PART TWO

Getting People Right

WHEN IT IS CLEAR that default thinking isn't working, people have a tendency to turn toward methods that aren't really methods at all. Before we discuss how a deeper investigation driven by the human sciences can solve business challenges, let's take a moment to debunk the most popular, but most misleading, strategic solutions on offer today.

The Big-Data Solution

The big-data solution—the tracking and number-crunching of vast amounts of consumer data, much of it available as digital traces—seduces us by promising a win in markets. Big data is alluring because it is presented in harmony with cutting-edge algorithms that promise to filter through vast amounts of information at a volume heretofore unprecedented. All of this is impressive, but the big-data solution places all of its emphasis on technology while downplaying the importance of the greatest computation machine: the human brain. After all, humans will, at some point, have to analyze the data, no matter how it is sliced and diced. Someone needs to have a perspective on what the algorithms deliver. It is this perspective—the moment of clarity—that requires time,

deep thinking, and experience. Big data can't deliver on any of those things.

The "Steve Jobs" Solution

Surely you have heard this one over the last ten years. This solution argues convincingly that someone on your team should play the role of Steve Jobs. The intoxicating aspect is the notion that anyone can become Steve Jobs or think like him. The natural by-product of such claims is that the solution to your company's problem is to create the iPod or iPad of your industry. This silver bullet—so the solution tells us—will then save your company.

The Customization Solution

Your strategy becomes fixated on the idea that consumers want to have their products personalized. Whether this means that the consumers design the finishing touches on their product or that the experience of ownership is somehow customized to fit the consumers' lifestyles, the solution suggests that value comes from allowing the consumers to tinker with a series of superfluous features.

The Open Innovation Solution

Problems will be solved if innovation comes from outside the firm, the open innovation solution tells us. Outsource, crowdsource, share-source everything! If customers, partners, and entrepreneurs

create your innovation through incentive efforts like contests and auctions, you will get better ideas and a wider variety of ways to win in the market.

The Social Media Solution

This solution promises that social media sites like Facebook and Twitter can transform a brand's relationship with its consumer base. Involving the consumers in the relationship—giving them the option to "like" or "retweet" gossip from their favorite brands—the solution tells us, will help to create more brand loyalty and generate the kinds of meaningful experiences that all brands hope to create with their customers.

While there may be truth and even inspiration from these solutions, none of them can form a long-term strategy for your company. None of them will provide you with a perspective on the market or do the messier work of revealing the changing phenomena at the core of your business. Take big data—obviously this is a very interesting opportunity: how do we capture and make sense of the data that comes from our customers' transactions on the internet? But big data is merely a tool for executing the bigger idea. You need a more profound understanding of what your products offer before you can filter through the noise of data analytics. Or think of Steve Jobs. He was an iconic leader, and Apple provides plenty of examples of inspiration. But the specificity of Jobs's vision—blending technology with the liberal arts—is not relevant for every industry. By focusing solely on another leader's success, we lose the ability to discern the game-changing opportunities for our own market successes. A leader can

see things no one else can see, not by trying to imitate Jobs but by taking all his or her years of experience and practical knowledge and widening the lens on the leader's own industry landscape.

It's not easy to turn away from the reassurance of these ideas as long-term strategic solutions, but we all know they are limited. Only a deep investigation into our consumers' behavior will open up opportunities for innovation and future growth. Only an open-ended embrace of reality—life as it really is—will tell us what truly matters.

FOUR

The Human Sciences

IT WAS 2010 AND A major multinational electronics company was trying to understand the market for small digital cameras. In the past, it had held a majority market share in small, sleek, and relatively inexpensive cameras. These were the types of cameras that people used to pop in their weekend bag for vacation pictures or keep on the family mantle for photos of the kids at graduation or after the prom. Such cameras were never anything fancy, but they fulfilled their core purpose: they allowed people to take a small amount of good-quality photos that could then be printed out later for photo books and frames. These cameras served as documentation devices for a relatively limited amount of memorable occasions.

And then, suddenly, all of that changed.

"It's Not about the Camera"

First there was the camera phone and then the explosion of social networking sites and new photo-sharing capabilities. In a matter of

only a few years, the company was completely in a fog. Did cameras even matter? What did kids want from their pictures? How could the company design new products when it didn't even understand the phenomenon of photography?

The company enlisted researchers to study teenagers' changing use of photography and snapshots across the United States. The researchers found that teenagers were uploading photographs in place of text—not just a few pictures but thousands and thousands of them. These photographs were not about documenting key events in the past; instead, they were enabling a dynamic conversation in the here and now. One researcher noted that in certain karaoke circles, one person was assigned to take a photograph every two minutes. These photographs were uploaded, shared, commented upon, and sometimes even deleted before the night had come to an end. The sheer amount of data—structured as a thread rather than as a coherent whole—was compromising the users' ability to retrieve or navigate information. Researchers noted that some kids were using social media postings to search for pictures instead of trying to find them in the camera's vast history of shots. Photography, once the realm of permanence, was now emblematic of the ephemeral. It was almost akin to a live performance.

All these changing practices required new capabilities from camera phones. Teenagers were looking for ways to process and sort through the thousands of images. They wanted a function that allowed them to mark certain photographs as keepsakes for sites like Instagram while sending the rest directly to a data garbage bin.

The company might have started its investigation with a question from default thinking: how do we recapture the market for cameras? But instead it chose to forgo any premature hypotheses. It simply spent time digging deeper into its consumers' behavior. What it found—digital photography is a form of live theater for the

youth culture—was so much richer than something it might have come up with at a strategy session. Business implications followed organically: design cameras with easy tools for uploading directly to sites, and assume that because most photographs serve as a kind of fluid memory bank for users, make the search functions intuitive and allow them to quickly determine which photos will be permanent and which will be forgotten.

The executives at the company realized they could only ever really understand the camera within the context of its use. They recognized that it's not just about the camera; it's about the people.

Human sciences, or "soft sciences," are not based on the quantitative methods of the natural sciences. The study of people, cultures, relations, power, norms, and values requires different skills from those required in the study of molecules, crops, and stars. For those of us in the business world, there is little daily need to sit and ruminate on the workings of reality and how we interact with it. But what happens when the ever-increasing complexity of the business world delivers a challenge we don't understand: Is yoga a sport? How is television in the household changing? Why does everyone suddenly wear headphones? How is digital play growing? Why don't young people want to pay for media? In such moments of mystery, we need to look beyond numbers and spreadsheets and focus instead on experiences.

In this chapter, we offer a theoretical backdrop from the human sciences for solving these types of business challenges. The backdrop is by no means exhaustive, but it can serve as your guide while you begin to cultivate your own practice of open-ended inquiry. Note our use of the word *practice*. What we describe for you in the following chapters is less a set of hard and fast rules and more a musical score, a suggestive framework for artful interpretation. You'll find

no five-step plan here, no seven secrets to such and such. What you will find is a theoretical scaffold for thinking differently about people as well as a method for applying the theory to your own business challenges. We call our method *sensemaking* because it describes the experience of connecting the dots amid a sea of confusing data. Through sensemaking, we arrive at moments of clarity. As your own practice grows deeper, you will likely develop your own names and heuristics. It will never be easy—no practice worth doing ever is—but your own version of sensemaking will start to feel intuitive the more you do it. Consider these chapters your primers. We will start with theory in this chapter and then move into more practical applications with business stories in chapters 5, 6, and 7. Let's begin by using the human-science lens to examine how people experience the world.

The Study of Experience

Phenomenology is the study of how people experience life. Although the word is rarely bandied about in a business context, phenomenology is the philosophical inspiration behind a method like sensemaking. It is the study of everything we feel in the world, everything that gives our lives meaning. Phenomenology can unlock the experience of driving a car or the sensation of being a mother. It is whether you see a Coke bottle and regard it with befuddlement, nostalgia, or disgust. In a pharma company, deductive reasoning can tell you how many salespeople met their quarter goals in 2010, but phenomenology will shed light on what, exactly, makes a good salesperson. In a *Fortune* 500 coffee company, management science can tell you how many premium cups of coffee the average American drinks in a day, but phenomenology will help you understand what constitutes the *experience* of really good coffee.

Properties versus Aspects

Any phenomenon—travel, sports, investing, entertainment, eating, or trust—can be analyzed using *property* data points from the hard sciences or experiential *aspects* from phenomenology. If biological gender (man or woman) is a property, then cultural gender (masculine or feminine) is the aspect. Science can help us determine if a person is a man or a woman, but how do we find out what it means to experience masculinity or femininity? What is being a man or woman *like*? Only the study of the phenomenon will help us understand that.

Things become meaningful when we start talking about aspects: a piece of fabric with three sewn colors becomes an American flag, a collection of molecules constituting gold becomes a wedding ring. Our experience in the world has to do with our investment in such objects and activities. How are kitchens, candy, soccer, or cell phones related to us? It is in this relatedness—this involvement in things—that objects have meaning. Although the brew might be exactly the same, a quick Styrofoam cup of coffee on the run is a vastly different experience from being served in fine china by a white-gloved waiter. The properties of the coffee are the same, but the aspects are not.

If all of this strikes you as decidedly unscientific—after all, how can you make a science out of the way things feel?—consider it in a different way. Phenomenology will not reveal the essence of something—say, a car or a restaurant—but rather will show the essence of our *relationship* to that thing. Not everything is important to us all the time. We stand in relationship to the things in our life, and phenomenology can show us which things matter most and when.

Another way to consider this argument is through the use of *correctness*, which is based on properties, and *truth*, based on aspects. If you ask Apple's iPhone application SIRI to tell you the difference between red and white onions, it will answer, "Six calories." While

that answer is certainly correct, is it true? Within the frame of cooking, gardening, or even simply grocery shopping, does this answer tell us anything truthful?

Oh yes, you may say, but SIRI is a computational machine; such differences don't really apply to our marketing analysis or research and development, because we know what our customers like. Do you really, though? Beverage companies argue, for example, that sweetness drives liking. "When we put in more sugar," they tell us, "people like it more." Our response to that is, "Yes, that is correct. But is it *true*?" People will often say they like something in the moment, but what is their deeper relationship to it? Lots of people may like sweetness but they may, at the same time, experience cultural aversions to it, like fear or disgust. When you understand what drives the behavior of your consumers, you will reach a deeper insight that goes beyond the facts of correctness into the experience of truth.

Familiarity

Imagine an average day: we wake up, have breakfast, maybe drive to work or take the subway. All of this is familiar to us, unworthy of deeper examination. We think we know what it is to feel hungry or stuck in traffic or frustrated. But if we take any one thing and begin to look more closely, we find a subterranean world filled with surprising insights. Great philosophers have been directing our attention to this world for close to a hundred years. We can use words like *background* or *familiarity*, but other expressions, like *muscle memory*, *common sense*, *natural behavior*, and *what one does* all express a similar notion. The radical idea is that most of our life is not steered by thinking at all, but is guided rather by our familiarity—our act of *being*—in the world. We are not conscious of the concept of a kitchen knife or a washing machine or a lawn mower. We simply use

them. They withdraw from our attention and turn into background the more involved we are. And we do this so deftly, so fluidly, that in most circumstances, our own behavior is invisible to us. Part 1 endeavored to show how our own business culture of default thinking exists all around us—filled with assumptions so familiar to us that we can no longer even discern them. Famed German film director Wim Wenders named one of his most acclaimed movies after this experience of familiarity: *In weiter Ferne, so nah!* (*Faraway, So Close*). This *faraway, so close* familiarity makes up phenomenology, or everything we experience in the world.

Take the very familiar concept of money. Instead of examining money's properties—cellulose with ink printed on it—try to examine its aspects. Money is a shared language for value. Most of us prefer more rather than less. Many of us are afraid of it. Others find it arousing, while certain cultures refuse to even speak of it out loud. When designing accounts for their customers, banks typically give people with more money more access to it. In a banker's world, it is vital for top clients to have full transparency with their account. But if you look more closely at how wealthy people *feel* about their money—how they experience having or spending money—a banker's world may not be the most appropriate mind-set for designing an account. After all, most people with money don't want to see it every day. They want to be assured that it is safe, but they don't have any interest in counting it the way bankers do. For this reason, bankers almost inevitably do better when they deconstruct their own culture before imposing it directly on the various cultures of their customers.

The slogan of phenomenology is "to the things themselves." The idea is to study the thing itself—be it a work of literature, death, the family, a car, or the hospital—without preconceived notions or reductionist theories or dogma imposed on it. This is the only way to achieve an insight into something both *faraway* and *so close*.

How to Begin the Study of Experiences

Any open-ended method like sensemaking is primarily built around this study of experiences. You don't need to know doctrines of philosophy—sometimes it is better if you don't—nor do you have to memorize Western civilization's greatest hits. Think of this as a DIY philosophy. Start by looking at the complexity and beauty of the world. Try to describe what you are experiencing and how you are experiencing it. How did you—really—go from the experience of not knowing to making a decision? How did you—honestly—make choices about this year's budget? When did you—truly—decide the numbers for the new product launch? A reasonable guess is that most of these decisions were made not in an entirely rational way, but on a gut-instinct level. What did you *feel*? This is where the study of experience begins: with the individual experience. It is not, however, a license to opine or navel-gaze. The subjective experience is only the beginning. We use it to think about how to gather the best data to uncover the patterns occurring in a market as a whole. Phenomenology is interested not in the extraordinary, but in the ordinary and commonplace for all (or most) of us. In this way, it isn't about the R^2 statistic or the significant sample size. In fact, a useful study of experiences would need to look at only a decent amount of people and their situations. These experiences should be collected and understood if a business is going to fully see the patterns of behavior that all people share.

If we can say anything about the study of experience, it is this: get out of the office and away from the spreadsheets. Don't start your inquiry with the theoretical. Only experience stripped of hypothesis will reveal the rich reality of humanity. We break down the study of human experience into three building blocks:

1. A fairly sophisticated *outlook* on what it means to be a human being and on life in its totality

2. Human-science theories and tools such as ethnography, thick description, an understanding of worlds, and double loop
3. The methodology of *abductive reasoning*

A Sophisticated Outlook on Human Experience

After the publication of her first books, Alice Munro—a revered Canadian fiction writer and winner of the 2013 Nobel Prize for Literature—started receiving fan letters from other writers. These letters were requesting what Munro later described as "brass tacks" information about the writing life. "Is it necessary to work on a computer? Have an agent? Associate with other writers?" Really, of course, the writers were asking Munro how she managed to capture the essence of life in language. How does one describe all of the mystery, heartbreak, joy, and grace that go into our own human existence? How does one describe "life"?

Munro might have responded to these letters with facts, or properties. She might have told writers exactly when she did her writing (in between other household responsibilities), where she did her writing (at the table and then, later, at an old desk), and what piece of equipment she used to make these scribblings appear permanently on paper (a pen, most often). But these details—the *hard science* of her accumulated writing experience—struck her as absurd.

> It assumes that I am a person of brisk intelligence, exercising steady control on a number of fronts. [That] I make advantageous judgments concerning computers and themes, I chart a course which is called a career and expect to make progress in it.

Munro was never able to answer these letters with "brass tacks" information. In one of her stories, however, her imagined character

describes the futility of attempting to capture the facts of life as it is lived:

> I would try to make lists. A list of all the stores and businesses going up and down Main Street and who owned them, a list of family names, names on the tombstones in the cemetery and any inscriptions underneath . . . The hope of accuracy we bring to such tasks is crazy, heartbreaking. And no list could ever hold what I wanted, for what I wanted was every last thing, every layer of speech and thought, stroke of light on bark or walls, every smell, pothole, pain, crack, delusion, held still and held together—radiant, everlasting.

We all know that life is complex: mysterious, by turns banal, and then, in moments, touched by transcendence. Humans live in a reality that is textured, nuanced, complicated, filled with *every last thing.* Try, like Alice Munro, to make a list of everything that you know in your embodied experience of the world. Experienced soldiers in Iraq describe the sensation of "feeling" the booby traps in their bodies upon getting near to these devices. Seasoned firefighters can intuit when the floor is going to collapse beneath them. George Soros, veritable emperor in the world of investing and high finance, knows that something is not right in the markets when the pain in his back acts up. Famed dancer and choreographer Twyla Tharp described the experience of watching her dancer Rose Marie Wright teach a dance that Wright learned thirty some years ago to a group of new dancers in the company: "If she demonstrates the dance without thinking about it, she will re-create each step and gesture perfectly on the spot the first time, as though she were a medium in a trance. That's muscle memory. Automatic. Precise. A little scary. The second time through, however, or trying to explain the steps and patterns to the dancers, she will hesitate, second-guess herself, question her muscles, and forget. That's because she is thinking about it, using language to interpret something she knows nonverbally. Her memory of movement doesn't need to be accessed through conscious effort."

The best of life—the richest existential layers—are deeply encoded within such details. The famous Japanese woodworker, Toshio Odate, told his students during one of his many master sessions, "You enjoy chisels, you enjoy planes, you enjoy the feeling of this organic material. You have to train your body to sensitivity. That's the key. Then you learn how to sharpen chisels, you feel the vibration. You can feel the resistance of many different types of wood." Odate explained that about a third of woodworking could be learned intellectually, by reading. The majority of it had to come from daily repetition: hands on the wood, the smells, the different blades, and even the painful cuts in the skin.

In the best of his music, famed trumpeter Miles Davis is described as playing not what is on the page but "the ghost note," interpolating musical and historical influences with the nuances of every sound coming out of his trumpet. Terence Blanchard, contemporary trumpeter and devotee of Davis, explained, "When Miles Davis played a simple phrase, sometimes that expressed something with more elegance and beauty than any very technically accomplished phrase could say." Davis himself put it simply: "Don't play what's there; play what's not there."

As the great philosophers of the twentieth century argue, if your outlook on life does not include this level of depth and richness—this embodied knowledge—you will never really understand people's behavior. Our argument directly contradicts the prevailing approach of the current business culture: default thinking. If we were to create a philosophical death match to illustrate our point,

we would pair René Descartes—father of rational thinking, or minds *detached* from the world—against Martin Heidegger, the philosopher who argued that human beings are at their best when deeply *embedded* in the world.

Not every decision people make is rational and diligent. They buy things they don't need, do things that are a waste of time, and sometimes hold sacred their various decisions made on a whim. This is why religion, magic, love, music, art, beauty, literature, and national parks don't make any sense in a rational universe. Over the last millennia, this deep divide between rational thought and real life has led philosophers to divide human beings into strange sets of two: body and spirit, subject and object, sense and sensibility.

To understand this divide, we must go all the way back to Plato and his deep interest in theory and mathematics. His whole philosophy is predicated on the idea that things (including us) are at their best when they are universal and devoid of any particularities. The horses that run around in the field aren't as perfect as the *idea* of a horse; a vase on the table is not as perfect as the *idea* of a vase. Plato's philosophy led to the notions we all live by every day in modern society: human beings are, above all, *thinking* things; we strive for perfection in rational thought; the cleanliness of theory is better than the particular things around us; and we are subjects giving meaning to objects in the world. According to Plato, we have a perfect map of the world in our minds, and we use it to make sense of everything around us. Descartes was the philosopher who most powerfully described this vision of us as rational thinking beings: minds floating outside the world. He conceived of us as seeing the world through a window of ideas rather than being directly involved in it. In Descartes's view, we humans are and should be autonomous agents making rational decisions. He believed that we have full access to our minds and, therefore, know what we want. Following that argument, we shouldn't take tradition, moods, or emotions into account, but rather should maintain a cold, distant relationship with what is around us.

When we argue for a conception of human experience that differs from conventional business perspectives, we are arguing for the phenomenological tradition led, primarily, by Martin Heidegger, author of the groundbreaking masterpiece written in 1927, *Being and Time*. Heidegger wrote that we are at our best not when we are sitting, detached and thinking, but when we are deeply involved in the world—when we forget about where we are and engage in activities that we can master. Heidegger is not saying that we never think. He is the first to agree that science exists because of our ability to think. But he argues that most people are so embedded in their daily activities that they don't need to think. When a trained chef is making a soufflé, he or she does not step back and think about the whisk and the bowl. The chef is deeply and practically involved in the world. Heidegger said that rather than being thinking things, we are "beings in the world." In his work, he dismantles over two thousand years' worth of philosophical tradition, blurring the distinctions between rational and irrational, subject and object. In his new tradition of philosophy, phenomena like love, trust, hatred, and beauty are examined through our experience of them in our everyday lives.

Human-Science Theories and Tools

Human science employs numerous techniques to recognize and describe the experiences that all people have. Let's look at some of the most important tools that businesses can use to understand both their own customers and the broader market.

Ethnography

Consider the following chronology in Bruno Latour's ethnographic description of a modern American workplace:

> *5 mins.* John enters and goes into his office. He says something very quickly about having made a bad mistake. He had sent the review of a paper. . . . The rest of the sentence is inaudible.
>
> *5 mins. 30 secs.* Barbara enters. She asks Spencer what kind of solvent to put on the column. Spencer answers from his office. Barbara leaves and goes to the bench.
>
> *5 mins. 35 secs.* Jane comes in and asks Spencer: "When you prepare for I.V. with morphine, is it in saline or in water?" Spencer, apparently writing at his desk, answers from his office. Jane leaves.
>
> *6 mins. 15 secs.* Wilson enters and looks into a number of offices, trying to gather people together for a staff meeting. He receives vague promises. "It's a question of four thousand bucks which has to be resolved in the next two minutes, at most." He leaves for the lobby.
>
> *6 mins. 20 secs.* Bill comes from the chemistry section and gives Spencer a thin vial: "Here are your two hundred micrograms, remember to put this code number on the book," and he points to the label. He leaves the room.
>
> Long silence. The library is empty. Some write in their offices, some work by windows in the brightly lit bench space. The staccato noise of typewriting can be heard from the lobby.
>
> *9 mins.* Julius comes in eating an apple and perusing a copy of *Nature*.
>
> *9 mins. 10 secs.* Julie comes in from the chemistry section, sits down on the table, unfolds the computer sheets she was carrying, and begins to fill in a sheet of paper. Spencer emerges from his office, looks over her shoulder and says: "hmm, looks nice." He then disappears into John's office with a few pages of draft.
>
> *9 mins. 20 secs.* A secretary comes in from the lobby and places a newly typed draft on John's desk. She and John briefly exchange remarks about deadlines.
>
> *9 mins. 30 secs.* Immediately following her, Rose, the inventory assistant, arrives to tell John that a device he wants to buy will cost three hundred dollars. They talk in John's office and laugh. She leaves.
>
> Silence again.
>
> *10 mins.* John screams from his office: "Hey Spencer, do you know of any clinical group reporting production of SS in tumor cells?" Spencer yells back from his office: "I read that in the abstracts of the Asilomar conference, it was presented as a well-known fact." John: "What was the evidence for that?" Spencer: "Well, they got an increase in . . . and concluded it was due to SS. Maybe, I'm not sure they directly tested biological activities, I'm not sure." John: "Why don't you try it on next Monday's bioassay?"
>
> *10 mins. 55 secs.* Bill and Mary come in suddenly. They are at the end of a discussion. "I don't believe this paper," says Bill. "No, it's so badly written. You see, it must have been written by an M.D." They look at Spencer and laugh.

Making observations without presupposing a model is a mental challenge. What strange tribe is this? How do they communicate? What do they value? Eventually, without more of a context, we begin to wiggle and twitch internally. "I need to understand what is happening!" we think to ourselves. Most of us long to leave the realm of

doubt and rest easily again in confident knowledge and understanding. "They are businesspeople!" "No, they are professors at a university." "Ah! I get it! They are research scientists!"

Ethnography—the process of observing, documenting, and then analyzing behavior—is one of the main data collection techniques for human sciences. Used in everything from anthropology and sociology to history and philosophy, ethnography is an imperative focus for analyzing phenomena. The technique emerged in the nineteenth century, when the study of society exploded through the scholarship of thinkers like Karl Marx and Emile Durkheim. It wasn't until 1922, however, with the work of Polish anthropologist Bronisław Kasper Malinowski, that the professional practice of *participatory observation* was defined and distinguished from the grab bag of techniques used by journalists, missionaries, and travelers.

Malinowski is widely considered the most skilled anthropologist in the history of the discipline. The majority of his research comes from his time spent in Papua New Guinea, particularly during World War I, when he became stranded on the Trobriand Islands, unable to return to Europe from the British-controlled region because he was a Pole from Austria-Hungary. Malinowski spent his period of exile as a participant-observer in the Kula tribe, ultimately turning his analyses into the ethnographic masterpiece, *Argonauts of the Western Pacific*. In this book, he lays out the foundation for the anthropologist's role as a scientific analyst versus a mere describer: "The integration of all the details observed, the achievement of a sociological synthesis of all the various, relevant symptoms, is the task of the Ethnographer . . . The Ethnographer has to construct the picture of the big institution, very much as the physicist constructs his theory from the experimental data, which always have been within reach of everybody, but needed a consistent interpretation."

Descriptive observation came first, followed by an educated guess at an analytical interpretation. Ethnography, using methods like participatory observation, was a radical, open-ended approach to understanding other cultures. It involved immersing oneself in the object of study rather than focusing on proving or disproving a hypothesis. With its emphasis on immersion, ethnography stands in contrast to other research techniques that aim to help businesses understand human experience, such as the use of desk-based market research and focus groups. While conventional forms of market research can play an important role in creating business strategies, market research is not the same thing as ethnography; nor does it deliver the same richly textured results. As we will discuss in later chapters, both LEGO and Coloplast had undertaken significant market research programs before turning to sensemaking and ethnography as their main data collection method.

Ethnography is best understood, like everything in the human sciences, within a context. Say your business needs to gain insight into the growing middle class in China. You might turn to properties—upward mobility will move hundreds of millions of households from poverty to prosperity in the next decade. But what do those numbers mean for an individual's experience of upward mobility? What is it like to pack up your life and move from a rural to an urban setting? How do you settle in? What is important? Is it confusing? Great? Both? An ethnographic perspective can offer up the aspects—or the experience—of such a sweeping sociological change. By looking at one ethnographer's intimate interaction with one middle-class Chinese man, we can gain far greater insight into the phenomenon than we ever could poring over reams and reams of consumer data.

Notes from the Field: What Does an Ethnographic Insight Look Like?

Eliot Salandy Brown, a researcher for ReD Associates, conducted an ethnographic study to get a glimpse of everyday life for a Chinese family. Here is part of his story:

> It was on my fourth attempt to find out what Wei Bao thought of the changes tearing through his neighborhood that I realized I wasn't going to get an answer. Not like this. The ethnography had started well. After I took off my shoes and presented a small gift of Danish biscuits, Wei Bao welcomed me into his sparsely furnished living room. Minutes later, sipping tiny thimbles of rich, earthy 'Pu'er tea his bright eyes darting between me and his wife, Wei Bao excitedly told the story of the day he was finally promoted to chief engineer at a small mine 20 kilometers west of Fuzhou.
>
> "It was my discipline that made the difference," he explained, his wife nodding knowingly next to him. "I'm a predictable man, and my bosses always knew they could depend on me to be steady."
>
> It was on the day of that promotion 30 years ago that Wei Bao was given the apartment we sat in now. Constructed in the early 1970s, the apartment was more or less identical to the 250 others surrounding it. Peering past his washing hanging on the balcony, I could make out men of Wei Bao's age playing mah-jongg in the dusty courtyard, the clatter of the plastic pieces drifting up in the still autumn air.
>
> "We are proud to live here because it means you have been recognized by the government. It is an honor, in a way." An hour earlier, walking up the dim stairwell with its discolored concrete and broken lights, I would not have guessed at the symbolic

> value of this address. But on reflection, I realized it was not only the condition of the building that had led me to assume that this was a rather standard piece of real estate. It was the contrast with what surrounded it. Wei Bao's worn-out housing complex now stands like a solitary gray pebble in an otherwise shimmering pool of blue glass. Fueled by Taiwanese investment, towering apartment complexes, neon-fronted restaurants, high-ceilinged European car dealerships, and mobile-phone shops have invaded Wei Bao's neighborhood, bringing with them a new generation of Chinese consumers who shop for leisure, not just out of necessity, and like coffee as much as tea.
>
> And what I now wanted to understand was how Wei Bao felt about all this. Was this progress or destruction? What was his common ground with the younger generations? Was Fuzhou westernizing or giving birth to a whole new interpretation of China? How did all of this make him feel about China's future trajectory?
>
> Nothing. Four attempts to get subjective perspectives had gotten me four pages of objective statistics. Wei Bao used his almost encyclopedic knowledge of population growth, urban migration rates, investment sources, and bank-loan rates to studiously avoid giving me the faintest idea of how he felt. And I was starting to panic. I get paid to find out what people feel, fear, regret, admire, desire, and I was about to go home with nothing but data.
>
> As though perceiving my horrific visions of returning to my bosses without knowing anything more interesting than his tea preferences ('Pu'er every time), Wei Bao made a suggestion. "Why don't we go and see my new apartment?"
>
> Five minutes later he was confidently whisking me through traffic on the back of his electric scooter, clearly enjoying

the challenge presented by Fuzhou's unpredictable traffic, and 10 minutes later we stood with our heads as far back as they would go, staring up at a sparkling 49-story apartment building cutting into the low gray sky.

"It's an investment together with my son. He's having his first child soon, and this is where they will live. Come, let me show you around." The "steady," quiet man I had met in his government apartment disappeared as Wei Bao sprang around the unfinished apartment explaining where the dishwasher, washing machine, microwave, and TV ("of course, plasma") would sit. He showed me the designs he'd been working on for the glass-and-steel kitchen, the recessed lighting, and his proudest contribution—the walk-in shower. And on his balcony, overlooking dozens of new Chinese dreams just like his were being constructed, Wei Bao finally opened up.

"I often stand here and think about how China has progressed. I imagine the life my grandson will have and compare it with mine—there's no doubt things are better. Young people have an energy now that we didn't have. It's like they have a light on inside them that we had to switch off and aren't brave enough to switch on again."

I ask him what it was about his life that was difficult, and after a long gaze out over the buildings he says, "It was restrictive. Limited. My son thinks he can be who he wants to be, professionally and as a person, and that is a very fortunate situation."

Wei Bao tells me that the Chinese way isn't always best and it's good to be inspired by what other countries do. That he would like to travel and see the world, especially Italy. That perhaps his old apartment building and the men

playing mah-jongg will one day disappear, and that's not such a shame.

As we left the apartment after three hours on the balcony, I realized what had allowed this quiet man to begin telling me what he really thought and felt. The answer was simple—we had moved to a social and physical context in which it was appropriate. Sitting with his faithful wife by his side, in the home given to him by the government, surrounded by proud artifacts from his younger days, it was not an option for Wei Bao to speak his mind. His wife would have lost face, he would have been indirectly criticizing his peers in the surrounding apartments, he would have seemed ungrateful, and he would have made any Chinese guest very uncomfortable.

I have taken Wei Bao's lesson with me, and when I'm in China now I always present people with a range of social and physical contexts that allow the various facets of their personality and perspectives to be expressed and explored. For this lesson I am very grateful to Wei Bao. Indeed, to thank him for such an enlightening day, I invited Wei Bao to dinner.

"Where would you like to go?" I asked him. "There's that famous Chinese restaurant near your bus stop."

"No," he replied. "You see that one over there on the corner? They do the best cheeseburger and fries in all of Fuzhou."

Thick Description

The ethnographer's insights into Wei Bao's perspective give us an example of what the American anthropologist Clifford Geertz famously describes as *thick description*. Geertz spent the lion's share of his academic career writing about the nuances of culturally

complex gestures, the *thickness* that adds depth to life. Take the wink. The computer might classify it as a twitch of the eye lasting for a millisecond, but we all know that a wink can mean so much more. This tiny movement has the ability to say, "Let's leave together," "You're an idiot," "I'm not serious," and so many other more ineffable desires.

To illustrate the importance of thick description to any complex understanding of human behavior, we can take something as culturally familiar as an Adele song. Try this thought exercise: think of Adele as thick and then thin.

At the 2012 Grammys, the British singer Adele took home six awards for her wildly popular album *21*. Part of the music industry's fever-pitch adoration of Adele has to do with her ability to create music that feels authentic, personal, intimate, and individualized—we sympathize with her emotions as if they're our own. So much so that a recent *Saturday Night Live* skit portrays an office worker putting on Adele's song "Someone Like You" for a good cry, only to have the entire office gather around her for a grand collective sob session.

The *Wall Street Journal* recently responded to this phenomenon by asking, "What is it about Adele's music that is so good at making us cry?" To answer this, they turned to empirical studies of musical triggers of emotional responses, measured by physiological changes such as spikes in heart rate, the appearance of goose bumps, or sweating. For example, as reported in the *Wall Street Journal*:

> Chill-provoking passages . . . shared at least four features. They began softly and then suddenly became loud. They included an abrupt entrance of a new "voice," either a new instrument or harmony. And they often involved an expansion of the frequencies played. In one passage from Mozart's Piano Concerto No. 23 (K. 488), for instance, the violins jump up one octave to echo the melody. Finally, all the passages contained unexpected deviations in the melody or the harmony. Music is most likely to tingle the spine, in short, when it includes surprises in volume, timbre and harmonic pattern.

While surely the neuroscience behind the analysis is more nuanced, presenting the emotional power of music in this way seems impoverished. It takes something magical and reduces it to the appearance of this or that stylistic device. But it misses another important point: cultural context influences which products we perceive as emotionally resonant and how our emotional reaction plays itself out. This is because cultural context affects our relationship to our own emotions—how we think about them and how we experience them. In other words, what makes a song emotionally evocative is partly contingent on time and place.

The emotions these stylistic devices trigger become commodities similar to others that we consume regularly. We eat a candy bar when we feel like we deserve a treat; we listen to Adele when we feel blue. In this way, the relationship between emotions and cultural products is commoditized.

So because we have grown up in the particular context that the culture industry has produced, we know that Adele is the kind of music we should listen to when we feel sad. This relationship between emotions and pop culture pieces (how they're thought about and experienced) is a unique product of our contemporary culture industry. This way of thinking about the issue doesn't delegitimize the emotional response of someone who finds Adele's song moving. It does, however, imply that the emotional dynamic underneath the goose bumps is wrapped up in a whole different set of

culturally conditioned baggage than, say, those experienced by the first audience members who heard Bach's famous *Ciaccona*.

So what can businesses learn from all of this? Though the natural sciences can scientifically measure heart rates and goose bumps, the measuring machines are giving us a thin description of properties and no insights into aspects. There are millions of ways to experience goose bumps; each way is thick with meaning.

Understanding Worlds

Any attempt to accurately study thick description needs to examine how the background—the system of various worlds—is structured. What kind of invisible scaffolding is present in our everyday lives dictating our actions and supporting our beliefs? This idea was introduced in chapter 2 through Pierre Bourdieu's concept of habitus. But it can be explored in more depth through the human-science lens.

In our everyday language, we talk about the business world, the theater world, or the world of high finance. These are names for sets of equipment, practices, and words that connect and become a system, or a *world*. If you want to work in the theater world, it is helpful to have equipment like tickets, a stage, critics, and actors making up the world. It would be impossible to be, say, a playwright, without a preexisting understanding of what is meaningful in the world of theater. When a politician doesn't understand the rules of the world of politics, for example, he or she is immediately labeled politically tone-deaf. Only insiders to the world of saltwater fly-fishing will know what a grand slam is, when to be quiet, and how to tip a guide. And jazz insiders know when to clap and what to order at the bar. In this way, we all belong to a series of worlds that run on their own logic and set their own rules. When someone from the outside enters—an ethnographer, for example—he or she has an

opportunity to see the familiar in the strange, and the strange in the familiar.

As social animals, we learn the rules of our worlds fast and adapt to them collectively, just as instruments in a symphonic orchestra are tuned together before the concert begins. *Attunement*—getting in sync with a world or learning its rules—is a key social skill that we all have, one we need if we are to switch fluidly between worlds. We all know the phenomenon of entering a party in a grumpy mood. If the party is great, our mood soon dissipates and we, too, are in sync with that great feeling.

An understanding of worlds necessitates an understanding of social norms, that is, the customs and practices that all (or most) of us follow without ever consciously thinking about it. All the unspoken rules that we follow every day—present but invisible—can be investigated through phenomenology. If an American soda brand wants to launch its product lines in China, the brand would find it extraordinarily helpful to understand how a person behaves around mealtime or whenever soda is consumed. A vodka manufacturer would profit from understanding what someone does around a mixing and cocktail culture. And a car company would make fewer mistakes if only it understood how a person buys a car. When the executives at the athletic shoe company were befuddled by the question "Is yoga a sport?" much of their confusion was a result of their social norms. A person simply did not do sport without competition. This normative behavior was adhered to so strongly within the company culture that it was next to impossible for the executives to conceive of an alternative culture.

All these examples underscore that despite what we may think, we are not individuals. We are, all of us, situated in a context. If we are to understand human behavior, then we must understand context, an argument for the holistic versus the atomized. Once we

embrace the importance of context, it becomes impossible to strip people and objects away from their embedded circumstances.

At the opening of Jamie Uys's 1981 comedy *The Gods Must Be Crazy*, for example, a Coke bottle drops from the sky into a tribe of Kalahari Bushmen. It is a mysterious object of wonder—a gift from the gods, surely—and the people try to find the best use for it. Is it a weapon? A storage tube? A decoration? At the end of the movie, even while fighting over who gets to keep it, the aura of the Coke bottle never reveals itself. Its very "Cokeness" is meaningless out of context.

We in the West, of course, have an entirely different relationship with the Coke bottle. Whether we look at the bottle and think about the shape of a woman's body or we taste the liquid and get transported back to our childhood, Coke is more than just an object. As discussed earlier, the Coke bottle functions within an entire series of relational worlds, what we might call *chains of meaning*. We can even extend this idea further by saying that all tools—the stuff that surrounds us—are organized into chains of meaning, and the meaning is frequently revealed by the phrase *in order to*. A hammer is only a hammer when it is used in order to a build a frame in order to create a shelter in order to provide a home in order to make the homeowner feel secure. I drink Coke in order to stay awake in order to be productive in order to be successful in order to be loved. And so on.

Because our understanding of the world is based entirely on context, we can only ever truly understand our tools—our mobile phones, our coffee, our cars—when these objects break down. We can only understand what it means to be online when, suddenly, we are unable to get online. Our phones only make sense to us when someone takes them away. A line for a coffee cart outside our office only becomes clear to us when we are from a culture that does not

stand in line for coffee. Things withdrawn from our understanding, from our mere consideration, come to the fore when they are disconnected from their chains of meaning. Only through this disconnection do we gain true understanding about our worlds.

Double Loop

The big difference between studying human beings and studying an object in the natural world—say, a leaf—is that leaves don't become self-conscious. When you fill out a questionnaire about your perception of beer brands, for example, how accurately do you report your behavior? Are you attempting to make a certain impression on your surveyors? Are you changing your behavior according to what you deem appropriate or inappropriate? And can you actually answer the questions with any kind of certainty in the first place? And then, of course, there is the person observing you—collecting the survey or asking you the question or even sitting across the table from you over coffee. He or she can't avoid filtering your behavior through his or her own mental models of the world.

Even social scientists like anthropologists behave according to an invisible system of rules. For this very reason, they must be vigilant about keeping their own cultural biases in check. This is the greatest challenge of ethnography: as the line between subject and object blurs—and with it, the promise of an objective reality—the ethnographer must always be observing his or her own assumptions while also analyzing those of the culture. This phenomenon—what we call *double loop*—is a conundrum that all social scientists grapple with. In the natural sciences, it is possible to observe phenomena objectively—the study of quarks or the size of a star—but the human sciences require the point of view of the human scientist. When a person is observing human behavior, there is no view from nowhere; it is necessary to acknowledge and assess one's own biases. This is

not always an easy or straightforward task, but what is the alternative? As we have seen, to give up on an interpretation of phenomena—choosing instead to look at one-dimensional data in the form of properties—is to give up on 99 percent of life as it is really lived.

The best human scientists attempt to understand their own values and biases just as they are studying the values and biases of another culture. They bring themselves to the endeavor and the big-picture insights they create—or *construct*, to use Malinowski's terminology—engaging both the analytical mind and aesthetic sensibilities. The moment of clarity arrives through the methodology of abductive reasoning.

Abductive Reasoning

How do we make discoveries? How do we observe phenomena, and what will prejudice or change the way we observe things? Is it right to start with a set of ideas rather than start from scratch and see where our work leads us? In which situations is it okay to start with a hypothesis and test it? In which situations is it better not to have any preconceived notions at all? These are all different ways of reasoning through a problem: a concern at the center of a centuries-old debate about the scientific method. In the late 1800s, American philosopher and logician Charles Sanders Peirce became famous for defining the three kinds of reasoning used to solve problems—abduction, induction, and deduction—each appropriate for different levels of certainty.

Peirce contended that only abductive reasoning—starting with observation and then moving next to possible hypotheses—was capable of generating new ideas. Deduction effectively evolved a hypothesis but was unable to incorporate new information. And the problem with induction, Peirce argued, was that the analysis was never exhaustive—one could always find more ways of looking at something. As we argued in chapter 2, when you reason inductively, you have limited yourself to one set of beliefs—all well and good for certain types of problems with set knowns and unknowns—but no longer useful for problems involving culture and behavior. Abduction, Peirce described in his 1903 Harvard "Lectures on Pragmatism," was both more compelling and more problematic: "The abductive suggestion comes to us like a flash but it is not a flash available to all. It is an act of insight, although of extremely fallible insight. It is true that the different elements of the hypothesis were in our minds before; but it is the idea of putting together what we had never before dreamed of putting together, which flashes the new suggestion before our contemplation."

For Peirce, abduction was about looking for answers. While the previous few hundred years had been about the development of science and the belief that the industrial age could conquer anything, Peirce, in his lecture "First Rule of Logic" (1899), questioned what we thought we knew. "Do not block the way of inquiry," he said, putting forth four offenses that we commit when we reason:

1. We make an absolute assertion that we're right.
2. We believe that something isn't knowable, because we don't have the techniques or technologies to figure it out.
3. We insist that some element of science is utterly inexplicable and unknowable.
4. We believe that some law or truth is in its final and perfect state.

Peirce rejected the notion that any theory was "true" while maintaining that it could be "near true." In other words, he believed there was always room for improvement and endless potential for new "truths" to emerge.

It's easy to see why scientists would dismiss the idea that you cannot come to the end of something—that "facts" are not necessarily conclusive. But one of Peirce's most significant contributions was to distinguish between the act of asking a question and the act of making a judgment, which we experience as doubt and belief, respectively: "Doubt is an uneasy and dissatisfied state from which we struggle to free ourselves and pass into the state of belief; while the latter is a calm and satisfactory state which we do not wish to avoid, or to change to a belief in anything else."

Why is it so difficult for us to change our minds? Peirce argued that our discomfort with doubt—not a lack of knowledge—leads us to hold fast to outdated and sometimes downright foolish ideas. Our blind faith makes us appear like an ostrich burying its head in the sand to hide from the danger while, at the same time, denying the existence of anything dangerous. Humans, like ostriches, tend to avoid dealing with anything that might change their core beliefs. If this requires turning a blind eye to mounting evidence or shutting out a voice of reason, so be it.

For better or for worse, abductive reasoning is *uncomfortable*. But it is only through such problem solving that we can achieve the moment of clarity, the foundation of genuine creativity.

As you will see in the business stories to follow, executive leaders felt their creative insight before they thought it. They experienced a dawning directly followed by the moment of clarity. Their insights were not the result of number-crunching on the spreadsheets or better slides in the deck. Every key insight came out of a deep reflective process involving a visceral connection with the data.

In these forthcoming chapters, we leave theory behind and look at how a method like sensemaking applies to real business challenges. To help guide us, we break down sensemaking into five phases:

1. Frame the problem as a phenomenon.
2. Collect the data.
3. Look for patterns.
4. Create the key insights.
5. Build the business impact.

The moment of clarity is different for every business challenge. In the chapters that follow, we'll discuss how different companies have used these methods to find their own moments of clarity and how their experiences can serve as a guide for your efforts. For example, the toymaker LEGO Group needed to set a long-term direction—the quintessential corporate turnaround story—so it experienced several moments of clarity, all dismantling assumptions the company had long held about the way children play. The process that Coloplast, a medical products manufacturer, used, by contrast, focused on product design in a single business within the corporation. For this company, sensemaking culminated in one dramatic moment of clarity that changed its entire value proposition. And for companies like Adidas and Intel, a nonlinear process of problem solving predicated on key insights is driving the entire corporate strategy into the future.