



New York Times (1/30/08)



## News

Runnin' Scared

### **NYPD Seeks an Air Monitor Crackdown for New Yorkers**

A city councilman and the cops don't want you to have that Geiger counter without their permission

by **Chris Thompson**

January 8th, 2008 12:00 AM

Damn you, Osama bin Laden! Here's another rotten thing you've done to us: After 9/11, untold thousands of New Yorkers bought machines that detect traces of biological, chemical, and radiological weapons. But a lot of these machines didn't work right, and when they registered false alarms, the police had to spend millions of dollars chasing bad leads and throwing the public into a state of raw panic.

OK, none of that has actually happened. But Richard Falkenrath, the NYPD's deputy commissioner for counterterrorism, knows that it's just a matter of time. That's why he and Mayor Michael Bloomberg have asked the City Council to pass a law requiring anyone who wants to own such detectors to get a permit from the police first. And it's not just devices to detect weaponized anthrax that they want the power to control, but those that detect everything from industrial pollutants to asbestos in shoddy apartments. Want to test for pollution in low-income neighborhoods with high rates of childhood asthma? Gotta ask the cops for permission. Why? So you "will not lead to excessive false alarms and unwarranted anxiety," the first draft of the law states.

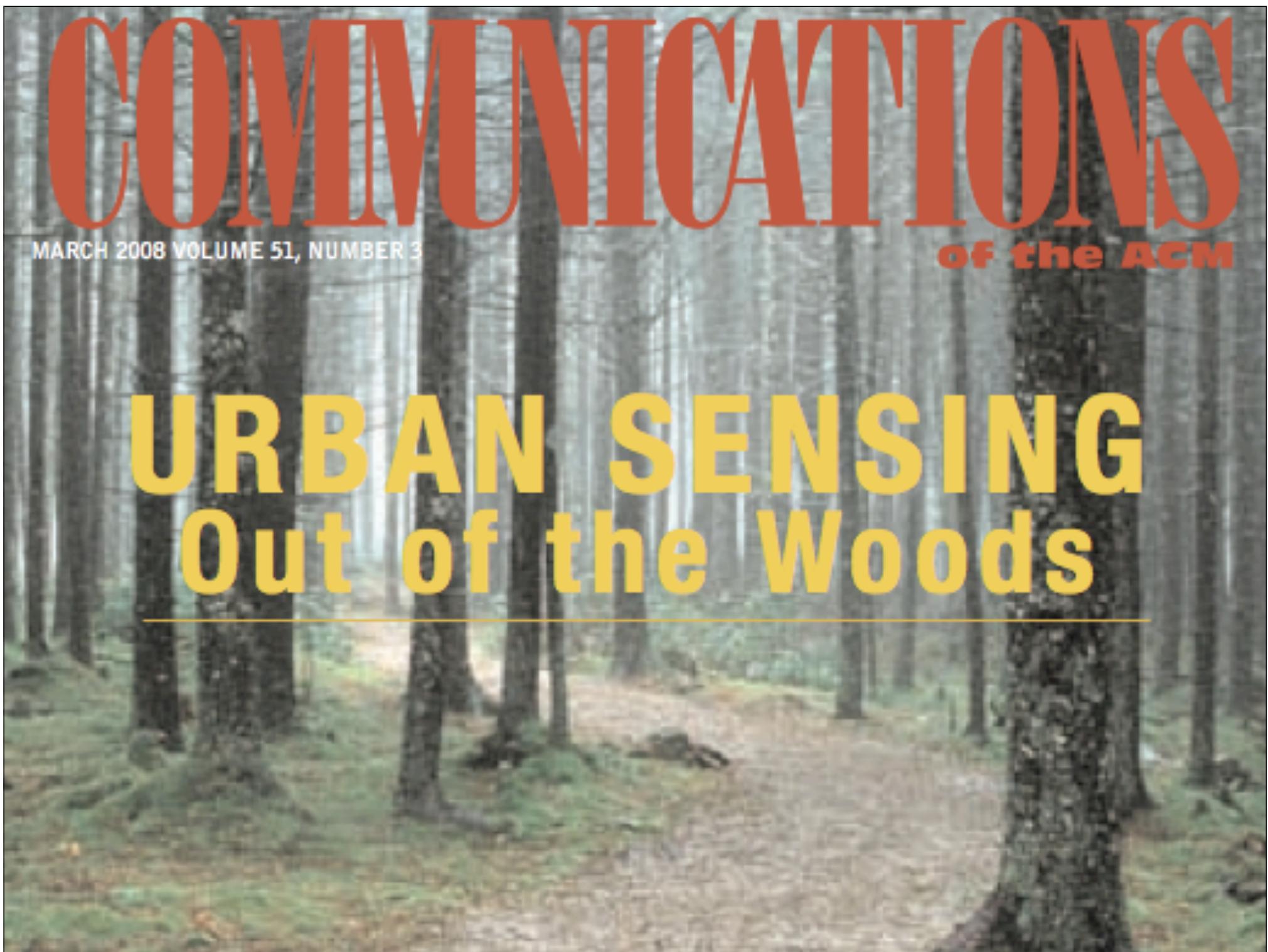
# COMMUNICATIONS

MARCH 2008 VOLUME 51, NUMBER 3

of the ACM

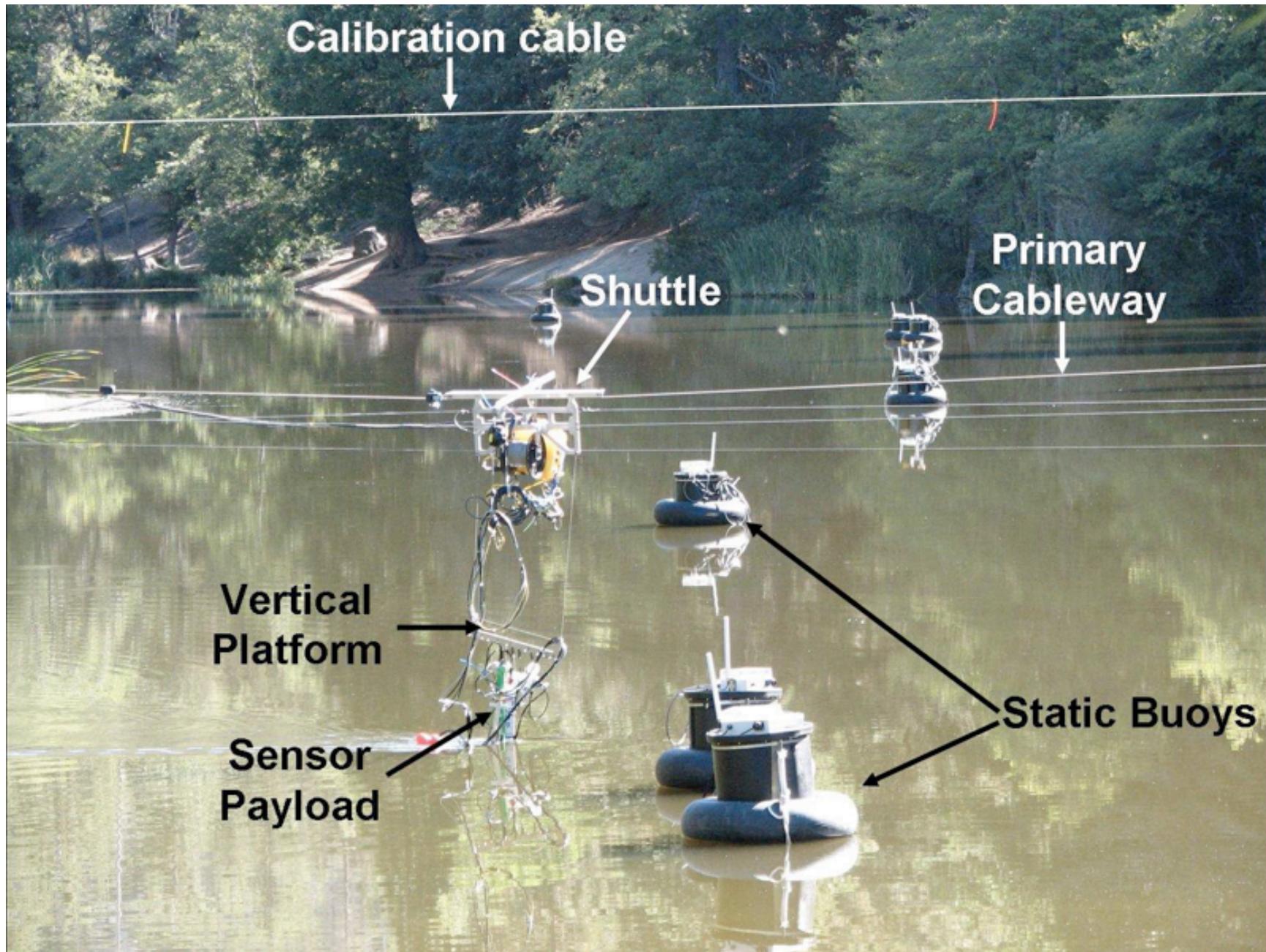
## URBAN SENSING Out of the Woods

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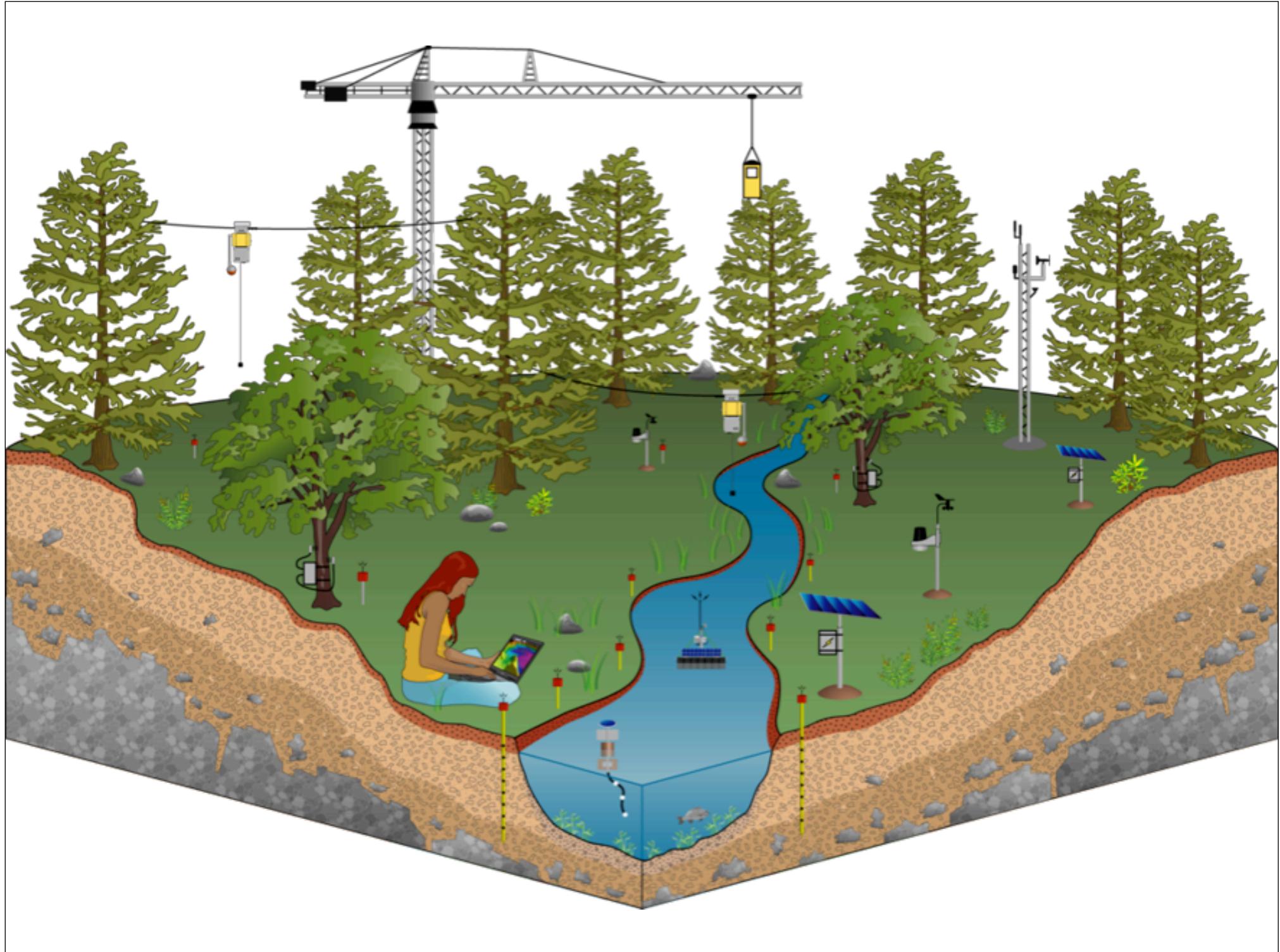


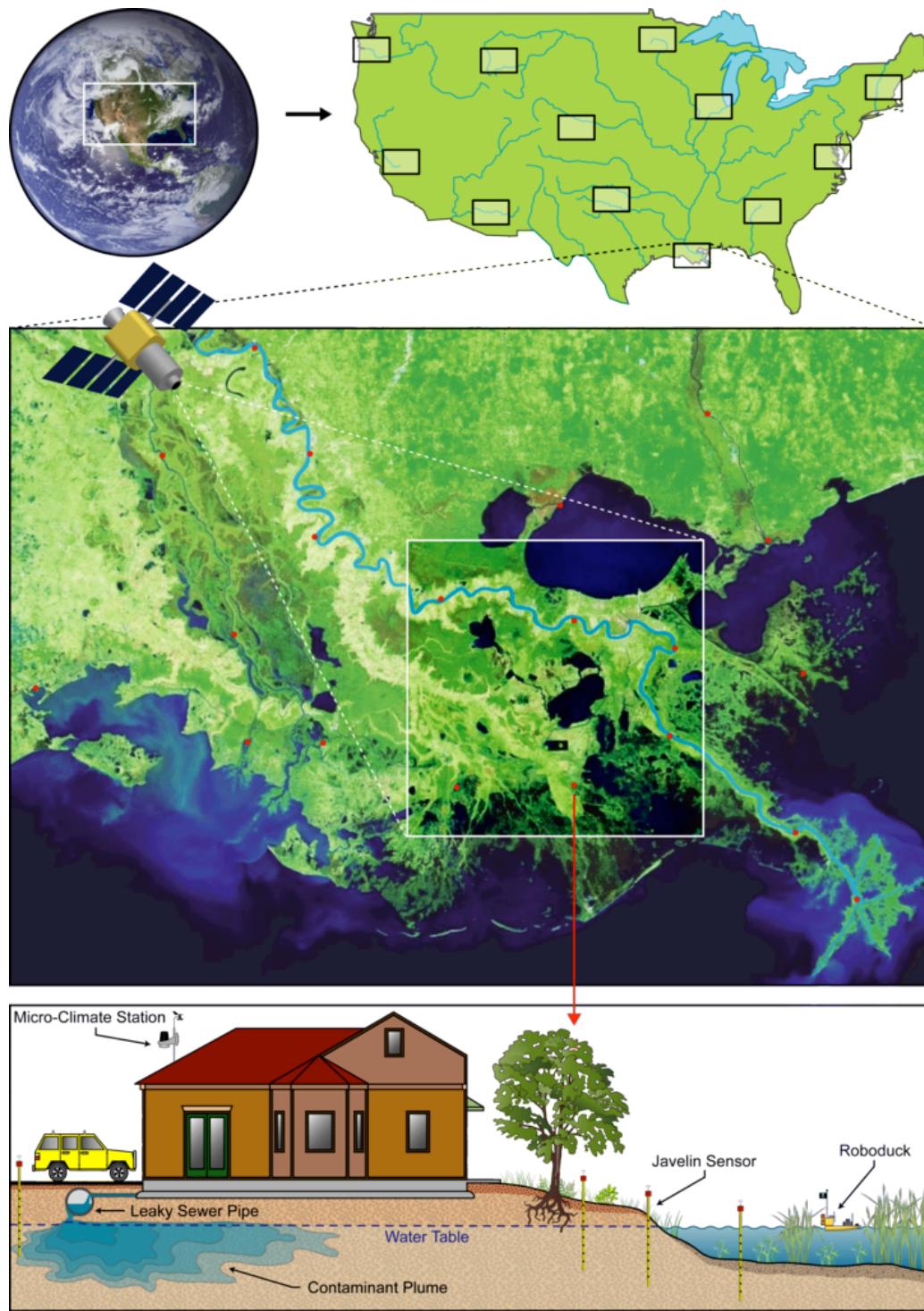


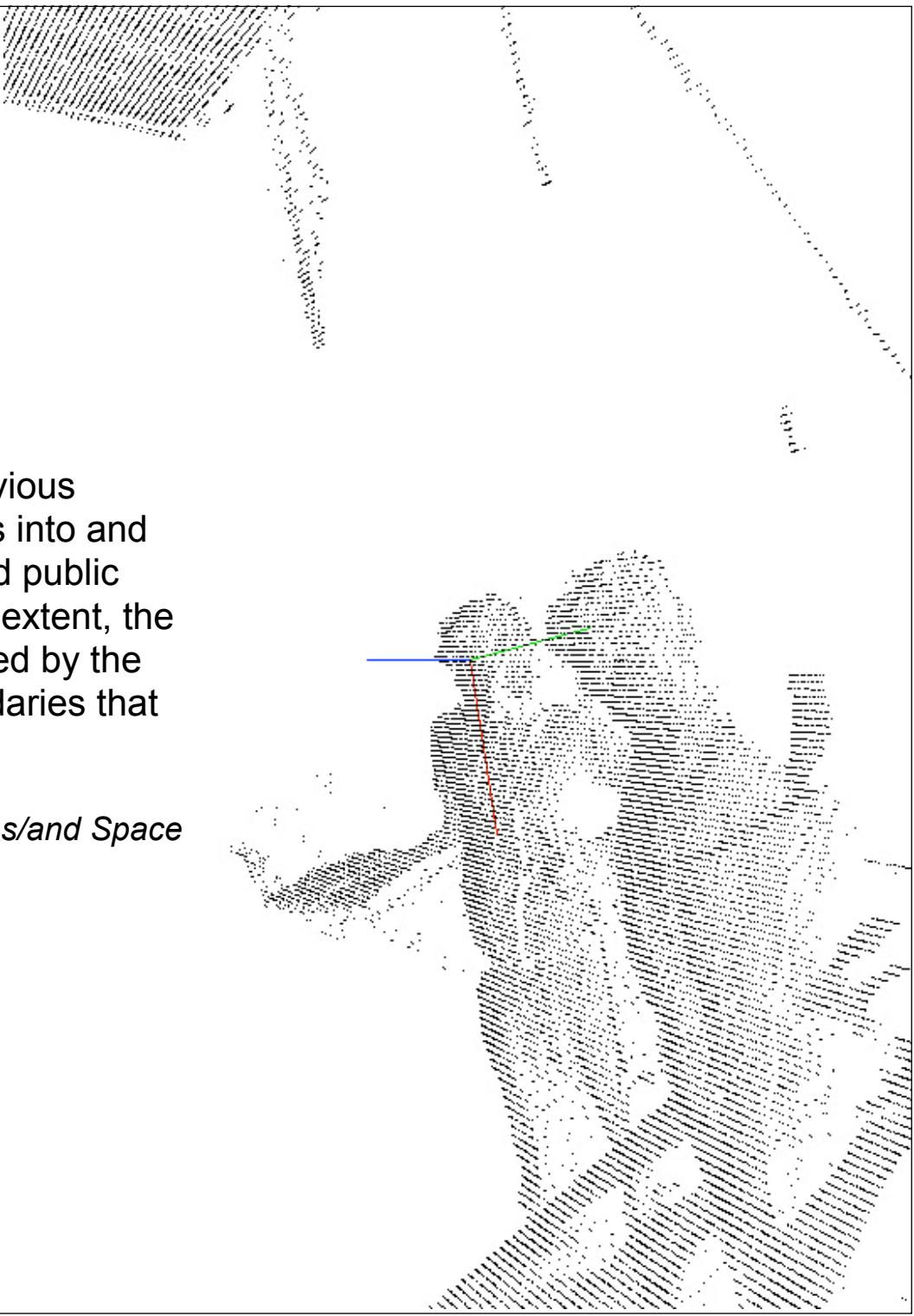








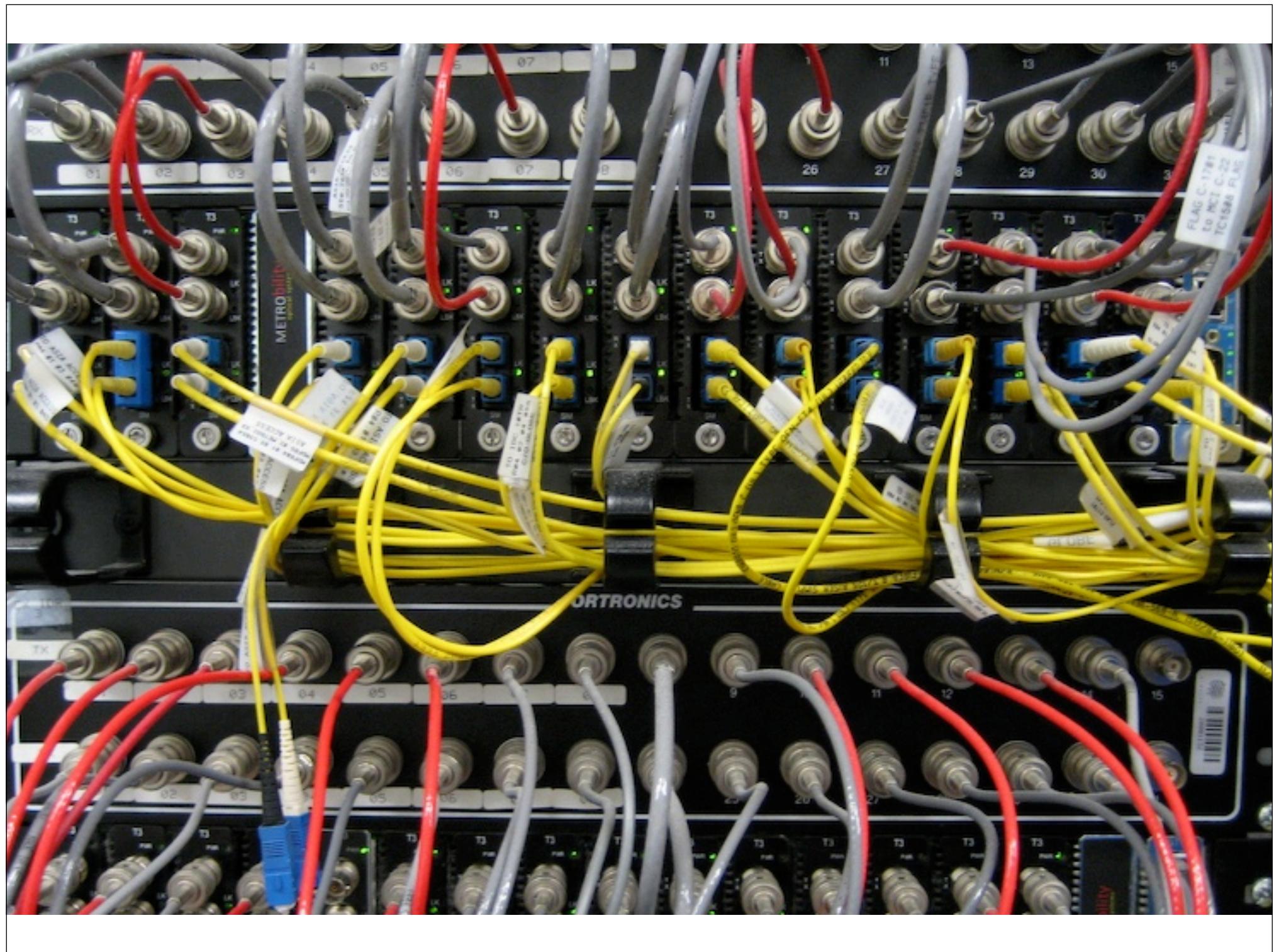




Data flows increasingly have escaped the obvious bounds of the networked computer, and cross into and out of homes, cars, personal accessories, and public spaces by many avenues... To an increasing extent, the production of networked space is characterized by the dissolution and penetration of personal boundaries that we have long regarded as fixed and natural.

Julie E. Cohen, *Cyberspace as/and Space*









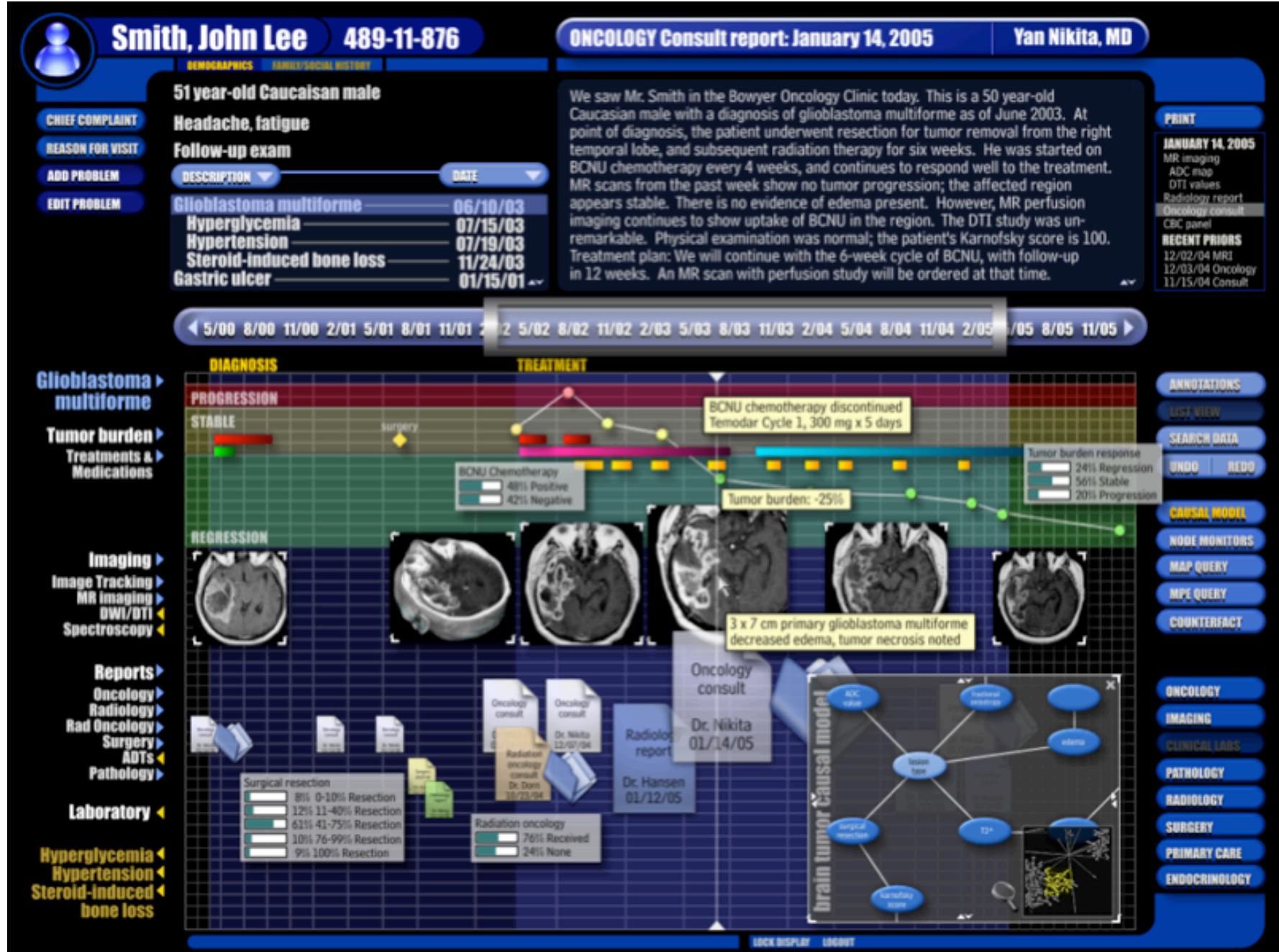


Image courtesy of Alex Bui, UCLA Biomedical Informatics Center



**DEPARTMENT  
OF  
TRANSPORTATION**

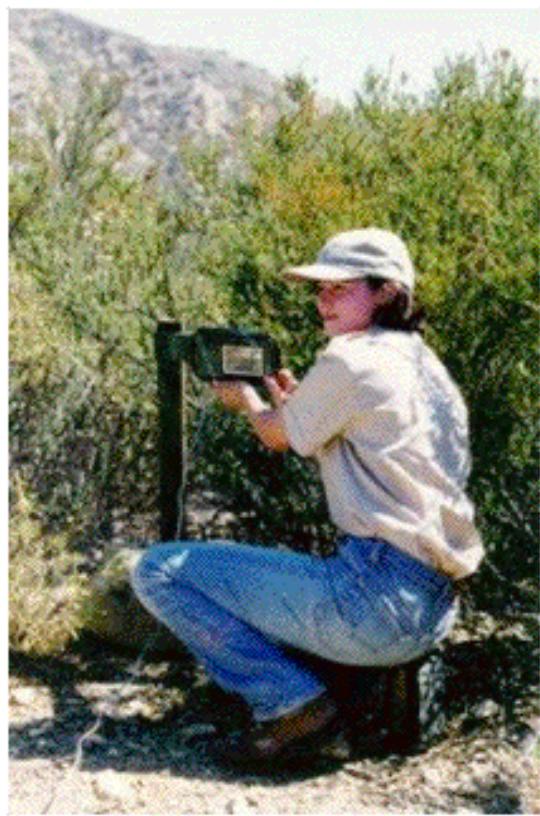
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**UCLA  
TOUR**











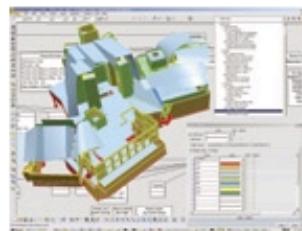
# Digital Practice

Gehry Technologies promotes design & construction methodologies that views three dimensional models of construction information as components of the project contract documentation. These methodologies - referred to collectively as **digital practice** - include not simply the technical aspects of tracking data, but also the contractual and procedural advances that need to take place. Digital practice enhances - and is compatible with - traditional construction and contracting methods.

**Digital practice is realized on building projects through several inter-related project activities including:**

## Digital Contracting

Contracting based on 3-dimensional project data is a key enabler for re-engineering the building value chain. Three-dimensional project descriptions, when properly built and managed, provide highly accurate information on which construction contracts can be based with confidence. Digital Project allows robust access to project data for viewing and verification, and supports the integration of geometric and non-geometric project information.



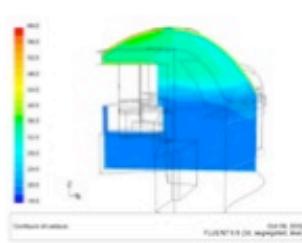
## Project Coordination and Control

Project geometry is developed and used by team members across the building project. This information needs to be coordinated and quality controlled to ensure error free construction. The comprehensive 3D model at the core of the GT's process provides an enormous aid for coordination. Engineering and fabrication documentation may be developed directly in the Digital Project environment, or imported from 3rd party applications in 2D or 3D format. System interferences may be detected, either via visual inspection or through tools that automate checking for spatial clashes or violations of required offsets between systems.



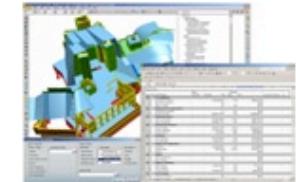
## Building Performance

Powerful computational engineering analysis techniques are now available to perform many difficult engineering tasks, including structural analysis, energy simulation and computational air flow studies, equipment performance simulation, and lighting and acoustic simulation. With the availability of a comprehensive, three dimensional project description, the level of effort required to generate specific analytical models becomes greatly reduced, since some representation of the system under inquiry is often available in the master model by the time that the analysis is required.



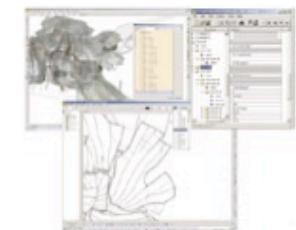
## Cost Estimating

Control of estimating is a critical aspect of project success. Conventional estimating techniques - where quantity takeoffs are produced by measuring off of paper drawings - have substantial potential for error. An accurate digital project model removes the ambiguity and potential disagreements about project quantities. Digital Project includes tools for rapidly and accurately producing quantity takeoffs and piece counts, and for automatically extracting quantities to spreadsheets and 3rd party estimating software.



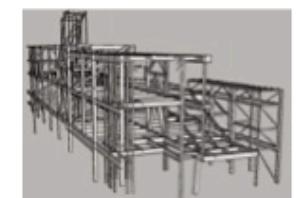
## 3D > 2D Integration

The generation of accurate, 2-dimensional project documentation remains a requirement for construction and needs to be supported while the industry moves to fully 3D processes. The Digital Project modeling platform streamlines the process of producing dimensionally accurate and coordinated 2-dimensional drawings, by extracting this documentation from the integrated 3D model. The software allows parametric definitions of drawing extractions to be defined in the 3D environment in a persistent manner. When project geometry is modified, drawing extraction is achieved through a simple update request.



## Digital Fabrication

Emerging practices support the direct integration of design and engineering data with fabrication activities. Digital design information is provided directly to fabrication shops to provide the dimensional specification and component placement information. Increasingly, project information is being repurposed directly to drive digital fabrication equipment. Shop drawings may be submitted in 3D form back to the master project database, allowing tight quality control of the construction process from design through fabrication.



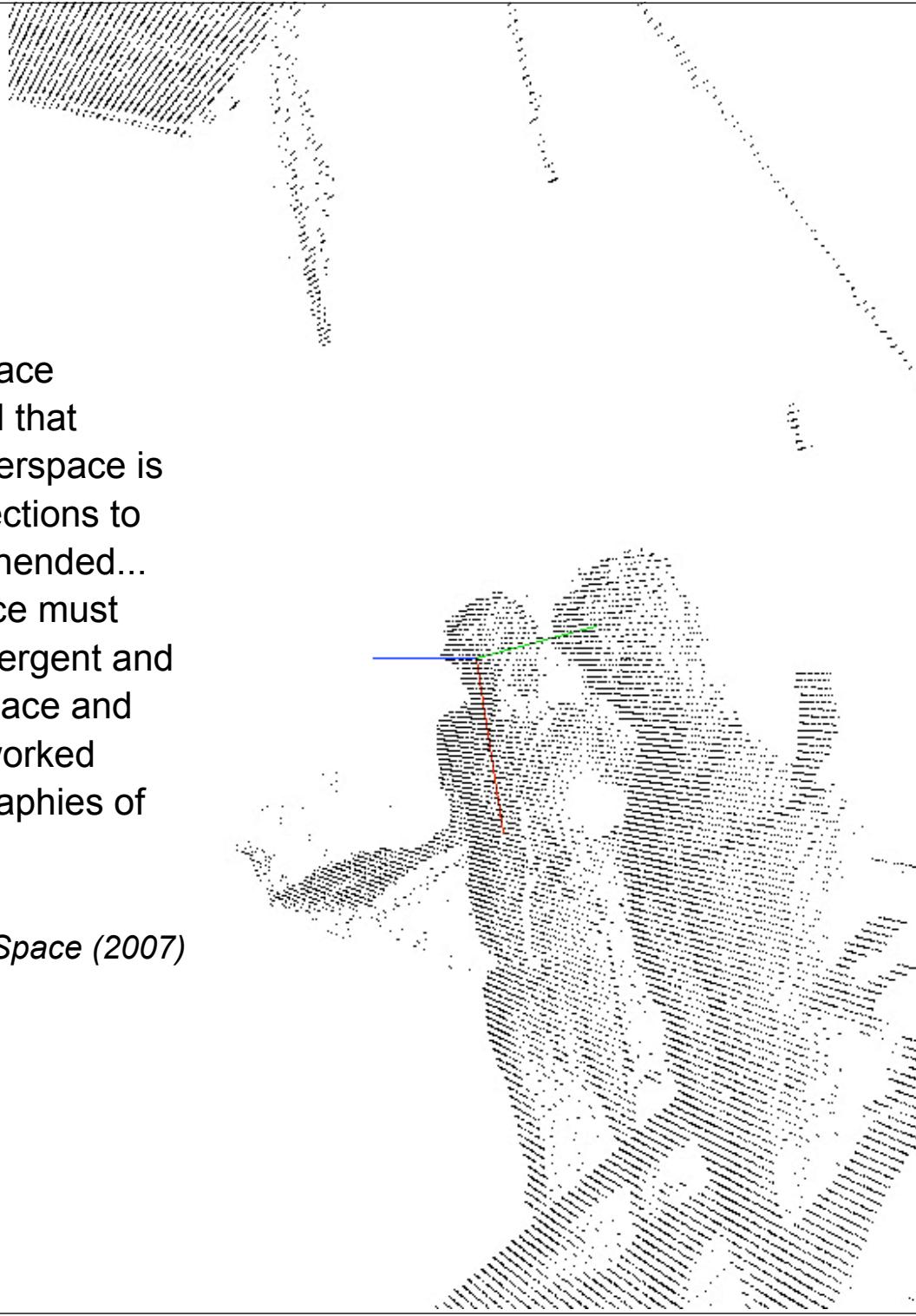
## On Site Integration

Digital Project viewing stations are often provided to the job site trailer, allowing direct access by construction personnel to the project data. Digital Project offers integration with digital surveying technologies to allow points from the 3D master model to be downloaded to digital surveying equipment. Rapid advances in consumer technology products, including wireless networking, cloud of points scanning, digital photography, tablet computers and PDAs offer the possibility of the potential for placing project information directly in the hands of construction personnel as they perform work in the field.



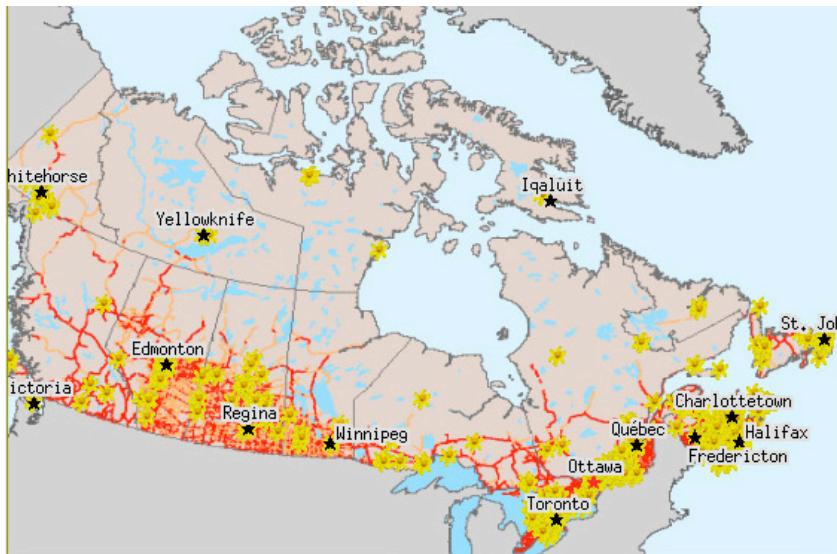


The One. The Only. The Grove.



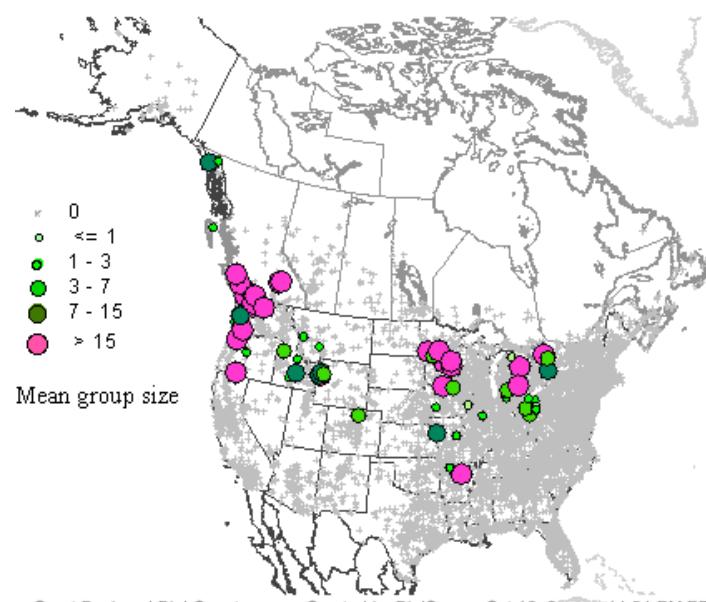
The important question is not what kind of space cyberspace is, but what kind of space a world that includes cyberspace is and will become. Cyberspace is part of lived space, and it is through its connections to lived space that cyberspace must be comprehended... In particular, a theory of cyberspace and space must consider the rise of networked space, the emergent and contested relationship between networked space and embodied space, and the ways in which networked space alters, instantiates, and disrupts geographies of power.

Julie E. Cohen, *Cyberspace as/and Space* (2007)



### Trumpeter Swan

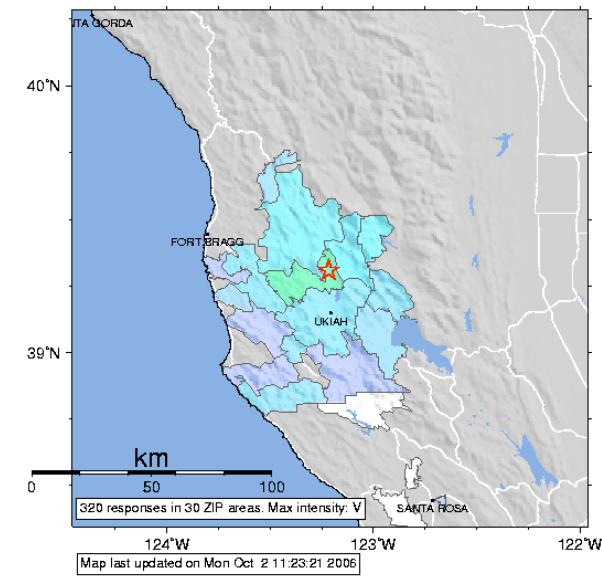
Feb 17, 2006 - Feb 20, 2006



Great Backyard Bird Count

Created by BirdSource Oct 16, 2006 14:54 PM EDT

USGS Community Internet Intensity Map (10 miles SE of Willits, CA)  
ID:40169407 13:56:14 PDT SEP 26 2006 Mag=3.6 Latitude=N39.31 Longitude=W123.22



INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+
SHAKING	None	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
DAMAGE	None	None	None	Very light	Light	Moderate	Moderate/Heavy	Heavy	Very Heavy

# Project BudBurst

A National Phenology Network Field Campaign for Citizen Scientists



## Project BudBurst is starting on February 15th!

Join us in collecting important climate change data on the timing of leafing and flowering in your area through Project BudBurst! This national field campaign targets native tree and flower species across the country. With your help, we will be compiling valuable environmental and climate change information around the United States.

**Register Now** - Become a member of the Project BudBurst community! This allows you to save your observation sites and plants that you are monitoring throughout the year and for coming years.

Subscribe to the Project BudBurst mailing list to receive updates and announcements about the new features added for 2008. Read about us in the [News](#)!

Last year's inaugural event drew thousands of people of all ages taking careful observations of the phenological events such as the first bud burst, first leafing, first flower, and seed or fruit dispersal of a diversity of tree and flower species, including weeds and ornamentals. The citizen science observations and records were entered into the BudBurst data base. As a result of the pilot field campaign, useful data was collected in a consistent way across the country so that scientists can use it to learn about the responses of individual plant species to climatic variation locally, regionally, and nationally, and to detect longer-term impacts of climate change by comparing with historical data. Due to the enthusiastic response and robust participation in the 2007 we have expanded the Web site features for Project BudBurst in 2008!



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Site last updated on 2/14/08

Become a Member! - Register  
Login

## WHAT PLANT DID YOU OBSERVE?

\*Plant:



If other, please provide:

\*Common name:

Scientific Name (If known):

## WHERE DID YOU OBSERVE?

\*Latitude:  decimal degrees (i.e. 39.9847)

Help me find my  
Lat/Lon with the  
UCAR Geocoder

\*Longitude:  decimal degrees (i.e.-105.2682)

Elevation:  feet

City:

\*State:

Postal Code:

Country:

Comments on (i.e. There is some fertilization and watering of this area.)

Location:

## WHEN DID YOU OBSERVE? (Phenophases Help)

BudBurst / First Leaf:  month  day

Full Leaf:  month  day

First Flower:  month  day

Full Flower:  month  day

End Flower:  month  day

Seed or Fruit Dispersal:  month  day

Additional Comments:



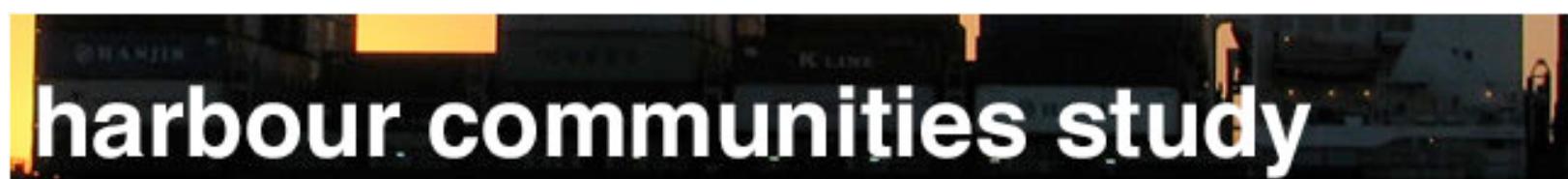
cyclesense



dietsense



footstep



networked naturalist



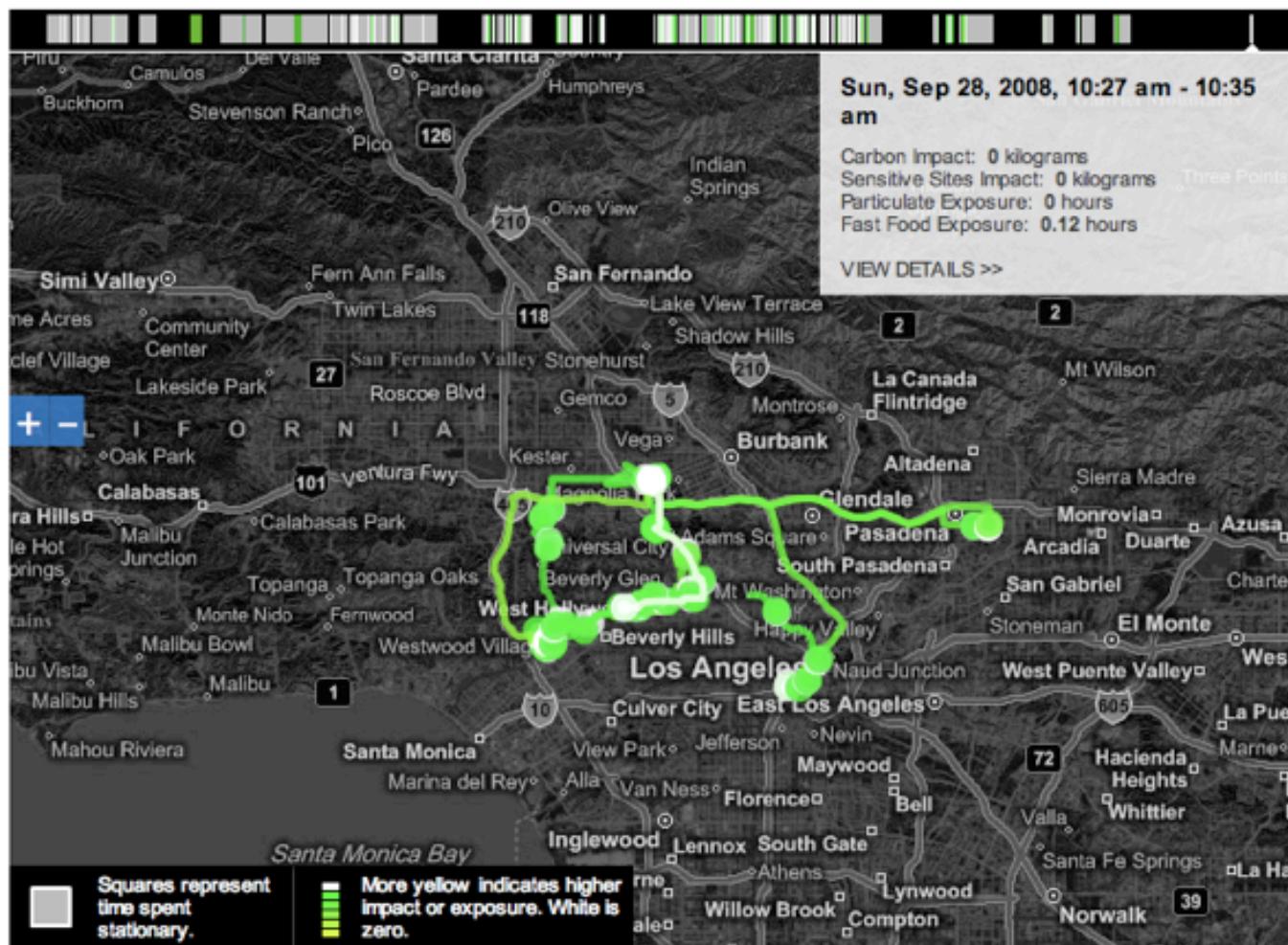
peir



## Dashboard

[prev](#) September 22 - September 29, 2008Tell us what you think! Send feedback to [peir-info@cens.ucla.edu](mailto:peir-info@cens.ucla.edu).

COLOR TRIPS BY:

[Carbon Impact](#)**STATUS**

Last update from your phone received **21 hours ago**.

**10,195 data points** uploaded this week.

**16 data points** are outstanding as part of your most recent incomplete trip.

**EXPLORE**[Trip Log](#)[Your Network](#)**SUPPORT**[About](#)[FAQ](#)



Diet Monitoring

### ▼ Personal Environmental Impact Report

How I interact with the environment...

GPS data from a Nokia mobile phone is used to derive the following results.

#### Impact

Rank **3** of 5 friends.

<b>Me</b>	4.60
<b>Friends</b>	4.60



**3**

#### Exposure

Rank **5** of 5 friends.

<b>Me</b>	87.76
<b>Friends</b>	86.39

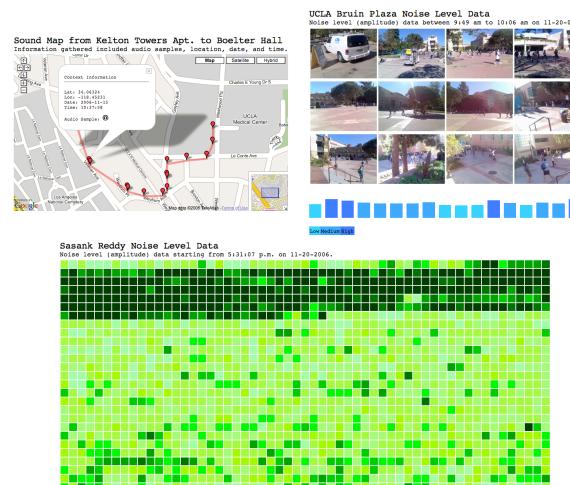
Current as of: 01/29/2008 02:31:42

A CENS project powered by Nokia

## Personal Environment Impact Report



Walkability Study



Noise Mapping



Neighborhood Asset Mapping

## Walkability Studies



Sasank Reddy

# Noise Mapping

**Sound Map from Kelton Towers Apt. to Boelter Hall**  
Information gathered included audio samples, location, date, and time.



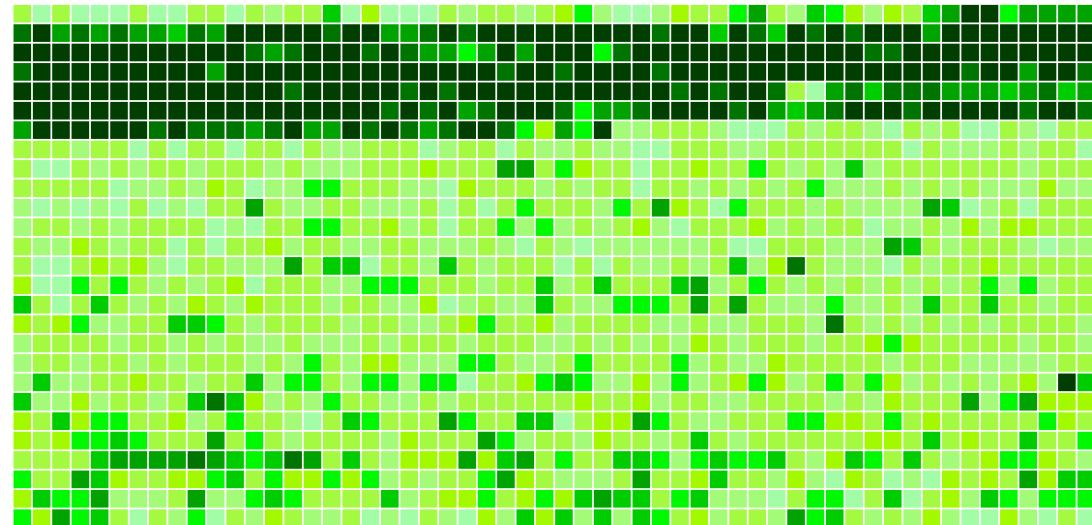
## UCLA Bruin Plaza Noise Level Data

Noise level (amplitude) data between 9:49 am to 10:06 am on 11-20-06.

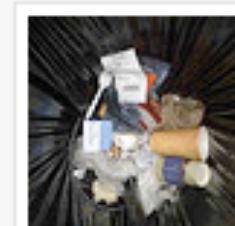
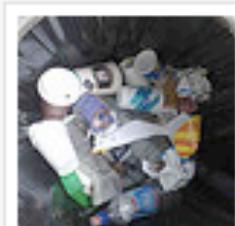
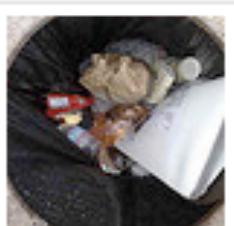
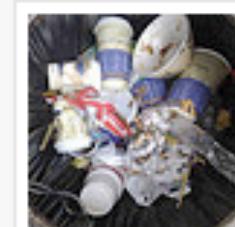
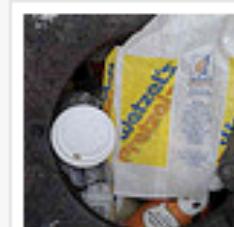
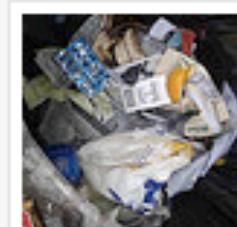
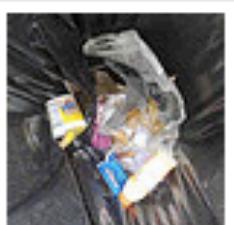
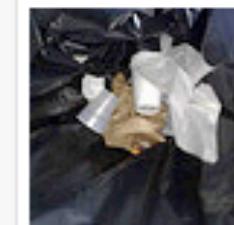


## Sasank Reddy Noise Level Data

Noise level (amplitude) data starting from 5:31:07 p.m. on 11-20-2006.



Sasank Reddy







# PLANTR

## OBJECTIVE

To evangelize sustainable gardening in urban environments, while building social networks, increasing the awareness of ecological processes, and contributing to our micro-level understanding of climate in urban spaces.

## STARTING OUT/ LEARNING



W/ LESS LIGHT



OPTIMAL PLANT  
BASED ON YOUR  
CONDITIONS



W/ MORE LIGHT

## RECOMMEND



## OVERALL PROCESS

Environmental conditions of the space...  
... imply what can grow there  
... which implies what are the requirements /needs of those plants

## SOCIAL NETWORKING



## SHARING/RECYCLE



Pots, Soil, Seeds, Advice...

# PLANTR

PUTTING THE 'YES' IN NOKIA

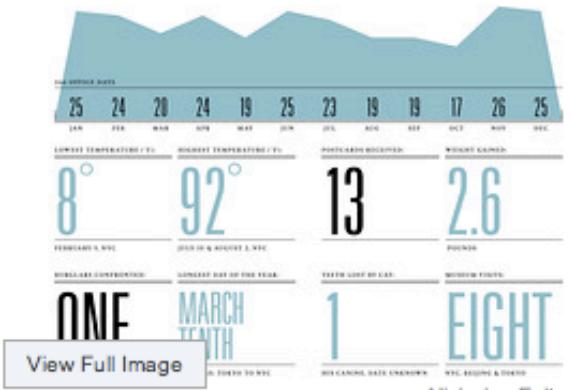
# The New Examined Life

*Why more people are spilling the statistics of their lives on the Web*

By JAMIN BROPHY-WARREN

In the first week of January, New York graphic designer Nicholas Felton will boil down everything he did in 2008 into charts, graphs, maps and lists.

The 2007 edition of his yearly retrospective notes that he received 13 postcards, lost six games of pool and read 4,736 book pages. He tracked every New York street he walked and sorted the 632 beers he consumed by country of origin.



An excerpt from New York graphic designer Nicholas Felton's annual report on his personal activities.

## More

- [The 2007 Feltron Annual Report](#)

seize data back from the statisticians and the scientists and incorporate it into our daily lives. Everyone creates data -- every smile, conversation and car ride is a potential datapoint. These quotidian aggregators believe that the compilation of our daily activities can reveal the secret patterns that govern the way we live. For students of personal informatics, the practice is liberating because it shows that our lives aren't random, and are more orderly than some might expect.

Part experimentation, part self-help, such "personal informatics" projects, as they are known, are gathering steam thanks to people like Mr. Felton who find meaning in the mundane. At their disposal are a host of virtual tools to help them become their own forensic accountants, including Web sites such as Dopplr, which allows people to manage and share travel itineraries, and Mon.thly.info, for tracking menstrual cycles. Parents can document infant feeding schedules with Trixie Tracker. And couples can go from between the sheets to spreadsheets with Bedpost, which helps users keep track of their amorous activities.

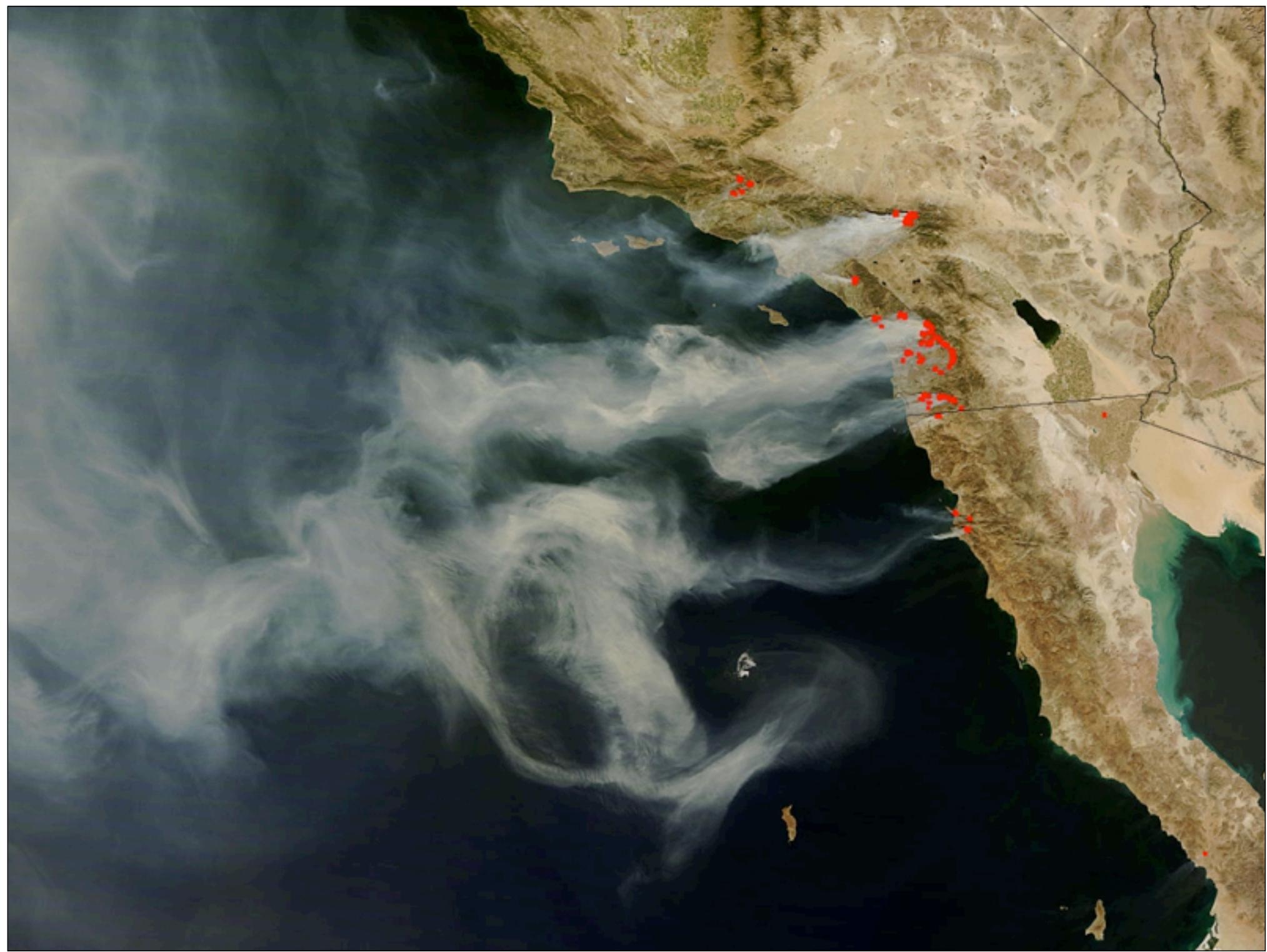
The objective for Mr. Felton and others is to seize data back from the statisticians and the scientists and incorporate it into our daily lives. Everyone creates data -- every smile, conversation and car ride is a potential datapoint. These quotidian aggregators believe that the compilation of our daily activities can reveal the secret patterns that govern the way we live. For students of personal informatics, the practice is liberating because it shows that our lives aren't random, and are more orderly than some might expect.

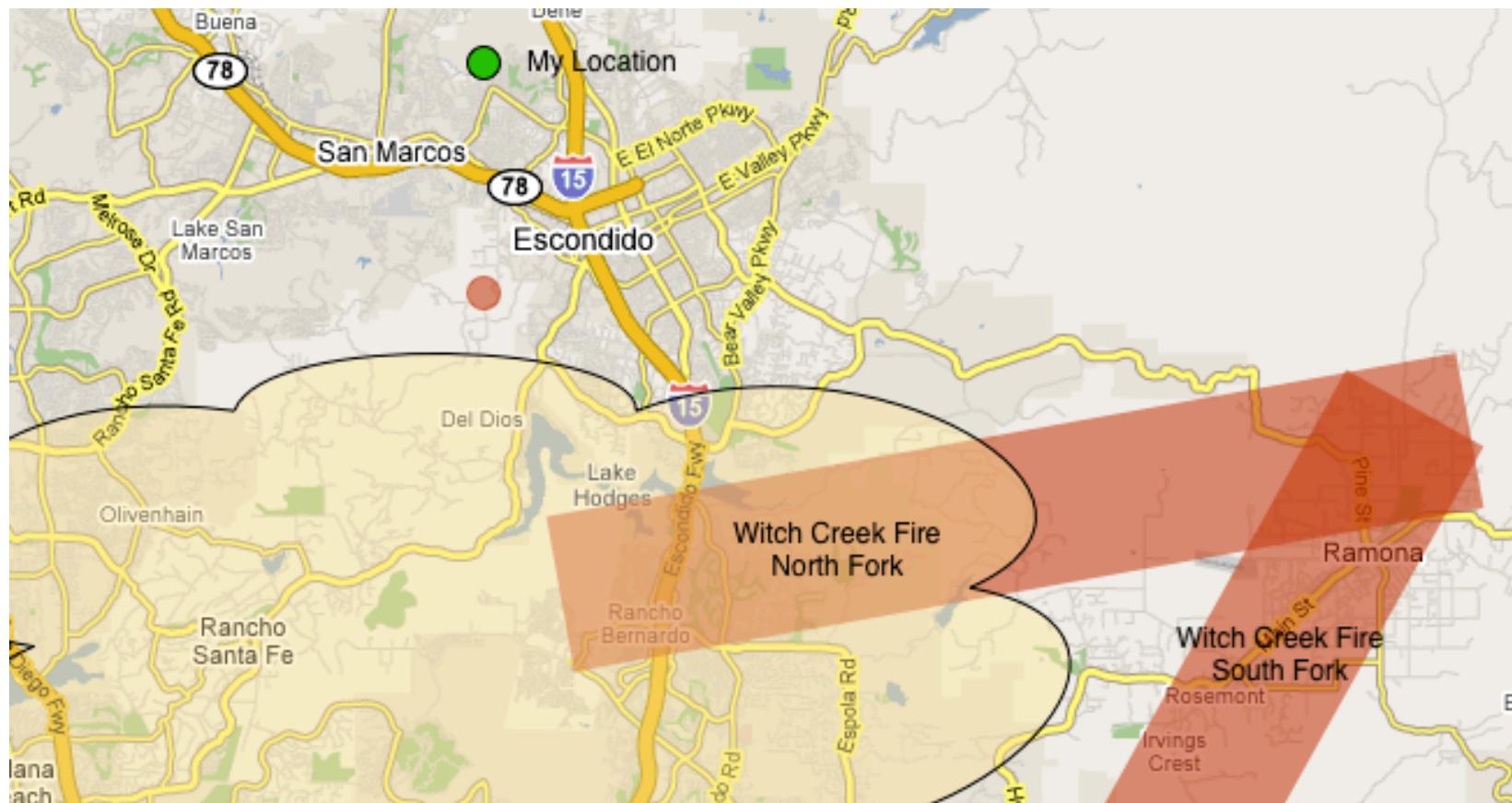


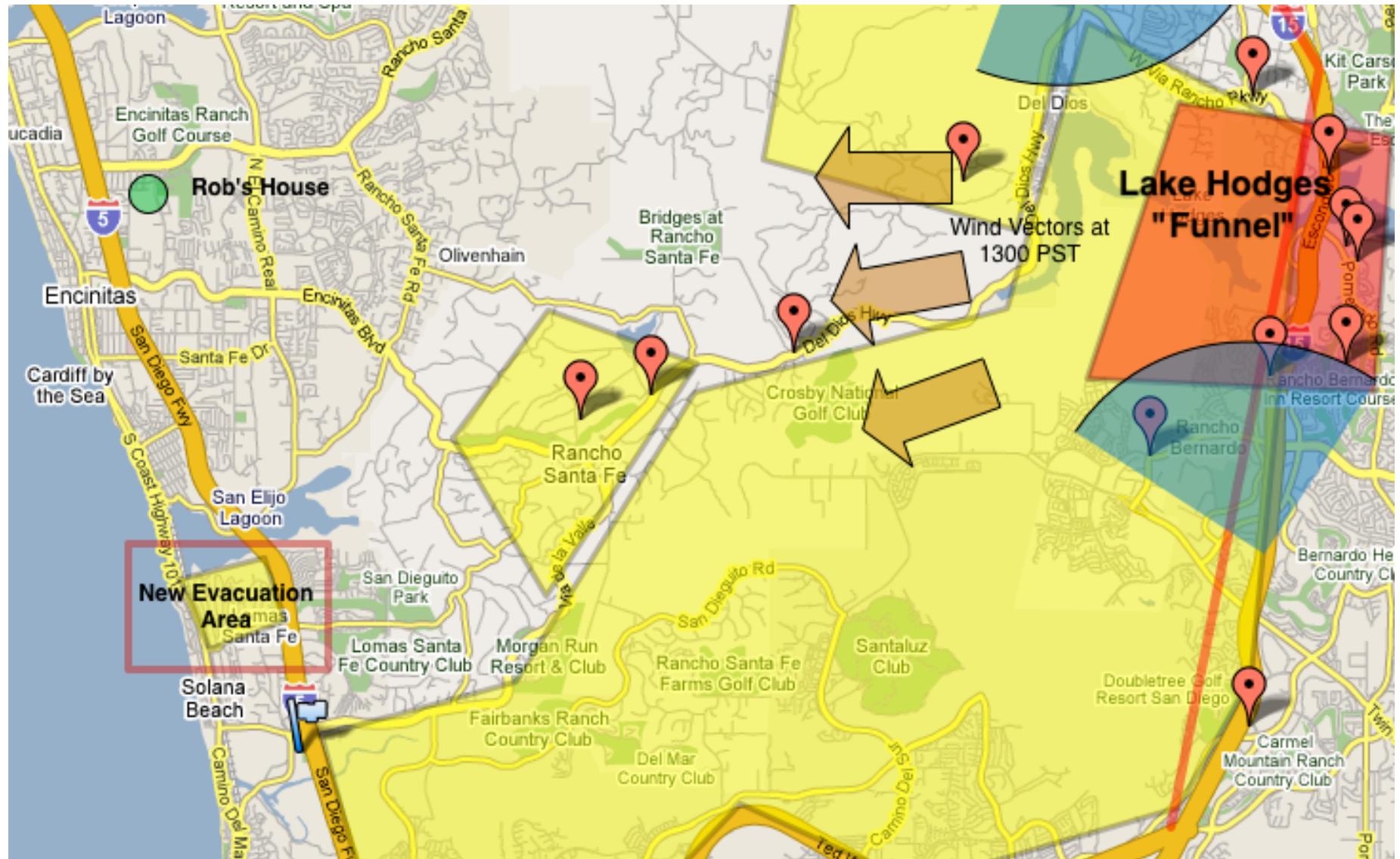


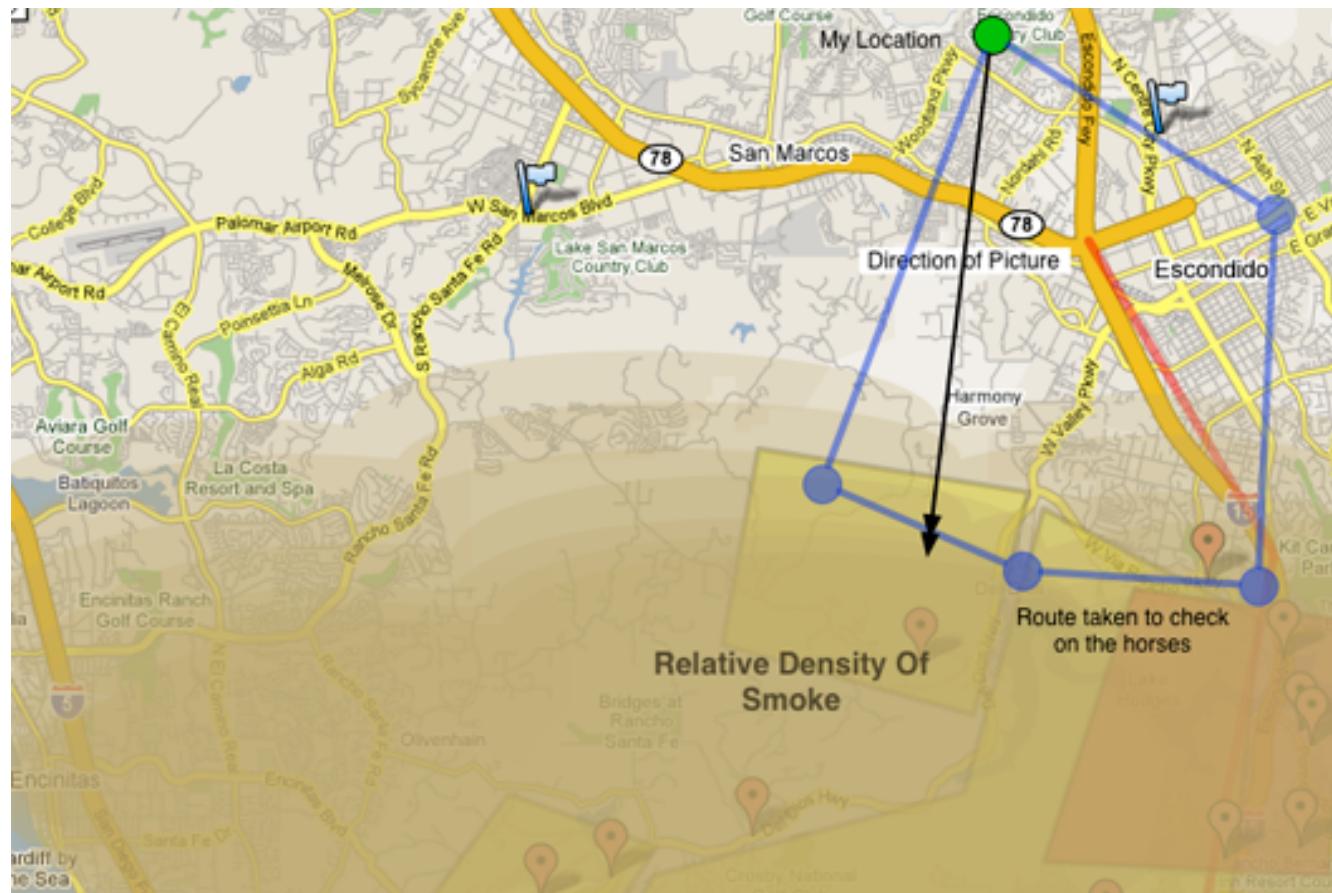


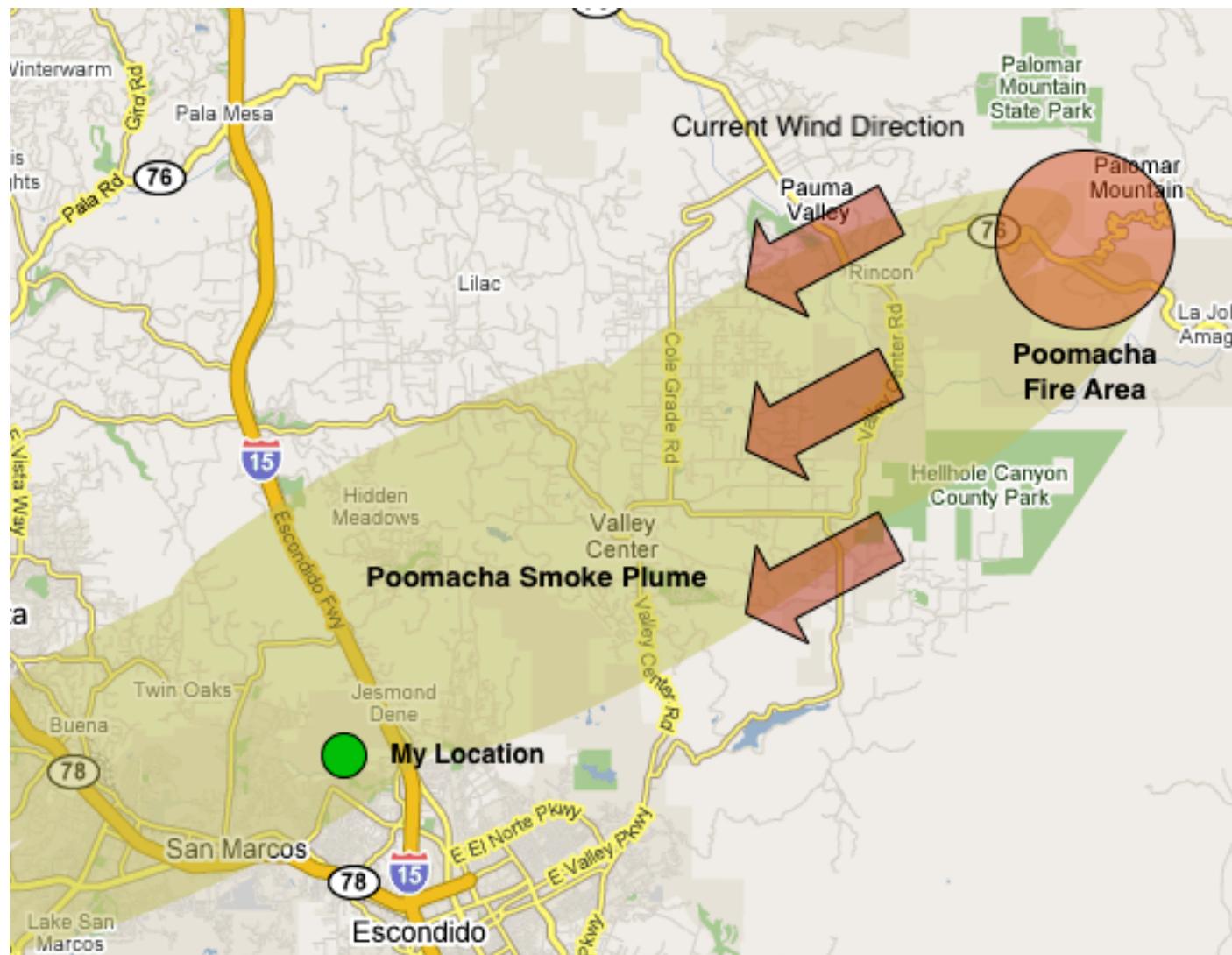


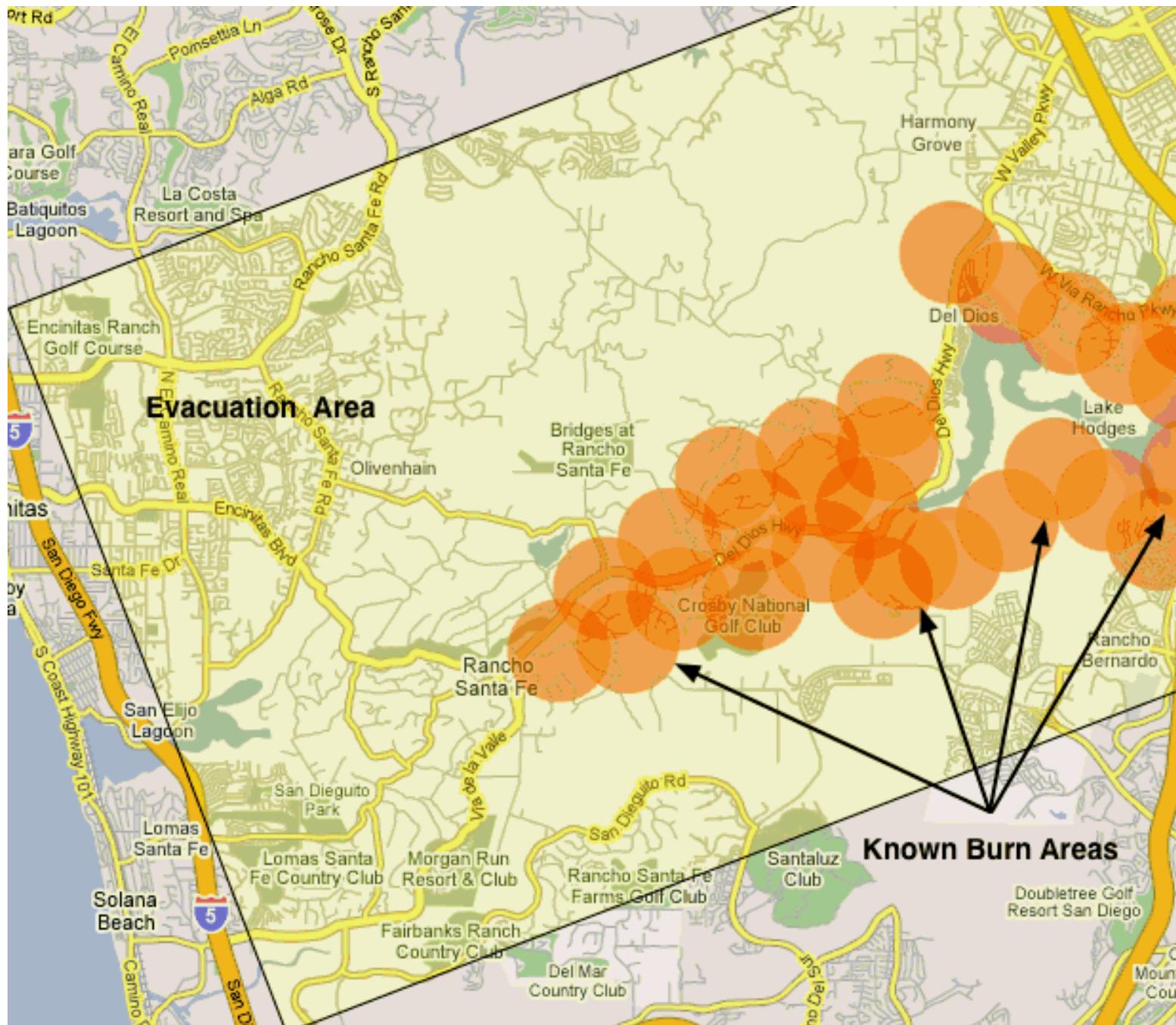


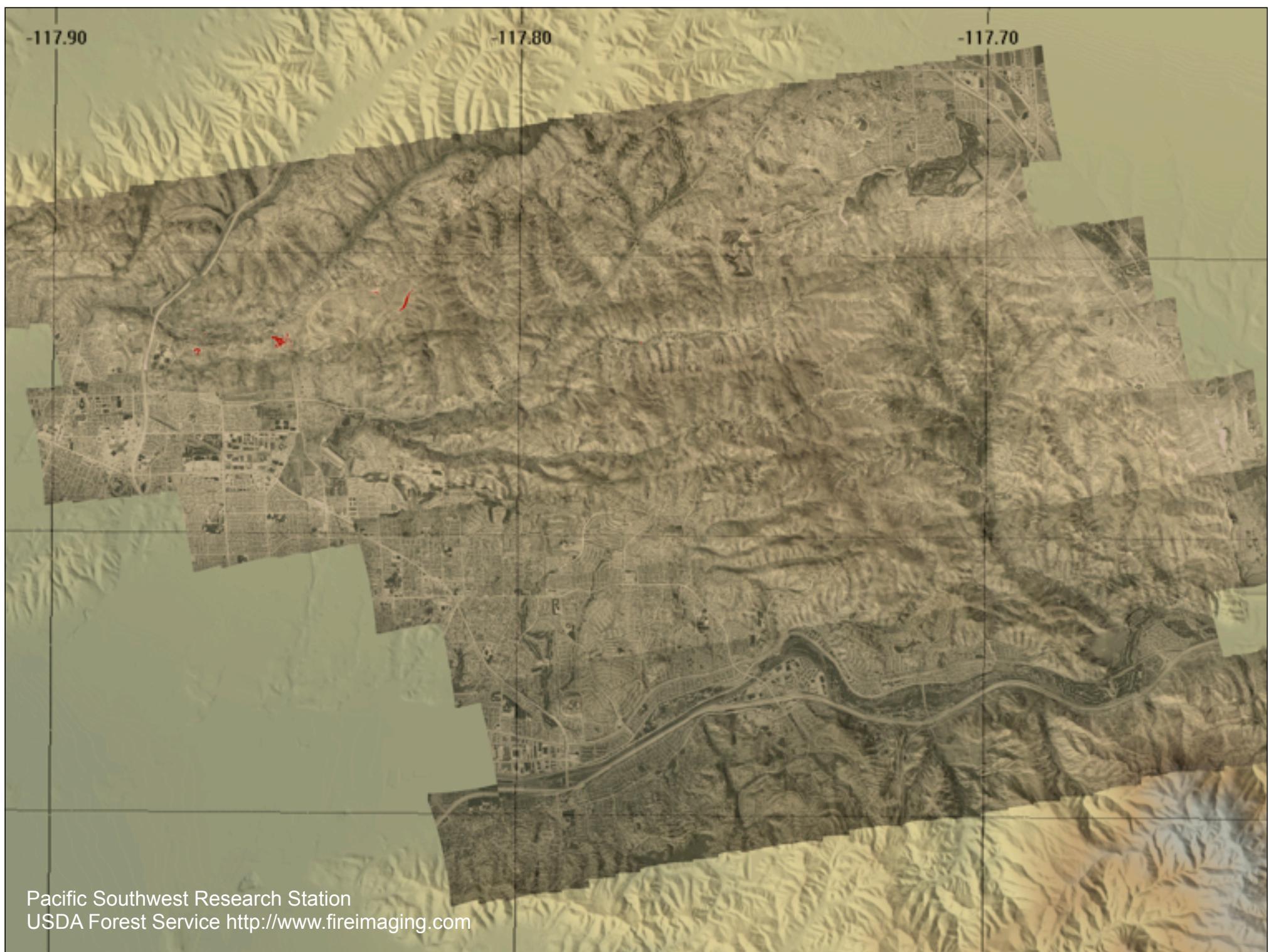




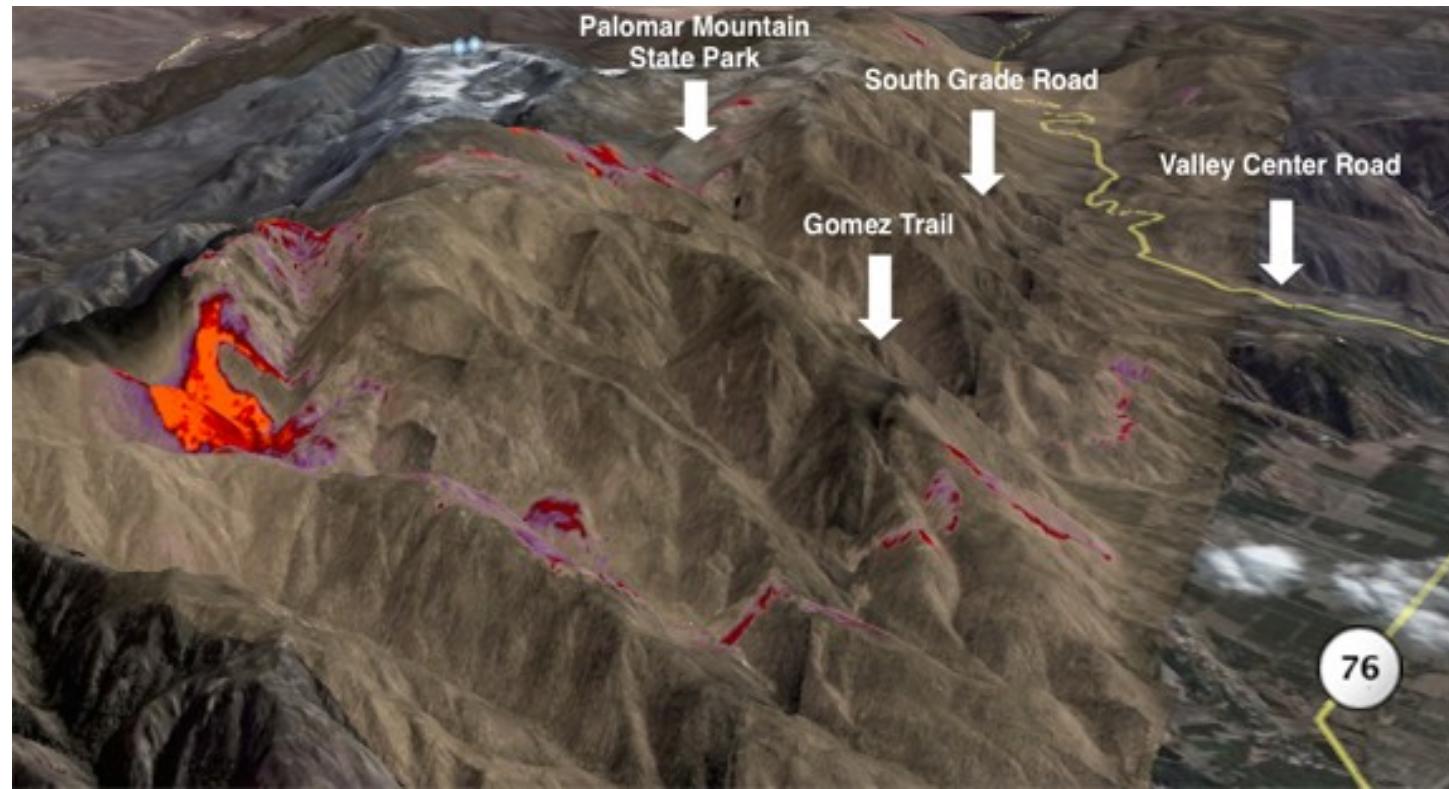


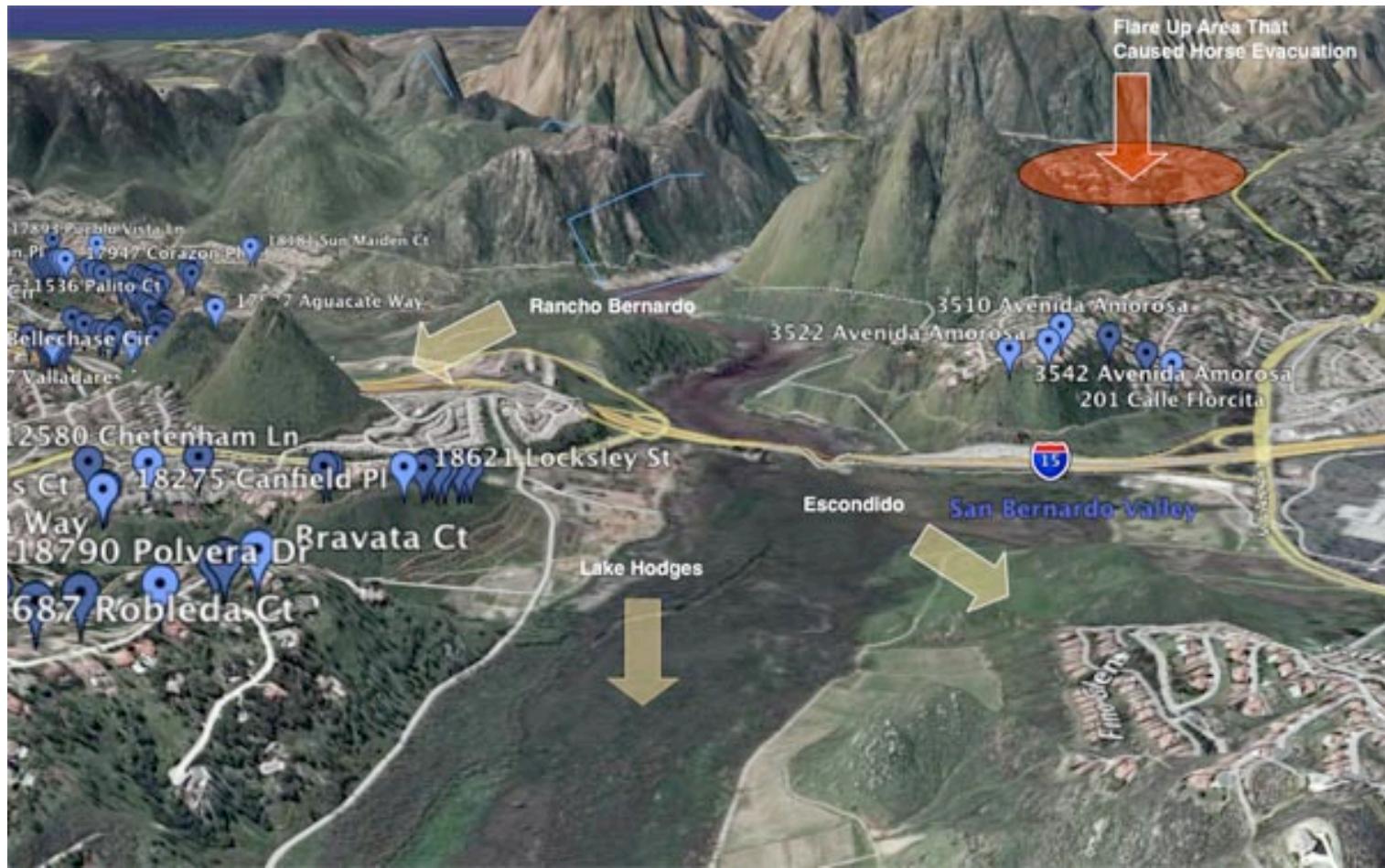


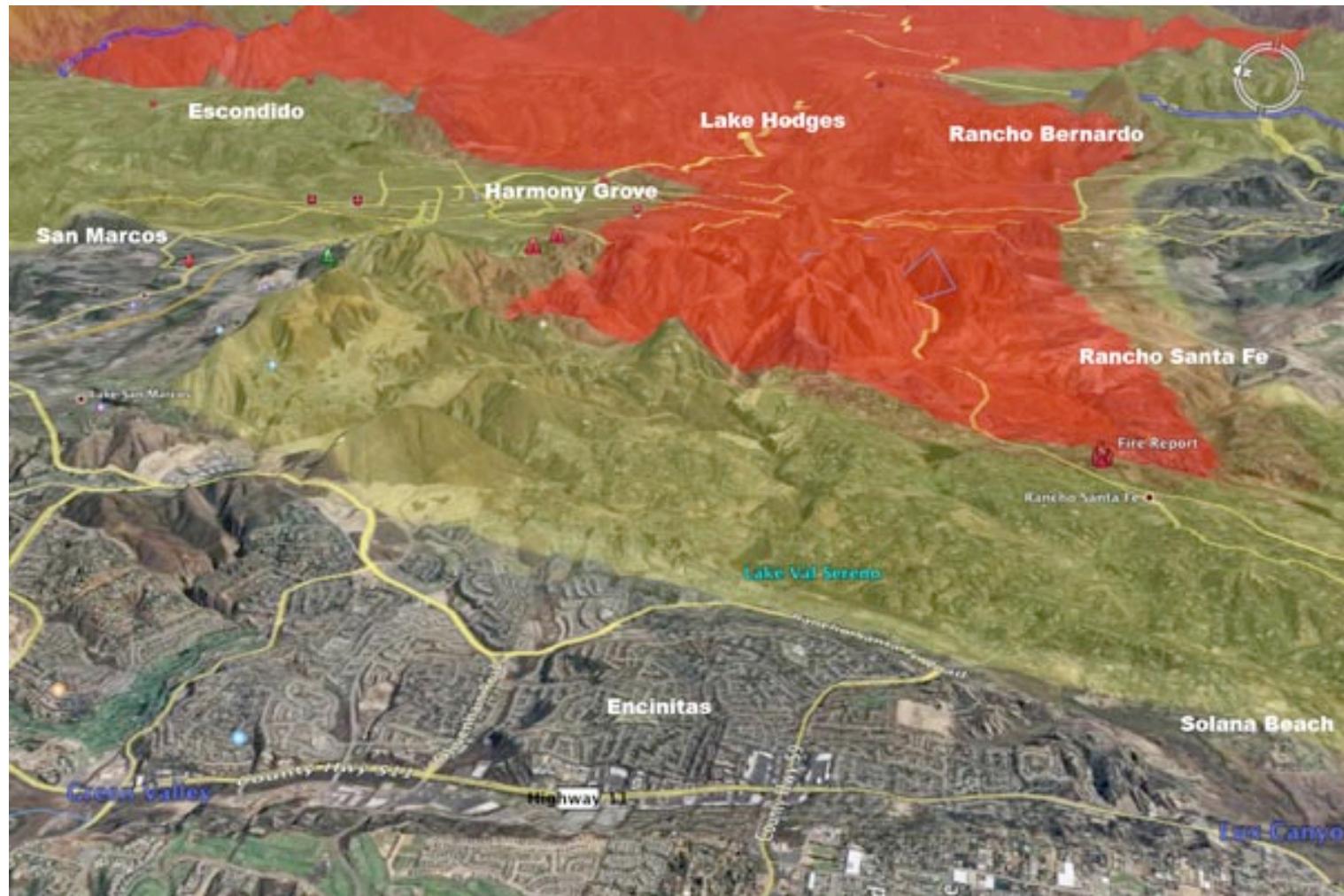




Pacific Southwest Research Station  
USDA Forest Service <http://www.fireimaging.com>









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about Many Eyes

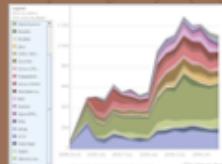
many eyes beta  
*for shared visualization and discovery*

data sets

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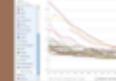
**Line Graph: Change in CO<sub>2</sub> Emissions by State, Per...**  
  
Midwest states are in a league of their own.  
by Monica

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Regional production, 1971-2005  
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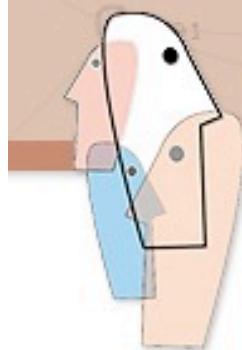
 **Irish Life**  
Aspects of Irish life.

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## About Many Eyes

Many Eyes is a bet on the power of human visual intelligence to find patterns. Our goal is to "democratize" visualization and to enable a new social kind of data analysis. Jump right to our [visualizations](#) now, [take a tour](#), or read on for a leisurely explanation of the project.

All of us in [CUE's Visual Communication Lab](#) are passionate about the potential of data visualization to spark insight. It is that magical moment we live for: an unwieldy, unyielding data set is transformed into an image on the screen, and suddenly the user can perceive an unexpected pattern. As visualization designers we have witnessed and experienced many of those wondrous sparks. But in recent years, we have become acutely aware that the visualizations and the sparks they generate, take on new value in a social setting. Visualization is a catalyst for discussion and collective insight about data.

We all deal with data that we'd like to understand better. It may be as straightforward as a sales spreadsheet or fantasy football stats chart, or as vague as a cluttered email inbox. But a remarkable amount of it has social meaning beyond ourselves. When we share it and discuss it, we understand it in new ways.

### A bit of history

In 2003, [Fernanda](#) created a program to visualize an individual's email archives. Given the personal nature of email, when she ran a study on the visualization she took great pains to ensure that each person's visualization would be completely private. But to her surprise, many of the study participants immediately sought out ways to share the images, mailing screenshots around or just calling friends over to see the program in action. This experiment revealed the intensely social side of visualizations, where discussion and storytelling are just as important as data analysis.

# Visualizations : Spending

Can't see the visualization? Download the latest Java plugin [here](#). On Macs: best viewed in Safari.

Created by: [pilhofer](#)      Created on: Friday August 03, 8:42 AM

## BroadCats

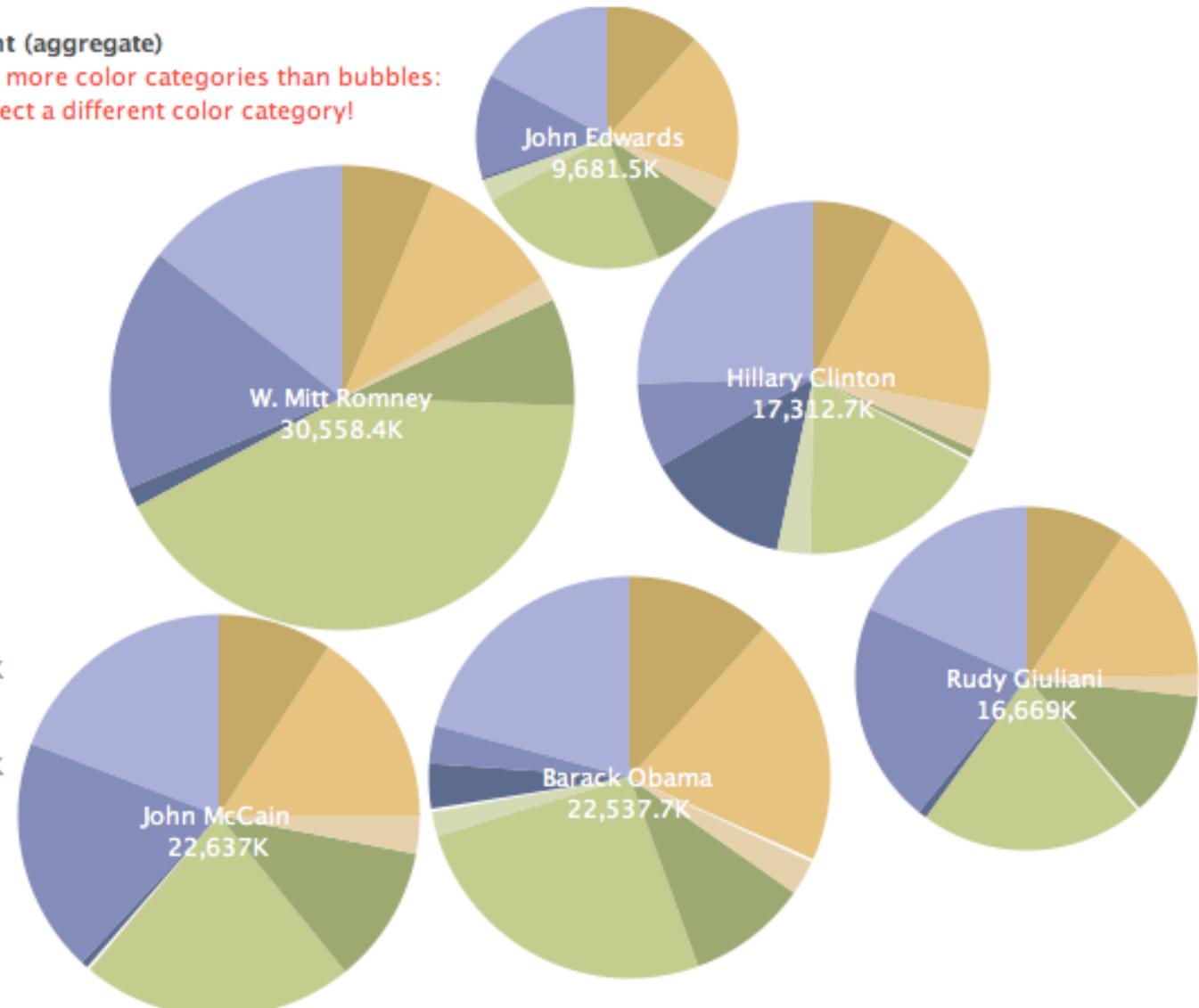
Click to select,  
Ctrl-Click: multiple  
Shift-Click: range

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- Consulting
- Events
- IT/Web Costs
- Media/Polling/Voter Co
- Payroll Taxes and Benef
- Refunds/Donations
- Rent
- Salaries
- Travel/Lodging
- Unk

## SumOfamt (aggregate)

Chart has more color categories than bubbles:  
please select a different color category!

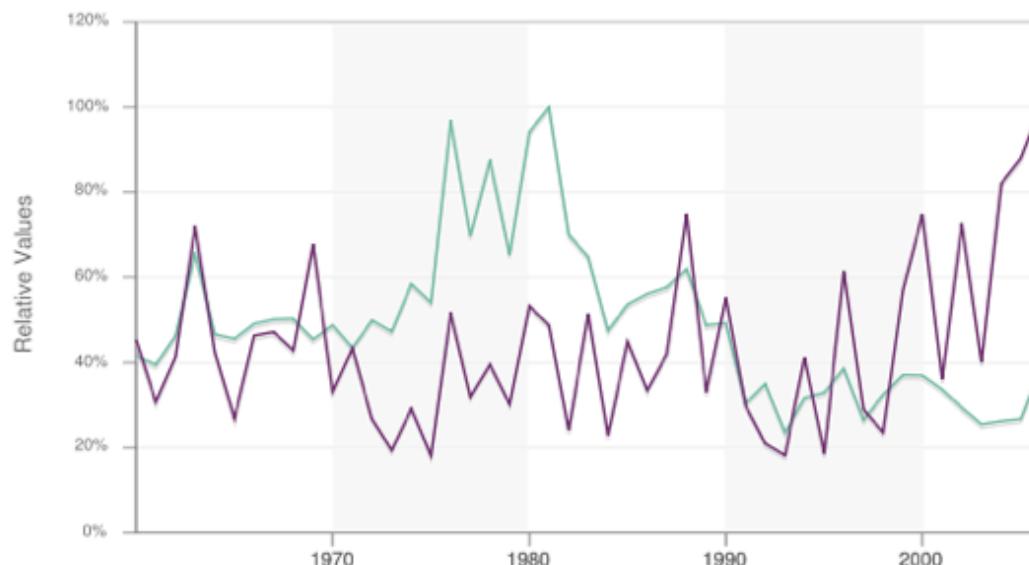
20,000K  
10,000K  
0K



## California in flames

By [Natalie](#) on Jun 25  
Viewed 1210 times[Graph](#) [Table](#) [Cloud Map](#)

Absolute Relative All 36y 24y 6y

[More Options](#)

Bling



Compare

Sources: National Interagency Fire Center (<http://www.nifc.gov/stats/f...>)

A raging forest fire has caused over 1,000 people to evacuate from their homes in Lake Tahoe, California today. This graph shows the number of forest fires (green) and acres burned (purple) from 1960 to 2006. In recent years, while the number of fires has decreased, the amount of land damaged is extremely

### Legend

[Total Wildland Fire](#)[Fires](#)[Acres](#)

### Tags

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## About Us

### Mission

Swivel's mission is to make data useful so people share insights, make great decisions and improve lives.

In an era of spin, opinion, and apathy about statistics, Swivel is a Web site that makes it easy for everyone to collaborate and explore data together — because better informed people make better decisions: in voting booths, in corporate boardrooms and at neighborhood meetings.

We believe data is most valuable when it's out in the open where everyone can see it, debate it, have fun, and share new insights. Swivel is applying the power of the Web to data so that life gets better.

### Who are we?

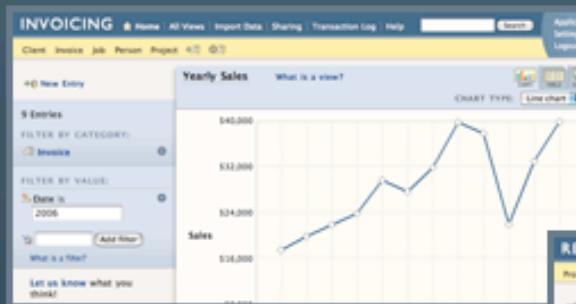
Swivel was founded in December 2005 by [Dmitry Dimov](#) and [Brian Mulloy](#). We both studied physics in college, Dmitry in Russia and Brian at the University of Michigan. We both worked together at a big software company. And we both love geeking out about data. Actually, all of us here at Swivel: [Tao Ge](#), [Visnu Pitiyanuvath](#), [Seema Sharma](#), [Huned Botee](#), [Richard Nghiem](#), [Sara Wood](#), [Joe "Thor" Gutierrez](#), [Abhay Kumar](#), [Brent Fitzgerald](#), and [Ben Walsh](#) are a little nerdy about data and curious about all sorts of stuff. Data makes us go.

We have a great trio of data-loving advisors too:

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10 am						
11 am						
12 pm						
1 pm						
2 pm						
3 pm						

Weekly Sales Meeting  
Description: Weekly Sales Meeting  
Attendees: Peter, John, Sam, Michael, Meeting Room A

Description:   
Date:   
Attendees:   
Add another  
Location: Meeting Room A  
Submit Form

Current Listings			
	Address	Bedrooms	Bathrooms
Central	124 Division Road	2	2
	571 1st Ave	3	2
Downtown	3901 Central Ave.	2	1
	712 Main St.	3	2
Lakeside	911 Marine Drive	4	2
	Actions		

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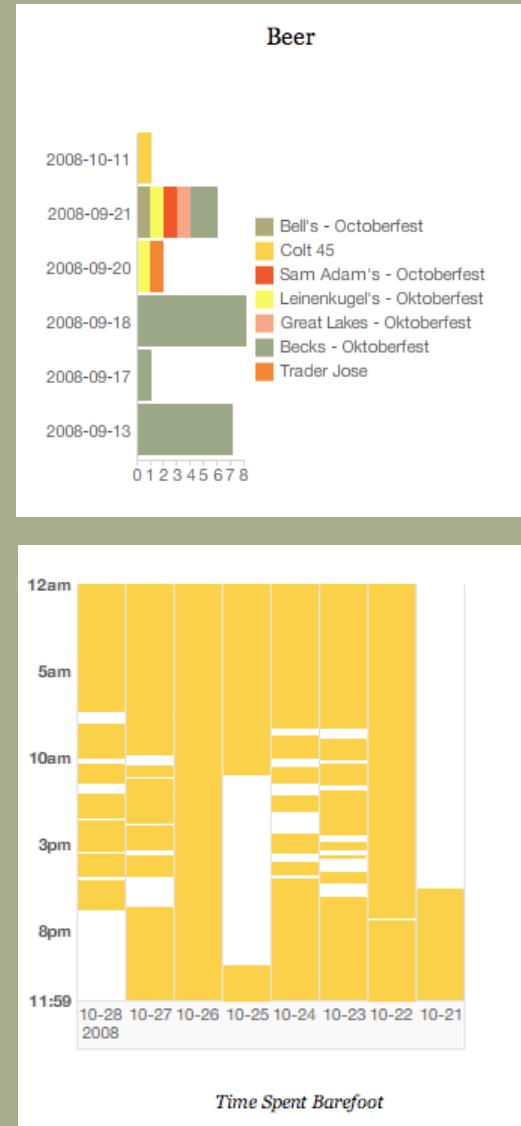
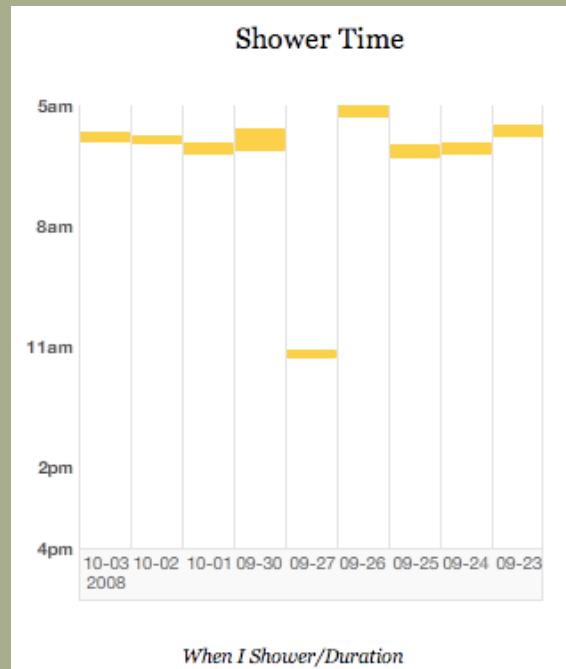
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a web service that allows you to share snippets of information from the minutiae of daily life in the form of simple statistical graphs.

# Self-experimentation as a source of new ideas: Ten examples about sleep, mood, health, and weight

Seth Roberts

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**Abstract:** Little is known about how to generate plausible new scientific ideas. So it is noteworthy that 12 years of self-experimentation led to the discovery of several surprising cause-effect relationships and suggested a new theory of weight control, an unusually high rate of new ideas. The cause-effect relationships were: (1) Seeing faces in the morning on television decreased mood in the evening (>10 hrs later) and improved mood the next day (>24 hrs later), yet had no detectable effect before that (0–10 hrs later). The effect was strongest if the faces were life-sized and at a conversational distance. Travel across time zones reduced the effect for a few weeks. (2) Standing 8 hours per day reduced early awakening and made sleep more restorative, even though more standing was associated with less sleep. (3) Morning light (1 hr/day) reduced early awakening and made sleep more restorative. (4) Breakfast increased early awakening. (5) Standing and morning light together eliminated colds (upper respiratory tract infections) for more than 5 years. (6) Drinking lots of water, eating low-glycemic-index foods, and eating sushi each caused a modest weight loss. (7) Drinking unflavored fructose water caused a large weight loss that has lasted more than 1 year. While losing weight, hunger was much less than usual. Unflavored sucrose water had a similar effect. The new theory of weight control, which helped discover this effect, assumes that flavors associated with calories raise the body-fat set point: The stronger the association, the greater the increase. Between meals the set point declines. Self-experimentation lasting months or years seems to be a good way to generate plausible new ideas.

**Keywords:** breakfast; circadian; colds; depression; discovery; fructose; innovation; insomnia; light; obesity; sitting; standing; sugar

Mollie: There has to be a beginning for everything, hasn't there?  
—*The Mousetrap*, Agatha Christie (1978)

## 1. Introduction

### 1.1. Missing methods

Scientists sometimes forget about idea generation. "How odd it is that anyone should not see that all observation must be for or against some view if it is to be of any service," wrote Charles Darwin to a friend (Medawar 1969, p. 11). But where did the first views come from, if not observation? According to a diagram in the excellent textbook *Statistics for Experimenters* (Box et al. 1978), the components of "data generation and data analysis in scientific investigation" (p. 4) are "deduction," "design," "new data," and so on. Scientific investigation, the diagram seems to say, begins when the scientist has a hypothesis worth testing. The book says nothing about how to obtain such a hypothesis.

It is not easy to come up with new ideas worth testing, nor is it clear how to do so. Table 1 classifies scientific methods by goal (generate ideas or test them) and time of application (before and during data collection or afterwards). The amount written about idea generation is a small fraction of the amount written about idea testing (McGuire 1997), and the amount written about what to do before and during data collection is a small fraction of the amount writ-

ten about what to do afterwards – so the empty cell in Table 1, on how to collect data that generate ideas, is no surprise. Although scientific creativity has been extensively studied (e.g., Klahr & Simon 1999; Simonton 1999), this research has not yet suggested new tools or methods. Even McGuire, who listed 49 "heuristics" (p. 1) for hypothesis generation, had little to say about data gathering.

Hyman (1964) believed that "we really do not know enough about getting ideas even to speculate wisely about how to encourage fruitful research" (p. 28), but 40 years later this is not entirely true. Exploratory data analysis (Tukey 1977) helps reveal unexpected structure in data, and such discoveries often suggest new ideas worth studying. Table 1 includes only those methods useful in many areas of science, omitting methods with limited applicability

SETH ROBERTS is an Associate Professor in the Department of Psychology at the University of California at Berkeley. He is a member of the University's Center for Weight and Health. His research includes follow-up of the results reported in this article, especially the weight and mood results, and study of how things begin in another situation – the generation of new instrumental behavior by rats and pigeons.

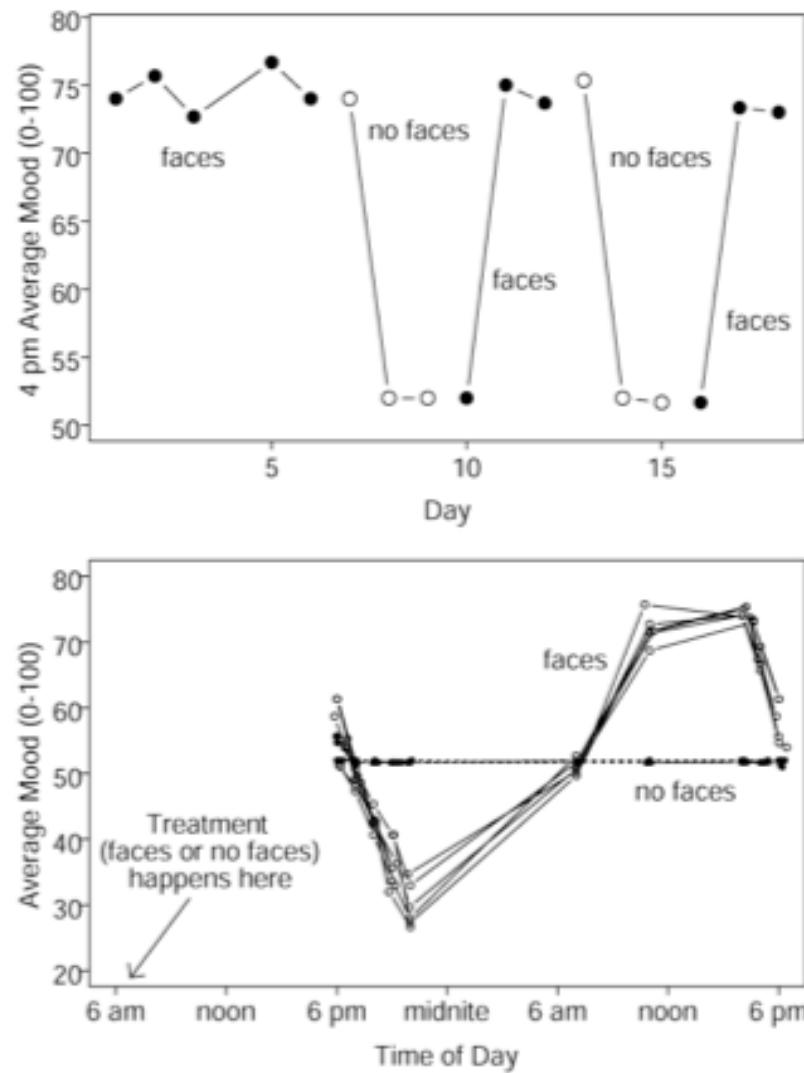
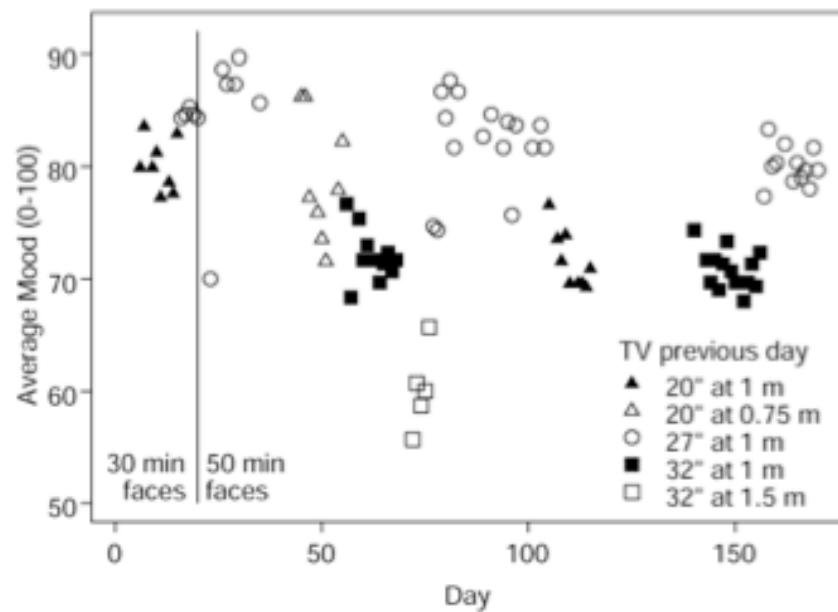


Figure 5. Mood ratings over 17 days, beginning October 13, 1999. Upper panel: Mood at 4:00 p.m. day by day. Lower panel: Time course of the effect. In both panels each point is an average of three ratings, one for each scale. The three scales measure the dimensions unhappy/happy, irritable/serene, and reluctant/eager (scale range: 5 = extremely negative, 95 = extremely positive, with 50 = neither negative nor positive). Each line is a separate series of measurements. The data start about 12 hours after the treatment because that is when the treatment began to have an effect.



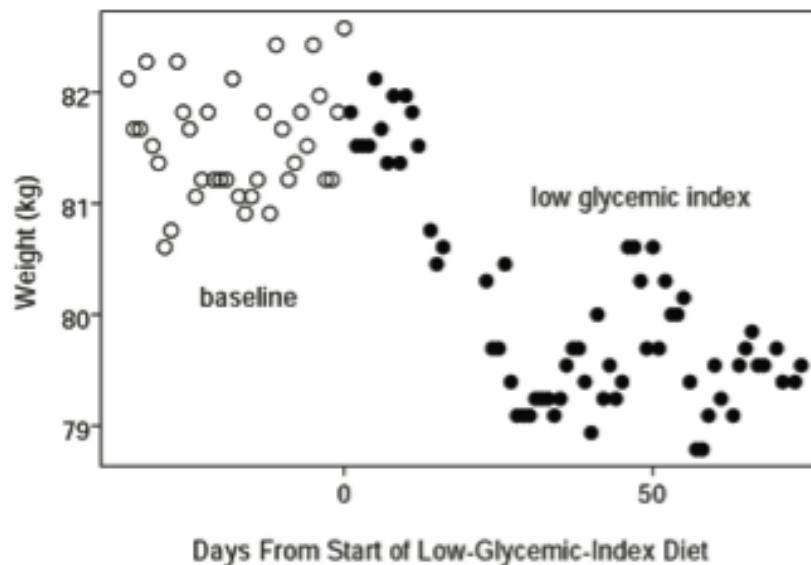


Figure 27. Effect of a low-glycemic-index diet on weight. The diet began July 18, 1996.

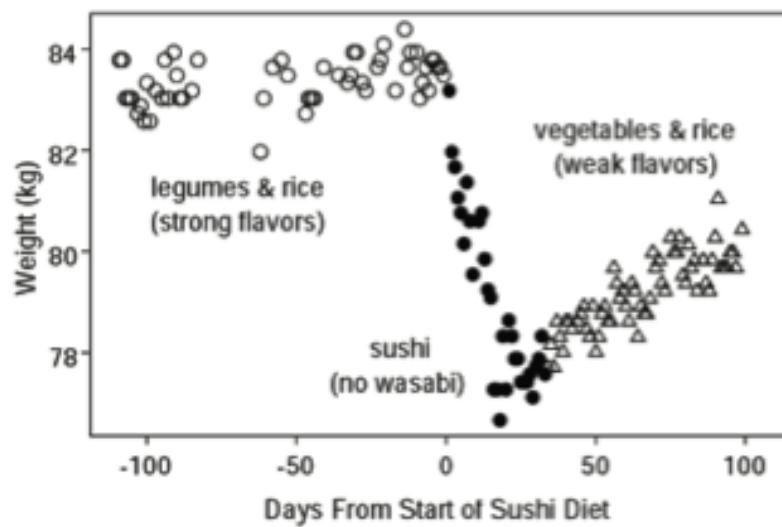


Figure 29. Effect of sushi on weight. The sushi diet began February 22, 1998.

# Open Peer Commentary

## How observations on oneself can be scientific

David A. Booth

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<http://www.bham.ac.uk>

**Abstract:** The design and interpretation of self-experimentation need to be integrated with existing scientific knowledge. Otherwise observations on oneself cannot make a creative contribution to the advance of empirical understanding.

Seth Roberts is right to argue that experiments on oneself are unduly neglected in contemporary science. Unfortunately, however, Roberts has misapplied scientific method in the studies that he describes running on himself.

There are four types of flaw in his claims to have evidence for some effects of visual exposure, movement practices, or food selection on expressed mood, perceived sleep, symptoms of a cold, and body weight.

1. Roberts' self-observations are contaminated by effects of his knowledge of previous observations that he made of himself. There is little or no point in self-replication when the phenomena depend on perceptible stimulation or controllable action.

2. Roberts' manipulations are confounded by known influences that may provide explanations of his observations that conflict with his hypotheses.

3. Contrary to the argument by Roberts, the unexpectedness of an observation makes no contribution to the strength of the evidence. This is because, if flaws 1 and 2 were avoided by consider-

## Self-experimentation chronomics for health surveillance and science; also transdisciplinary civic duty?

Franz Halberg<sup>a</sup>, Germaine Cornélissen<sup>a</sup>, and Barbara Schack<sup>b,1</sup>

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<http://www.msi.umn.edu/~halberg/>

**Abstract:** Self-surveillance and self-experimentation are of concern to everyone interested in finding out the factors that increase one's risk of stroke from <8% to nearly 100%; one also thereby contributes to transdisciplinary science.

**Why chronomics?** Whenever there are inter-individual differences in response, clinical trials on groups that do not consider such differences cannot solve what only the individual can do cost-effectively, such as finding out whether one's blood pressure (BP) responds to an increase in sodium intake with a rise, with no change, or with a decrease. Eventually, special institutions may be

## Linking self-experimentation to past and future science: Extended measures, individual subjects, and the power of graphical presentation

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**Abstract:** The case for the value of self-experimentation in advancing science is convincing. Important features of the method include (1) repeated measures of individual behavior, over extended time, to discover cause/effect relations, and (2) vivid graphical presentations. Large-scale research on Pavlovian conditioning and weight control is needed because verification could result in easy and inexpensive mitigation of a serious public health problem.

Several years ago, Irene Grote, a former student of mine and now a research scientist at the University of Kansas, expressed her conviction that increasing the frequency of self-experimentation among behavioral scientists would contribute significantly to the scientific understanding of behavior. I was not convinced and countered that self-experimentation was a fine tool for personal development and self-understanding, but I doubted its relevance to advancing science. Roberts' target article happily proves Dr. Grote right and leads the way in using a time-honored and powerful research method to bring experimental rigor to the task of integrating the principles of evolutionary theory and the principles of learning.

## Introspection and intuition in the decision sciences

Daniel John Zizzo

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<http://www.econ.ox.ac.uk/Research/Ree/ZizzoWebpage.htm>

**Abstract:** Self-experimentation is uncommon in the decision sciences, but mental experiments are common; for example, intuition and introspection are often used by theoretical economists as justifications for their models. While introspection can be useful for the generation of ideas, it can also be overused and become a comfortable illusion for the theorist and an obstacle for science.

This commentary complements the target article by analyzing the role that self-experimentation and mental experiments play in research on decision-making. Whereas Roberts appears to claim that participation in one's own experiments is common in human experimental psychology, my expectation is that, as a rule, papers in the decision sciences fail to have the experimenters as part of the sample. Of course, exceptions exist, especially in consumer research (e.g., Earl 2001), although even then they are controversial and usually thought of in terms of researcher introspection (Gould 1995; Wallendorf & Brucks 1993). They also tend to be less systematic than Roberts' own work (e.g., Earl [2001] is just a case study).

Roberts' target article makes sufficiently clear that self-experimentation means to run an experiment with oneself as a subject, going through one or more experimental conditions on the basis

## From methodology to data analysis: Prospects for the $n = 1$ intrasubject design

Joseph Glicksohn

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<http://www.biu.ac.il/soc/cr/cv/glicksohn.htm>

**Abstract:** The target article is important not only for black-box studies, but also for those interested in tracing cognitive processing and/or subjective experience (via systematic self-observation). I provide two examples taken from my own research. I then proceed to discuss how best to analyze data from the  $n = 1$  study, which has a factorial design.

Self-experimentation, or what some term *systematic self-observation*, has a venerable history in psychology, going back to the Würzburg school (Humphrey 1951) and even earlier to the work of Ebbinghaus. Roberts eschews a focus on subjective experience, discussing, as he does, cause-effect relationships in behaviour. Yet, I would argue that the importance of his target article is not only for black-box studies, but also for those interested in tracing cognitive processing and/or subjective experience. I provide two examples from my own research.

Schaeter (1976, p. 475) presents the "entoptic explanation" of hypnagogic imagery, which states that entoptics serve as the raw data for hypnagogia. To test this, we manipulated awareness of both entoptics and hypnagogia in the same observers – my two co-authors, Friedland and Salach-Nachum, serving in time-locked single-subject designs (Glicksohn et al. 1990–91). Systematic self-

## Self-experimentation as science

Harold L. Miller, Jr.

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**Abstract:** Examination of the target article for its relevance to the analysis of private behavior leads to three concerns: the absence of a new methodology for studying private behavior, the undisclosed possibility of interactions, and insufficient attention to the social context of idea generation. Regardless of these concerns, a larger issue remains: Can a science of  $n = 1$  be credible?

Kudos to BBS for publishing a target article at once offbeat and provocative, and to its author for estimable perseverance. His decade-long efforts to solve the personal problems of early awakening and weight loss are ingratiating as is his canny ability to invoke references to the Amish, astronauts, sushi, and tenure, for example, without once mentioning serendipity (except in his references).

It is not readily apparent how the target article should be classified. Is it evolutionary psychology? Applied psychology? Learning? Motivation? Or does it belong to the philosophy of science? Roberts' report drew me initially by its potential to illuminate a longstanding lacuna in the experimental analysis of behavior, namely, the analysis of covert (also termed "private") behavior. B. F. Skinner's recognition of overt and covert categories of behavior (and the further categories of respondent and operant behavior) placed them in functional relationships with the categories

# TACTICAL TECHNOLOGY COLLECTIVE

## Using Mobiles for Advocacy

Mobile phones have fundamentally changed the way we communicate. Their proliferation in the global South is going to profoundly impact how NGOs and advocates can organise, raise awareness and increase participation.

By the end of 2007 it is estimated that about half the world will have a mobile phone connection compared to about 300 million who have computers. The mobile telephone can be seen as a 'universal device'; a 'computer in the pocket' which has potential to impact the lives of the world's poorest people; not just through voice communication but also through other applications such as funds transfer, information delivery and internet connectivity.

This opens up new potential for community participation, for delivery of services, for coordination and mass organising and for dynamic and remote publishing - all actions that have not been conceivable in the global South using the internet.

But there is a long way to go before an average NGO will have the resources and services to use this new way of reaching its full potential. Developing applications and knowledge bases for those aiming to exploit mobile technologies for NGOs and advocates throw up some serious challenges.

Tactical Tech believes mobiles will be a crucial tool for increasing the participation of marginalised communities and improving the work of those who advocate for their rights.

# TACTICAL TECHNOLOGY COLLECTIVE

## **Reporting violence against people**

Individuals can text in incidents of human rights abuses (police or army brutality, for example) or submit photographic or video evidence of violence, rioting, looting and other civil disturbances, if they find themselves in the thick of the action. Photographic evidence can be particularly useful if peaceful demonstrations are broken up by the authorities using violence.

## **Gathering evidence**

Camera phones can be used to gather photographic evidence of a crime or abuse for use in prosecutions. A conservation team working in Sumatra collected evidence of poached tigers by taking mobile images of the tiger skins which were discovered in the home of a dealer.

## **Reporting environmental events**

Members of the public can send reports of environmental events, such as oil spills, flooding, forest fires or pollution, and submit photographic evidence for analysis or scrutiny. Picture evidence of environmental abuses by large oil companies in the Niger Delta region of Nigeria are very powerful activism aids.

## **To raise awareness of a plight or cause**

Local groups or individuals can collect mobile media – photographs, video, sounds – to create awareness around a local or national issue (such as violence against women in South Africa or 'slum' clearance in Zimbabwe, for example). These materials can be collected by a co-ordinating NGO and used as part of a wider publicity campaign or sent to traditional media outlets such as, television channels and newspapers.

## **To report or blog from events, meetings and conferences**

Blogging directly from conferences or events is becoming an increasingly popular way of media reporting by delegates and members of the general public. Blog entries, posted directly to websites, can combine text and images or video blogs (or vlogs – see <http://en.wikipedia.org/wiki/Vlog>) can be posted with interviews and actual footage of the events themselves. Videos are regularly collected and posted during large international gatherings such as the G8 summits.

## **Voxpops and getting public opinion**

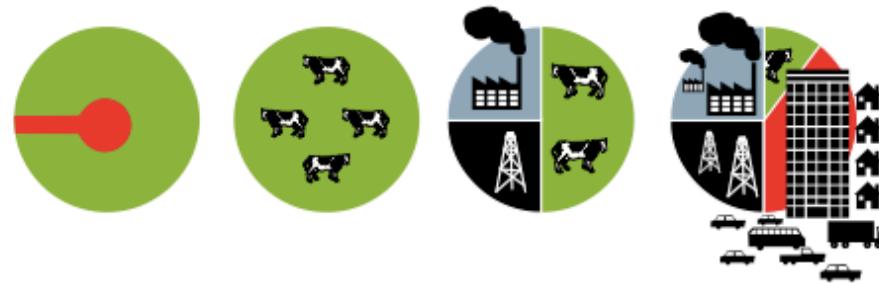
Voxpops are short sound or video clips of the general public stating their opinion on a current issue or topic. Voxpops are often recorded in shopping centres, with members of the public stepping into a booth for a short one or two minute recording of their comments. People's media can also make use of the voxpop phenomenon by gathering public opinion on a political issue, scandal or event.

## **General reporting and education**

Citizens can use peoples media to report daily news in their areas – events, opinions, daily living and so on – to help create general awareness about life for them and the people in their country. Technology has a key role to play in promoting cultural awareness. Information such as this can provide a good context for readers and give the wider public a good sense of what life is like for people in other parts of the world (see [www.mobilestorytelling.org](http://www.mobilestorytelling.org)).

## **Broadening the global news agenda**

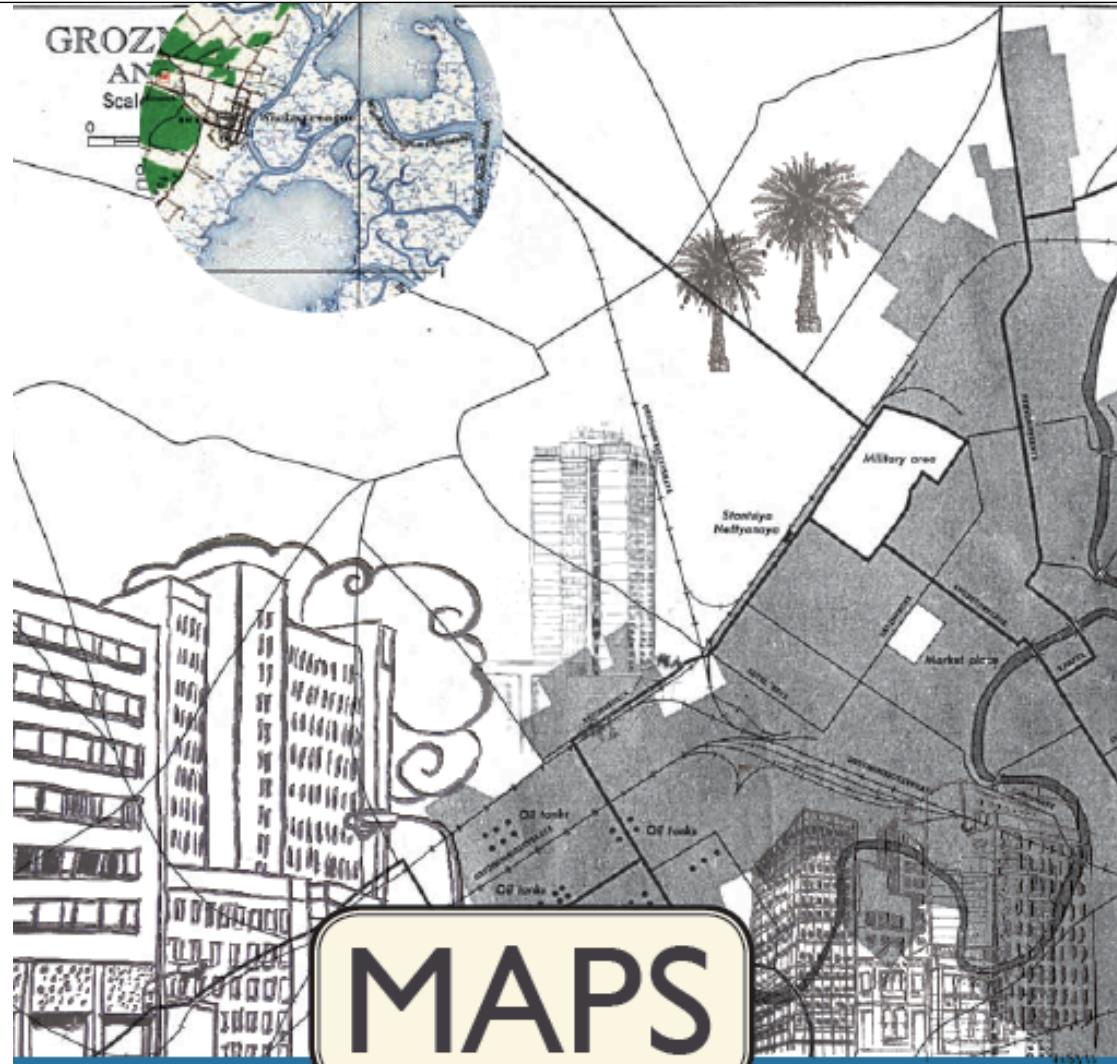
Citizens' media, as a news channel, provides members of civil society the world over the opportunity to bring wider attention to events occurring in their own back yard. Stories which may have never been heard or reported – a lack of awareness or a controlled media could be reasons for this – are now able to add real value to the news agenda and broaden the scope and reach on their own terms, not those of senior editors in newspaper publishers or heads of government. The power of blogging and mobile technology to rapidly spread news is now seen as a real threat in countries such as Iran and China. The very use of mobile technology in campaigning and awareness-raising is often now news in itself and its recent use in China (see box) became headline news the world over. In the face of such publicity, it is sometimes difficult for even the most oppressive regimes to turn a blind eye.



# Visualizing Information for Advocacy

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*An Introduction to Information Design*



# MAPS

for advocacy

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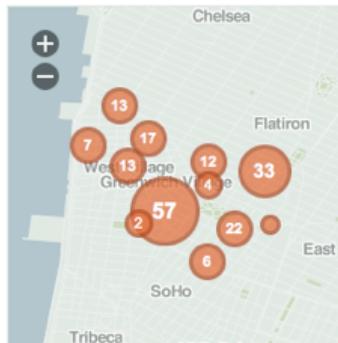
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 **West 3rd Between Mercer and LaGuardia. 2008** Somewhere in Greenwich Village  
Posted by Michael Neff to Flickr on March 25, 2008.

  
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# Experimenting with Context, Content, and Community to Improve Relevancy

Richard A. Hankins, Esa Eteläperä, David Racz  
Nokia Research Center - Palo Alto  
[{rich.hankins,esa.etelapera,david.racz}@nokia.com](mailto:{rich.hankins,esa.etelapera,david.racz}@nokia.com)

## Motivation

We have become increasingly dependent on search engines and other information services for the discovery, organization, and presentation of information. Unfortunately, the relevancy of the results returned by these services has plateaued. The key to improving relevancy may lie with incorporating knowledge about the context and communities in which content is created and consumed. However, many fundamental questions remain; for example, what aspects of context, content and community are most useful for improving relevancy? And what is the cost to privacy? To answer these questions we plan to collect and analyze a large amount of data from many different users.

Mobile devices are ideally positioned to capture the context, content and community data required to make potential breakthroughs in relevancy. Phones already capture much of the context and community of users, and more content is being generated on phones everyday. The C3 (Context, Content, and Community) group at Nokia Research Center - Palo Alto is developing the infrastructure for large-scale collection and analysis of this data. This will be a unique platform for information-relevancy research, data mining, algorithm development, and community-service experimentation and deployment.

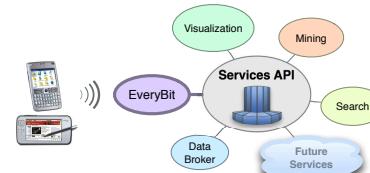


Figure 1: Services API

## Large-Scale Experimentation

Participants in our large-scale user studies will run special client software in the background on each of their mobile devices. This software will periodically collect all content, context, and community data from the device, and then push it into our Data Aggregation Center (DAC). A special data management software layer, called the DAC Services API, will provide access control to this data to all services. This process is illustrated in Figure 1.

To access participants' data, researchers will either leverage existing services or create their own through the DAC

Services API. As illustrated in Figure 1, standard services will include data visualization tools, data mining tools, search, and a data broker (a trusted intermediary that connects data suppliers to consumers). The actual amount and type of data available to each researcher will depend upon the security preference of each participant as well as the researcher's own permissions. Of course, each participant will have full access to their own data and possibly to a subset of other users' data, depending on explicit sharing permissions.

Examples of content and community data we plan to collect include: SMS messages, movies, pictures, address books, calendars, call logs, and message logs. Examples of context data include: battery strength, charger status, idle time, and currently active applications. We also plan to collect a large set of radio-related context, including GPS data, all visible cell IDs and strengths, and all visible Bluetooth and WLAN MAC addresses. The software service responsible for collecting data from users is called EveryBit, and is described next.

**EveryBit** is a community-focused, web-based filesystem for mobile devices. It supports efficient data archiving, search, and retrieval, and also allows users to easily publish and share their data with others. The potential benefits to the user include:

- Community Sharing - Facilitates communities where users can efficiently share (potentially) large amounts of data amongst other devices and other users.
- Unlimited Storage - Lowers the barrier to content creation on the phone.
- Persistence - Provides a reliable data store in case of device failure, loss, etc.

The motivation for providing this service is simple: We need to bootstrap our data collection effort, so we will offer the service for free in exchange for collecting users' context information.

## Current Status

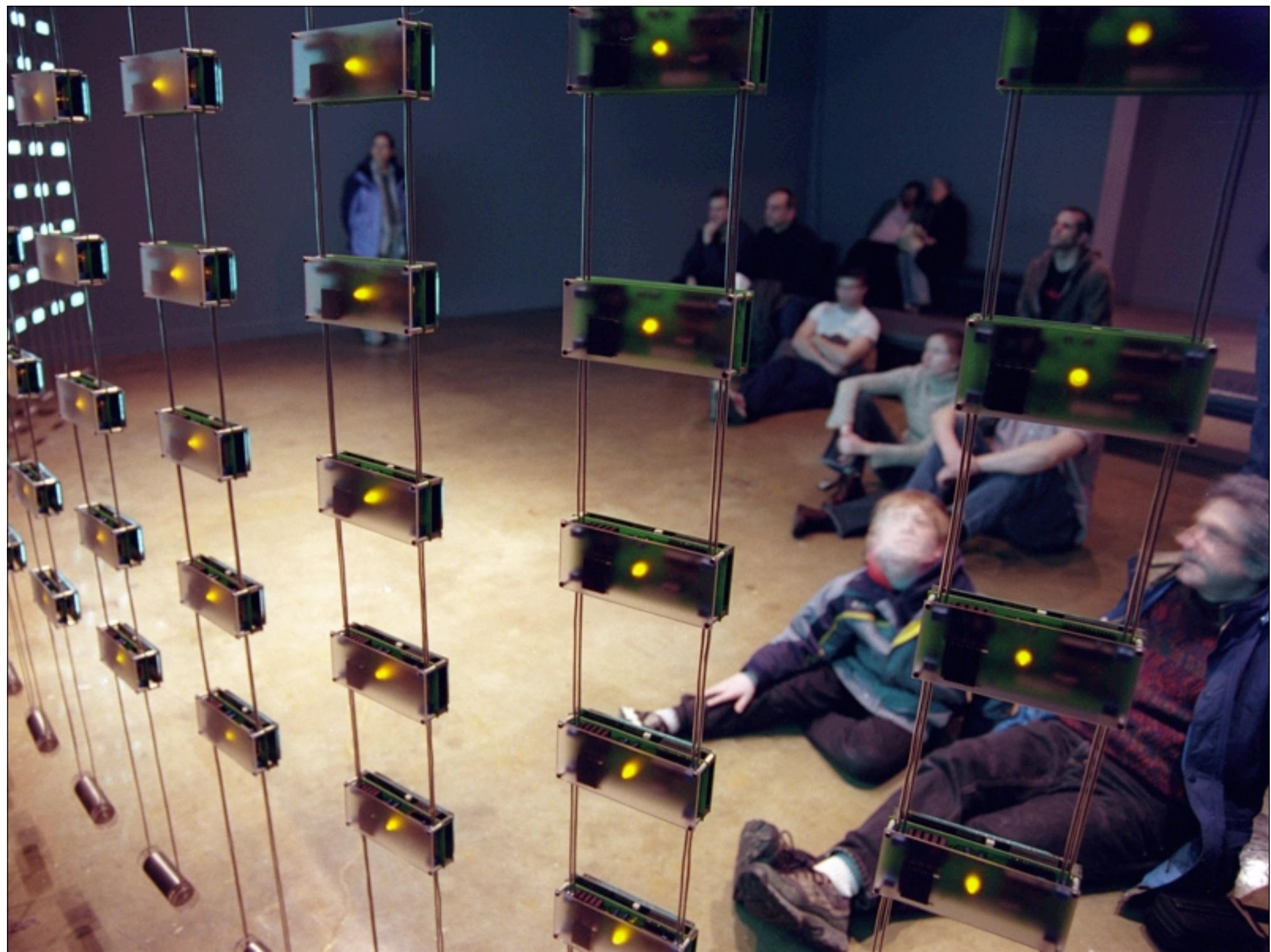
The EveryBit service will soon be distributed to select participants within the NRC-Palo Alto group. After this initial field test, a larger test is planned for all of Nokia Research. Upon initiating this second field test, we plan to begin collaborating with groups inside and outside of Nokia on designing experiments, collecting data, and analyzing results.

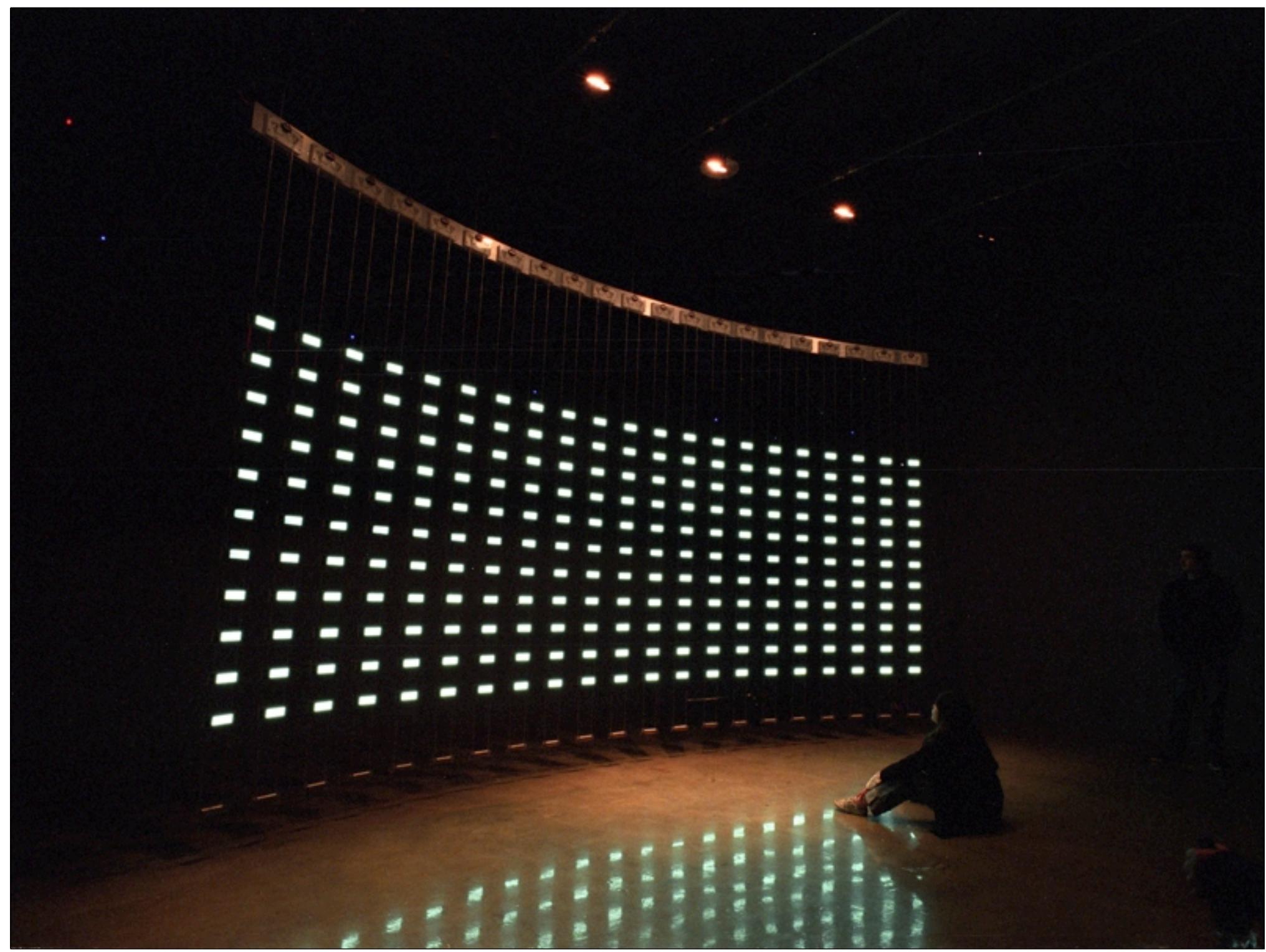


John W. Tukey

# EXPLORATORY DATA ANALYSIS







about yourself?  
like you too  
Sky... and three  
people I like

Korea will be delt with by Russia and China I bet

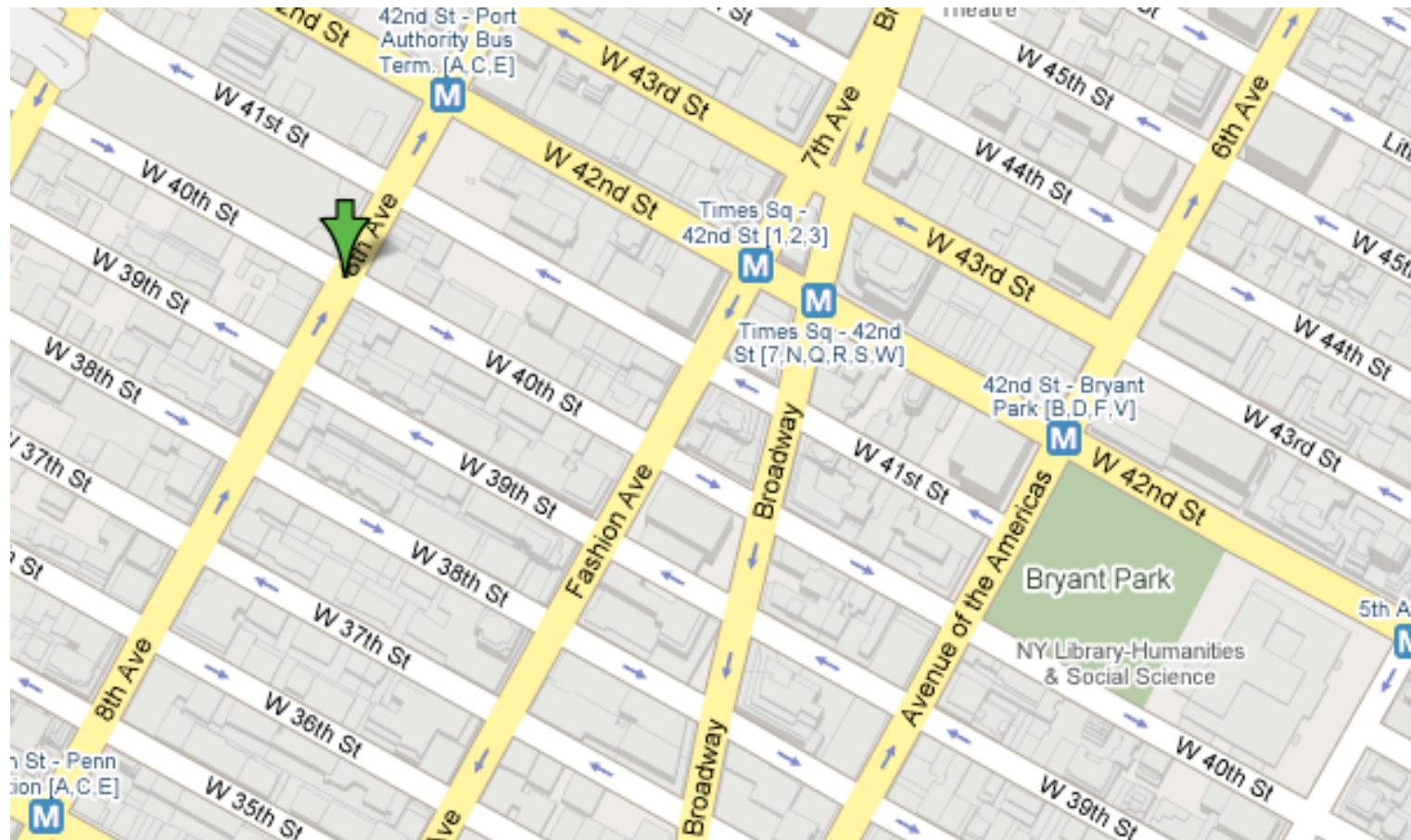
i was trying to  
change it to  
sweetiebab97\_inhell  
CUZ piW killed me

i am i'm ok except i have to go to class on memorial day  
I am 47 i am the light heavy wheight champion of the world  
i'm man I'm unable to begin to make sense of your reply  
i'm cool i'm not 'buff' or anything, but i'm doing okay.  
I'm tiny. I'm perfect, but I don't have bad intentions.  
i'm gay too i am 28 i am hot i am male looking for chat  
i'm at work i'm taking a more quiet stance lately  
i am a angel I'm happy as a pig in sunshine Nakie  
I am 18 years old I am in my boxer briefs and a shirt  
i am from Maryland I am glad of his and also proud.  
i am working there I'm gonna go back to bed soon  
i am ok emma honest I am being serenaded by mail  
I am too, bi I mean i'm doing php fulltime now  
I am the anti-christ. i m from illinois melissa  
I am a bit slow though I am reporting you fool  
I am a 35 year veteran i'm a girl, you stupid  
I'm horny all the time I am in St. Catherines  
I'm from ancient Babylon... I'm ok what bout u???  
i am getting worse as a talker i am a capricorn  
i'm just repeatin the hearsay. I m not yelling  
I am happy with my 512 at home i'm off too bed  
I am 35/male from Sweden, and you? I M FROM TURKEY  
I am curious if anyone else saw it i m from india  
I'm good too, just struggling a bit I'm a teacher  
i'm too much young to have children I'm tepid.  
I am a Christian, I love homosexuals. i'm alone  
i am looking for some men to chat with i am not  
i'm happy to have you on top MightyMidget i am 14  
I'm quite tempted to buy their piano back i'm 19  
I'm jealous. He got it on with Eleanor Mondale. i am  
I'm seeing a pattern here. It's called inflation. i m













The image shows the exterior of a modern skyscraper during sunset. The building's facade is covered in a grid of vertical and horizontal panels, with a darker section featuring the words "The New York Times" in large, serif capital letters. To the right, a smaller, orange-lit building is visible against a clear blue sky.

The New York Times

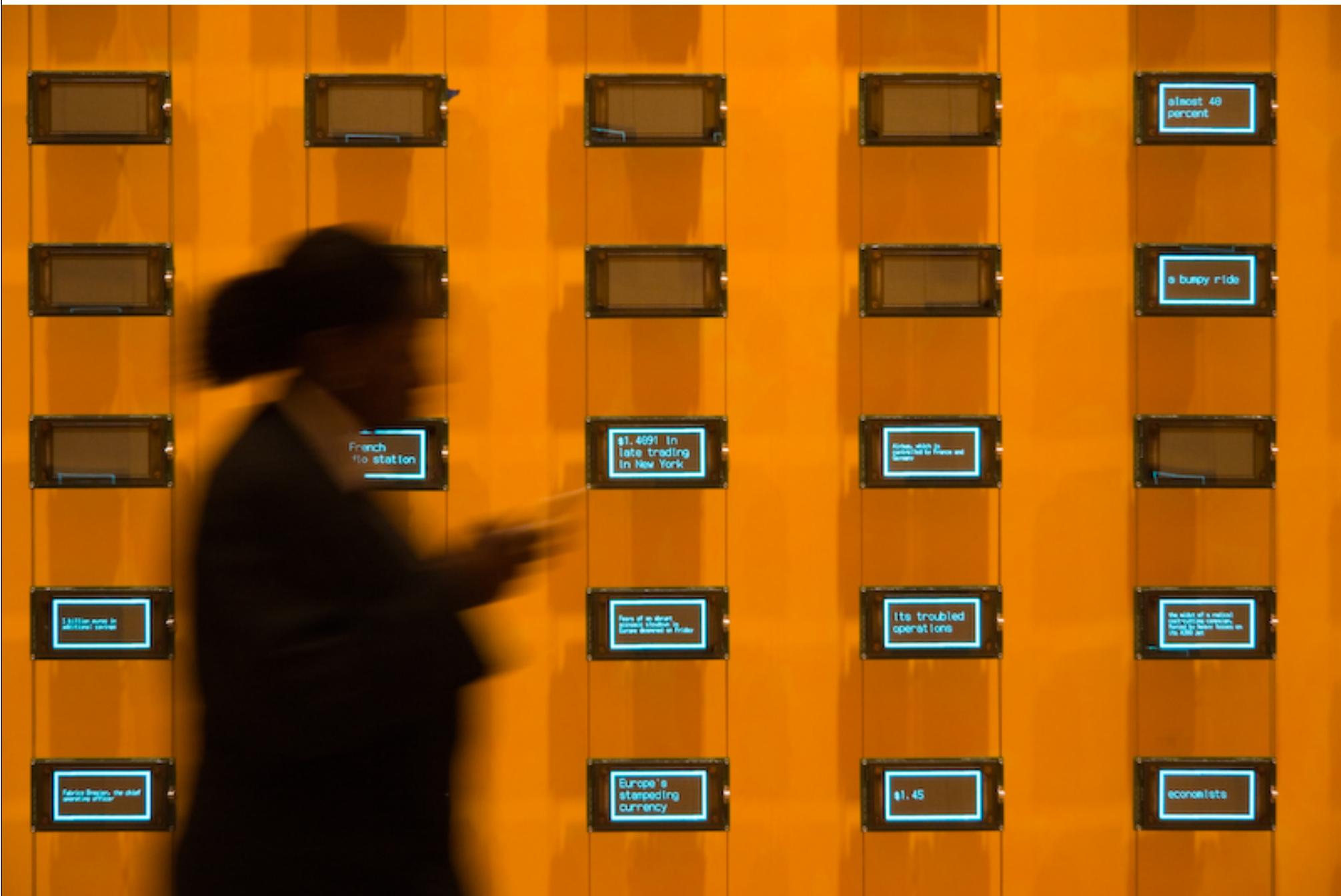
The New York Times

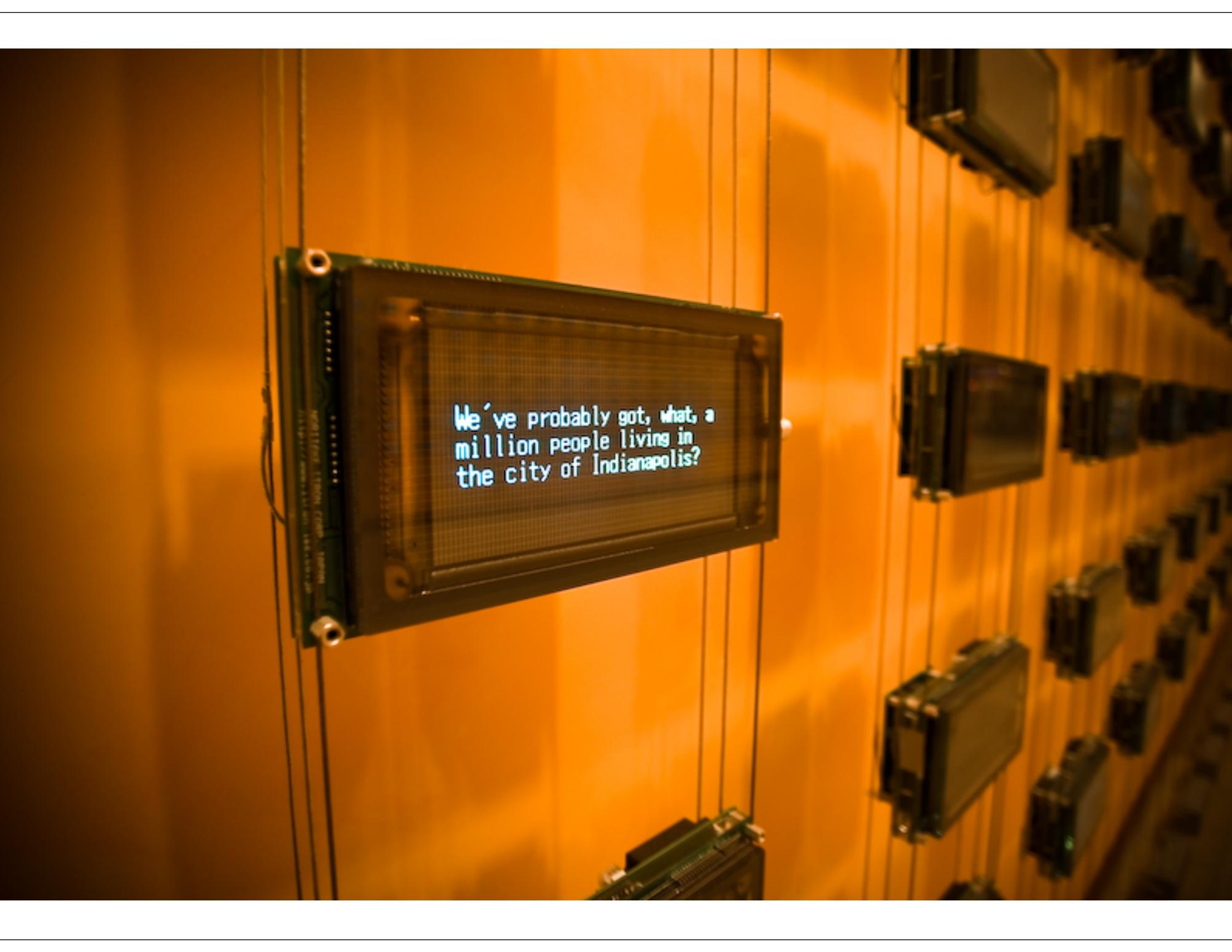
18











We've probably got, what, a  
million people living in  
the city of Indianapolis?





The statistics

two large social networking sites

50 large advertisers, including Ford and Taco Bell, are using its so-called HyperTargeting ad program, which scours user profiles for interests and then delivers related ads

two of the most splendid pieces of French furniture ever created

10 small pieces of wood furniture decorated with vividly colored ceramic tiles, plaques and panels

one window, it is a lovely jewel box of a parlor, as much a work of sculpture as of architecture

\$1.43 trillion in currency reserves, most of which are presumed to be denominated in dollars

one example of a currency falling completely off the pedestal

two prominent chief executives - at Merrill Lynch and Citigroup

five reactors in storage buildings here in Wuerenlingen, near the border with Germany

20-pound turkey

Four minutes later, kicker Jeremy Ito put the Scarlet Knights on the board with a 39 -yard field goal

three healthy sons and a good career

four times the amount that had been reported missing

200 endangered witnesses a year

one of Newark's most notorious homicides in recent years

seven dozen Taliban fighters killed during a six hour engagement

five-story limestone structure

Who? What? Where?

If we'd chosen differently, would she have made an icky expression, a sourpuss face?

Have children never seen people in underwear before?

When will it happen?

How much has the Giants' defense changed since it was exploited by the Dallas Cowboys in a 45-35 season-opening loss?

But when do you know?

Is that wrong?

Is this really a gesture?

Is she a girl, a woman or a tiny creature out of an English fairy painting?

How to package it?

Has the Democratic Party gone soft on trade?

Where would 180 performers and others - dancers and elves and Santas and children and singers and choreographers and trainers - fit?

HELLO HOW ARE YOU DOING?

Could you repeat it a couple of times, louder?

Is that number too high or too low?

Who can know?

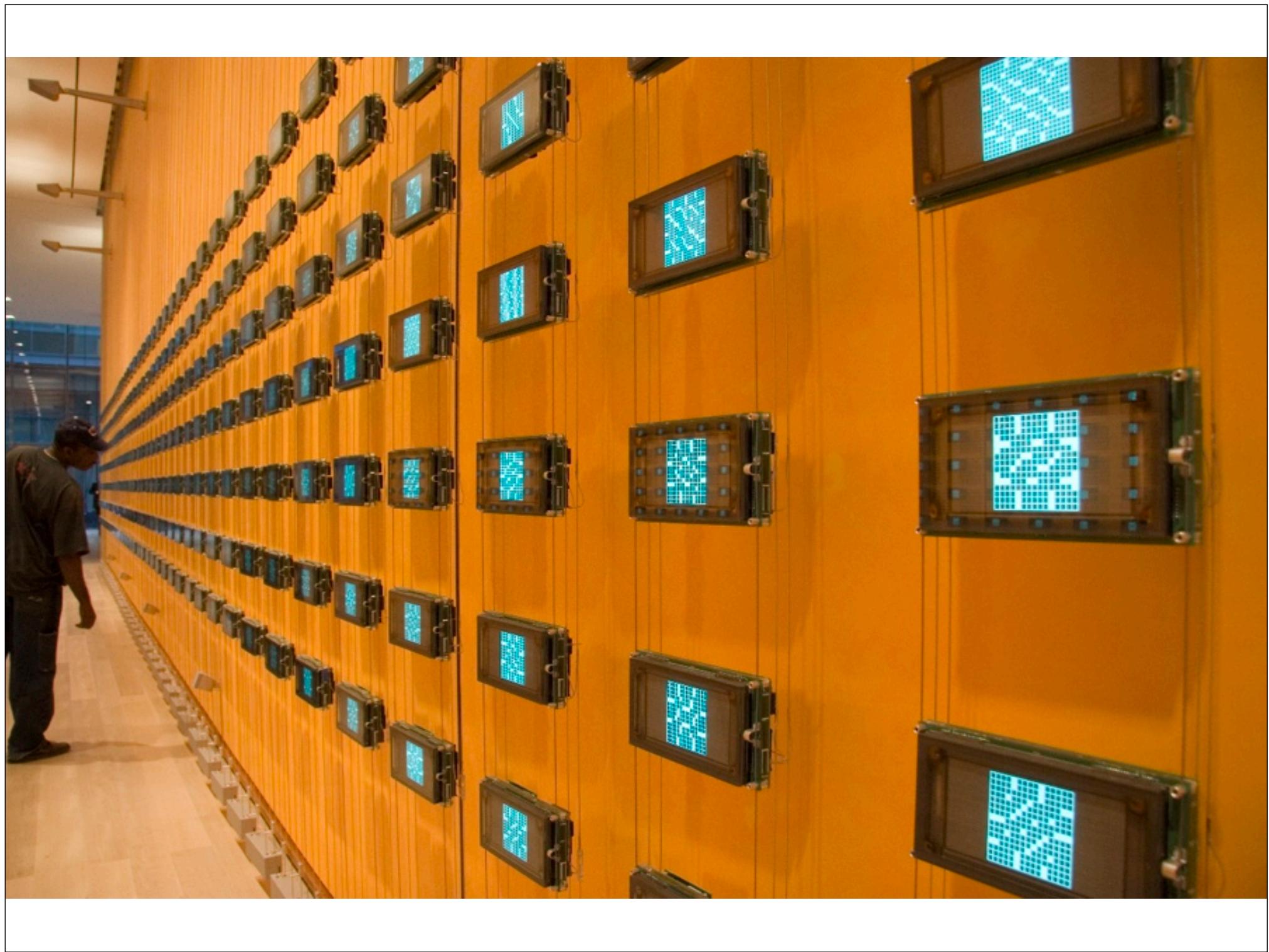
Would she have warned us that the squab tartare with candied jalapenos and a botulism emulsion was imperfect - and possibly ruinous?

Do employers distrust the entertainment and dating-focused MySpace more than the cleaner, more predictable Facebook?

But how did Mr. Biaggi explain his survival 16 years after his release from prison?

What does that mean?

280 letters to the editor



80 weeks of the NYTimes XWpuzzle

Alibi	Cry "nyah, nyah!"	Dempsey stat	Stat
Alibi, often	Cry (for)	Dems.' foes	Stat for 31-Down
Alicante article	Cry a river	Demurral	Stat for 5-Across
Alice of old musicals	Cry after "Forward!"	Den	Stat for Ali
"Alice" spin-off	Cry after "Oh, no!"	Den —	Stat for Clemens
"Alice" spinoff	Cry after "Psst!"	Den appliance	Stat for Jeff Bagwell
"Alice" star	Cry after "Yippee!"	Den denizen	Stat for Maddux
"Alice" waitress	Cry after a bad swing	Den denizens	Stat for Sammy Sosa
Alice's cat	Cry after a coin flip	Den din	Stat for Sosa
Alice's chronicler	Cry after a long wait	Den dweller	Stat for Yastrzemski
Alice's restaurant?	Cry after failing	Den fathers	Stat for a starter
Alice's sitcom boss	Cry at La Scala	Den light	Stat for infielders
Alien	Cry at a bakery	Den mother	Stat start
Alien craft	Cry at a circus	Den, often	Stat starter
Alien force, briefly	Cry at a leave-taking	Dendrologists' study	"Stat!"
Alien subject?: Abbr.	Cry at a light show	Denial	"Stat"
"Alien" heroine	Cry at fireworks	Denial, maybe	Stat. for Barry Bonds
Alien's subj.	Cry at the card table	Denials	Stat. for a pitch
Alienate	Cry before a fall	Denied admission	State
Aliens, for short	Cry before applause	Denier's comment	State Dept. figure
Alights	Cry before disaster	Denier's words	State Dept. worker
Align	Cry before firing	Denison denizen	"State Fair" setting
Align the cross hairs	Cry before "Open up!"	Denizens of Sumatra	"State Fair" state
Align the edges of	Cry during a duel	Denizens of sties	State Farm competitor
Aligned	Cry for "poor Yorick"	Denlike, say	State —
Aligns	Cry for attention	Denmark's — Islands	State again
Alike, in Alen<E7>on	Cry from Santa	Denmates	State biggie
Alike, to Andr<E9>	Cry from Scrooge	Dennis of "The Alamo"	State bird of Hawaii
Alike: Fr.	Cry from a balcony	Dennis of the N.B.A.	State bordering Tibet
Alimentary —	Cry from a crib	Dennis or Doris	State capital?
Alimentary particle?	Cry from a laggard	Dennis, to Mr. Wilson	State categorically
Alimony receivers	Cry from a litter	Denny's alternative	State confidently
Alit	Cry from the bench	Denny's competitor	State confidently to
Alitalia destination	Cry from the block	Denouement	State firmly
Alitalia stop	Cry from the pews	Denouement preceder	State fund-raiser
Alive with talk	Cry from within	Denounce	State in NE India
"Alive" setting	Cry harshly	Denounces	State next to Miss.
Alka-Seltzer sound	Cry heard by Cratchit	Dens	State north of Ind.
Alka-Seltzer, for one	Cry heard in a 2-Down	Dense clouds	State of India
Alkali in cleansers	Cry in Kiel	Dense fog	State of agitation
All Olympians, once	Cry in Kronenberg	Dense one	State of confusion
All Souls' Day mo.	Cry in cartoons	Density symbol	State of high alarm
All —	Cry in court	Dent or scratch	State of lateness

He graduated from Cornell and received an M.B.A. from Dartmouth.

His mother retired as an administrative assistant in the nursing office at Kings County Hospital Center in Brooklyn.

His father retired as the controller of Caramba Restaurants, which was a chain of Mexican restaurants in Manhattan.

She graduated from Wellesley and received a master's in public health from the University of Michigan.

Her father, a mechanical engineer, is a project management consultant in Houston with a technology services division of Royal Dutch Shell.

He graduated from the University of Pennsylvania.

His father, a general and cosmetic dentist, is a partner in the Island Dental Group in Plainview, N.Y.

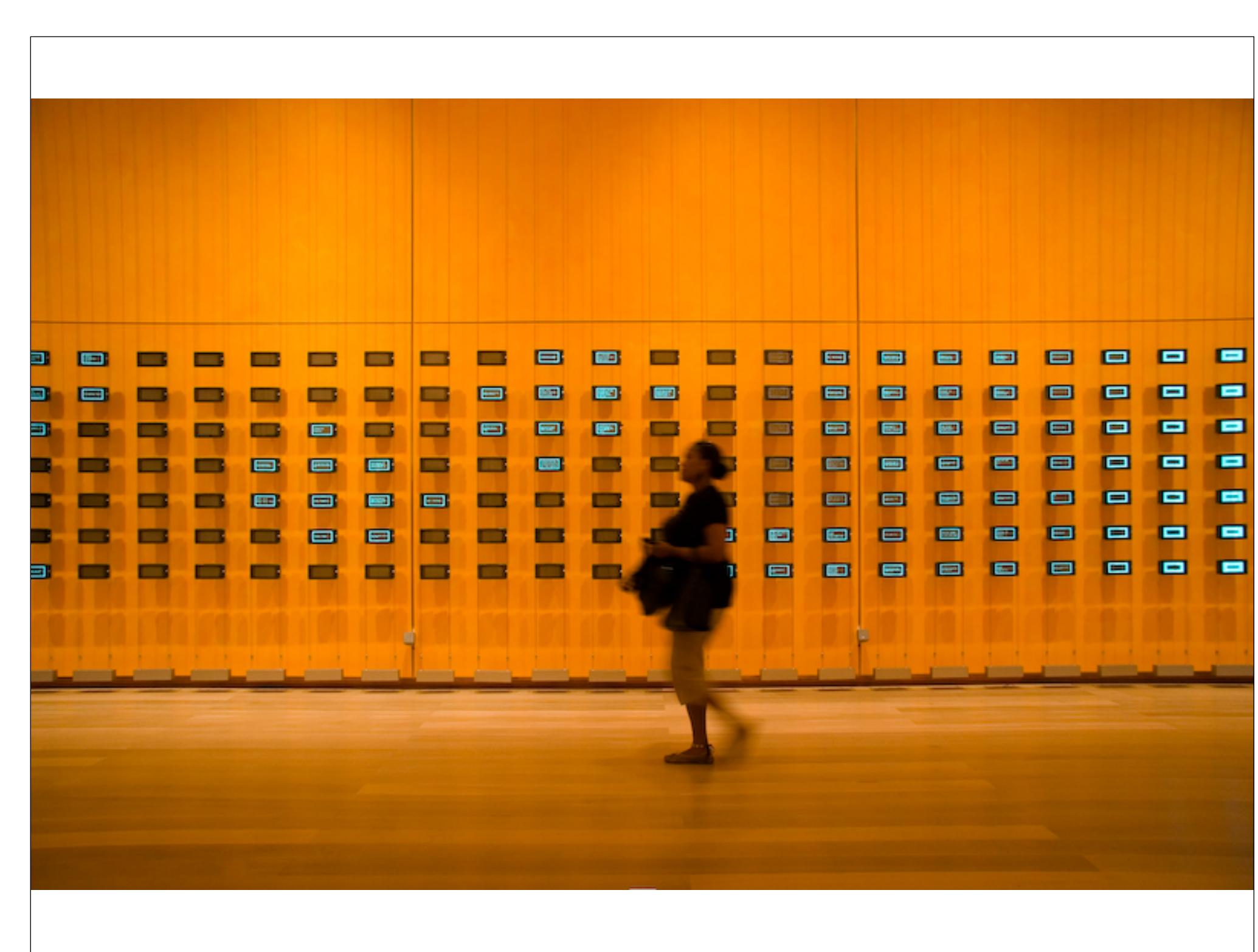
She graduated summa cum laude from Northwestern, where she also received a master's in journalism.

Her father is a senior account representative with Arrowpak, a cosmetics packaging company in Richmond Hill, Queens.

Her mother is a pension consultant at Creative Plan Designs, an employee benefits consulting firm in East Meadow, N.Y.

Rabbi Howard Buechler performed the ceremony at Temple B'n ai Sholom in Rockville Centre, N.Y., with Cantor Ralph Nussbaum participating.







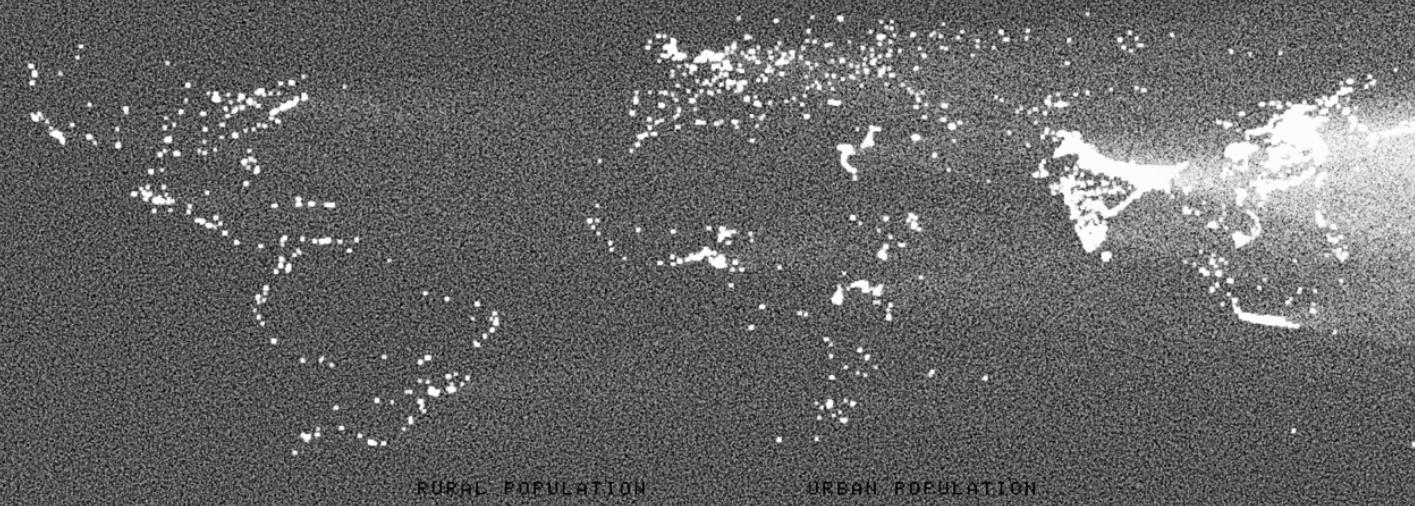


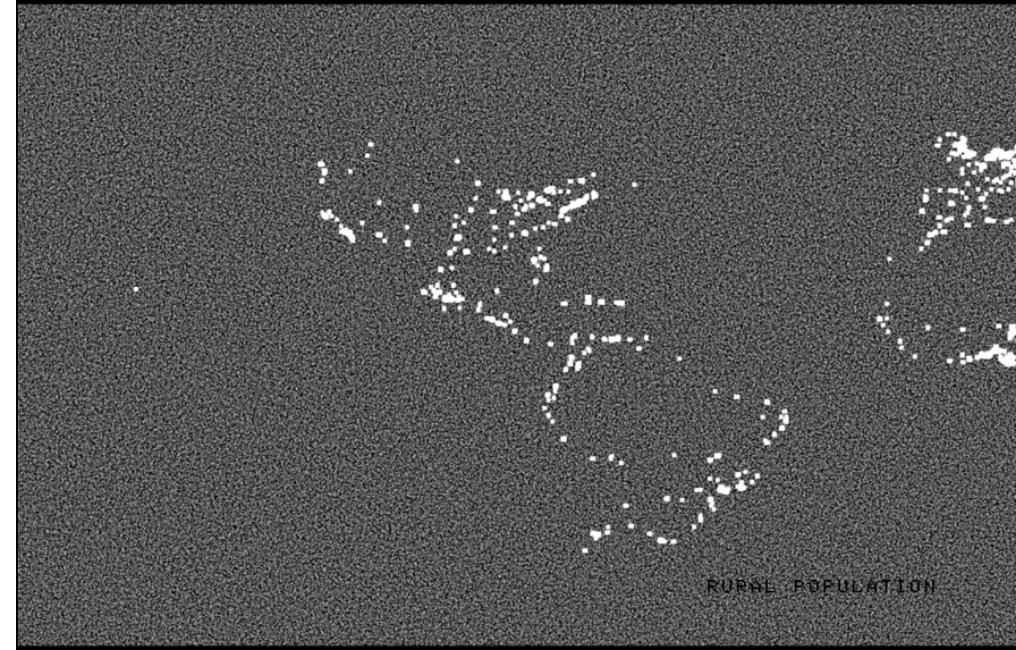
Gallery 1

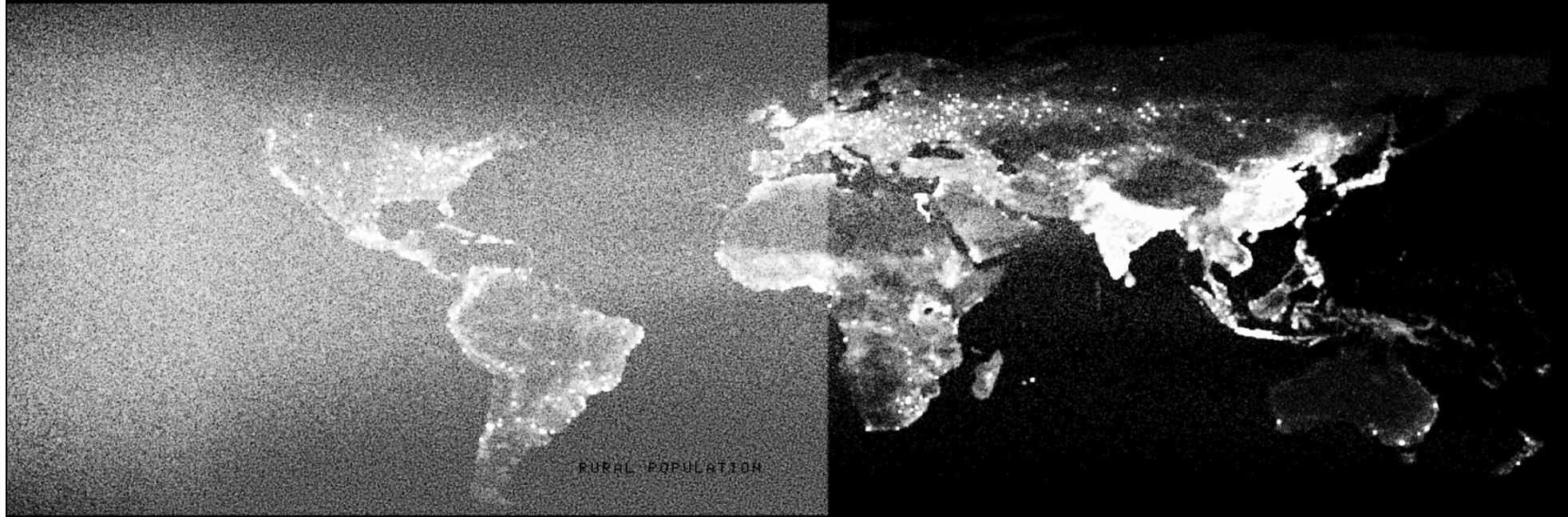


Gallery 1













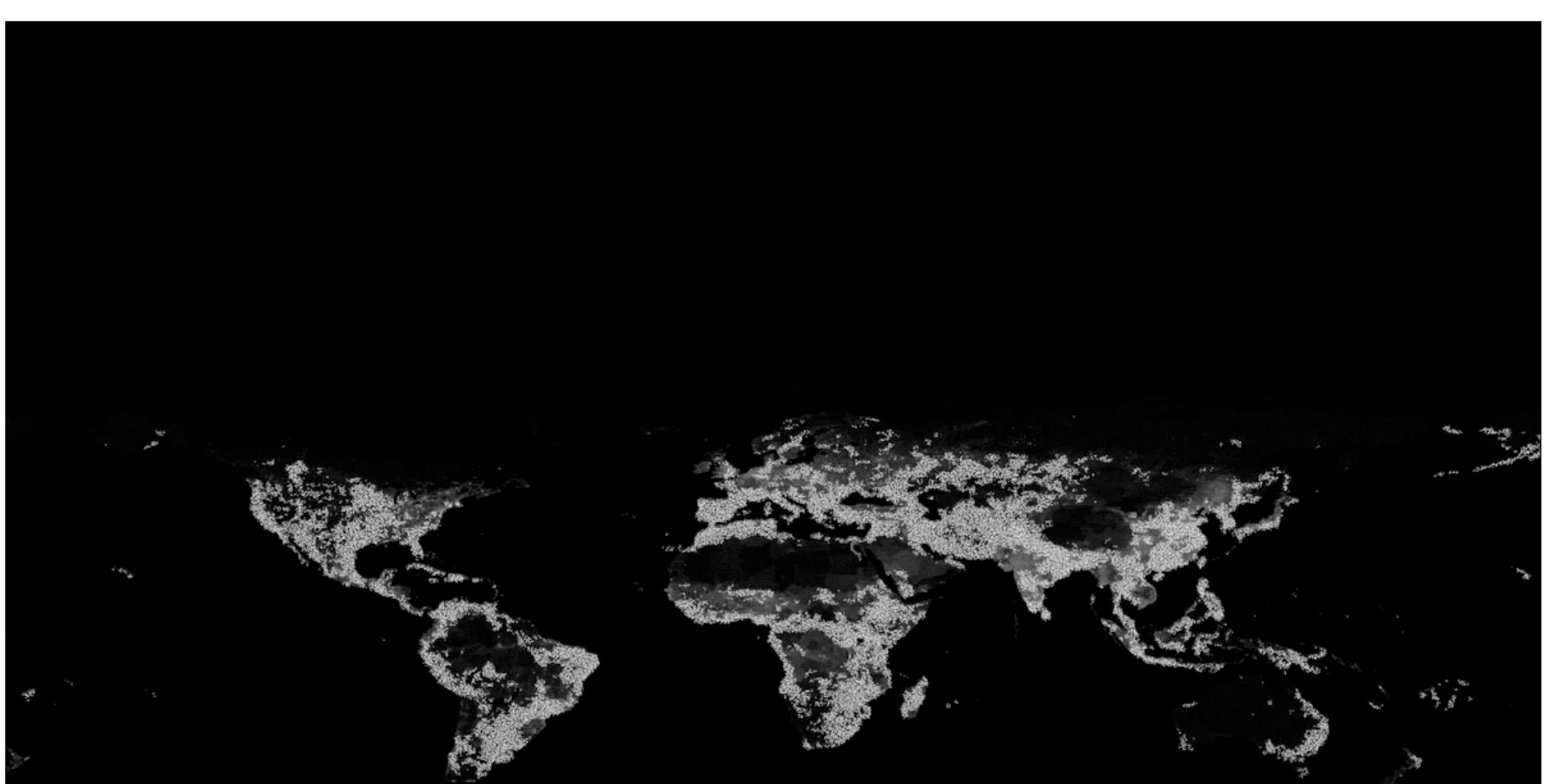


SÉCHERESSES  
DROUGHTS

FRÉQUENCE HISTORIQUE SUR 20 ANS  
HISTORICAL FREQUENCY OVER 20 YEARS

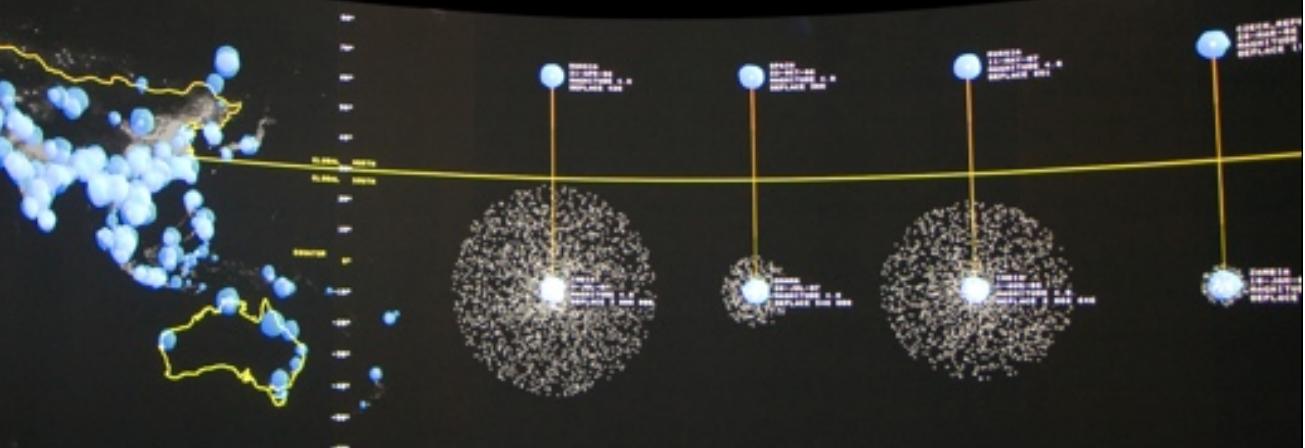
LE NOMBRE DE CATASTROPHES NATURELLES A AUGMENTÉ  
NATURAL DISASTERS HAVE INCREASED





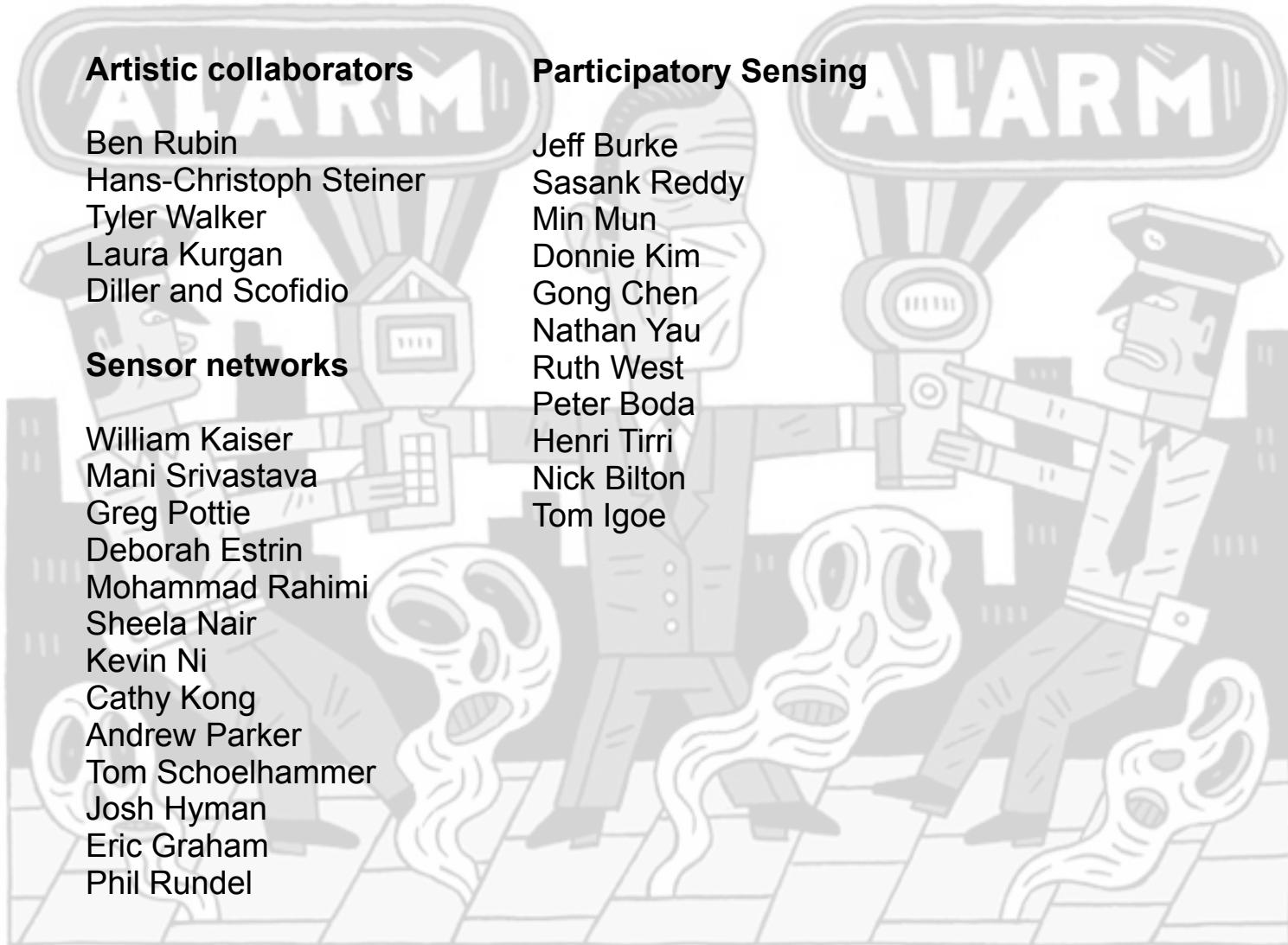
A world map where the affected areas are represented by white and light gray pixels against a black background. The most significant concentrations of affected populations are visible in sub-Saharan Africa, South America, and parts of Asia and Australia.

SÉCHERESSES : 1 041 523 716 PERSONNES TOUCHEES  
DROUGHTS : 1 041 523 716 AFFECTED POPULATION









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