitalize on this bias in human decisionmaking (for instance, by placing ads to cue anticipation of future regret over that family vacation never taken). But a broader application is helping people make choices that make them happier. “Why,” she asks, “do we have to wait until we are 60 or 70 to realize what’s really important to us?” The formula she suggests: recognize the tendency to prioritize short-term guilt over late-in-life regrets and make decisions that emphasize the long view. This also helps determine when taking the vacation is *not* the right decision: “If you think, ‘Ten years from now I’m going to wish I finished this project on time,’ then that’s probably the right thing to do.” She even offers an approach to assuage guilt for die-hard productivity devotees: frame a frivolous choice now as an investment in fond memories and future happiness.

—ELIZABETH GUDRAIS

ANAT KEINAN E-MAIL ADDRESS:

akeinan@hbs.edu