



responsive environment design

GORBET DESIGN ASKS US TO
REDEFINE OUR RELATIONSHIP
WITH THE SPACES THAT WE
CREATE TO SURROUND US.

BY BOB KIM

At the entrance of [Lileo](#), an upscale Toronto clothing store, a large concave sheet of black steel sits atop a massive waist-high pedestal. Resting on this structure are three stones encircled by swirls of light. Upon arrival, most visitors pause to contemplate the slow-moving trails of light, and then move on—another sculpture to admire. Some—the more curious—notice that if they move a stone, the light swims to follow it. This, of course, prompts them to begin moving the stones around, engaging them in a playful dance of wonder and delight...

Lileo's Light Fountain, created by Toronto-based [Gorbet Design](#) in collaboration with [3rd UNCLE design](#), asks us not only to reconsider the boundaries between design and art, but also to redefine our relationship with the spaces that we create to surround us. The Light Fountain is an extraordinary thing, at one moment an installation meant to entertain, and in another moment a profoundly democratic commentary on how we get what we get.

ENCODING A SENSE OF DISCOVERY

Play with the Light Fountain and you will spend time in Gorbet Design's world, where design, technology and information are carefully crafted to give life to the space around us and empower us to claim it as our own. Each of these environments draws us into its narrative through its responsiveness and makes discovery part of our story. Says Susan Gorbet with a grin, "The technology exists now for the environments we are in to know that we are there and respond to us in appropriate ways—sometimes useful, and often very interesting."

Gorbet's agenda is one which combines mischief with dissemination. Known for their quirky and clever interactive media installations, Susan and Matt Gorbet give



MOST VISITORS SIMPLY PAUSE TO CONTEMPLATE THE SLOW-MOVING TRAILS OF LIGHT, AND THEN MOVE ON. SOME—THE MORE CURIOUS—NOTICE THAT IF THEY MOVE A STONE, THE LIGHT SWIMS TO FOLLOW IT...

us a taste of a not-too-distant world where information is pervasive but understated.

Susan and Matt Gorbet have pedigrees which are the envy of anyone in the *Wired* generation—before *Wired* became cool, back when you would read *Wired* and then *Mondo 2000*, before chewing on a good issue of *Byte*. Back when the word “computer” didn’t mean business tool, it meant The Future.

Matt comes out of [MIT's Media Lab](#), having had a tenure at the famously infamous

[Xerox Palo Alto Research Center](#) in Palo Alto, California (GUI, anyone?). Matt landed in PARC's Research in Experimental Documents division, with a mandate to explore new document genres. In his final project there, taking a grassroots focus which would foreshadow his work to come, Matt and his colleagues took a more populist route. Instead of targeting academic journals, they built a museum exhibit called [XFR: Experiments in the Future of Reading](#). While

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IN A LARGE SCAFFOLDING GRID AFFIXED TO THE FRONT OF THE ROOFTOP PATIO OF THE DRAKE HOTEL IN TORONTO, A MATRIX OF 125 LIGHT BULBS WAS WIRED UP. ACROSS THE STREET, GORBET INSTALLED A CONTROL BOARD OF 125 CORRESPONDING RESIDENTIAL LIGHT SWITCHES.



FOR THE SPACE TO REACT TO THE VIEWER, THE VIEWER MUST FIRST REACT TO THE SPACE. IN GORBET'S NARRATIVES, THE TWO ELEMENTS ARE INTRICATELY INTERWOVEN...

at the MIT Media Lab, Matt worked with the [Tangible Media Group](#), which pioneered the development of ambient media devices.

Susan did graduate studies in computer science at [Stanford University](#), where she rebelled against the academic world and “decided to do real things for real people.” She moved on to [Oracle](#), and then [Silicon Graphics](#) (SGI), where she found herself working in small research groups that emphasized cutting edge experimental work. From there, she went on to become Director of User Interface at Excite@Home.

The two met at SGI and found an instant affinity, both personally and in terms of their passions and politics. Not too long afterward, Gorbet Design was born, and the two relocated to Canada.

“Toronto’s a really good city for doing interesting things with technology and art.

There are lots of people taking it in interesting directions,” says Susan.

RECLAIM YOUR SPACE: POWER 2 THE PEOPLE

A common theme throughout the Gorbets’ work is the role of the audience. Without someone to respond, to interpret its message, the installation is simply a pleasing backdrop. In other words, for the space to react to the viewer, the viewer must first react to the space. In the Gorbet narrative, the two elements are intricately interwoven.

Perhaps the most telling commentary on the pair’s work is embodied in [P2P](#), a free electric marquee shown at the [McLuhan International Festival of the Future](#) and one of Gorbet’s largest installations. In a massive scaffolding grid affixed to the front of the rooftop patio of the [Drake Hotel](#) in Toronto, a

matrix of 125 light bulbs was wired up. Across the street, Gorbet installed a control board of 125 corresponding residential light switches.

What they built, in effect, was a custom billboard. Anyone walking by could flick the right combination of switches to write a message, or leave a note. In a most democratic fashion, the Gorbets intentionally left it unguarded, and simply let the community respond to it.

This, of course, raised the obvious concern that a grand statement on the public’s impulses would be reduced to a series of expletives and rude comments. In truth, just the opposite occurred. The majority of passersby seized the moment to say something out loud, to shout from the rooftops. Since it was in place for the last U.S. election, some statements were political, while others were simply positive and affirming, like “IAMGAY”.

RESPONSIVE DESIGN

AMBIENT MEDIA IS THE IDEA OF TAKING INFORMATION AND PUTTING IT INTO THE PHYSICAL WORLD IN A TASTEFUL, NON-INTRUSIVE WAY.



The goal was to create a medium without a message: the piece itself would be incomplete until communication was added. In doing so, the work addressed a very political agenda—to pull art out of the galleries and give it to the masses. “A lot of people who would never get to experience an interactive piece of art were able to play with this because it was just sitting on the sidewalk,” remarks Matt.

Empowerment for all is P2P’s *raison d’être*. “We are bombarded all the time by messages and billboards,” says Susan, “but when do we get to change the urban environment? We don’t have that kind of power.”

A testament to this power was the absence of vandalizing during the time it was up. Just three feet away, a bus shelter was repeatedly bombed by neighborhood graffiti artists. But they didn’t feel a need to attack Gorbet’s work—they tagged *through* it. Vandalism is an expression of power by those who feel powerless; but these taggers simply put their messages up in lights.

SEEING RED

When asked by [Herman Miller, Inc.](#) to tie together real-time data gathered from the company’s online virtual store with its brick-and-mortar store in Manhattan’s hip Chelsea district, the Gorbets faced a challenge. How do you create a way to monitor website performance within the context of a retail storefront without overwhelming the

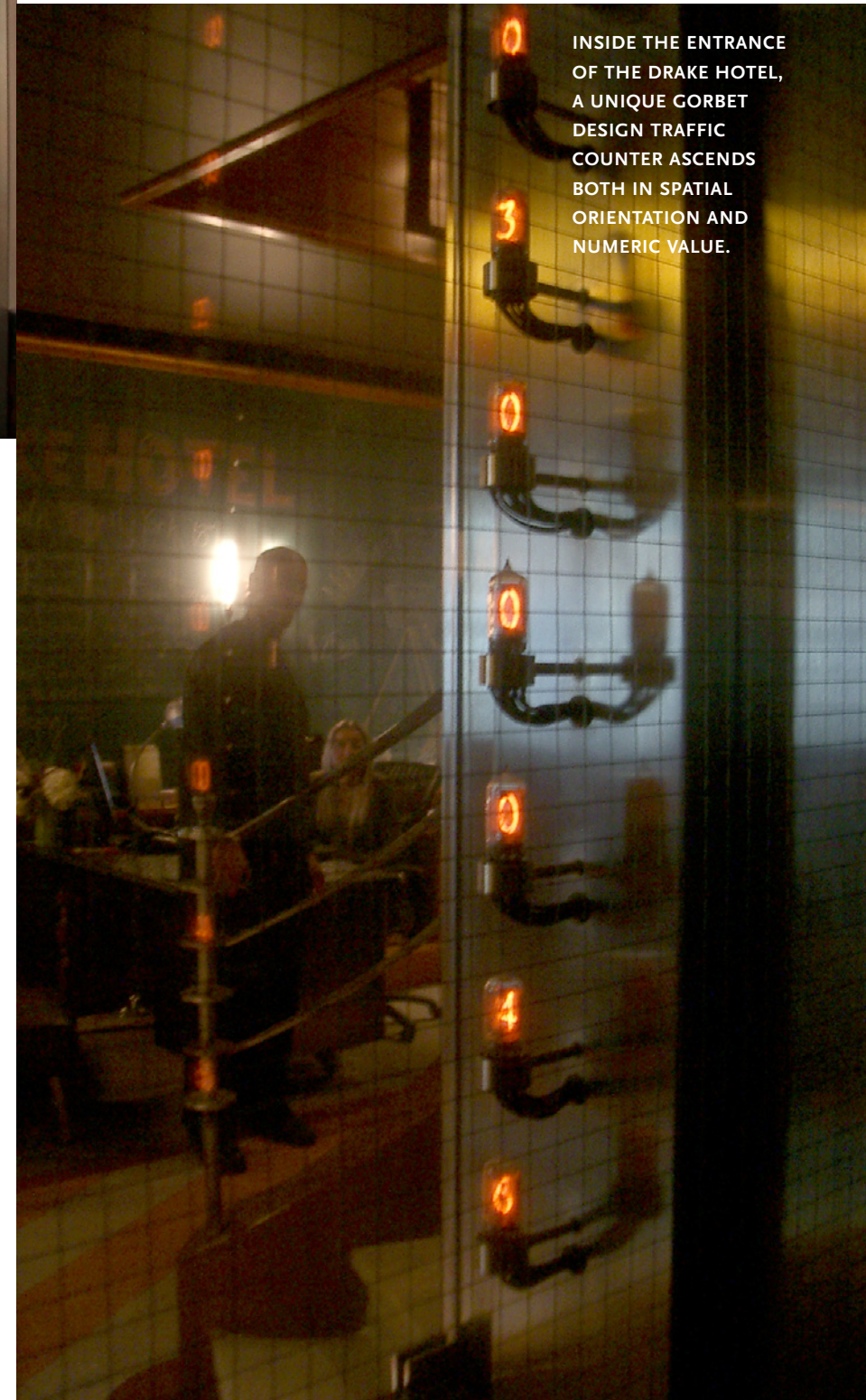
audience with numbers and graphs? After all, website stats aren’t exactly aesthetically pleasing or easy to digest—and definitely not something you would want as the basis for a public installation. Making it look good would necessitate simplifying the information, which would reduce its effectiveness.

Similarly, information gathered by standing in the middle of the store is, by definition, much less precise. There is no way to know in real-time the number of customers, or when each arrived, or what they bought. This information can be pieced together, but this requires a lot of people and a large amount of effort.

However, the environment of the store *can* provide information which a database can’t—the mood of the salespeople, noise levels in one section compared to another, whether or not customers are talking to each other, how much buzz a certain product is creating, or how the physical layout affects customer behaviour. While imprecise, this information can dramatically affect the bottom line and is more likely the type of data to which a store manager would respond.

“When you open a store,” observes Matt, “you’re always constantly aware of traffic coming through the store, what people are looking at, and what people are buying.”

To put the two together, Matt drew on his [ambient media](#) work with the Tangible Media Group. Ambient



INSIDE THE ENTRANCE OF THE DRAKE HOTEL, A UNIQUE GORBET DESIGN TRAFFIC COUNTER ASCENDS BOTH IN SPATIAL ORIENTATION AND NUMERIC VALUE.

“DO YOU WANT A QUANTITATIVE REPORT ON HOW THE WEBSITE IS DOING, OR DO YOU WANT SOMETHING IN THE BACKGROUND, GOING CONSTANTLY—A WINDOW INTO THE DATA?”

media is the idea of taking information and putting it into the physical world in a tasteful, non-intrusive way. It does not confront its audience like a billboard; it simply sits in the background—in fact, it often *is* the background.

Projected onto a wall in Herman Miller’s main showroom, a heavily branded screen shows within the RED logo; in it, small floating squares represent all logged-in users on the company’s website. When a user clicks to a product page, the product floats to the foreground, and the user’s square hovers around it. If there are twenty users on a page, then twenty squares will appear. As more users gather around a particular product, it grows larger. Throughout this activity, the elements in the background move in a slow, dynamically choreographed pattern, performing a dance in three dimensions, as the objects gently circle the display, expanding and shrinking. Over the course of a day, the entire display will shift through a color palette.

Naturally, this data is nowhere near as precise or complete as a spreadsheet. Seemingly, it lacks depth, analysis and relationship. But like the imprecise data that comes from being in the store itself, what is important is how the data is contextualized and interpreted. A store manager might notice lots of squares swimming around an enlarged [Aeron Chair](#) whenever the display is orange. If this is repeated over several days, she might look at her watch and conjecture that there

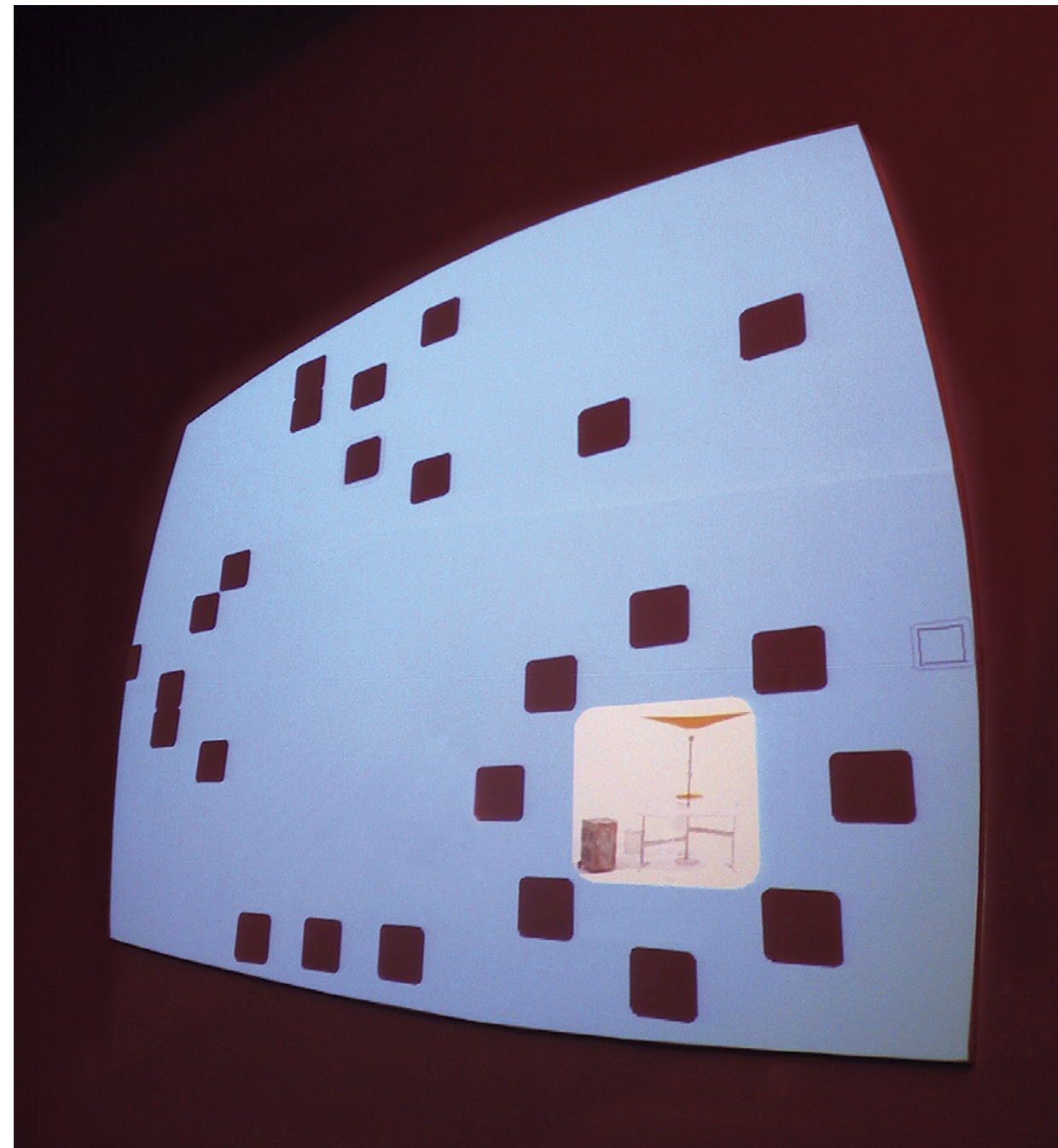
is an increase in interest in this product after lunch—the kind of information which is often more valuable than a spreadsheet. The exercise is much like gauging the weather outside—you could take a look at the weather reports, see the numbers, and dress accordingly. Or, you could just poke your head out a window and get a feel for what kind of day it’s going to be.

“And that’s the difference,” says Matt. “Do you want a quantitative report on how the website is doing, or do you want something in the background, going constantly—a window into the data?”

Most interesting is the fact that the apparent dumbing-down of the interface and data generates information which may be less definitive but is ultimately more instructive and subtle. It forces the user to immediately interpret and internalize the data in order to get any value. In a sense, one could say that the piece is incomplete until someone has interacted with it.

Through a clever combination of technology and imagination, the Gorbets remind us that we can make the spaces around us come alive in ways that are both playful and serious. All we have to do is reach out and touch.

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ON THE SCREEN IN HERMAN MILLER’S NEW YORK SHOWROOM, FLOATING SQUARES REPRESENT USERS ON THE COMPANY’S WEBSITE. A PRODUCT FLOATS TO THE FOREGROUND WHEN USERS CLICK ON IT, THEIR SQUARES HOVERING AROUND IT. AS MORE USERS VIEW THE PRODUCT, IT GROWS LARGER IN THE FOREGROUND.