

The real act of discovery consists not in finding new lands, but in seeing with new eyes. —MARCEL PROUST

If I could choose just one persona, it would be the Anthropologist. I have the fervor of a convert on this one, because back when I joined the tiny firm that became IDEO, there were no Anthropologist roles. Experimenters, yes. Even a few Cross-Pollinators. But no one had yet adopted the persona that has since become the cornerstone of our work. When the notion of applying anthropology first came to IDEO in 1991, I wish I could say I was a visionary, instantly recognizing it as the future of the firm. In fact, the opposite was true. I remember saying to my brother David at the time, "Now here's a sweet job. All these bright people with Ph.D.s have to do is *watch* people. They take a few pictures while they're at it, maybe a video clip or two, and then come back and tell us about what they saw. That hardly sounds like work at all." Meanwhile, our engineers were hunkered down at their CAD machines, trying to create electronic products that could survive a four-foot drop onto concrete without breaking. Now *that* seemed like hard work.

But in the intervening years, I have come around 180 degrees on the role of the Anthropologist in our firm. Far from being some fluffy, esoteric process of questionable value, the Anthropologist role is the single biggest source of innovation at IDEO. Like most of our client companies, we have lots of great problem-solvers. But you have to know what problem to solve. And people filling the Anthropologist role can be extremely good at reframing a problem in a new way—informed by

their insights from the field—so that the right solution can spark a breakthrough.

So what makes Anthropologists so valuable? At IDEO, people in this role typically start with a very solid grounding in the social sciences, coming to us with advanced degrees in subjects like cognitive psychology, linguistics, or anthropology. But what's apparent when you work with them is not their academic knowledge so much as a sense of informed intuition, akin to what Harvard Business School professor Dorothy Leonard calls "Deep Smarts." Although no IDEO Anthropologist has ever given me a unified theory of their role, I have noticed half a dozen distinguishing characteristics. Some are strategic and some are quite tactical:

Anthropologists seek out epiphanies through a sense of "Vuja De."

- 1 **Anthropologists practice the Zen principle of "beginner's mind."** Even with extensive educational backgrounds and lots of experience in the field, people in the Anthropologist role seem unusually willing to set aside what they "know," looking past tradition and even their own preconceived notions. They have the wisdom to observe with a truly open mind.
- 2 **Anthropologists embrace human behavior with all its surprises.** They don't judge, they observe. They empathize. Lifelong students of human behavior develop a genuine love of watching and talking to people that cannot be faked. The skills and techniques of cultural anthropology can be learned by anyone, but the people drawn to this role usually find it intrinsically rewarding, which is another way of saying that they love their work.
- 3 **Anthropologists draw inferences by listening to their intuition.** Both the business-school curriculum at prominent universities and on-the-job learning in the corporate world focus on exercising our left-brain analytical skills. They sharpen our deduc-

tive reasoning powers, what Guy Claxton calls the "d-brain" in his intriguing book *Hare Brain, Tortoise Mind*, and what Daniel Pink calls "L-Directed Thinking" in his book *A Whole New Mind*. Anthropologists are not afraid to draw on their own instincts when developing hypotheses about the emotional underpinnings of observed human behavior.

4 Anthropologists seek out epiphanies through a sense of "Vuja De."

Everyone knows that feeling of déjà vu, a strong sense that you have seen or experienced something before, even if you never really have. Vuja De is the opposite—a sense of seeing something for the first time, even if you have actually witnessed it many times before. I first heard the expression from my friend Bob Sutton, a professor at Stanford, though I've also been told that it traces its origin to the comic George Carlin. Applying the principle of Vuja De, Anthropologists have the ability to "see" what's always been there but has gone unnoticed—what others have failed to see or comprehend because they stopped looking too soon.

5 Anthropologists keep "bug lists" or "idea wallets."

Anthropologists work a little like novelists or stand-up comics. They consider their everyday experiences to be good potential material, and write down bits and pieces that surprise them, especially things that seem broken. A bug list focuses on the negative—the things that bug you—while idea wallets contain both innovative concepts worth emulating and problems that need solving. Whether the idea wallet lives electronically in your PDA or is simply a low-tech index card in your back pocket, it can sharpen your powers of observation and your skill as an Anthropologist.

6 Anthropologists are willing to search for clues in the trash bin. The Anthropologist looks for insights where they are least expected—before customers arrive, after they leave, even in the

garbage, if that's where learning is to be found. They look beyond the obvious, and seek inspiration in unusual places.

Over the years, IDEO has developed dozens of tools for Anthropologists. We've documented fifty-one of them in a set of action-oriented cards called the *Methods Deck*. The interrelated methodologies are organized into the four categories of "Ask," "Watch," "Learn," and "Try." But our enthusiasm for anthropology began with observations. We do extensive fieldwork to begin a project, to move it along, and to breathe life into a team when a project slows down. The process is remarkably similar to that followed by an inquisitive scientist or ethnographer. We watch human behavior in people's native habitat. We track customers or would-be customers as they interact with a product or service.

"The way to do fieldwork," Mead said, "is never to come up for air until it is all over."

When we go out in the field for inspiration, we try to observe with fresh eyes. Adopting a Zen-like "beginner's mind" is easier said than done, of course. But doing so makes a world of difference in gathering fresh observations. Margaret Mead is a familiar example of the archetypal anthropologist, studying cultures of the South Pacific in a series of books that challenged stereotypes about the imaginations of children and the limitations of so-called primitive societies. Mead believed you had to be there, you had to observe firsthand. "The way to do fieldwork," she said, "is never to come up for air until it is all over." Great minds through the ages have urged this technique. Charles Darwin, for example, was a born observer. He began by studying the faces of his own children and included photos of infants expressing their discomfort through crying in his book *The Expression of Emotion in Man and Animals*. More famously, Darwin joined the crew of the HMS *Beagle* as the ship's naturalist for two years of remarkable observations that helped inspire his classic *On the Origin of Species*.

Observers talk with people others have ignored and travel to far-away worlds. They subscribe to Albert von Szent-Györgyi's belief that discovery "consists of seeing what everyone else has seen and thinking what no one has thought." The Anthropologist humanizes the



scientific method and applies it to the business world. But seeing with fresh eyes may be one of the hardest parts of the innovation process. You have to put aside your experience and preconceived notions. You have to drop your skepticism and tap into a childlike curiosity and open-mindedness. Without that sense of wonder and discovery, you're likely to be blind to the opportunities right before your eyes.

History tells us that routine often blinds us to the truths that have been before us all the time. Until Jane Goodall applied her rare combination of patience and bravery to the study of chimpanzees, no one seemed to notice how much those clever primates share our ability to make tools, kiss, tickle, hold hands, and even, yes, pat one another on the back. The truth was there all along, waiting for us to discover it.

We can't all be Jane Goodall (or Margaret Mead, for that matter). Nor, in the corporate world, do we need to be. But approaching field observations with a spirit of curiosity can make all the difference in the world in identifying new opportunities or solutions to existing problems. So what makes a gifted Anthropologist? Patrice Martin, a bright young IDEOer with a degree in industrial design from the University of Michigan, has found her true calling as a human factors specialist. Patrice has an uncanny knack for getting people to talk about

themselves. She looks even younger than her twenty-seven years and has a bubbling enthusiasm that's contagious. She might have been a star newspaper reporter in another life, because she quickly gets at the essence of a problem.

Why is she such a good observer? She truly enjoys meeting and talking to people. She asks probing questions that encourage people to reveal themselves. She projects a nonthreatening image that says it's safe to talk. She seems to have an intuitive sense of how to mine stories that unearth epiphanies into human behavior. For instance, Patrice recently worked on a project to develop healthy snack foods. Our client arranged for a series of interviews with doctors and patients—a perfectly reasonable approach. But Patrice took a less structured tack. She got permission to hang out in several pharmacies and talk with customers. Patrice made the initial contact, offering people discount coupons to encourage them to chat about healthy snacks. The men and women she talked to in drugstores were all over the dietary map: A middle-aged man looking for an energy boost while his wife was on the South Beach Diet. An elderly woman trying to combine two health drinks to meet all her dietary needs. A college student into natural foods, overwhelmed by the complexity of nutritional labels. A woman recently diagnosed with diabetes, confused about what foods would be best for her.

Armed with discoveries from her fieldwork in the pharmacies, Patrice next journeyed to the homes of a dozen people to learn more about food-preparation and eating habits. Spending time with people on their home turf not only makes them more comfortable, it also gives the Anthropologist a chance to look beneath the surface. For example, one woman in Patrice's field observations seemed to be the perfect home-maker, a virtual Betty Crocker. When Patrice arrived, she smelled the tempting aroma of a chicken baking in the oven. A healthy-looking green salad and steamed vegetables were already on the table. As usual, Patrice had brought a video camera along to preserve her findings, so she was capturing this domestic scene on tape. If Patrice had spent only a short time there, she would have come away with a distinct—though misleading—impression of the family's eating habits. A few minutes later, however, the woman's kids arrived home and expressed stunned amazement on camera—"Mom, you cooked!?"

Patrice laughed as she told the story. "Her cover was totally blown. Later, we found pizza boxes and frozen-snack containers in the recycling bin." Patrice wasn't trying to bust this homemaker's meal-preparation skills, just get at her family's true eating habits. She found it easier to get the real story when she spent quality time with them at home.

Patrice asked a busy soccer mom to create a food map of everything eaten during the day. The woman wrote down three square meals and a couple of healthy snacks. Just to double-check, Patrice asked her, "You didn't eat anything else?" Without further cajoling, she admitted to a chocolate bar or two. Good Anthropologists paint a fuller picture. We're not looking for perfection, just authenticity.

One thing Patrice taught us about her experiences in cultural anthropology is that "life isn't typical." She never asks general questions, like "What's your typical diet?" In the process of generalizing, human nature causes people to idealize, which defeats the purpose of the observation in the first place. On this project, for example, she asked people what they ate that morning and the morning before. Says Patrice: "It's amazing how often people will say, 'Well, today was unusual.'" Today is *always* a little unusual. Life is messier than it is in a marketing brochure.

Patrice was looking for people's journey. She handed out "emotional stickers" bearing evocative words like *guilty*, *healthy*, *satisfied*, *balanced*, and *stuffed* to stick on their food map for the day. The words were meant to help express how people's food choices actually made them

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feel. Above where they described their meals was a separate line to put in what they wished they'd eaten. She also asked them to plot their energy throughout the day. The process created a series of richly textured food journeys that conveyed an individual and emotional sense of what people eat and aspire to in their daily routines.

So how can you bake up some fresh inspirations? Enthusiastic Anthropologists are the yeast, skilled and interested individuals who actively seek out authentic experiences to observe. Trying to under-

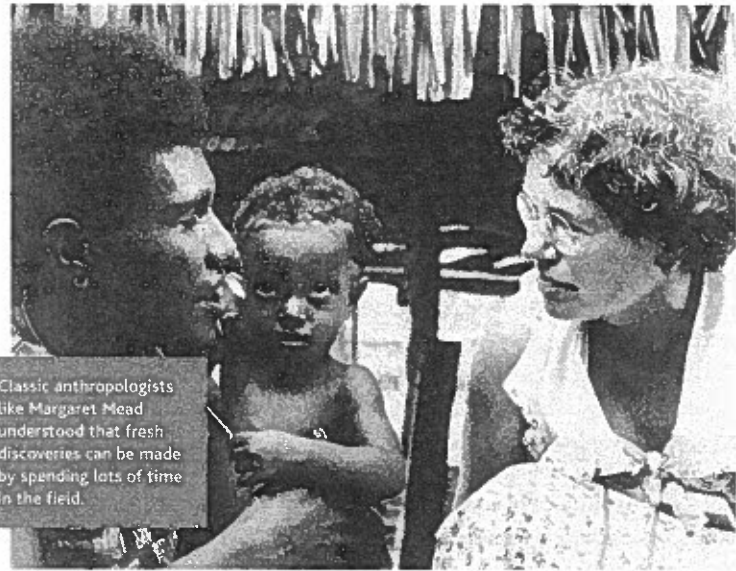
stand real eating patterns, Patrice wasn't satisfied just inviting people in for interviews. She sought out consumers where they shopped, and brought her camera and open-minded curiosity to people's homes. Patrice pushed to make her food maps more than just dry charts and statistics. They included emotional descriptors and a list of the foods people wished they had eaten. Her charts added a deeper human dimension to learning about the role of food in people's lives.

When you seek out field observations, remember: The more emotional breadth you gather, the better. The more human needs and desires you unearth for your experiential map, the more likely it is that they will lead you to promising new opportunities.

Human Extremes

Anthropologists have a knack for *not* falling into routines. There's a freshness to how they collect observations and dig up new insights. You've probably heard of "human factors," a technical term for the social science of observing people to gain an edge. But the term can be misleading, as it sounds slightly passive or academic. Human factors enthusiasts are highly proactive. They seek out the touch points of a situation—the key opportunities that have been overlooked or misunderstood.

If you want fresh and insightful observations, you have to be innovative about where and how you collect those observations. For instance, let's say you want to gain insight into improving a patient's experience in a busy hospital. Ask the doctors or nurses? Talk to lots of patients? Circulate a thoughtfully prepared survey form? All of these approaches sound reasonable, but IDEOer Roshi Gvechi opted for a more radical technique. She calls it *Extreme HF*—short for "extreme human factors." Though not as wild as the extreme sports you see on ESPN, it's not for the faint of heart, either. Roshi, who has a background in film and new media, decided to bring a video camera right into the hospital room. With the permission of the patient and hospital staff, Roshi and her camera essentially moved in with a woman undergoing hip-replacement surgery. Roshi set up her video camera in



Classic anthropologists like Margaret Mead understood that fresh discoveries can be made by spending lots of time in the field.

the corner to run a few seconds every minute for forty-eight hours straight. To get the full experience firsthand, Roshi stayed in the room herself for two days, occasionally squeezing in a catnap in a reclining chair next to the bed. Following Margaret Mead's admonition, she didn't "come up for air until it was all over."

So what did her forty-eight-hour cinema verité capture?

The time-lapse video caught the ceaseless intrusions into a patient's room. Lights flipping on and off, doors opening, commotion in the hallway outside, nurses on their rounds. More than anything, it caught the astonishingly high number of people who entered the patient's room day or night. Roshi's flick was a bit like watching a vintage episode of *Candid Camera* or MTV's pioneering *Real World*. The images revealed how hospital staff bent various rules—like the number of family members allowed in the room at one time, or the visiting-hour restrictions—in their efforts to make the patient more comfortable. The video also demonstrated the impossibility of rest, let alone sleep, at some times of

the day. Roshi edited down her forty-eight-hour time-lapse tape into an easily digestible five minutes—a powerful tool for understanding some of the problems and opportunities in a patient's room.

After seeing the video and talking to Roshi, I'm convinced that we're just scratching the surface for this novel technique. Digital video technologies have greatly advanced in the last few years, opening up many previously high-end capabilities to people without deep technical expertise. Though Roshi's media training helped her conceive, capture, and edit her time-lapse films, you don't need Steven Spielberg on your team to turn out evocative minivideos.

My advice is to pull out your video camera or find someone with a cinematographer's bent. What if you set up a camera to record the activity in a retail store? A lobby? A factory floor? Your offices? Not to spy on your staff, but to gain a better understanding of the ebbs and flows of your customers and your business. The next time you're looking for new discoveries, instead of holding a focus group, why not focus a lens on real customers, gaining insight into how people interact with your products, your services, your spaces. Body language says a lot. Imagine what you might learn if you could capture in images the circadian rhythms of your organization, the highs and lows of connecting to your customers. Imagine if you could use extreme human factors to gain new insights on what makes your customers tick.

Small Observations Pay

Picking up on the smallest nuances of your customers can offer tremendous opportunities. Recently, after giving a talk at the Food Marketing Institute conference in Chicago, I found myself surrounded by four large Polish guys who clearly had something they wanted to say. I was a little intimidated until one of them cracked a smile. It turned out that they all worked for a soft-drink company in Warsaw. They had cornered me because they wanted to tell me their own innovation success story. A few years back, they'd seen ABC's *Nightline* episode on "The Deep Dive" that illustrated IDEO's technique for learning from customers by doing field observations. After viewing the video together,

they decided, "Maybe we could do that ourselves." So they set out for local train stations to look for clues about how they could sell more soft drinks to the captive audience of passengers waiting for the next train.

As they observed the crowds, they noticed a recurring pattern: In the minutes before trains arrived, people would stand on the platform, look over their shoulder at the drink kiosk, glance at their watch, and then scan the platform for the incoming train. A casual observer might have missed the clue. But these budding Anthropologists realized that passengers were torn between wanting something to drink and not wanting to miss their train.

So what did they do? They created prototype soft-drink displays boasting clocks so large that passengers could simultaneously watch the clock *and* the drink display. The result? Sales shot up in Warsaw train stations. The clocks reassured customers that they had time to buy a cold refreshment. That simple success made believers of these Poles. All inspired by watching a thirty-minute TV show.

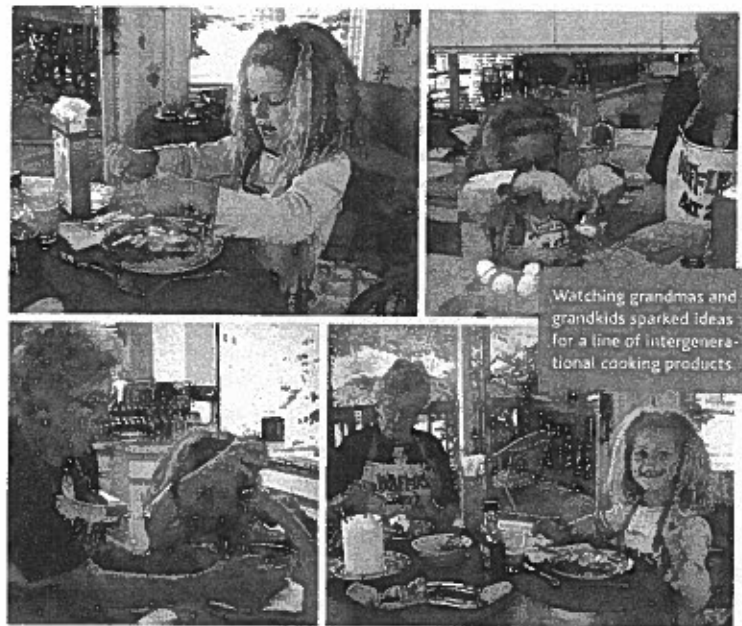
We've been advocating field observations and quick prototyping for a long time. Sometimes a breakthrough is one small insight away. A simple telling observation—like the train passengers glancing from their watches to the soda kiosks—can make all the difference. Make patient observation and quick prototyping part of your recipe for innovation. You might be surprised by the results.

Interns & Intergenerational Waffles

At IDEO, the annual crop of summer interns is a continuous source of renewal for the firm. Some people think it's a form of organizational altruism that causes us to bring in more interns than we really need. Insiders know better. Not only does the intern program give us a leg up on recruiting decisions farther down the road, but it helps us stay fresh with a steady flow of ideas and irreverence.

For example, Michelle Lee, one of this year's new interns, recently spent several months watching grandparent-grandchild cooking experiences as part of her master's project for the Product Design program at Stanford. You may have heard of generation-skipping trusts, but this

is generation-skipping in the kitchen. In a cultural anthropology program of her own design, Michelle noticed that the younger and older generations in some ways have more in common than the baby-boom generation in between. They live in the moment, not worrying about what they're doing next. They take time to savor the experience with all their senses, feeling the texture of the ingredients, smelling each new item, and liberally tasting the sweeter parts. Both young and old struggle with awkward or bulky items like heavy bowls and full bags of flour, and both seem extra attentive when their kitchen companion is handling a sharp knife.



There are also times when the kids cover for their grandparents and vice versa. Grandparents have more knowledge, kids have sharper eyesight. Grandma knows what she's looking for, but her granddaughter can see it better. One cooking project Michelle watched while in

Anthropologist mode was a grandma making cookies with her four-year-old grandson and eight-year-old granddaughter. When it came time to read the recipe, Grandma had trouble with the fine print and the four-year-old had trouble with the words, so the eight-year-old stepped in to help out.

As her research continued, Michelle focused in on making waffles, a simple, rewarding process that all kids—and their grandparents—seemed to enjoy. The result is a line of product ideas she has for fun waffle-making. For example, all kids seem fascinated with breaking the eggs, but many struggle with the mechanics of getting that step just right. A fun, foolproof egg breaker that doesn't drop shells into the batter seems like a tool that these intergenerational cooking teams would buy in a minute. And that one idea may be just the tip of the iceberg for grandparent/grandchild products and services. The potential market seems huge, and grandparents seem willing and able to spend freely on such precious moments. So keep your eyes open for small insights in your field that can lead to new market opportunities. And in the meantime, never underestimate the power of an intern.

Kate's Seven Kid Secrets

We believe it's critical to observe and talk to kids. The freshness of their insights can't be found elsewhere. They see things adults skim right over. And there's no way to fudge their perspective. For one thing, you're not a kid anymore yourself. Your sense of childhood—and your view of the world—are filtered through layers of memory and shaped by the lens of adulthood. "I believe that kids have a certain kind of 'sixth sense' you don't find in most adults," claims Kate Burch, a designer who started her IDEO career in our Zero20 group—a team that gets its name from the age range of its favorite customers. And Kate reminds us that every generation's world is unique. "What it was like when I was eight is not even close to what it's like today. Kids today have a whole new set of opportunities—and a whole new set of pressures."

FIXED OPPORTUNITIES

If you take a close look at your world, you'll notice clever people playing the modern-day role of fix-it man. We've all seen the Post-it note with a helpful little instruction on top of the photocopier or the handwritten sign taped to the front of the reception desk. Perhaps you've been served by a resourceful salesperson or customer-service rep who doesn't do things by the book when the rules don't make sense. People can be ingenious and flexible when things don't work as advertised. They adapt technology and systems to fit their needs. At IDEO, we seek out these human touches in the field, these grassroots efforts by people to soften the sharp corners of the world, to offer a hand to help people along. They're signs that a product or service is incomplete. But they're also opportunities for future innovations.

Some opportunities are more obvious than others. To see how many exist in your world, try this exercise one day. Write down every fix you see at work, at home, or out on the town. Watch for things that have been duct-taped or bolted on. Look for add-on signs that explain what's broken or how a machine really works. You'll be surprised at how many you can spot. For example, enter most any urban taxicab and you're likely to see several little modifications added by drivers who spend their days and nights behind the wheel. And this quest for alterations and "fixes" is no idle exercise. Give it your serious attention and you'll have taken an important first step toward sensing the rough edges of many current offerings. You'll have a better understanding of why some products or services truly sing. And you'll learn to recognize when a product—or even a whole category—is crying out for improvement.

Kate has a natural, easy way of working with children. She makes it look effortless. What are her secrets? "It's all just common sense," she says. But from my experience, her gift is not that common. After reflecting for a bit, she comes up with one of the techniques she uses, and then another, and finally the ideas start to tumble out:

1 Ask them about their shoes.

Almost every kid has an opinion about their shoes. A big height difference is a barrier to communication, and a good Anthropologist wants to learn as much as possible. Get down on their level and talk.

2 Offer something about yourself.

Tell them a little about your day or your interests, especially something that shows your vulnerabilities; it will make you seem more human and help open new lines of communication.

3 Ask them to invite their best friend along to talk.

Even shy kids open up in the presence of a good friend, and they will provoke one another's storytelling. Sometimes, best friends will launch into an absorbing conversation on a subject and ignore you completely, which can be a remarkable thing when you're doing cultural anthropology.

4 Remind them (only if it's true) that the project is "top secret."

Even for kids who can't successfully keep a secret from their mother or their best friend, a little secrecy adds drama to the conversation and underlines the fact that you believe their ideas are important. We believe they're important, too.

5 Ask for a house tour.

Interview kids in their homes to gain fresh insights about the toys and things they like and dislike. Once they understand that Mom and Dad say it's OK, most young kids love to show you around. They'll jump from the macro tour of their home to the micro focus on the stuff in their room in five minutes or less. The house tour quickly becomes a window into the world of childhood.

6 Ask kids what they would buy with ten dollars. Or a hundred.

This question is an indirect but very effective way to find out what's hot and what's not. Ask a teenager about the latest gear

and you may just raise their defenses. But ask them what they'd spend a hundred dollars on and you'll get the real answer. What they'd buy is what's current, what's cool, what's top-of-mind for kids of that age.

7 Make them laugh.

Kids having fun have more to say. In a serious interview, they'll be on their best behavior, saying what they think you want to hear. But if you get them laughing, they're more likely to let you in on their real feelings, their real preferences, and give you the inside story on what it's like to be a twenty-first-century kid. They do less self-editing than the average adult, which is part of why interviewing kids can yield such insights. There's a lot you can learn from them.

Instant Observations

Even the most gifted Anthropologists sometimes lack the time or resources to do intensive observations. What can you accomplish when you're looking for a ready source of new ideas, fresh images, a sense of what's happening beyond your corner of the world?

At IDEO we believe in the quick provocation and information value of magazines and new books. We have an entire wall adjacent to my office filled with popular and edgy magazines for staffers to peruse, from *BusinessWeek* and *Fast Company* to *Dwell*, *Stuff*, and *Zoom*. They're not hidden away in some be-on-your-best-behavior style corporate library. They're placed in a big open room that's near one of the busiest thoroughfares in the firm. We believe that simply flipping through new magazines is a serious and productive practice for any organization interested in innovation. You might even find that it prompts your own publishing efforts. Our Consumer Experience Design group at IDEO (known internally as CxD) periodically produces booklets they call "Thought Bombs" to inspire the team. The Thought Bombs I've seen have been a fascinating collection of trends, concepts,

and provocative ideas, mostly inspired by recent material from unusual print media sources.

To anyone who feels immune to the energy field around magazines, let me offer a suggestion. Drop by the Universal News and Café on Eighth Avenue in New York City. Imagine a generously sized bookstore, except that the more than 7,000 different titles reaching high up the walls are not books but glossy magazines. The intensely considered photography and arresting headlines of thousands of magazine covers in one place are so stimulating that they almost force you to deal with the store one section at a time. Even so, each of the store's categories has more titles than the total number of magazines you're likely to find at your local supermarket. I counted seven floor-to-ceiling rows—well over a hundred titles—just for science. One hundred and sixty auto magazines. More than a hundred and fifty on the subject of art and design. Separate international and foreign-language sections, each with dozens of titles in French, German, Italian, Spanish, as well as an entire row devoted to Africa. Universal News and Café is brimming with information, and the combined imagery of 7,000 titles has a certain magnetic quality that makes the store hard to leave. I'd venture to say that a few hours spent within its walls—there's a café to fuel you with ample food and drink—could tell you an awful lot about the trends and emerging vocabulary of just about any subject you care to research. There's no



A well-stocked magazine store can be a prolific source of fresh ideas and the latest trends.

skimming even on the hours: 5:00 A.M. to midnight gives you nineteen potential hours for intensive information retrieval every day.

What if you don't have a chance to drop by Eighth Avenue? Most major cities have a couple of stores similar in approach if not size to Universal News. Hollywood's World Book and News has 5,000 magazine titles. City Newsstand in Chicago tops out at around 6,000. In Miami's South Beach, there's the News Café. The major bookstores aren't bad, either—the biggest might even carry upward of a thousand magazine titles. Even if you don't spend an hour browsing—most of us have been conditioned *not* to—there's one piece of meta-learning you can pick up in the first five minutes: that there's more going on in the world than you can possibly keep up with. And *way* more magazines than you could possibly imagine. Spend some time looking at covers, flipping the pages, and, yes, even reading. You're likely to find some new ideas, not to mention a few new magazines you should subscribe to today.

First Look

Executives love to say that their company listens to its customers. In a world where there's always room for improvement, listening is mostly a good thing, but it's better at assessing the present than foreseeing the future. So even though detailed questionnaires can be really useful for assessing customer satisfaction, we don't really believe that the best breakthrough innovations come from asking customers.

Most customers are pretty good at comparing your current offerings with their current needs, and they're all in favor of something a little faster, cheaper, or easier to use. But they're not so good at helping you plan for new-to-the-world services, and they won't give you many clues to creating new business models. Asking them how to reinvent your service offering is a bit like asking someone on the street what NASA should do after it retires the space shuttle. Or even what product not currently on the market will change their lives in the next ten years. Those aren't the kinds of questions customers are well equipped to answer. There are just too many unknowns. Customers usually can't tell you how to create disruptive innovations.

But spend a day with them and watch what happens. Then you may actually start to get somewhere. If you're interested in making something new and better, you've got to watch people struggle and stumble. Take note of the people who pass by a shop because the entrance doesn't invite. Watch how would-be customers use your competitor's offering to see why they seem to prefer it. Some of the strongest clues to new opportunities can be found in the curious quirks and habits of people navigating their ever-changing world: how they respond to their environment, or exploit a novel situation, or adapt objects for their own use—often in ways the creators of those objects never anticipated. Some of these clever human adaptations are quite intentional, while others are almost unconscious. Jane Fulton Suri, IDEO's thought leader for our human factors work, calls these coping and response behaviors "Thoughtless Acts," and she has assembled a collection of her favorites into a book by the same name. Some of the insights you gain observing such thoughtless acts among your customers may be mere curiosities, but others may indicate a latent need that you could profitably serve. If you've got an open mind, these "acts" can spark your thinking—and maybe, just maybe, push you toward something new and authentic.

Practical Observations

Jane has helped me to see how anthropological fieldwork can be a disarmingly simple source of innovation ideas. Why do so few organizations practice this technique? Perhaps many just fail to act on the insights received. Good observations often *seem* simple in retrospect, but the truth is that it takes a certain discipline to step back from your routine and look at things with a fresh eye. I think organizations would send a lot more teams out into the field if they understood just how many business opportunities or cost savings simple observations can bring.

Part of what I've learned from Jane and other dedicated Anthropologists is that this work requires curiosity. How can you get better at it? Find a field that commands your interest. For me, it's travel. I do an awful lot of it, and by focusing on what works and what doesn't, I think I've become better at observations for a broad range of industries.

Not too long ago, for example, I literally stumbled onto an opportunity after a flight across the Atlantic. I was giving a talk outside of Paris, and like most overseas visitors to the City of Light, I flew into Charles de Gaulle Airport. My guidebook suggested heading into town via the urban train that connects the airport to the Paris Métro subway system. The train is superb, but it makes a pretty painful first impression. After buying a ticket for 7.50 euros, your first experience with the train station is to pass through the turnstiles on the way in. And that's where the trouble begins.

What fact did the architects—or, more likely, engineers—overlook? That nearly all passengers arriving on international flights would actually have *luggage*. The entrance did not seem to recognize the possibility of travelers carrying bulky suitcases, and the scene was so ridiculous that I stuck around for a while just watching people struggle. Not to take satisfaction in the suffering of my fellow travelers—for I had the same problems and sympathized with their plight—but just to observe human behavior and adaptive problem-solving.

As you attempt to enter the station, first you squeeze in toward a narrow turnstile. Once into that funnel-shaped space, you can't even



carry *one* piece of luggage at your side, let alone the standard two. Since I travel light, with a twenty-two-inch black rolling carry-on bag and a briefcase piggybacked on top, I managed to squeeze through the first part of the station's unintentional obstacle course. But the classic three-pronged spinning stainless-steel turnstiles were like high hurdles for anyone with luggage. Those carrying two full suitcases were hard-pressed. While holding both of your bags at shoulder height—one in front of your body and one behind—you then have to slip a little purple ticket into a slot at the front of the gate and—worse yet—pick it back out of the forward slot at exactly the same time that you are spinning through the turnstile. Most passengers were dumbfounded at first, but they were motivated by the line backing up behind them and the desire to get to Paris. I saw “teamwork solutions” where husbands passed bags to wives on the other side. I watched individuals toss their bags over the barrier and then follow along. I witnessed balancing acts worthy of The Flying Wallendas. But I did not see a single person with two bags sail through easily on their first try.

Any good architect, engineer, designer, or machinist could come up with a host of simple solutions, but if and only if someone took the time to *notice* the problem in the first place. I only hung around for five minutes of field research and general entertainment, but presumably there are people who've been working near those turnstiles many hours every day for *years*. I'm sure most of these people must have witnessed this calamity hundreds of times. I suspect it's just considered to be “the way things are,” something they'll fix in a decade, maybe when they expand the station or put in new electronic turnstiles. If only they'd first done a prototype—or even just considered that international travelers carry suitcases. Take the time to watch people or anticipate their needs, and I daresay they are less likely to get stuck.

Start Young

Anthropologists aren't valuable only for helping you understand today, they can also give you a glimpse of the future. For a look at *tomorrow's* mainstream markets, look at teenagers *today*.

A FASTER HORSE

A few years ago when IDEO was working with the Mayo Clinic on innovation, we had a small office in their Department of Medicine. I happened to visit the space one day and was struck by a Henry Ford quote the team had posted on the wall. “If I had asked my customers what they wanted,” said the inventive Mr. Ford, “they'd have said a faster horse.” Ford had a point. Don't expect customers to help you envision the future. Make that mistake and you're likely to get lots of suggestions for “faster horses.”

Ford achieved many of his best breakthroughs in the early years of the twentieth century, but imagine you worked for a consumer electronics company that manufactured videocassette recorders in the first years of the twenty-first century. If you'd asked people what they wanted in a VCR, and let the question hang in the air awhile, they might eventually have suggested something like “super-fast rewind.” You can imagine a customer saying, “When I am done watching a movie, I want to take it back to Blockbuster as soon as possible, so please give me faster rewinding!” How could you fail by listening to your customer? You might set out to create the fastest-rewinding VCR in the world. But just as you released your fancy new model, you would have been blown away by the arrival of the first DVD players—which, along with sporting superior image quality, sound, capacity, and improved reliability, require *no rewinding at all!* And as the pace of innovation accelerates, I hope everyone associated with the DVD format is preparing for subsequent innovations involving downloadable movies or video on demand, which will inevitably eclipse the same DVD players that had previously disrupted VCRs.

Of course, good companies still make a habit of listening to their customers. Just don't confuse that proven business practice with how you go about hunting up the next big breakthrough. That's not likely to come from asking people what needs improvement or fine-tuning. It's probably going to be something your customers haven't even thought of.

We've talked about extreme human factors. Central to these techniques is the idea that it pays to look at people who are a little different. People who love or hate a new product or service. People with opinions and biases who aren't afraid to express their feelings. Sound like a teenager you might know?

Teens try stuff constantly, check it out, and love it or chuck it. Prototyping at its very best. Kids ride the latest new technologies and fashions like the break at Waimea Bay. And when they do love something, their enthusiasm can help make it a hit.

Think of blogging, gaming, instant messaging, and MP3 file sharing. Teens helped drive all of these trends, and they're driving more as we speak. Pay attention to toys. They often inspire products that later captivate adults.

Kids are no strangers to IDEO. Indeed, our "lookout" space perched over San Francisco Bay with its racks of fun reading material and ever-shifting group tables sometimes feels a bit like a kindergarten classroom. And the common area of what passes for our management offices has a cluttered array of interesting objects and a full set of video gaming options that some days makes it resemble a teenager's room. It seems like every other week we're inviting kids to play with new toys and educational products to see what connections they make.

Of course, the toy-development portion of IDEO's Zero20 group has tapped into "kid power" for years to test out its countless toy prototypes. And get this: Founder Brendan Boyle discovered almost by accident one day that he could get more kids to show up on time if he charged a minimal hourly fee for playing with the prototypes. Moms were happy to pay (it was cheaper than babysitting), and the fee somehow triggered a psychological response that made them arrive early so as not to miss any of the valuable session.

Why do we watch and try to learn from kids and teens? They just soak up novel ideas, whereas grown-ups often spend a lot of time pushing back, telling you why it won't work. Text messaging, for instance, isn't necessarily the most efficient communication medium. But it spoke to teens' insatiable need to gossip and chat, and it wasn't long before adults lumbered on board too.

The Anthropologist has to start somewhere, and I can't think of a better place to begin than with the young. Whatever you do, in whatever industry you find yourself, make sure you watch and talk to teens and kids. We all know children make us younger in spirit. They can also help you see what's next.