The Flight from Conversation

My guess—and I think this will be debated for a long time—is that humans are very communicative, and so the fact that you're talking to more people with shorter bursts of communication is probably net neutral to positive.

—ERIC SCHMIDT, EXECUTIVE CHAIRMAN OF GOOGLE

Don't all these little tweets, these little sips of online connection, add up to one big gulp of real conversation?

—STEPHEN COLBERT, ACTOR AND COMEDIAN

These days, we want to be with each other but also elsewhere, connected to wherever else we want to be, because what we value most is control over where we put our attention. Our manners have evolved to accommodate our new priorities. When you're out to dinner with friends, you can't assume that you have their undivided attention. Cameron, a college junior in New Hampshire, says that when his friends have dinner, "and I hate this, everyone puts their phones next to them when they eat. And then, they're always checking them." The night before at dinner he had texted a friend sitting next to him ("'S'up, dude?") just to get his attention.

Cameron's objection is common, for this is the reality: When college students go to dinner, they want the company of their friends in the dining hall and they also want the freedom to go to their phones. To have both at the same time, they observe what some call the "rule of three":

When you are with a group at dinner you have to check that at least three people have their heads up from their phones before you give yourself permission to look down at *your* phone. So conversation proceeds—but with different people having their "heads up" at different times.

I meet with Cameron and seven of his friends. One of them, Eleanor, describes the rule of three as a strategy of continual scanning:

> *Let's say we are seven at dinner. We all have our phones. You have to make sure that at least two people are not on their phones or looking down to check something—like a movie time on Google or going on Facebook. So you need sort of a rule of two or three. So I know to keep, like, two or three in the mix so that other people can text or whatever. It's my way of being polite. I would say that conversations, well, they're pretty, well, fragmented. Everybody is kind of in and out. Yeah, you have to say, "Wait, what . . ." and sort of have people fill you in a bit when you drop out.*

The effect of the rule of three is what you might expect. As Eleanor says, conversation is fragmented. And everyone tries to keep it light.

Even a Silent Phone Disconnects Us

Keeping talk light when phones are on the landscape becomes a new social grace. One of Eleanor's friends explains that if a conversation at dinner turns serious and someone looks at a phone, that is her signal to "lighten things up." And she points out that the rule of three is a way of being polite even when you're not at the dinner table. When "eyes are down" at phones, she says, "conversation stays light well beyond dinner."

When I first planned the research that would lead to this book, my idea was to focus on our new patterns of texting and messaging. What made them compelling? Unique? But early in my study, when I met with these New Hampshire students, their response to my original ques-

tion was to point me to another question that they thought was more important. "I would put it this way," says Cameron. "There are fewer conversations—not with the people you're texting, but with the people around you!" As he says this, we are in a circle of eight, talking together, and heads are going down to check phones. A few try not to, but it is a struggle.

Cameron sums up what he sees around him. "Our texts are fine. It's what texting does to our conversations when we are together, that's the problem."

It was a powerful intuition. What phones do to in-person conversation *is* a problem. Studies show that the mere presence of a phone on the table (even a phone turned off) changes what people talk about. If we think we might be interrupted, we keep conversations light, on topics of little controversy or consequence. And conversations with phones on the landscape block empathic connection. If two people are speaking and there is a phone on a nearby desk, each feels less connected to the other than when there is no phone present. *Even a silent phone disconnects us.*

So it is not surprising that in the past twenty years we've seen a 40 percent decline in the markers for empathy among college students, most of it within the past ten years. It is a trend that researchers link to the new presence of digital communications.

Why do we spend so much time messaging each other if we end up feeling less connected to each other? In the short term, online communication makes us feel more in charge of our time and self-presentation. If we text rather than talk, we can have each other in amounts we can control. And texting and email and posting let us present the self we want to be. We can edit and retouch.

I call it the Goldilocks effect: We can't get enough of each other if we can have each other at a digital distance—not too close, not too far, just right.

But human relationships are rich, messy, and demanding. When we clean them up with technology, *we move from conversation to the efficiencies of mere connection.* I fear we forget the difference. And we forget that children who grow up in a world of digital devices don't know that there

is a difference or that things were ever different. Studies show that when children hear less adult talk, they talk less. If we turn toward our phones and away from our children, we will start them off with a deficit of which they will be unaware. It won't be only about how much they talk. It will be about how much they understand the people they're talking with.

Indeed, when young people say, "Our texts are fine," they miss something important. What feels fine is that in the moment, so many of their moments are enhanced by digital reminders that they are wanted, a part of things. A day online has many of these "moments of more." But as digital connection becomes an ever larger part of their day, they risk ending up with lives of less.

I'd Rather Text than Talk

For many, a sentiment has become a litany, captured by the phrase "I'd rather text than talk." What people really mean is not only that they like to text but also that they don't like a certain kind of talk. They shy away from open-ended conversation. For most purposes, and sometimes even intimate ones, they would rather send a text message than hear a voice on the phone or be opposite someone face-to-face.

When I ask, "What's wrong with conversation?" answers are forthcoming. A young man in his senior year of high school makes things clear: "What's wrong with conversation? I'll tell you what's wrong with conversation! It takes place in real time and you can't control what you're going to say."

This reticence about conversation in "real time" is not confined to the young. Across generations, people struggle to control what feels like an endless stream of "incoming"—information to assimilate and act on and interactions to manage. Handling things online feels like the beginnings of a solution: At least we can answer questions at our convenience and edit our responses to get them "right."

The anxiety about spontaneity and the desire to manage our time

means that certain conversations tend to fall away. Most endangered: the kind in which you listen intently to another person and expect that he or she is listening to you; where a discussion can go off on a tangent and circle back; where something unexpected can be discovered about a person or an idea. And there are other losses: In person, we have access to the messages carried in the face, the voice, and the body. Online, we settle for simpler fare: We get our efficiency and our chance to edit, but we learn to ask questions that a return email can answer.

The idea that we are living moments of more and lives of less is supported by a recent study in which pairs of college-aged friends were asked to communicate in four different ways: face-to-face conversation, video chat, audio chat, and online instant messaging. Then, the degree of emotional bonding in these friendships was assessed both by asking how people felt and watching how they behaved toward each other. The results were clear: In-person conversation led to the most emotional connection and online messaging led to the least. The students had tried to "warm up" their digital messages by using emoticons, typing out the sounds of laughter ("Hahaha"), and using the forced urgency of TYPING IN ALL CAPS. But these techniques had not done the job. It is when we see each other's faces and hear each other's voices that we become most human to each other.

Much of this seems like common sense. And it is. But I have said that something else is in play: Technology enchants. It makes us forget what we know about life.

We slip into thinking that always being connected is going to make us less lonely. But we are at risk because it is actually the reverse: If we are unable to be alone, we will be more lonely. And if we don't teach our children to be alone, they will only know how to be lonely.

Yet these days, so many people—adults and children—become anxious without a constant feed of online stimulation. In a quiet moment, they take out their phones, check their messages, send a text. They cannot tolerate time that some people I interviewed derisively termed "boring" or "a lull." But it is often when we hesitate, or stutter, or fall silent, that we reveal ourselves most to each other. And to ourselves.

"My Tiny God"

I'm not suggesting that we turn away from our devices. To the contrary, I'm suggesting that we look more closely at them to begin a more self-aware relationship with them.

So, for example, I have a colleague, Sharon, thirty-four, who describes herself as "happily texting" since 2002. But she is taken aback when she hears a friend refer to her smartphone as "my tiny god." The comment makes Sharon wonder about her own relationship with her phone. Are there ways in which she treats her own phone as a god? Perhaps.

As Sharon talks with me, it becomes clear that her main concern is how social media is shaping her sense of herself. She worries that she is spending too much time "performing" a better version of herself—one that will play well to her followers. She begins by saying that all interactions, certainly, have an element of performance. But online, she feels involved in her performances to the point that she has lost track of what is performance and what is not.

I spend my time online wanting to be seen as witty, intelligent, involved, and having the right ironic distance from everything. Self-reflection should be more about, well, who I am, warts and all, how I really see myself. I worry that I'm giving up the responsibility for who I am to how other people see me. I'm not being rigorous about knowing my own mind, my own thoughts. You get lost in your performance. On Twitter, on Facebook, I'm geared toward showing my best self, showing me to be invulnerable or with as little vulnerability as possible.

Research tells us that being comfortable with our vulnerabilities is central to our happiness, our creativity, and even our productivity. We are drawn to this message, weary, it would seem, of our culture of continual performance. Yet life on social media encourages us to show ourselves, as Sharon puts it, as "invulnerable or with as little vulnerability as possible." Torn between our desire to express an authentic self and the

pressure to show our best selves online, it is not surprising that frequent use of social media leads to feelings of depression and social anxiety.

And trouble with empathy. Research shows that those who use social media the most have difficulty reading human emotions, including their own. But the same research gives cause for optimism: We are resilient. Face-to-face conversation leads to greater self-esteem and an improved ability to deal with others. Again, *conversation cures*.

To those with Sharon's doubts, this book says you don't have to give up your phone. But if you understand its profound effects on you, you can approach your phone with greater intention and choose to live differently with it.

Pro-Conversation

So, my argument is not anti-technology. It's pro-conversation. We miss out on necessary conversations when we divide our attention between the people we're with and the world on our phones. Or when we go to our phones instead of claiming a quiet moment for ourselves. We have convinced ourselves that surfing the web is the same as daydreaming. That it provides the same space for self-reflection. It doesn't.

It's time to put technology in its place and reclaim conversation. That journey begins with a better understanding of what conversation accomplishes and how technology can get in its way. As things are now, even when people are determined to have in-person conversations, their plans are often derailed. Across generations, people tell me, "Everyone knows you shouldn't break up by text. That's wrong. A breakup deserves a face-to-face conversation." But almost everyone has a story to tell in which they or a friend broke up a relationship by text or email. Why? It's easier.

We are vulnerable, compelled and distracted by our devices. We can become different kinds of consumers of technology, just as we have become different kinds of consumers of food. Today, we are more discerning, with a greater understanding that what tempts does not necessarily nourish. So it can be with technology.

A ten-year-old in New York tells me that he and his father never talk alone, without the interruptions of a phone. I ask his father, forty, about this. The father admits, "He's right. On Sunday morning, when I walk with my son to get the newspaper, I don't go out without my phone." Why is that? "Because there might be an emergency." So far, no emergencies have come up, but on the walk to the corner store, he takes calls.

The real emergency may be parents and children not having conversations or sharing a silence between them that gives each the time to bring up a funny story or a troubling thought. A counselor at a device-free camp describes a common experience that the staff is having. If you go on a walk in the woods with a camper who has been acting up (perhaps getting into fights, perhaps bullying younger boys in the dining hall), an hour can go by in silence. Sometimes two. "And then," the counselor says, "and then, there will be the question. And then, there will be the conversation."

The Three Wishes

Our mobile devices seem to grant three wishes, as though gifts from a benevolent genie: first, that we will always be heard; second, that we can put our attention wherever we want it to be; and third, that we will never have to be alone. And the granting of these three wishes implies another reward: that we will never have to be bored. But in creative conversations, in conversations in which people get to really know each other, you usually have to tolerate a bit of boredom. People often struggle and stumble when they grapple with something new. Conversations of discovery tend to have long silences. But these days, people often tell me that silence is a "lull" from which they want to escape. When there is silence, "It's good to have your phone. There are always things to do on your phone." But before we had our phones, we might have found these silences "full" rather than boring. Now we retreat from them before we'll ever know.

I said that I began my research planning to investigate the sentiment "I'd rather text than talk." Technology makes possible so many new kinds of connections—on email, text, and Twitter, just for a start. I thought I would explore what makes them appealing and unique.

But soon my interviews—across generations—put another issue at center stage. What people say to each other when they are together is shaped by what their phones have taught them, and indeed by the simple fact that they have their phones with them. The presence of always-on and always-on-you technology—the brute fact of gadgets in the palm or on the table—changes the conversations we have when we talk in person. As I've noted, people with phones make themselves less vulnerable to each other and feel less connected to each other than those who talk without the presence of a phone on the landscape.

In the midst of our great experiment with technology, we are often caught between what we know we should do and the urge to check our phones. Across generations, we let technology take us away from conversation yet yearn for what we've lost. We reach for a moment of correction, an opportunity to recapture things we know by heart. When we invest in conversation, we get a payoff in self-knowledge, empathy, and the experience of community. When we move from conversation to mere connection, we get a lot of unintended consequences.

By now, several "generations" of children have grown up expecting parents and caretakers to be only half there. Many parents text at breakfast and dinner, and parents and babysitters ignore children when they take them to playgrounds and parks. In these new silences at meals and at playtime, caretakers are not modeling the skills of relationship, which are the same as the skills for conversation. These are above all empathic skills: You attend to the feelings of others; you signal that you will try to understand them. Children, too, text rather than talk with each other at school and on the playground. Anxious about the give-and-take of conversation, young people are uncertain in their attachments. And, anxious in their attachments, young people are uncertain about conversation.

These days, the first generation of children that grew up with smartphones is about to or has recently graduated from college. Intelligent and creative, they are at the beginning of their careers, but employers report that they come to work with unexpected phobias and anxieties. They don't know how to begin and end conversations. They have a hard time with eye contact. They say that talking on the telephone makes them anxious. It is worth asking a hard question: Are we unintentionally depriving our children of tools they need at the very moment they need them? Are we depriving them of skills that are crucial to friendship, creativity, love, and work?

A high school senior tells me he fears any conversation that he cannot edit and revise. But he senses its worth. "For later in life I'll need to learn how to have a conversation, learn how to find common ground." But for now, he is only wistful. He says, "Someday, someday soon, but certainly not now, I'd like to learn to have a conversation." His tone is serious. He knows what he does not know.

The Pilot in the Cockpit

Walking through a campus library or almost any office, one sees the same thing: people in their own bubbles, furiously typing on keyboards and tiny touch screens. A senior partner at a Boston law firm describes a scene at his office: Young associates lay out their suite of technologies: laptop, tablet, and multiple phones. And then they put their earphones on. "Big ones. Like pilots. They turn their desks into cockpits." With the young lawyers in their cockpits, the office is quiet, a quiet that does not ask to be broken.

The senior partner realizes that the junior associates retreat to their cockpits in the name of efficiency. But he says that if they end up not interacting with their colleagues, the fallout will be more damaging than what they gain from doing "all of those emails." He worries that life in the cockpit leaves the junior associates isolated from ongoing, informal conversations in the firm. He wants reassurance that the new recruits are

part of the team. He believes that in the end, success at his firm demands a commitment to in-person collaboration.

There are times in business when electronic exchanges are the only choice. But in the law firm where the "pilot" works, many are *actively finding ways around face-to-face conversation*. There, the young recruits are forthright about wanting to avoid even the "real-time" commitment of a telephone call. And the senior partner says that the strategy of hiding from conversation "is catching," rapidly crossing generations. In fact, it is an older lawyer who first tells me that he doesn't like to interrupt his colleagues because "they're busy on their email," before he corrects himself: "Actually, I'm the one; I don't want to talk to people now. It's easier to just deal with colleagues on my phone." He, too, has become a "pilot." The isolation of the cockpit is not just for the young.

And we use technology to isolate ourselves at home as well as at work. I meet families who say they like to "talk problems out" by text or email or messaging rather than in person. Some refer to this practice as "fighting by text." They tell me that electronic talk "keeps the peace" because with this regime, there are no out-of-control confrontations. Tempers never flare. One mother argues that when family members don't fear outbursts, they are more likely to express their feelings.

A woman in her thirties lists the advantages of online disagreements with her partner: "We get our ideas out in a cooler way. We can fight without saying things we'll regret." And she adds another benefit: Fighting by text offers the possibility of documentation. "If we fight by text, I have a record of what was said."

In all of these cases, we use technology to "dial down" human contact, to titrate its nature and extent. People avoid face-to-face conversation but are comforted by being in touch with people—and sometimes with a lot of people—who are emotionally kept at bay. It's another instance of the Goldilocks effect. *It's part of the move from conversation to mere connection.*

At home, at school, at work, we see a flight from conversation. But in these moments of flight, there are moments of opportunity. We can reclaim conversation. Consider dinner.

Table Manners 2.0

Young people tell me it would be nice to have the attention of their friends at meals but that this has become an unrealistic expectation. Social norms work against it, plus "you don't really want to give up what's coming in on your phone." For anyone who grew up with texting, "continuous partial attention" is the new normal, but many are aware of the price they pay for its routines.

I interview college students who text continuously in each other's presence yet tell me they cherish the moments when their friends put down their phones. For them, what counts as a special moment is when you are with a friend who gets a text but chooses to ignore it, silencing his or her phone instead. For one woman, a college sophomore, "It's very special when someone turns away from a text to turn to a person." For a senior man, "If someone gets a text and apologizes and silences it [their phone], that sends a signal that they are there, they are listening to you."

A junior admits that she wants to ask her friends to put away their phones at meals but she can't do it because she would be socially out of line. "It's hard to ask someone to give you their undivided attention." She elaborates: "Imagine me saying, 'I'm so happy to see you, would you mind putting your phone away so that we can have a nice breakfast conversation?' And they would think, 'Well, that's really weird.'" Asking for full attention at a meal, she says, "would be age inappropriate."

What is "age appropriate" is that "rule of three," the mealtime strategy where you make sure that enough people are participating in a group conversation before you give yourself permission to look at your phone. Young people recognize that full attention is important, yet they are unwilling to give it to each other. They treat their friends the way that made them feel so bad when they were growing up with distracted parents—parents on phones.

Some young people accept their vulnerability to being distracted and try to design around it. They come up with a dinner game, usually played at a restaurant. It recognizes that everyone wants to text at dinner, but

that the conversation is better if you don't. The game is called "cell phone tower." All the dinner guests take their phones and place them in a pile in the center of the table. No phones are turned off. The first person to touch a phone when it rings pays for the meal.

Why do you need a game to force you to pay attention to your friends? One college junior says that "rationally" she knows that if she sends a text to a friend during the dinner hour, it is reasonable that she won't get a reply until after dinner. And that's fine. But if someone sends *her* a text during dinner, she can't relax until she has responded. She says, "I tell myself, 'Don't read it at the table!' But you want to read it, you do read it; it's a weird little pressure to have."

This comment about the "weird little pressure" to respond immediately to a dinnertime text reminds me of a conversation I had with a student in one of my undergraduate seminars—a class on memoir—who came to office hours to tell me that although she felt committed to the seminar, she had been checking her phone during class time. She had been feeling guilty—in the class, after all, students had been telling their life stories—and she wanted to talk to me about her texting. She said she felt "compelled" to check her messages. Why? All she could offer was that she needed to know who was reaching out to her, who was interested in her. Her formulation: "We are not as strong as technology's pull." Phones exert a seductive undertow. The economies of the "cell phone tower" help individuals swim against the tide.

In all of this, there is no simple narrative of "digital natives" at ease in the world they grew up in. On the contrary. The story of conversation today is a story of conflict on a landscape of clear expectations.

Indeed, when college students talk about how they communicate today, they express seemingly irreconcilable positions. In a group of college juniors, one man goes from saying "All of my texting is logistical. It's just a convenience" to admitting that he can't follow most dinner conversations because he feels such pressure to keep up with his phone. Another makes wistful remarks about the future of communication, such as "Maybe something new will be invented." The implication is that this "something new" might be less distracting than what he has

now. Two women say that they don't look forward to what they have now being in their future—but they can't imagine alternatives. One man suggests that maybe there isn't a problem at all: Humans are "co-evolving" with their phones to become a new species. But his note of optimism ends when he jokes about being "addicted to texting" because it "always feels safer than talking." He throws up his hands: "It's not my fault, my mother gave me my first phone." Advertisers know their customers. I look up at a sign in a San Francisco subway station for a food delivery service that will deliver from a wide range of restaurants in the Bay Area. It reads, "Everything great about eating combined with everything great about not talking to people!"

"I'm Sorry," Hit Send

In this atmosphere, we indulge a preference to apologize by text. It has always been hard to sit down and say you're sorry when you've made a mistake. Now we have alternatives that we find less stressful: We can send a photo with an annotation, or we can send a text or an email. We don't have to apologize to each other; we can type, "I'm sorry." And hit send. But face-to-face, you get to see that you have hurt the other person. The other person gets to see that you are upset. It is this realization that triggers the beginning of forgiveness.

None of this happens with "I'm sorry," *hit send*. At the moment of remorse, you export the feeling rather than allowing a moment of insight. You displace an inner conflict without processing it; you send the feeling off on its way. A face-to-face apology is an occasion to practice empathic skills. If you are the penitent, you are called upon to put yourself in someone else's shoes. And if you are the person receiving the apology, you, too, are asked to see things from the other side so that you can move toward empathy. In a digital connection, you can sidestep all this. So a lot is at stake when we move away from face-to-face apologies. If we don't put children in the situations that teach empathy (and a face-

to-face apology is one of these), it is not surprising that they have difficulty seeing the effects of their words on others.

The "empathy gap" starts with young children and continues throughout life. A graduate student in economics comments on what is missing when her friends apologize by text. She calls it an "artificial truce."

The texted "I'm sorry" means, on the one hand, "I no longer want to have tension with you; let's be okay," and at the same time says, "I'm not going to be next to you while you go through your feelings; just let me know when our troubles are over." When I have a fight with my boyfriend and the fight ends with an "I'm sorry" text, it is 100 percent certain that the specific fight will come back again. It hasn't been resolved.

The "I'm sorry" text is a missed opportunity. These opportunities can be seized. Parents can insist that their children's apologies be done in person. One mother explains that her always-connected son, now thirteen, had a habit of canceling family plans by sending an email or text to announce his intentions. She has changed the rules. Now, if he wants to cancel a plan—say, dinner with his grandparents—he has to make a phone call to break the date.

That real-time telephone call teaches that his proposed actions will affect others. His mother says, "He can hear how my mother made the roast chicken and it's already in the oven. He can hear that his grandfather has already bought the syrup to make ice cream sundaes." In sum, he can hear that he is expected and that his presence will be missed. She adds that since the new rules have gone into effect, there has rarely been a cancellation.

In-person apologies are no less potent in business settings. Managers tell me that a big part of their job has become teaching employees how to apologize face-to-face. One CEO says he cries out in frustration, even to longtime employees, "Apologize to him. Face-to-face. You were wrong. Say you are sorry." Another tells me that in business, not being able to

say you're sorry face-to-face is "like driving a car but not knowing how to go in reverse." Essentially, it means you can't drive. In his view, he is working with a lot of people who need driving lessons.

"I Would Never Do This Face-to-Face. It's Too Emotional."

When we move from conversation to connection, we shortchange ourselves. My concern is that over time we stop caring—or perhaps worse, we forget there is a difference. Gretchen is a college sophomore who doesn't see a difference. She sits in my office and tells me she is having a hard time concentrating on her coursework. It's roommate trouble. She's been flirting with a roommate's ex-boyfriend. She started out meaning no harm, but things escalated. Now the ex-boyfriend is using her as a weapon against her roommate. When we speak, Gretchen is distracted. Her grades are a disaster. I ask her if she wants to talk to someone in the counseling center. She says no, she needs to make things right with her roommate. What her roommate needs to hear, says Gretchen, is her apology and "the honest truth." Gretchen adds, "That is what will restore my concentration."

I ask Gretchen if she is comfortable going home now; it's close to dinnertime and her roommate is probably at the dorm, no more than a ten-minute walk from my office. Gretchen looks confused as though my question has no meaning. "I'm going to talk to her on Gchat," she says. "I would never do this face-to-face. It's too emotional."

I was taken aback when Stephen Colbert—as his "character," a right-wing blowhard political talk show host—asked me a profound question during an appearance on his show: "Don't all these little tweets, these little sips of online connection, add up to one big gulp of real conversation?" My answer was no. Many sips of connection don't add up to a gulp of conversation.

Connecting in sips may work for gathering discrete bits of information or for saying "I am thinking about you." Or even for saying "I love

you." But connecting in sips doesn't work so well for an apology. It doesn't work so well when we are called upon to see things from another's point of view. In these cases, we have to listen. We have to respond in real time. In these exchanges we show our temperament and character. We build trust.

Face-to-face conversation unfolds slowly. It teaches patience. We attend to tone and nuance. When we communicate on our digital devices, we learn different habits. As we ramp up the volume and velocity of our online connections, we want immediate answers. In order to get them, we ask simpler questions; we dumb down our communications, even on the most important matters. And we become accustomed to a life of constant interruption.

Interruptions? "This Is My Life."

On a balmy evening in June, I interview a group of twenty-five young people, from eighteen to twenty-four, who are in Boston for a summer study program. During our two hours together they tell me that if I really want to know how they communicate, I should be in their group chat. They are having it on an application for their mobile phones called WhatsApp. They invite me into their group, I accept, and our meeting continues. Now we are together in the room and online. Everything changes. Everyone is always "elsewhere" or just getting on their way. With everyone on the app, people switch rapidly between the talk in the room and the chat on their phones. At least half of the phone chat takes the form of images—cartoons, photos, and videos—many of which comment on the conversation in the room. As the students see it, images connect them, equal to any text or any talk.

In the room, the topic turns to how hard it is to separate from family and high school friends during college. But it is hard for this discussion to go very far because it is competing with the parallel activity of online chat and image curation.

Yet I see how happy these students are. They like moving in and out

of talk, text, and images; they like the continual feed. And they like always having someplace *else* to go. They say that their greatest fear is boredom. If for a moment students don't find enough stimulation in the room, they go to the chat. If they don't find the images compelling, they look for new ones. But sharing an image you find on the web is a particular kind of participation. You don't turn to your own experience, but pull instead from external sources. You express yourself but can maintain a certain distance.

As all of this is going on, I remember saying to my daughter when she was three, "Use your words." At first I wonder at my association. I appreciate the pertinence (and the wit!) of the students' shared images, but to me, going to the images is also a way for these young people to slip away from our group conversation just as it becomes challenging. When things get complicated, it's easier to send a picture than to struggle with a hard idea. And another child-raising truism comes to mind, this one in my grandmother's voice: "Look at me when you speak to me." We teach children the outward manifestations of full attention because we hope that by working backward from behavior we can get them to a more profound feeling state. This is the feeling state of attachment and empathic connection. We don't ask children to use their words or to look at us to make them obedient. We want words to be associated with feelings. Eye contact is the most powerful path to human connection.

The students who invited me onto WhatsApp said I could understand them best if I shared their app. But once we shared WhatsApp, their faces were mostly turned down, eyes on their phones.

On this June evening, in the mash-up of talk, texts, and images, the students keep returning to the idea that digital conversations are valuable because they are "low risk." The students talk about how, when they are online, they can edit messages before sending them. And whether the text is to a potential employer or a romantic prospect, if it's important, they often ask friends to go over their writing to help ensure they are getting it "right." These are the perks of connection. But in conversations that could potentially take unexpected directions, people don't always try to get things "right." They learn to be surprised by the things

they say. And to enjoy that experience. The philosopher Heinrich von Kleist calls this "the gradual completion of thoughts while speaking." Von Kleist quotes the French proverb that "appetite comes from eating" and observes that it is equally the case that "ideas come from speaking." The best thoughts, in his view, can be almost unintelligible as they emerge; what matters most is risky, thrilling conversation as a crucible for discovery. Notably, von Kleist is not interested in broadcasting or the kind of posting that social media would provide. The thrill of "risky talk" comes from being in the presence of and in close connection to your listener.

The idea that risky talk might be exciting is far from my students' minds during our evening on WhatsApp. In fact, someone in the group says that one of the good things about sending images is that it makes communication even *less* risky than sending edited texts. Like text, images can be edited. They can be cropped and passed through the perfect filter. And the more you manipulate them, he says, the more you can keep them ambiguous and "open to interpretation." He sees this as a good thing because you can't be hurt if you haven't declared yourself. But if you haven't declared yourself, you haven't tried out an idea. Or expressed a feeling. Declaring and defending yourself is how you learn to be forthright. It is a skill that helps in both love and politics.

In Boston, once the group is both talking out loud and attending to WhatsApp, all communications are constantly interrupted. Phones interrupt talk; talk interrupts phones. I ask everyone how they feel about these interruptions and my question hardly seems to make sense. This group doesn't experience the intrusions of WhatsApp as interruption. One young man says, commenting on the buzz, "This is my life."

In the new communications culture, *interruption is not experienced as interruption but as another connection*. Only half joking, people in their teens and twenties tell me that the most commonly heard phrase at dinner with their friends is "Wait, what?" Everyone is always missing a beat, the time it takes to find an image or send a text.

When people say they're "addicted" to their phones, they are not only saying that they want what their phones provide. They are also saying that they don't

want what their phones allow them to avoid. The thing I hear most is that going to your phone makes it easier to avoid boredom or anxiety. But both of these may signal that you are learning something new, something alive and disruptive. You may be stretching yourself in a new direction. Boredom and anxiety are signs to attend more closely to things, not to turn away.

We don't live in a silent world of no talk. But we drop in and out of the talk we have. And we have very little patience for talk that demands sustained attention. When talk becomes difficult or when talk turns to quiet, we've given ourselves permission to go elsewhere. To avoid life's challenges and boring bits.

Life's Boring Bits

A college senior has a boy in her dorm room. They're in bed together. But when he goes to the bathroom, she takes out her phone and goes on Tinder, an app where she can check out men in the area who might be interested in meeting—or more. She says, "I have no idea why I did this—I really like this guy. . . . I want to date him, but I couldn't help myself. Nothing was happening on Facebook; I didn't have any new emails." Lying there in bed, waiting for her lover to come out of the bathroom, she had hit one of life's boring bits.

When I share this story with people under thirty, I usually get shrugs. This is how things are. A dull moment is never necessary. And you always want to know who is trying to reach you. Or who might be available to you. But the sensibility in which we want a constant stream of stimulation and expect to edit out life's "boring bits" has also come to characterize their elders.

A young father, thirty-four, tells me that when he gives his two-year-old daughter a bath, he finds it boring. And he's feeling guilty. Just a few nights earlier, instead of sitting patiently with her, talking and singing to her, as he did with his older children, he began to check email on his phone. And it wasn't the first time. "I know I shouldn't but I do," he

says. "That bath time should be a time for relaxing with my daughter. But I can't do it. I'm on and off my phone the whole time. I find the downtime of her bath boring."

In a very different setting, Senator John McCain found himself feeling restless on the floor of the Senate during hearings on Syria. So he played poker on his iPhone to escape the feeling. When a picture of his game got into the press, McCain tweeted a joke about being caught out. "Scandal! Caught playing iPhone game at 3+ hour Senate hearing—worst of all I lost!"

Escaping to something like video poker when you come to a moment of boredom has become the norm. But when senators are comfortable saying that going "elsewhere" is normal during a hearing on the crisis in Syria, it becomes harder to expect full attention from anyone in any situation, certainly in any classroom or meeting. This is unfortunate because studies show that open screens degrade the performance of everyone who can see them—their owners and everyone sitting around them.

And we have to reconsider the value of the "boring bits" from which we flee. In work, love, and friendship, relationships of mutuality depend on listening to what might be boring to you but is of interest to someone else. In conversation, a "lull" may be on its way to becoming something else. If a moment in a conversation is slow, there is no way to know when things will pick up except to stay with the conversation. People take time to think and then they think of something new.

More generally, the experience of boredom is directly linked to creativity and innovation. I've said that, like anxiety, it can signal new learning. If we remain curious about our boredom, we can use it as a moment to step back and make a new connection. Or it offers a moment, as von Kleist would have it, to reach out and speak a thought that will only emerge in connection with a listener.

But now we turn away from such reverie and connection. The multitasking we can do on our digital devices makes us feel good immediately. What our brains want is new input—fresh, stimulating, and social. Before technology allowed us to be anywhere anytime, conversation with other people was a big part of how we satisfied our brains' need for

stimulation. But now, through our devices, our brains are offered a continuous and endlessly diverting menu that requires less work.

So we move away from the slower pace, where you have to wait, listen, and let your mind go over things. We move away from the pace of human conversation. And so conversations without agenda, where you discover things as you go along, become harder for us. We haven't stopped talking, but we opt out, often unconsciously, of the kind of conversation that requires full attention. Every time you check your phone in company, what you gain is a hit of stimulation, a neurochemical shot, and what you lose is what a friend, teacher, parent, lover, or co-worker just said, meant, felt.

Does Technology Make Emotions Easy?

Clifford Nass was a cognitive psychologist and communications professor at Stanford University who also worked as a "dorm dad," living in a freshman dorm as a counselor and academic adviser. Nass describes how he tried to connect with one freshman by talking to her about his own high school emotional ups and downs. The student's response was that she and her friends were beyond those kinds of worries. Nass was surprised. Teenage angst was over? That's exactly what the freshman was saying, and she had a theory of why: Social media had stepped in to smooth things out. Her summation: "Technology makes emotions easy."

This freshman's comment inspired Nass to explore the relationship of online life and the emotional life of teenage girls. Was this young woman's intuition correct? In short, the answer was no. Technology does not make emotions easy. Social media can make emotional life very hard indeed.

Nass compared the emotional development of young women who considered themselves "highly connected" with those who spent less time online: The highly connected young women did not have as strong an ability to identify the feelings of other people or, indeed, to identify

their own feelings. They felt less accepted by peers and did not have the same positive feelings from interacting with friends as those who used social media less frequently. Online life was associated with a loss of empathy and a diminished capacity for self-reflection.

This is not really surprising. If you are only partially present, it's easy to miss out on the emotional and nonverbal subtext of what people are saying to you. And you are not focusing on your own feelings either.

For Nass, the emotional tone of social media is another possible source of trouble. When students go online, some of what appeals to them is that they meet a world of good news. Facebook, Nass reminds us, has no "thumbs-down." You can feel disappointed if something you share doesn't get the number of positive reactions you want, but you train yourself to post what will please.

So, on social media, everyone learns to share the positive. But Nass points out that negative emotions require more processing in more parts of the brain. So if you spend a lot of time online—responding to positive emotions—you won't get practice with this more complex processing. As a result, says Nass, your reaction time will be slowed down. This may be what happens to frequent users of social media: They can't respond quickly to others or to themselves. When they respond slowly to others, they "seem insensitive and uncaring." When they respond slowly to themselves, they lose crucial capacities for self-reflection.

Nass worries that in the "thumbs-up" world of online life, young people learn the wrong life lessons. Among the wrong lessons they learn: First, negative emotions are something that unsuccessful kids have rather than normal parts of life that need to be addressed and coped with; second, it is natural to allow distraction and interruption to take you away from other people.

This is a lot of bad news. But here again, there is good news as well: Conversation cures. Nass compares the parts of the brain that process emotion to a muscle: They can atrophy if not exercised, and can be strengthened through face-to-face conversation. Nass says, "The one positive predictor of healthy emotional interactions as well as feelings of social success (statements such as 'people my age understand me' and 'I feel accepted

by my friends'): lots of face-to-face communication." Nass sums it up: "Technology does not provide a sentimental education." People do.

Technology Does Not Provide a Sentimental Education

Reclaiming conversation begins with reclaiming our attention. These days, average American adults check their phones every six and a half minutes. We start early: There are now baby bouncers (and potty seats) that are manufactured with a slot to hold a digital device. A quarter of American teenagers are connected to a device within five minutes of waking up. Most teenagers send one hundred texts a day. Eighty percent sleep with their phones. Forty-four percent do not "unplug," ever, not even in religious services or when playing a sport or exercising.

All of this means that during the dinner hour, the typical American family is managing six or seven simultaneous streams of information. Scattered about are laptops, tablets, phones, a desktop, and of course, in the background, a television, perhaps two. College students who are using any form of media are likely to be using four at a time. If students are on Facebook, they are also on Netflix, a music blog, and their class reading. What happens to conversation here? We want it to be something to which we can pay attention in the same way that we pay attention to other things—that is, we want it to be something we can drop in and out of. Something like the "crawl" on the bottom of a cable news screen.

Again, we live in a world of unintended consequences. Hyperconnected, we imagine ourselves more efficient, but we are deceived. Multitasking degrades our performance at everything we do, all the while giving us the feeling that we are doing better at everything. So it makes us less productive no matter how good it makes us feel. And recall technology's deficiencies as a "sentimental education": Frequent multitasking is associated with depression, social anxiety, and trouble reading human emotions.

What is most hopeful is our resiliency. If children develop problems with self-esteem and empathy when they turn to screens at an early age, con-

versation, remarkably, seems able to reverse it. So, instead of doing your email as you push your daughter in her stroller, talk to her. Instead of putting a digital tablet in your son's baby bouncer, read to him and chat about the book. Instead of a quick text if you find a conversation going stale, make an effort to engage your peers.

But the talking cure is no simple matter. For one thing, we are wired to crave instant gratification, a fast pace, and unpredictability. That is, we are wired to crave what neuroscientists call "the seeking drive," the kind of experience that scrolling through a Twitter feed provides. And people who chronically multitask train their brains to crave multitasking. Those who multitask most frequently don't get better at it; they just want more of it. This means that conversation, the kind that demands focus, becomes more and more difficult.

A twenty-four-year-old young woman who works at a start-up tells me that she is no longer able to focus on one thing or one person at a time. And that's the problem with conversation; it asks for a skill she no longer can summon. "If I try to do one thing, I'm not good. I pick my nails off. I can't do it. I physically can't do one thing." At first her multitasking made her feel like Wonder Woman. Now she feels she needs help.

One college junior describes her "problem with conversation" in similar terms. It rules out multitasking, and multitasking is how she copes with life: "When you deal with people face-to-face, you are only seeing one of them at a time. When I get used to messaging with my Facebook groups, talking to one person at a time seems slow." After college, she took a break from Facebook. She deleted the app from her laptop and her phone. She was off Facebook for only a few weeks, but she says the experience "calmed" her. "I am less impatient with people," she says. "And for the first time I know I can be alone."

We could say we are "addicted to multitasking," but this is not the most helpful way to frame the problem. Our phones are part of our media ecology. We have to find a way to make our lives better with our phones. I prefer to think in terms of technological affordances—what technology makes possible (and often attractive and easy)—and human

vulnerabilities. If you are addicted, you have to get off your drug. If you are vulnerable, you can work to be less vulnerable.

Thinking in terms of technological affordances and human vulnerabilities positions us to design for vulnerability. I meet with an inventor who observes that when people engage with smartphones, they are compelled into a new kind of vigilant behavior. "They want to make sure they're not missing anything," he says, "so they keep interacting with their devices." He makes this intriguing suggestion: "What if we designed a smartphone interface that made it easy for us to do a specific task (such as messaging a friend or family member) and then, instead of encouraging us to stay connected as long as possible, would encourage us to disengage? The interface would be designed to reduce our usage, and make spending more time on our phone a deliberate action." The point is not to make connection impossible or difficult. But it should demand intention; it should not be something the system helps you slide into. He says, "So instead of a phone that keeps us mesmerized, we may want to build a phone that lets us attend to our business and then gradually releases us because that is what is best for us."

We can design technology that demands that we use it with greater intention. And in our families, we can create sacred spaces—the living room, the dining room, the kitchen, the car—that are device-free. We can do the same thing at work—for certain meeting spaces and classes. We can plan for a future in which the design of our tools and our social surroundings encourages us to be our best. As consumers of digital media, our goal should be to partner with an industry that commits to our using their products, of course, but also to our health and emotional well-being.

"They Look like Deer Caught in the Headlights. They Don't Want to Have Another Conversation."

Conversation implies something kinetic. It is derived from words that mean "to tend to each other, to lean toward each other," words about the *activity of relationship*, one's "manner of conducting oneself in

the world or in society; behavior, mode or course of life." To converse, you don't just have to perform turn taking, you have to listen to someone else, to read their body, their voice, their tone, and their silences. You bring your concern and experience to bear, and you expect the same from others.

When we express our anxiety about conversation, we express our anxiety about our ability to do all of this. A sixteen-year-old boy tells his mother that he has just received a text from his best friend. His friend's father has died. He tells his mother that he has texted his friend to say he is sorry. His mother, almost uncomprehending, asks, "Why didn't you call?" She is thinking about consolation. The boy says, "It isn't my place to interrupt him. He's too sad to talk on the phone." The boy assumes that conversation is intrusive even at moments that beg for intimacy.

I tell this story to a twenty-one-year-old college senior who has been working with me at my home every day for months, organizing my papers for an archive. She says that she wouldn't call me if she heard that there had been a death in my family. She says that she *knows* I would be more comforted by a call, that it would mean more to me. But she echoes the sentiments of the sixteen-year-old boy. She says, "Anything having to do with the voice feels like an interruption."

One high school senior talks about a plan to put himself on a self-improvement program. He is going to "force himself" to use the telephone. I ask him why. "It might," he says, "be a way to teach myself to have a conversation . . . rather than spending my life in awkward silence. I feel like phone conversations nowadays will help me in the long run."

This is a poignant admission. This young man acknowledges that for all his many hours a day texting and messaging, he has not learned how to listen and respond. At news of a death, he, too, would send an email. These days, there are college courses on conversation. The curriculum includes how to pay attention to someone on a date. How to disagree with someone politically. It is an acknowledgment that students are comfortable going to bed with each other but not talking to each other. They will know each other's sexual preferences but not if their partner

has a widowed father or an autistic sister. They may not even know if their partner has siblings at all.

Employers have come to appreciate the vulnerability of the new generations. Some businesses explicitly screen for an ability to converse. A vice-president at a large pharmaceutical company tells me her strategy for hiring new recruits. "It's very simple," she says. "I have a conversation with them."

Most applicants are prepped for one conversation. And then at the end, I tell the potential recruits that their homework is to organize what we've discussed and from that make an agenda of interesting themes for our next conversation . . . hopefully tomorrow or the day following. They are stunned. They look like deer caught in the headlights. They don't want to have another conversation. They were hoping for some follow-up emails.

The Three Chairs

I n the chapters that follow, I look at the kinds of conversation Thoreau envisaged when he described the three chairs in his cabin. The story begins with *one-chair conversations*, those of solitude. Solitude does not necessarily mean being alone. It is a state of conscious retreat, a gathering of the self. The capacity for solitude makes relationships with others more authentic. Because you know who you are, you can see others for who they are, not for who you need them to be. So solitude enables richer conversation. But our current way of life undermines our capacity for solitude.

I've said that, these days, being alone feels like a problem that needs to be solved, and people try to solve it with technology. But here, digital connection is more a symptom than a cure. It expresses but it doesn't solve the underlying problem—a discomfort with being alone. And, more than a symptom, constant connection is changing the way people

think of themselves. It is shaping a new way of being. I call it "I share, therefore I am." We share our thoughts and feelings in order to feel whole.

In order to feel more, and to feel more like ourselves, we connect. But in our rush to connect, we flee solitude. In time, our ability to be separate and gather ourselves is diminished. If we don't know who we are when we are alone, we turn to other people to support our sense of self. This makes it impossible to fully experience others as who they are. We take what we need from them in bits and pieces; it is as though we use them as spare parts to support our fragile selves.

If you don't have practice in thinking alone, you are less able to bring your ideas to the table with confidence and authority. Collaboration suffers. As does innovation, which requires a capacity for solitude that continual connection diminishes.

A love of solitude and self-reflection enables sociability. Many think of Thoreau as a recluse. He was anything but. In fact, his friends joked that he could hear the Emerson family dinner bell from his cabin in the woods. Thoreau's *two-chair conversations* are with friends, family, and romantic partners.

These days, parents complain that children won't talk to them because they are so busy with their phones at mealtime; children have the same complaints about their parents. Parents respond that children don't have the "standing" to make this kind of complaint. During meals, children go to their phones. We are at an odd standoff with neither side happy.

In a television commercial for Facebook, a large, gregarious family sits down to a meal. It is a Norman Rockwell moment. In our positive associations to family dinner, myth and science come together. We know that for children the best predictor of success later in life is the number of meals shared with their families. The dinner in the Facebook commercial looks like one of those dinners that everyone knows they are supposed to love.

Just as the viewer locks on to this image of unconditional "good," the

narrative is disrupted. An older woman at the table—let me call her "boring Auntie"—begins a painfully dull story about trying to buy a chicken at the market. A teenage girl at the table does the predictable: She pulls out her phone and goes onto Facebook. Immediately, the scene is populated with scenes from her newsfeed: A friend plays the drums, another performs ballet, yet others are in a snowball fight. The teenager is no longer at dinner. She is elsewhere.

We once taught our children to ignore a ringing phone at dinner. We became annoyed if telemarketers interrupted us. Now, Facebook suggests that it may be a good thing to interrupt dinner *ourselves*.

And then there are *three-chair conversations*, conversations in the social world. Here I begin with examples from the world of work. I look at my own kind of workplace, the world of education, and also the business and corporate world. I saw striking commonalities between education and business, between the dynamics of classrooms and offices. I found conversation to be at the heart of the learning culture and I learned that conversation is good for the bottom line.

And both domains face similar threats to their cultures of conversation. In classrooms and offices, the cultural expectation for multitasking subverts conversation and constant interruption threatens achievement. Just as we go to dinners with friends that are not quite dinners together, we go to classes that are not quite classes and work meetings that are not quite meetings. What these not quite encounters have in common is that we all feel free to be on some device and to let our minds wander.

And, most recently, in both education and at work, conversation is challenged by new experiments that use technology to engage people from a distance. So, for example, there is the hope that online courses will make remote learning more "efficient" in ways that can be measured. One unexpected result of the online experiments has been to make the value of teachers and students talking face-to-face ever more clear. A teacher "live" in front of a classroom gives students an opportunity to watch someone think, boring bits and all. That teacher is a

model for how thinking happens, including false starts and hindsight. There has been a parallel development in the workplace: Many of the firms that encouraged employees to work at home are calling them back to the office in order to have a more collaborative and productive workforce.

Of course, in many businesses, remote work is the cost-saving rule. I interview an executive, Howard Chen, who is the creator of a social media site for a multinational corporation. He is passionate about the necessity for advanced social media in his company because it has decided to close down local offices. In their place is a new system called "hoteling." When people need the resources of an office, they bring their computer to a building where an automated system assigns them a room. When they get there and plug in their computer, a virtual telephone pops up on the screen. That is their company line for the day. They are "at work."

So when Chen goes to the office, there are no regular colleagues around, no community at all. But this is all the more reason for him to be excited about the new social network he has designed. He dreams that it will restore life to his work environment, now stripped so bare of familiar objects and people. On the day I meet him, we are in a new hotel space. He responds to his unfamiliar physical surrounds by extolling the "sociability" of his social media. With only a few keystrokes he can call up an international database of all employees and their interests. This, he hopes, can be the basis for online conversations and new connections. He says, "Yeah, if you're a soccer fan, you can talk to all the other soccer fans in the company. How cool is that?" But as an aside, he says that recently he has been feeling rather sad:

Last week I was sitting there and I finished doing something and I looked around and you could hear a pin drop. And I'm, like, this is ghastly. It's just horrible. So I took out my iPhone and I recorded the silence for a minute to show my wife. This is what it sounds like, or doesn't sound like, at work.

We work so hard to build our online connections. We have so much faith in them. But we must take care that in the end we do not simply feel alone with our devices.

This is all the more important because although the flight from conversation affects us as individuals, it also changes our life in communities. Here I consider three questions about politics and social policy on our new digital landscape.

First, the Internet gives us the possibility of sharing our views with anyone in the world, but it also can support information silos where we don't talk to anyone who doesn't agree with us. Studies show that people don't like posting things that their followers won't agree with—everyone wants to be liked. So technology can sustain ever more rigid partisanship that makes it hard to talk, enabling us to live in information bubbles that don't let in dissenting voices.

Second, when politics goes online, people begin to talk about political action in terms of things they can do online. They are drawn to the idea that social change can happen by giving a "thumbs-up" or by subscribing to a group. The slow, hard work of politics—study, analysis, listening, trying to convince someone with a different point of view—these can get lost. The Internet is a good start, a place to bring people together. But politics continues in conversation and in relationships developed over time. I have said that technology gives us the illusion of companionship without the demands of friendship. Now I worry that it can also give us the illusion of progress without the demands of action.

Third, digital communication makes surveillance easier. The corporations that provide us with the means to talk on the net (to text, email, and chat) take our online activity as data. They declare ownership of it and use it, usually to better sell things to us. And we now know that our government routinely makes a copy of our communications as well. The boundaries have blurred between private communication and routine surveillance, between private communication and its repackaging as a commodity. So, in addition to the question *What is intimacy without privacy?* I consider another: *What is democracy without privacy?*

The Fourth Chair

And I think of a "fourth chair." I've said that when conversation got expansive, Thoreau took his guests into nature. I think of this as his fourth chair, his most philosophical one. These days, the way things have gotten philosophical causes us to confront how we have used technology to create a second nature, an artificial nature. For so long we have assumed that the conversations that matter are the conversations we have with other people. In recent years, this idea has been challenged by computer programs that seduce us not by their smarts but by their sociability. I explore proposals for new, more intimate conversations with "socially" competent machines—a development with the potential to change human nature itself. For me, our *fourth-chair conversations* are ones that Thoreau could not have envisaged: We are tempted to talk not only through machines but to them, with them.

At first, we met Siri, a digital companion always ready to engage. But that was just the beginning. As I write these words, the media is full of stories about the launch of the first "home robots" who are there to be always-available "best friendly companions" by acting as though they understand what you are saying when they exchange pleasantries through the magic of simulated feelings. Have we forgotten what conversation is? What friendship is? Is talking to machines companionship or abandonment?

We lose our words. *Intelligence* once meant more than what any artificial intelligence does. It used to include sensibility, sensitivity, awareness, discernment, reason, acumen, and wit. And yet we readily call machines intelligent now. *Affective* is another word that once meant a lot more than what any machine can deliver. Yet we have become used to describing machines that portray emotional states or can sense our emotional states as exemplars of "affective computing." These new meanings become our new normal, and we forget other meanings. We have to struggle to recapture lost language, lost meanings, and perhaps, in time, lost experiences.

Solitude

I Share, Therefore I Am

You need to build an ability to just be yourself and not be doing something. That's what the phones are taking away. The ability to just sit there. That's just being a person.

—LOUIS C.K., ACTOR AND COMEDIAN

I n 2013, Louis C.K. brought the necessity for solitude, especially for children, to a late-night television audience. He began by telling Conan O'Brien how he explains to his two daughters why they can't have cell phones. He set the stage by making clear that when it comes to his children, he takes the long view: "I'm not raising the children. I'm raising the grown-ups that they're going to be." For him, phones are "toxic, especially for kids."

They don't look at people when they talk to them. And they don't build the empathy. You know, kids are mean. And it's because they're trying it out. They look at a kid and they go, "You're fat." And then they see the kid's face scrunch up and they go, "Ooh, that doesn't feel good to make a person do that." . . . But when they write "You're fat," then they just go, "Mmm, that was fun. I like that." . . .

You need to build an ability to just be yourself and not be doing something. That's what the phones are taking away. The ability to just sit there. That's just being a person. . . . Because underneath everything

in your life there is that thing, that empty, forever empty. That knowl-edge that it's all for nothing and you're alone. It's down there. And sometimes when things clear away and you're not watching and you're in your car and you start going, Ooh, here it comes that I'm alone, like it starts to visit on you just like this sadness. Life is tremendously sad. . . . That's why we text and drive. Pretty much 100 percent of people driving are texting. And they're killing and murdering each other with their cars. But people are willing to risk taking their life and ruin-ing another because they don't want to be alone for a second. . . . I was alone in my car and a Bruce Springsteen song came on . . . and I heard it and it gave me a kind of fall, back-to-school-depression feeling and it made me feel really sad and so I went, "Okay, I'm getting really sad," so I had to get the phone and write "Hi" to, like, fifty people. . . . Anyway, I started to get that sad feeling and reached for the phone and then I said, "You know what: Don't. Just be sad. Just stand in the way of it and let it hit you like a truck."

So I pulled over and I just cried like a bitch. I cried so much and it was beautiful. . . . Sadness is poetic. . . . You are lucky to live sad mo-ments. And then I had happy feelings because when you let yourself have sad feelings your body has like antibodies that come rushing in to meet the sad feelings. But because we don't want that first feeling of sad, we push it away with our phones. So you never feel completely happy or completely sad. You just feel kind of satisfied with your products. And then . . . you die.

So that's why I don't want to get a phone for my kids.

The Virtues of Solitude

Solitude doesn't necessarily mean a lack of activity. You know you are experiencing solitude when what you are doing brings you back to yourself. The writer Susan Cain has persuasively argued that solitude is important for introverts and that introverts are a significant number

among us. Louis C.K. provides poetic support for an even broader argument. Solitude is important for everyone, including the most extroverted people. It's the time you become familiar and comfortable with yourself. And developing the capacity for solitude is one of the most important tasks of childhood, every childhood.

It's the capacity for solitude that allows you to reach out to others and see them as separate and independent. You don't need them to be anything other than who they are. This means you can listen to them and hear what they have to say. This makes the capacity for solitude essential to the development of empathy. And this is why solitude marks the beginning of conversation's virtuous circle. If you are comfortable with yourself, you can put yourself in someone else's place.

In his soliloquy on solitude, Louis C.K. raises a concern that lies beneath the surface of so many anxious conversations about children and technology. What if children are so absorbed in their phones that the alchemy of solitude and the capacity for empathy doesn't take place? Without empathy, the comedian points out, we don't understand the impact we have when we bully others because we don't see them as people like ourselves.

Developmental psychology has long made the case for the importance of solitude. And now so does neuroscience. It is only when we are alone with our thoughts—not reacting to external stimuli—that we engage that part of the brain's basic infrastructure devoted to building up a sense of our stable autobiographical past. This is the "default mode network." So, without solitude, we can't construct a stable sense of self. Yet children who grow up digital have always had something external to respond to. When they go online, their minds are not wandering but rather are captured and divided.

These days, we may mistake time on the net for solitude. It isn't. In fact, solitude is challenged by our habit of turning to our screens rather than inward. And it is challenged by our culture of continual sharing. People who grew up with social media will often say that they don't feel like themselves; indeed, they sometimes can't *feel* themselves, unless they

are posting, messaging, or texting. Sometimes people say that they need to share a thought or feeling in order to think it, feel it. This is the sensibility of "I share, therefore I am." Or otherwise put: "I want to have a feeling; I need to send a text."

With this sensibility we risk building a false self, based on performances we think others will enjoy. In Thoreau's terms, we live too "thickly," responding to the world around rather than first learning to know ourselves.

In recent years, psychologists have learned more about how creative ideas come from the reveries of solitude. When we let our minds wander, we set our brains free. Our brains are most productive when there is no demand that they be reactive. For some, this goes against cultural expectations. American culture tends to worship sociality. We have *wanted* to believe that we are our most creative during "brainstorming" and "groupthink" sessions. But this turns out not to be the case. New ideas are more likely to emerge from people thinking on their own. Solitude is where we learn to trust our imaginations.

When children grow up with time alone with their thoughts, they feel a certain ground under their feet. Their imaginations bring them comfort. If children always have something outside of themselves to respond to, they don't build up this resource. So it is not surprising that today young people become anxious if they are alone without a device. They are likely to say they are bored. From the youngest ages they have been diverted by structured play and the shiny objects of digital culture.

Shiny Objects

We have embarked on a giant experiment in which our children are the human subjects.

Breast-feeding mothers, fathers pushing strollers—their phones are rarely out of sight. New studies correlate the growing number of cell

phones and the rise of playground accidents because at the park, parents and caretakers are paying attention to phones.

In every culture, young children want the objects of grown-up desire. So our children tell us they want phones and tablets, and, if they can afford it, very few parents say no. In parental slang, giving a smartphone to quiet your toddler in the rear seat of the car is known as the "passback."

In a moment of quiet, children have an alternative to turning within. And they are taken away from human faces and voices, because we let screens do jobs that people used to do—for example, reading to children and playing games with them. Checkers with your grandparents is an occasion to talk; checkers with a computer program is an occasion to strategize and perhaps be allowed to win. Screens serve up all kinds of educational, emotional, artistic, and erotic experiences, but they don't encourage solitude and they don't teach the richness of face-to-face conversation.

A fourteen-year-old girl sums up her feelings about spending an hour on Facebook: "Even if it is just seeing the 'likes' on things I posted, I feel that I've accomplished something." What has she accomplished? Time on Facebook makes a predictable outcome (if you post a likable photograph you will get "likes") feel like an achievement. Online, we become accustomed to the idea of nearly guaranteed results, something that the ups and downs of solitude can't promise. And, of course, time with people can't promise it either.

When children have experience in conversation, they learn that practice never leads to perfect but that perfect isn't the point. But perfect can be the goal in a simulation—in a computer game, for example. If you are tutored by simulation, you may become fearful of not being in control even when control is not the point.

An eight-year-old boy is in a park, his back against a large tree. He is engrossed in his shiny object—a small tablet computer, a recent present. He plays a treasure-hunt game that connects him with a network of players all over the world. The boy bites his lip in concentration as his

fingers do their work. From the point of view of the other children in the park, the boy is carrying a DO NOT DISTURB sign. His focus marks him as unavailable to join in a round of Frisbee, maybe, or a race to climb the monkey bars. This is not a day he will accept such an invitation, or make one himself. This is not a day he will learn to ask questions of other children or listen to their answers. And most of the adults at the park are staring at screens; the eight-year-old is connected in the game, but in the park, he is very much alone.

Yet unlike time in nature or with a book, where his mind might wander, the experience of his online game drives him back to the task at hand. He masters the rules of a virtual treasure hunt but doesn't get to hang by his knees on a jungle gym, contemplating the patterns in an upside-down winter sky.

Whereas screen activity tends to rev kids up, the concrete worlds of modeling clay, finger paints, and building blocks slow them down. The physicality of these materials—the sticky thickness of clay, the hard solidity of blocks—offers a very real resistance that gives children time to think, to use their imaginations, to make up their own worlds.

The psychoanalyst Erik Erikson, a specialist in adolescent development, wrote that children thrive when they are given time and stillness. The shiny objects of today's childhood demand time and interrupt stillness.

Of course, there are many ways to use the computer that encourage children to work creatively. One example is when children don't simply play computer games but learn to program so that they can build their own games. But when we expect to see children at screens, that becomes the new normal and we stop noticing the details. We stop noticing exactly what is on our children's screens. What we need to do is stop seeing child and screen as natural partners. Then, we can step back and notice what exactly is on those screens. Then, we can talk about what we want childhood to accomplish.

"Alone With"

ow can the capacity for solitude be cultivated? With attention and respectful conversation.

Children develop the capacity for solitude in the presence of an attentive other. Consider the silences that fall when you take a young boy on a quiet walk in nature. The child comes to feel increasingly aware of what it is to be alone in nature, supported by being "with" someone who is introducing him to this experience. Gradually, the child takes walks alone. Or imagine a mother giving her two-year-old daughter a bath, allowing the girl's reverie with her bath toys as she makes up stories and learns to be alone with her thoughts, all the while knowing her mother is present and available to her. Gradually, the bath, taken alone, is a time when the child is comfortable with her imagination. Attachment enables solitude.

So we practice being "alone with"—and, if successful, end up with a self peopled by those who have mattered most. Hannah Arendt talks about the solitary person as free to keep himself company. He is not lonely, but always accompanied, "together with himself." For Arendt, "All thinking, strictly speaking, is done in solitude and is a dialogue between me and myself; but this dialogue of the two-in-one does not lose contact with the world of my fellow-men because they are represented in the self with whom I lead the dialogue of thought."

Paul Tillich has a beautiful formulation: "Language . . . has created the word 'loneliness' to express the pain of being alone. And it has created the word 'solitude' to express the glory of being alone." Loneliness is painful, emotionally and even physically, born from a "want of intimacy" when we need it most, in early childhood. Solitude—the capacity to be contentedly and constructively alone—is built from successful human connection at just that time. But if we don't have experience with solitude—and this is often the case today—we start to equate loneliness and solitude. This reflects the impoverishment of our experience. If

we don't know the satisfactions of solitude, we only know the panic of loneliness.

Recently, I was working on my computer during a train ride from Boston to New York, passing through a snowy Connecticut landscape. I wouldn't have known this but for the fact that I looked up when I walked to the dining car to get a coffee. As I did, I noted that every other adult on the train was staring at a screen. We deny ourselves the benefits of solitude because we see the time it requires as a resource to exploit. Instead of using time alone to think (or not think), we think of filling it with digital connection.

And we get our children to live the same way. The children on the Boston–New York train had their own devices—tablets and phones. I said that we use digital "passbacks" to placate young children who say they are bored. We are not teaching them that boredom can be recognized as your imagination calling you.

Of course, any too-poetic picture of solitude needs correction. Solitude may be a touchstone for empathy and creativity, but it certainly does not always feel good. For the poet Rainer Maria Rilke, "Openness, patience, receptivity, solitude is everything." And yet, in a way that Louis C.K. would have understood, Rilke confronted its difficulty: "And you should not let yourself be confused in your solitude by the fact that there is something in you that wants to move out of it." Indeed, research shows that adolescents experience solitude as downtime that can feel bad in the short run. But in the long run it facilitates healthy development. Without solitude, in days and nights of continual connection, we may experience those "moments of more" but lives of less.

When I ask children and teens about quiet time alone with their thoughts, most tell me that it is not something they seek. As soon as they are alone, they reach for their phones. No matter where they are. Most are already sleeping with their phones. So, if they wake up in the middle of the night, they check their messages. They never take a walk without their phones. Time alone is not, most say, something their parents taught them to value. If we care about solitude, we have to communicate this to our children. They are not going to pick it up on their

own. And more than telling our children that we value solitude, we have to show them that we think it is important by finding some for ourselves.

Disconnection Anxiety

We have testimony about solitude from the most creative among us. For Mozart, "When I am, as it were, completely myself, entirely alone, and of good cheer—say, traveling in a carriage or walking after a good meal or during the night when I cannot sleep—it is on such occasions that my ideas flow best and most abundantly." For Kafka, "You need not leave your room. Remain sitting at your table and listen. You need not even listen, simply wait, just learn to become quiet, and still, and solitary. The world will freely offer itself to you to be unmasked." For Thomas Mann, "Solitude gives birth to the original in us, to beauty unfamiliar and perilous—to poetry." For Picasso, "Without great solitude, no serious work is possible."

Answering these warm poetic voices are the cool results of social science. Susan Cain, writing about the importance of privacy for creative work, cites a study known as "The Coding War Games." Here, researchers compared the work of more than six hundred programmers at ninety-two companies. Within companies, programmers performed at about the same level, but among different organizations, the performance gaps were striking. One thing characterized the programmers in the high-performing organizations: They had more privacy. The top performers "overwhelmingly worked for companies that gave their workers the most privacy, personal space, control over their physical environments, and freedom from interruption."

It is not surprising that privacy allows for greater creativity. When we let our focus shift away from the people and things around us, we are better able to think critically about our own thoughts, a process psychologists call meta-cognition. Everyone has this potential. The important thing is to nurture it. The danger is that in a life of constant connection, we lose the capacity to do so.

A vice-president of a Fortune 500 company tells me that he recently had to write an important presentation and asked his secretary to "protect" him from all interruptions for three hours.

I wanted my email disabled. I asked her to take my cell phone away from me. I told her to let no calls through except for family emergencies. She did exactly as I wished. But three hours without connection were intolerable. I could barely concentrate on the presentation, I felt so anxious. I know this sounds crazy but I felt panicky. I felt that no one cared about me, loved me.

His experience illustrates disconnection anxiety. Now that connection is always on offer, people don't know what to do with time alone, even time they asked for. They can't concentrate; they say they are bored, and boredom becomes a reason to turn to their phones for a game or a text or a Facebook update. But mostly, it is anxiety that leads them back to their phones. They want to feel a part of things. That is the message of our messages: We are on someone's radar.

I've talked so much about virtuous circles; here is a vicious cycle. Knowing we have someplace "else" to go in a moment of boredom leaves us less experienced at exploring our inner lives and therefore more likely to want the stimulation of what is on our phones. To reclaim solitude we have to learn to experience a moment of boredom as a reason to turn inward, to defer going "elsewhere" at least some of the time.

Where Empathy Begins

I 've spoken about Holbrooke, a middle school in upstate New York. It is small, with about a hundred and fifty students, boys and girls in grades six to eight. For several years, the teachers have felt that something is amiss. This year, they have called me in as a consultant. The main thing on their minds: Their students are not showing empathy toward each other. The teachers themselves make the connection

between this lack of empathy and the difficulty children have with solitude. As the teachers see it, if students can't take time for themselves, how will they take time for others?

The teachers say they are trying to slow things down for their students. They want each student to have an experience of "breathing room." Right now, students struggle to sit quietly and concentrate. They have very little patience. In the past, there were always some students who would balk at lengthy assignments. But now, even academically ambitious students rebel when they see a reading list that includes more than one long book.

While our brains are wired for talk, we can also train them to do deep reading, the kind that demands concentration on a sustained narrative thread with complex characters. It is the kind of reading the Holbrooke students say they don't want to do. Generations of English teachers told their charges that reading this kind of fiction was "good for them." It sounded like something teachers would say; no one really believed them in a literal sense. But now we know that literary fiction significantly improves empathic capacity, as measured by the ability to infer emotional states from people's facial expressions. The English teachers were right, literally. First one identifies with the characters in a complex novel and then the effect generalizes.

Jane Austen endures because readers identify with the mix of pride and prejudice in her most famous hero and heroine. Readers groan at the mountain of complications that character and circumstance throw in their path and celebrate when Elizabeth and Darcy can find each other despite. Literary fiction exercises a reader's imagination in matters of character and emotional nuance. The parallels to conversation are clear. Conversation, like literary fiction, asks for imagination and engagement. And conversation, like literary fiction, demands quiet time.

It's time that today's students don't seem to have. An English teacher at Holbrooke says of her seventh graders: "They don't want to be assigned projects that will claim their attention over time. They don't want to see things through." One teacher tries to sum up a new distractedness: "My students say things like, 'I misplaced my journal. I looked for it for

ten minutes.' And then they look at me. The understanding is that now, it is my job to organize the search."

At Holbrooke, my mind jumps to conversations with businesspeople who talk about the "special needs" of recent college graduates who come to them seeking employment. One advertising executive, with thirty-five years of experience, describes the sensibility of her recent hires. As she talks about them, she is arguably describing the kinds of workers the Holbrooke students will become:

These young people are not used to working on their own on a project. In the past, if you think of employees . . . who are now in their forties, fifties, sixties . . . if you gave them a project, they thought it was their job to do it. Alone. Now, people can't be alone. They need continual contact and support and reinforcement. They want to know they are doing well. Left on their own to do their work, they feel truly bereft. They are always connected to each other online, but as I listen to their supervisors, they also need more support than before. They need a different kind of management.

An art director at an advertising agency says of her new hires, all from elite colleges: "They are incredibly talented, but they grew up in a world of Facebook 'thumbs-ups.' They are accustomed to a lot of encouragement. So, you don't know if you should indulge that or if the management challenge is to teach them how to be alone and give themselves a 'thumbs-up.'"

Negotiating Boredom

The concerns of the Holbrooke teachers are shared by those who teach older children. At one high school in Maine, teachers from all academic departments worry that students lack downtime. They say that high school students need it to learn how to think with autonomy.

But the teachers don't think that parents are on their side. As the teachers see it, "Parents don't want their kids to have downtime. There can always be more piano lessons or soccer practice. . . . The kids in our school are shuttled from activity to activity; they eat dinner in their cars. . . . If parents think their children have any free time, they say to us and to the child: 'You're not doing enough to succeed.'" Or parents worry that downtime is the same as boredom and see it as a waste of time.

But childhood boredom is a driver. It sparks imagination. It builds up inner emotional resources. For the child psychoanalyst Donald W. Winnicott, a child's capacity to be bored—closely linked to the child's capacity to play contentedly alone while in the quiet presence of a parent—is a critical sign of psychological health. Negotiating boredom is a signal developmental achievement.

The high school teachers say that most of their students don't have this achievement behind them. Even short periods of time alone make their students uncomfortable. If there is an open space in the day, students expect an adult to come in with an activity. If not, they expect to turn to their phones for distraction, a new connection, or a new game. What they don't allow themselves is stillness. A high school math teacher tries to sum up the costs: "Seeing things takes time. Seeing yourself takes time. Having a friend takes time. And it takes time to do things well. . . . These kids don't have time."

Back at Holbrooke, an art teacher describes her most recent attempt to get a class of twelve-year-olds to slow down. She asked students to take five minutes to draw an object of their choice. "Several," she says, "told me that this was the longest they had ever concentrated on one thing, uninterrupted." And then she says, "They got upset when they couldn't do it well. They asked for help. So, what happened is that I went over to help. But then, as soon as I stepped away, they lost interest. Some turned to their phones."

A drama teacher says she had similar problems during rehearsals for a recent school play: "I tell them that acting is not about the verbal performance. The actor is really doing 'deep listening.' That is, the actor is

responding to the other actors." But the students could not sit still long enough to listen to each other. In the end, the drama teacher presented them with an ultimatum: Listen to each other or leave the play. The ultimatum had its effects: A group of students dropped out.

The Holbrooke teachers worry that they are making some problems worse. At Holbrooke, each student is given an iPad for reading textbooks, organizing assignments, and keeping up with the school schedule. The school is asking students to work from the very devices that distract them.

One fifteen-year-old says that once he's on his iPad, "I am lost. I go on to check the time for a team practice, but it pulls me in. So I check my Facebook." Life, for him, "would be simpler with a printed schedule." A fourteen-year-old girl describes the strain of having to do all her class reading online. "Once I'm on the iPad for assignments, I'm messaging my friends and playing a game. It's hard to stay on school things. I don't see why they got rid of books."

Right now, the Holbrooke teachers are in no position to take the iPads away. They tell me that as a school they have made a commitment to the platform's "efficiency" and to the "content available online." But it's hard to keep students from jumping online whenever they have a free moment. And once students are online, it's hard to keep them from the path of least resistance. That path leads to texting, games, and shopping. That path leads to Facebook.

The Facebook Zone

How does technology hold us close, so close that we turn to it instead of turning within? It keeps us in a "machine zone." When she considered gamblers' connection to their slot machines, the anthropologist Natasha Dow Schüll wrote about the machine zone as a state of mind in which people don't know where they begin and the machine ends. One of the gamblers Schüll interviewed said, "I'm almost hypno-

tized into *being* that machine." For gamblers in the machine zone, money doesn't matter. Neither does winning or losing. What matters is remaining at the machine and in the zone. Technology critic Alexis Madrigal thinks of the "Facebook zone" as a softer version of the numbed state of Schüll's gamblers. When you're on social media, you don't leave, but you are not sure if you are making a conscious decision to stay.

Here is how Maggie, a college junior, describes that place: "When I check my Facebook and Twitter and email on my cell phone, I feel like I am forgetting to check something and I'll continue to look through those three things because I feel like I am missing something." The process of checking draws her into the process of checking. Judy, another junior, speaks about Facebook on her phone as a "lucky charm" that will protect her from boredom. But when she describes her time with her phone, it seems as if it is training her to be bored with anything other than her phone:

> *If you're on some app and looking through stuff because you're bored, you can click your little round button and go through a circuit of apps. Even if nothing is happening you probably have an email. Sometimes when you're just sitting and talking to someone or in class it's boring. So you check your phone even if you know nothing has happened. That switching makes it so that when you're just sitting or engaged in one thing, it feels weird.*

As Judy would put it, in the Facebook zone, you are never available for "just sitting" or "being engaged in one thing." That's a problem: These are the building blocks of solitude.

It is helpful to compare the Facebook zone with what the psychologist Mihaly Csikszentmihalyi calls "flow." In flow, you are asked to do a task that isn't so easy as to be mindless but isn't so hard as to be out of your grasp. If, when skiing, you are challenged but your skills are sufficient to give you a feeling of connection with the mountain, you are experiencing flow. For Csikszentmihalyi, experiences in the flow state

always lead to new learning and a stronger sense of self. Schüll's gamblers don't experience growth but entrapment and repetition. Madrigal calls the machine zone the "dark side of flow."

Between flow and its dark side, where are we when we enter the Facebook zone? Maggie and Judy both say that cycling through apps takes them away from other—and they think more important—things they used to do, like going for a walk, drawing, and reading. They no longer make time for these activities, but they can't break away from their phones and are not sure they want to. In their stories, we see the "success" of devices whose goal, ultimately, is to keep their users connected.

A humorous moment made this point during a Boston visit of Eric Schmidt, the executive chairman of Google. Schmidt was in town to speak about his recently published book. When he walked into the hall, he asked the audience, "How many of you are going to be on your phones during the lecture?" When a roomful of hands shot up he said, "Good! That's what we want you to be doing." Apps are designed to keep you on apps. And the more of your downtime you spend cycling through apps, the less time you have to be alone with yourself.

Surfing as Solitude

College students are clear: What they count as solitude involves being online. One college junior tells me that she doesn't daydream but does something she calls "chilling." It involves "aimlessly searching the web." Think of it as daydreaming 2.0. But it doesn't do the work of daydreaming. In fact, she calls the web her "safety mechanism" against daydreaming. Time wandering the web protects her from the "danger" of having her mind wander. Another, in a similar spirit, calls her phone an "insurance policy" against boredom. Like the Fortune 500 vice-president alone at his desk, these young women understand that time alone without a phone creates anxiety.

I ask Carmen, twenty, if she ever has time to just sit and think. Her answer: "I would never do that." If she has a quiet moment she goes to Facebook. She says she doesn't want to think about the past without it. "To think about your past experiences instead of looking at pictures or messages, it takes more effort to do that."

Effort she would rather not put in. "The problem," she explains, is that "if you think about the past without Facebook, you would have to consciously say, 'Okay, now I am going to think. . . .' You would have to prepare to go sit by yourself." To her, this is an unlikely idea. Carmen has reached a point where solitude means being alone with her laptop and the people she reaches through it, a new definition of solitude as crowd management.

Anya, twenty, describes an evening when she accompanied her college roommate to the hospital. A triage nurse decided that the roommate's stomach pain was not an emergency and so the two women had to wait for over five hours to see a doctor. They both went to their phones. When her phone began to lose its charge, Anya panicked.

My phone gets to the red mark and I started freaking out, like, "Oh no, it's about to die." That anxious feeling. I really get anxious when my phone is about to die. And then it dies. I am not even joking when I tell you that I went around the entire hospital. I asked every worker, every nurse, every random person I could find if they had an iPhone charger. I finally found a random security guard. He took me to a back room so I could charge my phone. I will go to that length—even invade people's privacy.

This is disconnection anxiety in the presence of your best friend. Anya explains that she and her roommate didn't want to sit quietly with their thoughts. And in a related development, conversation felt like too much work. "We just wanted to be quiet and look at our phones and keep our minds preoccupied."

Lightbulb Moments and the
Value of Your Inner World

People like the image of a creative idea coming to someone as though a lightbulb turned on. But usually these "lightbulb" ideas have been long prepared.

Writing about his own experience, the French mathematician and philosopher Henri Poincaré explored the slow unfolding of what seem like "lightbulb" ideas. "Sudden illumination," says Poincaré, is only "a manifest sign of long, unconscious prior work," work usually done alone.

Often when one works at a hard question, nothing good is accomplished at the first attack. Then one takes a rest, longer or shorter, and sits down anew to the work. During the first half-hour, as before, nothing is found, and then all of a sudden the decisive idea presents itself to the mind.

It was the dream of early computer scientists to have machines do the fast and routine work so that the slow and creative work could be done by people. In 1945, the inventor and engineer Vannevar Bush dreamed of a device he called a Memex (an idea often considered a precursor to the web) that would take care of logical processes in order to leave more time for the slow unfolding of human creativity. Ironically, as we move closer to the world Bush imagined, the opposite may have happened. Machines present us with information at a volume and velocity that we try, unsuccessfully, to keep up with. But we try. And the effort means that we are often so busy communicating that we don't have time to think. K–12 teachers and college professors use the same words to describe their students: rushed, impatient, not interested in process, unable to be alone with their thoughts. It's as though we are waiting for the lightbulb without taking the time or the time alone for the "long, unconscious prior work."

The psychologist Jonathan Schooler demonstrated that "mind wan-

dering" is a stepping-stone to creativity. "The mind is inherently rest-less," says Schooler. "It's always looking to attend to the most interesting thing in its environment." If children grow up expecting that the most interesting thing in their environment is going to be on their phones, we have to teach them to give their inner worlds a chance. Indeed, in a quiet moment, all of us, child and adult, have to fight the impulse to turn first to our devices.

Our devices compel us because we respond to every search and every new piece of information (and every new text) as though it had the ur-gency of a threat in the wild. So stimulation by what is new (and social) draws us toward some immediate goal. But daydreaming moves us to-ward the longer term. It helps us develop the base for a stable self and helps us come up with new solutions. To mentor for innovation we need to convince people to slow things down, let their minds wander, and take time alone.

Reclaiming conversation begins with reclaiming our capacity for sol-itude. When we reach for a phone to push reverie away, we should get into the habit of asking why. Perhaps we are not moving toward our phones but away from something else. Are we hiding from anxiety? Are we hiding from a good idea that will demand difficult work? Are we hid-ing from a question that will take time to sort through?

In our world of "I share, therefore I am" we are not primed to give solitude a chance. We can cultivate a different attitude, beginning with our children. We can give them time without electronic devices. And we can give them more time alone. The teachers who complain that parents see free time as their children's enemy are pointing to something real. Children can't develop the capacity for solitude if they don't have the experience of being "bored" and then turning within rather than to a screen.

When young children go to their bedrooms at night, they should go without their phones or tablets. Recall Erikson's thought that children need "stillness" to find their identity. The social critic William Deresie-wicz argues that these days, online, we rob ourselves of the conditions to think independently. Leadership, he says, "means gathering yourself

together into a single point rather than letting yourself be dispersed everywhere into a cloud of electronic and social input." You don't have to move to a cabin in the woods to get these benefits, but even a short amount of solitude lets people hear their own thoughts. It opens up the space for self-reflection.

Friendship

The Quality of Empathy (Is Strained)

With my friends, it's either no conversation or conversation about what's going on, on your phone.

—A FIFTEEN-YEAR-OLD BOY

You can put so little effort in when you text and then you get instant gratification. I can connect with fifteen people with no effort and it feels so good to just extend the feelers and get a positive response. I would rather have that than a conversation a lot of the time.

—A TWENTY-ONE-YEAR-OLD WOMAN

Trevor, twenty-six, is a master of phubbing—the art of talking to other people but with your eyes on your phone. And Trevor is never far from his phone. When I tell him I'm working on a book on conversation, his reaction is close to a snort: "Conversation? It died in 2009."

That was the year he was a college senior, majoring in history.

That's the year we shared things on Facebook instead of talking to each other. We put our energy into our profiles. We talked about what we had put online. The focus of friendship became what you found online

and how you would share that with your friends. These days, you do it with Instagram or Snapchat. People are less into their profiles. But the idea is the same. Don't talk it. Post it. Share it.

Trevor says that when he was in college, social media changed his "face-to-face world." He recalls a farewell party for graduating seniors:

People barely spoke. They ordered drinks and food. Sat with their dates. Looked at their phones. They didn't even try. Everyone knew that when they got home they would see the pictures of the party. They could save the comments until then. We weren't really saying good-bye. It was just good-bye until we got to our rooms and logged onto Facebook.

And, says Trevor, "even our style of talking in class was different." There was less give-and-take during class time. Students got into a style that was less conversational but resembled the composed "postings" you would do on Facebook. In class,

You would try to say something brilliant . . . something prepared in advance . . . and then you'd sit back and wait for your responses. You didn't have to really engage. The idea of saying something as it occurred to you and getting a conversation going, that was gone. . . . And you didn't just do this new thing in classes, you did it with your friends. Now, you'd say what you [had planned] to say. And then, you'd get your responses.

Using this style of participation was a balm for academic anxiety. And Trevor says that his friends used it to relieve social anxiety as well. "By composing your thoughts in advance the social anxieties of friendship could go away." His comment reminds me of the Stanford freshman who told Clifford Nass that "technology makes emotions easy."

The March of Generations with
Their Generations of Technology, 2008–2014

Trevor's report, as Mark Twain might have it, greatly exaggerates the death of conversation. But this much is true: These days, day to day, teenagers choose to use texting more than any other form of communication, including face-to-face communication. And styles of online talk can change in the time it takes for a new app to capture the collective imagination.

Since Trevor met Facebook, young people have moved from wanting to put their energy into managing a Facebook-style profile to being more interested in ephemeral ten-second communications on Snapchat. They seem less interested in being defined by what they say *about* themselves and would rather be known as they are in the everyday, by how they behave and what they share. Snapchats and Instagrams and the very short videos of Vine have become the media of the moment.

I see the rapidity of change in two conversations in early 2014. In the first I am with a college senior who talks to me about FaceTime. She dismisses it: "*We* don't do that. You have to hold it [the phone] in front of your face with your *arm*; you can't do anything else." Only a week later, a group of high school freshmen talk to me about the merits of FaceTime— they use it for after-school conversations with friends while running other apps on their iPads or phones. They *like* FaceTime because it allows them to multitask during conversations. Tired arms never come up.

Junior high school students use Snapchat video to record "sides" of conversation that they send back and forth—sort of like an asynchronous FaceTime. Recently, Snapchat introduced a new feature. Where users could previously only send pictures that would automatically disappear after the receiver viewed them for a preset time, now people can send self-destructing text messages. The ephemerality of conversation reborn—this time with a chance to edit before you hit send.

What is clear is that across generations, the profile, once the defining concept of social media, has come to seem almost onerous. Trevor de-

scribes it as too "heavy." But as he contemplates the "lightness" of posting a photo on Instagram, he points out that "what endures" across the apps—old and new—is "that going out for a drink often seems like too much work." He adds that "it still takes a lot to risk having to sit down with each other and just see what happens." A group of thirteen-year-old FaceTime enthusiasts tell me that they use the app to talk to friends who live in their neighborhood. Why not visit? They explain: Keeping the exchange online means "you can always leave" and "you can do other things on social media at the same time." Continual attention is what 2009 taught that friendship didn't require.

That year—and for several before—I was interviewing students in high schools in the Northeast and I heard the idea take hold that friendship always presents you with a choice. If you have something to say, you can wait to say it until you are together—online. Young people came to this at first slowly, then faster as their technology gave them new options. Flip phones, Sidekicks, instant messages. And then there were the game changers: MySpace, Facebook, and smartphones that gave messaging a new fluidity, turning it into something that seemed close to magic.

I've kept up with the cohort of students who graduated from high school in the years 2008–2010. As they have matured, certain things have remained constant. Friends want to be together, but when they get together, the point isn't necessarily to talk—what counts most is physical closeness. And when friends are physically together, they often layer their conversation so that part of it is online (with the same people who are in the room).

Bree, a college senior in 2014, says that when she is with her friends, "I'll jump online with the people I'm with, just briefly, to get a point across. . . . I never really learned how to do a good job with talking in person." James, a classmate, does the same thing: "Even when I'm with my friends, I'll go online to make a point. . . . I'm more at home. Online life makes the conversation work. . . . It's just so relaxing to have that texting channel open."

If you punctuate face-to-face conversation with text messages, have

you opened up conversation or disrupted it? James thinks you have made it more "relaxing." Bree thinks she needs the extra channel because she is missing the skills for "in-person talk."

I think of Bree when I look back to the early years of the smartphone and how it presented an alternative to conversation. I recall a 2008 birthday party for a fifteen-year-old girl with very little talking, the guests in small groups, several looking at phones together. Some guests stood alone, immersed in their own phones, texting. Some took pictures of themselves and friends. There was clustering near the refreshments; people took pictures of the food. Fifteen is a difficult year for socializing across the sexes. Here, phones provided a welcome alternative to talk.

Before there were smartphones, an event such as the birthday party would have meant long silences, some stumbling around, and a few brief conversations with members of the opposite sex. These might have been awkward. But when they occurred, an important step would have been taken. Developmentally, the fifteen-year-olds would be closer to having sixteen-year-old confidence in their ability to connect. Eyes down at screens do not provide this groundwork.

The social preferences of Amy as a high school senior in 2008 help to explain the silences of a birthday party when the teenage guests have Facebook on their mind. Amy barely says a word to boys at school or a party, but she rushes home to talk to them online. There, Amy says, you can "take a breath," relax, and plan what you are going to say before sending your message. In person a conversation can get out of control, go flat, or stop dead. Online, Amy feels playful.

If you have a relationship with a person, you think they're cute and stuff, you can make more of a conversation online than you would be able to in person because when you're in person, you're intimidated by the person. You like them. You don't know if they like you back. Online, you can say "Hi," and they'll say "Hi" back, and you can start a full-blown conversation. In person, there are so many reasons why you don't want to talk to that person. Because you think, "Maybe they think I'm ugly" or something like that.

Given these anxieties, when she is having a face-to-face conversation with a boy, Amy tries to keep things short and then get him online as soon as she can.

> *When we talk online, we talk about a whole bunch of stuff, but when I'm on the phone with a boy or in person, it's like "Ahh, mad awkward!" . . . Let's say you are both together face-to-face. Unless you come up with some kind of question or something, like if you say, "How was school?" or whatever, you've got nothing. And let's say he says, "Good," or "Fine" . . . You've still got nothing.*

By the time Amy was a high school senior, the culture had made her anxieties easier to live with. In fact, the social mores around cell phones had moved most friendships toward online exchanges, not just those with a promise of romance. Facebook friending and group texting—these were among the first steps in creating an online circle that felt like your own private community, a family of always-available friends.

Friends like Family

In 2008, I talk to Rona, a high school senior, who has just joined Facebook and says what this means to her: "Your friends become more like family and you want to talk to them in the most relaxed way." It turns out that what Rona means by "relaxed" is particular: She can reach her friends immediately and have them get back to her immediately. New habits take hold as children feel a responsibility to be on call for their friends. In 2008, high school homework means, as Rona puts it, "an open laptop, Sidekick, and an every-five-minute check to see if anyone sent me anything." She knows the rules: *"If someone sends me a message on Facebook, I have to . . . I feel the need to get it and get back to them when they're still online."*

In contrast, telephone calls don't have to be returned. Rona says that if she calls her best friend, her friend will respond by text. Rona under-

stands. Telephone calls "put you on the spot." Texting gives more space to say things right and make things right. If "you do something wrong you can fix it right away." I ask Rona to go over this again because I want to make sure I understand. Isn't the telephone a way to have the person *right there* if you want to correct a misunderstanding?

"Not really," says Rona. The phone call is in real time and she sees real time as a place of awkwardness. Again, relaxation comes from fast response time with the possibility of editing. The phone is not a safe place to "just kind of put yourself together with somebody to see what your feelings are."

That's what Facebook and texting are for. That's where you share a self in process. But you share best if you can edit, because you want to share what your friends will find acceptable. And young people come to expect their friends to be there to receive their messages. They need them to be. Sharing is how you come to feel most real to yourself.

But now Rona, accustomed to her online social life, is afraid to "put herself out there," unedited, when she meets people face-to-face. In person, Rona says, "you could do something that the other person might not like . . . and you're scared that something is going to make you look stupid."

Looking back, Trevor's comment that conversation died during his senior year in college no longer seems so flip. In interviews I conducted from 2008 to 2010 with high school and college students, they make it clear that the back-and-forth of unrehearsed "real-time" conversation is something that makes you "unnecessarily" vulnerable. And it presents technical difficulties. When you are with your friends in person, you will also want to be on your phone, *texting them and other friends.* This parallel set of commitments doesn't leave much space for "real-time" conversation.

At the limit, you have to get your friends to pipe down in order to get down to the serious business of composing your notes to them. It may be at the limit, but it is common enough that there are collections of comic strips devoted to depicting friends and lovers sitting opposite each other, texting each other, trying to set up dates to be together.

Our Phones, Our Selves:
A Natural History of Texting

It is spring 2008 and eight seniors at an all-male day school in Connecticut are talking about their phones. Only a few months earlier, most of them had received smartphones as holiday gifts and texting has exploded.

Oliver begins by saying that "it's official"—texting is the "baseline" for his friendships. In fact, his friends would think that something was wrong if he didn't keep it up. He tells me that most of his conversations with friends start with a text and continue in person. He searches for a metaphor: "The text is an outline of what you're going to talk to a person about if they're your good friend." But then he corrects himself: That is not right. Most often, the in-person conversation doesn't happen, so you just "go with the text." So the "outline" actually ends up being the conversation itself, and Oliver says he has gotten used to this; it doesn't bother him.

Oliver's friend Jasper thinks they are all embarked on a future from which there is no turning back, but he nevertheless wants his friends to know that he sees a downside: Even when he is there *in person* with his close friends, he is having text conversations with other friends elsewhere.

Why? Because Jasper can do it silently "as soon as they [the friends who are not physically present] cross my mind." And because "when you are with your friends, other friends are texting you. . . . And the 'other friends' can make it sound like their problems are more urgent than what you are talking about with the friends who are with you."

Jasper tries to be tactful because he is telling his best friends that once he has his phone, they exist in an ecology of "all his friends." And once he is dealing with "all his friends," the ones who are with him (in person) lose a certain priority. He tries to make his point sound less personal by linking it to a larger question: When you have your phone, maybe it's not just the people in front of you who lose priority. Does the world in front of you lose priority? Does the place you are in lose priority? Your phone

reminds you, all the time, that you could be in so many different places. Jasper says:

> *There are so many things you can do . . . so many connections that are at your fingertips. You can look through your phone book, and there's probably one hundred, two hundred people that you can call, you can text, you can find. You don't have to rely on other people to find a party and stuff, if you go hang out with your friends or if they come hang out with you. You find a party by texting around. . . . To find a party is five buttons away.*

Jasper says that all this power makes him feel independent, but his description of finding a party with "five buttons" foreshadows what Kati, a college junior only six years later, will experience as a general anxiety about too many choices, any choices.

In spring 2014 Kati is interested in politics, the Italian Renaissance, and training for the Boston Marathon. When she goes to parties, she reports that there is a lot of texting. Here is what she tells me: At any party, her friends are texting friends at *other* parties to figure out "whether we are at the right party." Kati says, "Maybe we can find a better party. Maybe there are better people at a party just down the block." Kati is describing how smartphones and social media have infused friendship with the Fear of Missing Out—now a feeling so well known that most people just call it by its acronym, FOMO. In its narrow definition, the acronym stands for tensions that follow from knowing so much about the lives of others because of social media. You develop self-doubt from knowing that so many of your friends are having enviable fun. As the term caught on, it came to capture the widespread anxiety about what to do and where to go now that so many options are apparent to you.

The sociologist David Riesman spoke of an other-directed life, where you measure your worth by what friends and neighbors think of you and by whether you have what they have. He contrasted other-directedness with an inner-directed point of view, where your choices are measured against a personal standard. These days, as social media let us all track

our friends' homes, jobs, lovers, children, spouses, divorces, and vacations, we are tempted to measure ourselves—every day—against what other people are doing. From middle school on, I have found evidence of Riesman's "other-direction."

And that is what Kati and her friends are living. Wherever she and her friends are, they strategize about where they *could* be. With so much choice, says Kati, it becomes harder to choose, because "you're afraid you won't make the right choice." And nothing seems like the right choice. Nothing Kati and her friends decide seems to measure up to their fantasy of what they might have done. With this state of mind, being at any party can turn into a research project to make sure it is the right party:

> *Instead of talking to who we are with, we are on our phones, checking out other parties, asking what's happening at other parties, trying to figure out if we should be there. You end up not talking to your friends because you're on your phone, getting information about whether you should be someplace else altogether.*

I ask Kati if, while this frantic foraging is happening, she and her friends feel warmly toward each other, part of a group. "Oh, definitely. We feel that we're there together. We came to the party together. But we end up not talking about anything other than the best places we could go. So you end up not even talking to your friends. We're focused on what our phones are saying about what our other options are. It's not much of a conversation."

Five Buttons, Then and Now

When texting was new and pressing five buttons was a novelty, Jasper felt independent and a master of his choices. Six years later, Kati sounds exhausted. By 2014, the fear of missing out has become a fear of missing anything.

In 2008, Jasper is not there yet. He is high-spirited about how on-line choice gives him independence, but even he warns his friends about the downside of infinite choice: They are all paying less attention to where they are and the people they are with. "People forget . . . that sit-ting here right now might be the best thing that you can get. That might be the best you have."

Jasper's comment is followed by a long silence in the group of young men. Finally, Oliver breaks the silence: "What if you're always looking for something better and then you die? You've searched all the way until you're dead. And you've never said, 'Maybe I've found it.'" The group gets quiet again.

And since all the members of the group admit that they are now hav-ing a hard time focusing their attention because their minds are always on their phones, it's not surprising that they begin to talk about how to keep their attention on each other. They decide that there should be a rule: *A good friend should keep you off your phone when you are together.*

But as they talk about what it is actually like when they go out to-gether, it becomes clear that even in 2008, this "mission statement for friends" has already become aspirational. It's how they think friends should behave; it's not what they do. Staying off their phones is so hard that one of the boys, Aidan, has taken on the role of "monitor." The group tells Aidan that they want him to keep them in line, to call them out. If they take out their phones, he should shame them. They talk about how they don't want to be "that guy" who is hanging out, going to the beach with his friends, but also on his phone. "That guy" is not cool.

But they feel closer to that guy than they would like to be. One by one they admit that they need Aidan as a monitor because when they are together, they almost always want to go to their phones.

Jasper reminds the group of something they seem to have conve-niently forgotten: When he first got his phone, he wanted to resist the pressure to make it the center of his life. After six months, he noticed that he was texting all day, right until he went to bed, and so he put his phone in a drawer and got off Facebook. It lasted seven weeks. As he tells it, he was "forced back online" by his friends: "People were just

really annoyed that they couldn't keep in contact with me. They hated it. They needed constant contact."

The group is subdued as Jasper tells this story. They don't contradict him. They know they forced him back onto Facebook. Jasper was angry with them at first, but now he simply says of life with phones and social media: "This is where we are. Once you get used to it, heaven forbid someone takes it away."

My interviews with high school students in those early years, 2008–2010, most often began with their optimistic statement that they had texting and social media under control. And then, at some point, they recounted an incident that made it clear that things were not so simple. Often, it would be a story about how, when they went out together, each of them was on the phone with other friends.

Today that same cohort, now college graduates, is alert to the ways their friendships have been shaped by their phones. *Young people know this: If you want to get friendship right, you have to get right with your phone. But this will most probably not involve talking on the phone.*

Phone Phobia

I t was in 2008–2009 that I first became aware of how averse a new generation was to talking on the phone. Jasper and his friends make elaborate plans to avoid it. They receive calls from college sports coaches who want to interview them. These are important calls. But the young men have their parents take the calls, and they, the college hopefuls, send a follow-up email. As soon as young people saw a real alternative to the telephone call, they found ways around it, usually email. Their problem with the telephone call is by now familiar: Recall how Rona said that she disliked the way telephone calls put her "on the spot." Voice calls unfold in "real time." I am told that "this is no longer necessary." Yet this is the pace at which life unfolds.

Not much has changed since 2008 in how young people talk about voice calls. In 2014, a high school senior sums up his feelings about

phone calls: "Sending an email is so much easier because you get to think about everything, you get to write it down. . . . There are just so many variables on the phone or in an in-person conversation." When he avoids the phone, he gets more than the ability to self-edit. The fact that he can answer emails and texts when he wants gives him the feeling that the world is there for him, when he wants it. And a telephone call makes it hard to do more than one thing at a time. He is bound for an Ivy League university and is worried about the demands of "a fair amount of on-the-spot talking."

I've followed this generation's anxiety about voice calls through their college years and well into first jobs. In 2014, a group of junior and senior college women talk about the rigors of a phone call. One describes it as "the absolute worst. . . . I instantly become this awkward person. On the phone—I have to have little scripts in front of me." For a second woman, a call is stressful because it needs "a reason . . . so I have to plan what I'm going to say so it doesn't sound awkward." A third also needs to prepare with notes: "It all goes too fast on the phone. I can't imagine the person's face. I can't keep up. You have to be listening and responding in real time. . . . You have to be listening to the emotion in a person's voice." This is exhausting and, whenever possible, something to avoid.

A twenty-six-year-old takes a job at a trade publication and is asked to research a group of potential media consultants. Her supervisor makes it clear that their personal qualities are crucial to determining who will be chosen. The new hire completes the project based exclusively on web research. I speak to her supervisor, who had to insist that the project be started anew, this time with voice contact. She says of the young woman, "Talking on the phone had been such an onerous prospect, she didn't even want to consider it."

In another organization, a large non-profit that consults to the health-care industry, staff members are told to check when new hires say they have "talked" to clients. Have they *spoken* with clients on the phone? Out of college and graduate school, new recruits will use the word "talk" to refer to an email exchange. Very few will use the phone unless specifi-cally instructed to do so.

Never a Dull Moment: Friends Talk
About What Is on Their Phones

While young people today don't want to talk on their phones, they can't stop talking about what is on their phones. Here is Devon, fifteen, assessing lunchtime talk: "With my friends, it's either no conversation, or conversation about what's on your phone." And as phones have more and more on them, their role as the touchstone of conversation grows for all generations.

Maureen, thirty-two, recently received a master's degree in social work. She describes a monthly brunch with her friends as getting together, with phone in hand. Maureen spends some of brunch texting friends who are not present, but even if she didn't need her phone for these connections, she says it is hard to imagine socializing without its support. "The things I talk about now, I feel they come from my phone. I'm aware that if I don't have my phone to tell me what is going on, I would feel like a person without anything to say."

And here is Randall, twenty-four, a real estate broker, on how he and his friends spend their free time: He stresses that it is important that they get together, physically, but when together, at a bar or restaurant, "someone always has their phone out, showing something." I ask Randall what happens when there is a lull in the conversation. He looks at me, seeming not to understand. Later he explains that in his mind, he has just made it clear that there is never a lull in the conversation. Anything like that would be filled by showing something on your phone or doing something with your phone. But I haven't understood this yet, so I try again. I say, "Like, if things got quiet among your friends?" Randall says, "Oh, if the conversation was not providing information, I'd check out some YouTube stuff I'm behind on . . . or take a picture of us and post it."

Maureen and Randall talk about the value of getting together with friends in person. But they describe friendships in which they hold back from giving full attention to the people they are with. They both de-

scribe a hard time tolerating what Maureen calls "the boring bits" when friends get together. Or letting conversations go beyond sharing information. And, of course, they feel pressure to have information to share.

There is another way to think about conversation, one that is less about information and more about creating a space to be explored. You are interested in hearing about how another person approaches things—his or her opinions and associations. In this kind of conversation—I think of it as "whole person conversation"—if things go quiet for a while you look deeper, you don't look away or text another friend. You try to read your friends in a different way. Perhaps you look into their faces or attend to their body language. Or you allow for silence. Perhaps when we talk about conversations being "boring," such a frequent complaint, we are saying how uncomfortable we are with stillness. And how hard we find it to "read" the face and voice, changes in body language, and changes in tone.

Indeed, Randall says that when things get quiet with a friend, he finds it "hard to focus." That's when he is likely to take a photograph and upload it to social media. When he does this, he takes his attention off his friend. But in another way, the photograph is his effort to reach out. Randall is doing what he knows how to do. The conversation has stopped, but the photograph says "We are together." The photograph speaks when Randall doesn't have words or is not sure what his friend is trying to communicate. It is Randall's effort to navigate the conversation's quiet spaces. When he moves his friend's image to the screen, he is ready for Facebook and a conversation he can manage.

Posting often involves choosing among several similar photographs, cropping, or selecting a favorite filter—for example, one that turns the photograph sepia or into something that looks as though it was shot on a 1950s Brownie camera. There are moments, as one plays with all of this, when one has the occasion to attend to a friend in a different way, to notice a change in expression, a change in posture, to sense something new. Is this communion, but at a manageable distance?

In 1979 Susan Sontag wrote, "Today, everything exists to end in a photograph." Today, does everything exist to end online? One thing

seems clear: Time with friends becomes more comfortable when it produces images to be shared.

As this happens, our ideas about comfort change. For Randall, they expand from what a friend can offer to what a phone can offer—among other things, "comfortable" places to find your friends.

Right now: Facebook, texting, Instagram, Snapchat, and Vine. In the pipeline: everything from glasses that transmit messages directly onto the visual field of the person you are trying to reach to a bracelet you tap to send a coded message to someone wearing a matching bracelet. What all of these have in common: They are "friendship technologies" to make you less vulnerable to ever feeling alone.

Security Blankets

oelle, a senior at a large state university, talks about her phone as a "security blanket." It's easy to feel isolated if you are not with your closest friends; people won't talk to you. "You can't expect a lot from your peers. Certainly not conversation." A phone always gives you a way to look busy.

So we never have to be truly alone in any situation. You get to a party and text your friend that you are at a party and don't know anyone. You ask them where they are. But you aren't necessarily being vulnerable at the party. Because you're removing yourself and showing that you are choosing to be on your phone. It isn't that no one wants to talk to you. It's that you're choosing not to talk to anyone else because you're on your phone.

Vanessa, a college junior, shares a similar story to illustrate how her phone almost always makes her feel less vulnerable. If she arrives at an exam room a few minutes early, or at a party where she doesn't know anyone, she will take out her phone rather than turn to the person next

to her. I ask Vanessa if she is shy. She says she doesn't think so. It's more that in her group of friends, striking up a conversation with strangers would go against the norm. And besides, it takes so much work. The phone gives her an easy way to stay in touch with her private social world.

In these accounts, there are new silences. Classes where you don't talk to classmates because you pretend to be doing important things on your phone. Conversations you interrupt to "refresh" your phone, text a distant friend, or take a photo. Parties where you sit in a corner and text friends who are not with you.

What makes these new silences acceptable? Or appealing? We've met Haley, the college junior who was upset when her parents used their phones at dinner. She thinks she has part of the answer to why we are willing to put up with phones that cut off conversations. She calls it "the seven-minute rule."

Haley thinks that realistically, seven minutes is the amount of time you have to wait to see if something interesting is going to happen in a conversation. It's the amount of time you have to wait before you should give up and take out your phone. *If you want to be in real conversations, you have to be willing to put in those seven minutes.* She says that they are not necessarily interesting minutes. In those seven minutes, "you might be bored."

> *You know the seven-minute rule? It's that lull. That really uncomfort-able, shitty thing where you're, like, "Oh no, should I go? Should I leave? Is this over?" And you don't know how to end it. And just like the work you have to put in, you have to go through so much unpleasantness be-fore you actually hit something. In real conversation, sitting next to each other. And then it can be really good. But inevitably . . . you're, like, "Okay . . . What now?" It's an art.*

As Haley describes her own practice, she makes it clear that she often doesn't put in her seven minutes. She skips a conversation and sends a

text instead. Why? "It feels enclosed and self-contained. Whereas it's messy in a conversation and it's scary for that reason." She speaks for many. We don't put in our seven minutes and we don't let the conversation happen. We use our phones to take what we can get. And often, we make what we can get good enough.

The Friend Beside You and the Friend on the Phone

I n 2008, you had to justify being inattentive to friends you were physically with. Oliver, Jasper, and their crew even asked a friend to "monitor" them in case they fell into bad habits. By 2014, there are no more "monitors." The mores of friendship include being "there" for a friend by providing physical presence while your friend is on the phone, texting other people.

Among college students, some rebel—not many—and make strenuous efforts to stay off their phones when they are with friends. Some say they don't like dividing their attention, but take it as a given of "life today." Others talk about a "natural evolution"—we will get better at multitasked conversation. We will become better at picking up where conversations left off. Others think that the evolution will be in social expectations. We will come to experience people in the room and "people on the phone" as equally present. The trick, hard now, but perhaps not so hard in ten years, is not to devalue yourself when the friend beside you turns to the "people on the phone."

Carl, twenty-three, a graduate student in computer science, sees physical and electronic presence as socially on par. And when you see these as equal, you aren't critical of your friend if he or she turns away from you to pay attention to someone on the phone. Turning to the person on the phone is like turning to another friend present in the room.

Carl's position seems pragmatic, but I see little evidence that it makes emotional sense. I remember the first time—sometime in the late 1990s—that a graduate student pointed out to me how hurt he felt when his friends took cell phone calls when he was with them. He told me it

made him feel like a tape recorder that someone was putting "on pause." A friend turning away from him to attend to a "friend in the phone" made him feel like a machine. These days, we have learned to crave interruption—we like the buzz of the new—but emotionally, not much has changed. When Haley tried to console an unhappy friend who started to text other people in the middle of their conversation, she says she felt invisible, like smoke that had disappeared.

The story Haley tells is this: She was out for dinner with her best friend, Natalie, when Natalie received an upsetting text from an ex-boyfriend. Haley tried to console Natalie, but her friend was more interested in what other friends were saying who were leaving messages on the network. Here is how Haley describes Natalie's turn to the "people in the phone":

> *I am not great at consoling people at all but I was hugging her and trying so hard. I decided that it was my chance to console her. She had been there for me. It had been an uneven break. I decided to go all out. I was trying all of these different methods. And five minutes into me trying to console her she sent out five texts to people describing the situation and then started reading their feedback while I was talking to her. We were walking down the street and she was just texting her "consolation network." So then I changed my approach and started asking her what people were saying over text. And I tried to engage with her on that strange and oblique access point. But it was so weird to not be the primary person even though I was the only real person there.*
>
> *Terrible. She was texting people that were hundreds of miles away instead of talking to me.*

Why do we turn away from the people before us to go to the people on our phones? Haley gave one answer. In person, we have to wait seven minutes in order to see where a conversation is going. But if it is acceptable to answer a text during a conversation with a friend, we have an excuse to not even try to put in those seven minutes. And then, once we are on the phone, we can get more of what we have become accustomed

to: the validation that texts can provide, along with the fact that they come in great numbers.

Haley talked about Natalie's consolation network and her consolation texts. Think of those online consolations as the first minutes of a conversation, the first things you might say to an unhappy friend. You provide support. You say you are sorry and how much you care for them. When you allow yourself to be consoled by a friend in person, you take the chance that things might go beyond this. There is more of a chance for the conversation to open out onto more delicate areas. If, as Natalie, you are talking about a relationship that has ended, you could find yourself talking details: how each party in the relationship might have contributed to its demise. How the *other* person might be feeling.

If you confine yourself to consolation texts, you don't really have to take that chance. You are in a position to get solace and safety in numbers. If you don't like where things are going in any exchange, it is relatively easy to end it. But sticking with the consolation texts means you lose out on what the conversations of friendship can provide—not only solace, but a deeper understanding of yourself. And of your friend.

Of course, just as some conversations disappear, new ones appear. Just as you can make a friend feel invisible by going to your phone, you can make that same friend feel more important by *not* going to your phone. So, the existence of mobile phones has invented a new kind of privileged conversation. These are conversations with friends that are elevated when both participants know they are getting text messages and both choose to ignore their phones. After she recounts her dispiriting experience with Natalie, Haley describes this heady experience: "So you know that you are both getting texts but you are ignoring them and thereby elevating the importance of the conversation that you are having. You show each other that you're into it because you are both blowing up with texts. . . . Ignoring a text for me means a lot to me."

Arjun, a college senior, gave me another way to view why people turn away from a friend and to a phone. For him, the phone not only serves up comforting friends; it is a new kind of friend in itself. The phone itself is a source of solace.

Intellectually, I know that it's the people on the phone who keep me company. So when I go to check my messages, I am technically going to check for which people reached out to me. But let's say I see there are no new messages. Then I just start to check things—Twitter, Instagram, Facebook, the familiar places to me. Now, it's just the phone that is a comfort. The phone that is the friend.

Disruptions

We let phones disrupt the conversations of friendship in several ways: By having our phones out, we keep conversations light and we are less connected to each other in the conversations we do have. And we rarely talk to friends about how we feel when they turn away from us to their phones. This behavior has become a new normal. But behavior declared "normal" can still sting.

This is Richard, forty-eight, on what he misses when he visits his college roommate Bob. This happens about twice a year, every time that his work takes him to Washington, D.C.

I keep remembering what it used to be like before [cell] phones. We used to talk. I don't know. One thing would lead to another. Sometimes we would get into pretty serious conversations about books we had read, people we knew, our marriages. Now, he has his phone and he just idly will look at it from time to time. If I said, "I have something really important to talk about," I know Bob would put down the phone.

But Richard doesn't say that. He doesn't challenge his friend. "It seems so basic to him, to hold his phone," he says. Richard has accepted the new way their visits will work.

Not everyone is resigned. I interview a group of good friends in their late twenties, most of whom are still working in their first jobs. When I tell them I am writing a book about conversation, their thoughts turn

the conversations they are *not* having. What follows is something I rarely hear: friends calling out friends because of the time they spend on their phones. I attribute this unusual conversation to their degree of intimacy. So Maria accuses her best friend, Rose, of "hiding behind her phone." Maria says that Rose and her boyfriend "are the worst two cell phone people I have ever met." Maria says that when you're with them, it's tough to have a conversation.

> *You two just text constantly, check your phones constantly, like you are always on it. Sometimes I'll just go crazy because I can't stand how long your boyfriend stares at the phone. And sometimes I feel that way when I'm with you—because you're, like, text, text, text. And I'm, like, "Are you listening to me? I'm trying to talk to you!"*

The tone of sharp disappointment in this conversation helps me understand why friends don't often ask other friends to put down their phones. Raising the topic is a minefield.

On Call

Phones have become woven into a fraught sense of obligation in friendship. For the same young people who complain of inattention from their friends "in person," being a friend means being "on call"—tethered to your phone, ready to be attentive, online. From middle school on, children describe this as a responsibility. They sleep with their phones for many reasons—one of which, they say, is to be available to friends in case of what many refer to as "emergencies."

This sense of urgency extends from bad news to good. You always want to know who is reaching out to you. Your phone is your view onto that. When a friend sends a text and says it is urgent, you will stop whatever you are doing and attend to your friend on the phone.

Here, a fifteen-year-old explains why she worries about forgetting her phone. She sees herself as family to her friends.

During the school year if I forget my phone anywhere—going out anywhere—it really puts me on edge. Because a lot of my friends trust me for helping them feel better if they are upset. And so I worry when I am going out: What if someone is really upset and they need someone to talk to but I can't because I don't have my phone?

Another fifteen-year-old says she sleeps with her phone because only its constant presence allows her to meet her responsibilities to her friends. But then again, only her phone could create such demands. She explicitly refers to what she owes her friends as being "on call." And indeed, she describes her responsibilities as close to those of a small dispensary.

I've had to be on call for a friend during the school year. She was out using questionable substances and I messaged her—"Hey what's up?"—and I could tell by the text she sent back that she was quite obviously out of balance, like, completely. And so I talked to her—I got her to go to bed. The next morning I knew to bring aspirin to school and saltines and a water bottle. And I still—I'm always worried I'll miss something like that. And that someone might get hurt because of it.

A fourteen-year-old says she "is never completely relaxed," even when she sleeps with her phone by her side. Any bad news will show up first on her phone.

I feel like there's always something nagging me. There's always drama or something stressing me out—that I am always worried about. Most of it starts because of phones; the expectation is that when something big happens, you'll tell, like, your best friends right away. Because you can.

Even at night, she worries that she might be left out of some big development in her circle of friends. To miss that "would become a big deal." In large measure, she determines her worth by how much she

knows about what is going on with her friends. And by how rapidly she is there to support them. In her circle, it is expected that you respond to a text from a friend within a few minutes.

And then consider Kristen, a junior majoring in economics who follows the rule of three during meals and then, after meals, continues to keep the conversation light if she is with people who have phones with them. Although I meet her during finals week, she is not under much stress. Her own classes are for the most part graduate economics seminars. She has a close relationship with her professors. After our interview, she will be off to proctor a freshman calculus exam. We talk about texting in classes. She shrugs. "It's a problem." Texting is a commitment. When you text, you are promising your friends that you will be there for them. She thinks that when you get a text from a close friend, it should be responded to within "about five minutes."

So, Kristen checks her phone periodically during classes. If she gets a text from a friend that in some way signals an emergency, "I leave class and go to the bathroom in order to respond to the text." I ask Kristen what would count as an emergency, and I learn that, in her world, the bar for emergencies is set fairly low. "My friends need me. I'm the one they see as the stable one. They'll text for boyfriend things. For when they feel a crisis. I need to get back to them." And so, a few times a week, this young economist walks out of her advanced seminars to go to the bathroom, sit in a stall, and text her friends.

"That's what friends do, respond to a crisis," says Kristen. That is why she is often in the bathroom, missing class.

When friends are together, they fall into inattention and feel comfortable retreating into their own worlds. Apart, they are alert for emergencies. It is striking that this often reflects how they describe the behavior of their parents: When their children are not at home, they become hovering "helicopters"; when their children are in plain sight, parents give themselves permission to turn to their phones. *This is our paradox. When we are apart: hypervigilance. When we are together: inattention.*

Perhaps on-call friendship, primed for "emergencies," begins as chil-

dren's way to deal with parents who are less available than children want them to be—and indeed, than parents themselves might wish to be.

Middle School: The Feeling of Empathy

ecall Holbrooke, the middle school in upstate New York, where I have been called in to consult with a faculty worried about students' lack of empathy.

At a meeting, we go around the table and over twenty teachers voice their concerns: Students don't seem to form anything but superficial friendships. In the past few years, faculty conversations with students have become increasingly strained. And students don't seem much interested in one another. Teachers eavesdrop on student conversations: "Among themselves, they talk about what is on their phones." And the teachers worry whether students are learning the rudiments of conversation: listening and turn taking.

At the first break, teachers say over coffee what they were not ready to admit around the table:

Students don't make eye contact.

They don't respond to body language.

They have trouble listening. I have to rephrase a question many times before a child will answer a question in class.

I'm not convinced they are interested in each other. It is as though they all have some signs of being on an Asperger's spectrum. But that's impossible. We are talking about a schoolwide problem.

Holbrooke is not a school for emotionally or cognitively challenged students. It is a private school with competitive admissions that finds that the academically promising students it admits are not developing as

expected. Ava Reade, the school's dean, puts her concern in the strongest possible terms: "Even as ninth graders, they can't see things from another person's point of view." Many students don't seem to have the patience to wait and hear what someone else has to say. Three teachers back her up; students have trouble with the empathy that conversation both teaches and requires.

They are talking at each other with local comments, minutiae really, short bursts, as though they were speaking texts. They are communicating immediate social needs. They aren't listening to each other.

The most painful thing to watch is that they don't know when they have hurt each other's feelings. They hurt each other, but then you sit down with them and try to get them to see what has happened and they can't imagine things from the other side.

My students can build websites, but they can't talk to teachers. And students don't want to talk to other students. They don't want the pressure of conversation.

Because Holbrooke is a small private school, its teachers are given the time to be both emotional and intellectual mentors to their students. This is why they enjoy teaching at Holbrooke. But now they say they are unable to do their jobs as before. For the first time, they feel they must explicitly teach empathy and even turn-taking in conversation. One says, "Emotional intelligence has to become an explicit part of our curriculum."

The teachers have theories about what stands behind the changes they observe. Perhaps their students grew up playing video games instead of reading and didn't develop their imaginations. Perhaps video games kept them from the playground, where they would have developed their social skills. Perhaps students are overscheduled. Or perhaps they don't get enough practice with conversation when they go home.

Their parents may be preoccupied with work—on their own phones and computers. The teachers' talk circles back many times to technology. A history teacher sums up how powerful he feels it to be: "My students are so caught up in their phones that they don't know how to pay attention to class or to themselves or to another person or to look in each other's eyes and see what is going on."

One Holbrooke teacher is distressed that, at least in her view, student friendships have moved from an emotional to an instrumental register. Friendships seem based on what students think someone else can do for them. She calls these "Who has my back?" friendships. In these kinds of connections, she says, "[Friendship] serves you and then you move on." A friendship based on "Who has my back?" is the shadow of friendship, just as time alone with a phone is the shadow of solitude. Both provide substitutions that make you think you have what you don't. Perhaps the substitutions make you forget what you have lost.

Reade, the dean, comes to the group meeting with the results of a small exercise, a small experiment, really. One of Reade's jobs is to run advisory groups of about twenty students each. She asked members of her groups to list three things they want in a friend. In the more than sixty responses she received, only three students mentioned trust, caring, kindness, or compassion. Most of the students say they are interested in someone who could make them laugh, who could make them happy. One student writes, "As long as I'm with somebody, I'm happy." Reade says that she has to conclude that these students don't understand or value what a "best friend" can be. Best friends are more than amusements or insurance that you won't be alone. Best friends are people you care about. They are people to whom you reveal yourself. You learn about yourself as you learn about them. But Reade notes that these lessons are hard to learn online.

Reade sums up her "What do you want in a friend?" exercise: "I feel that these kids have a sense that friendships are one-sided. It is a place for them to broadcast. It is not a place for them to listen. And there isn't an emotional level. You just have to have someone there. There is no

investment in another person. It's like they can turn the friendship off." She doesn't say so, but the implied end to this thought is "the way you can turn off an online exchange." After Reade's exercise, she came to fear that children are treating other children as "apps," as means to an end. She observes that her students are quick to say to each other, "Can you do this for me?" and then, she says, "they just 'toggle' to another friend once the job is done or if they don't get satisfaction, either way."

Reade worries that the habits developed with online "friending" have become the habits of friendships in face-to-face, everyday life. She says:

When they hurt each other, they don't realize it and show no remorse. When you try to help them, you have to go over it over and over with them, to try to role-play why they might have hurt another person. And even then, they don't seem sorry. They exclude each other from social events, parties, school functions, and seem surprised when others are hurt. One time, everyone was talking about a concert that one student hadn't gone to, right in front of this girl—she didn't have the money for the tickets—but they went on and on. She had tears in her eyes.

They are not developing that way of relating where they listen and learn how to look at each other and hear each other.

By middle school, the Holbrooke teachers hope to see children content to quietly work on projects—in art, science, or writing. Teachers talk about becoming teachers for the thrill of watching children discover a gift and the capacity to concentrate on it, both during school hours and in their spare time. But at this meeting, teachers mourn that they no longer have this pleasure. Their students can't concentrate, don't have any downtime, and actually can't tolerate it when they do. As early as sixth grade, students come to school with smartphones and tablets, caught up in a constant stream of messages to which they feel the need to instantly respond. Teachers know the student culture. At Holbrooke, a text from a friend requires a response within minutes.

What children are sharing, of course, are tokens that they belong—a

funny video, a joke, a photograph, the things that happen to be circulating that day. "It's all about affiliation," says one teacher. Another reflects: "It's as though they spend their day in a circle exchanging charms for their charm bracelets. But it takes place in a circle where they never get time off."

The teachers know that students text under their desks and take bathroom breaks to respond to messages on their phones, and now the phones are even making their way onto the playing fields. The teachers want to make school a time when students can take a step away from the pressure to be sending and receiving. But more and more course content is delivered electronically, so students are never away from the medium that distracts them.

At a meeting with another group of middle school teachers, I hear similar concerns: Students have long, heart-to-heart text conversations online and then meet in school the next day without acknowledging the person with whom they have been sharing intimacies. It seems more important for students to get reinforcement from a large number of online "likes" than to have in-person conversations. But teachers worry that without face-to-face conversation, students aren't developing empathic capacity or listening skills.

A middle school teacher says, "One girl told me: 'I always keep thirteen unanswered texts on my phone. I have thirteen people who are trying to reach me.'" The teacher found this exchange disturbing. The phone was not there to communicate but to make this girl feel good about herself. The teacher asked the girl about how the people who had left the unanswered texts might feel. The girl seemed puzzled. She said she had never really thought about their feelings.

Two years after I visit Holbrooke, the issues I met there seem as pressing as ever. In winter 2015, I visit with Greg Adams, the headmaster of Radway, a middle school in New York City, who tells me about a sixth grader, Luis, whose father committed suicide the year before. Ever since, Luis has been fragile and dependent on his sister, Juanita, a year ahead of him at school.

One day, Anna, a classmate of Luis's, becomes irritated that he interrupted her in the lunchroom when she was trying to talk to Juanita. The next day, Radway is in an uproar. Anna has posted on Facebook: "I hope Luis ends up just the way his father did." Adams calls Anna into his office. He says he was "steaming, trying to stay in control. Smoke was coming out of my ears." He asks Anna, "Why? Why would you do this?" Anna has an answer ready: "It was just on Facebook." It is clear to Adams that Anna doesn't see what she did as altogether real.

The headmaster sets himself to "making Anna put herself in Luis's place." In his office, Adams tells Anna, "We are not leaving until I have made you cry. We are not leaving my office until you are melted in tears." He says that this takes him about fifteen minutes. "And then," he says, "of course, I have to call Anna's mother about why I made her daughter cry." But Adams is not reassured by Anna's tears. Somehow, Facebook gave her a way to think about other people as objects that can't be hurt. And a way to think about a kind of cruelty that doesn't count.

We have learned that people who would never allow themselves to be bullies in person feel free to be aggressive and vulgar online. The presence of a face and a voice reminds us that we are talking to a person. Rules of civility usually apply. But when we communicate on screens, we experience a kind of disinhibition. Research tells us that social media decrease self-control just as they cause a momentary spike in self-confidence. This means that online we are tempted to behave in ways that part of us knows will hurt others, but we seem to stop caring.

It is as though a signal is being jammed. For Adams, what is not getting through is a model of other people in which you see them as like you. Without this, his students can't feel empathy or form secure attachments. It is an environment that fosters bullying and casual cruelty. He does not find it surprising that a recent study concluded that the percentage of college students who feel safe and trusting in their attachments has decreased and the percentage who feel insecure in their attachments has increased.

Hoarders

The last time we saw Haley she was trying to console Natalie, a friend by her side who in a moment of loss had turned to "the people on the phone." Haley was disappointed, but she says she understands what drove Natalie to her phone. At the time of that encounter, Haley's own social life centered around texting and messaging. She's not altogether happy about this, but this is what her life is about. Constant connectivity makes her feel that she belongs. "You can put so little effort in when you text and then you get instant gratification. I can connect with fifteen people with no effort and it feels so good to just extend the feelers and get a positive response. I would rather have that than a conversation a lot of the time."

Haley has a cool eye on her numbers. Those "fifteen people," and indeed her many hundreds of contacts on Facebook, are not so much friends as "people who will text me if I text them." These relationships are close to contractual. Yet she says, "It's really hard for me to turn down a new friend on the network. It's hard for me not to try to accumulate as big a network as I can." But she knows that not all of these "friends on the network" are friends. "In a weird way we treat friends like capital market items. You keep hangers-on, just to have more. . . . I do hoard friends." Haley uses the "hangers-on" to keep up her numbers. She says it enables "that weird hoarding impulse."

Is this kind of hoarding abundance or the sense of abundance? Haley's description of her pleasures helps us understand life in a gray zone, where the accumulation of friends who are not friends is at the same time both gratifying and alienating.

Haley insists that she likes the feeling of abundance that online friendships provide. But she also describes a half-formulated plan for getting back to basics. She says that next year, when she takes a semester abroad, she might delete her Facebook account. She worries that she will want to "show people what I'm doing and will miss having Facebook."

But she's getting uncomfortable seeing friends as "capital market items" and with "that weird hoarding feeling."

By the end of senior year, Haley has taken action. She has discarded her smartphone. She decided that her smartphone—she'd had one for five years—was overwhelming her friendships. For Haley, it wasn't just the phone "but the history on the phone. . . . When I texted someone I was so aware of the history the phone held. Every relationship was documented. And I carried the documentation—the texts and the email—with me all the time."

Haley shows me her current phone, a flip phone, a "retro" phone. It makes calls. It sends texts but doesn't have enough memory to store more than a hundred of them. And of course it has no apps. This means it's not a way to access Facebook. Haley says she feels lighter. She says her friendships feel "unencumbered by past history. I am able to be more forgiving."

Empathy Machines

We are at a choice point. Some feel liberated by the prospect of giving up their personal archives (to Haley, even the history of her texts feels like a burden), but some feel comforted by the prospect of developing an ever more sophisticated archive of every aspect of their life. This is the case for a group of people who experimented with a technology called Google Glass. Glass is a pair of spectacles that let you carry the web—along with all of its apps—wherever you go.

Andi, twenty-seven, is a graphic designer who applied to be in the first group of "explorers" who were issued Google Glass when it was ready for real-world trials. Andi joined the explorers because she wanted to experiment with ways to have a more reflective life. Glass can take photographs or video from the wearer's point of view. Andi programs her Glass to take a picture and record a minute of video every ten minutes. She tries to review and annotate her photographs every evening. So far, she finds her project comforting: "I don't know now what will be impor-

tant in my life. I will only know this later. I won't have to rely on memory to retrieve the important conversations. I'll have some record of them, even if I didn't think they were important at the time." But at home, she usually takes off the glasses because her husband objects to the project. He thinks their conversations change when she is recording. And he doesn't like the idea that if he says something off-putting, it won't be enough to simply see the reaction in Andi's face and say he is sorry. His wife will have the record forever. Perhaps she will never be able to forgive because she will never be able to forget.

Andi has a strong reaction to her husband's concerns: "I think this is about inequality. I think he would feel different if he had Glass. It doesn't seem fair if only one person has a record. What you need is both partners keeping a record. I hope that when Glass is more widely available, he'll get it as well."

Haley and Andi have opposite intuitions about what is important about memory. Haley is betting that everyone will want to power down. "I want people to live in the moment for friendship. Don't come with your history or expectations. You should be able to start your relationship from where you are now." Andi has the opposite feeling. She believes that having a record of her past will allow her to live more fully in the present.

I speak to several users of Google Glass who go further than Andi. They hope that Glass (or something like it), by recording your life, will evolve into a kind of empathy machine. If you record your life from your point of view, you can then show it to others in the hope that they will understand you better. And if they, too, are recording their lives, you can see the world through their eyes. Conversation, in this case, may be a supplement to understanding. But they say it will often be unnecessary and that could be a good thing because not everyone is good at it. Glass reassures. If you fear you cannot adequately express your point of view, Glass will be a way to share it more effectively. If you fear you lack empathy, you look forward to being able to take on the visual perspective of others.

Ronald, twenty-six, a programmer at a renewable energy start-up,

has had Glass for six months. He says, "If you are bad at conversation, like me, Glass is important. You don't have to be good at describing what is happening with you, how you feel. Someone you care about can [look at a Glass video and] experience it directly."

We've seen families who hoped to export conflict by having their disagreements by text message and email. Here is another idea that involves export—this time the wholesale export of your experience. Behind technological fantasies there is so often a deep sadness that human beings have simply not gotten it right and technology will help us do better.

I'm not optimistic about the empathy machine as a shortcut, or what one enthusiast describes to me as "training wheels for empathy." Perhaps for some it makes sense as a supplement. But of course, with technology, we have a tendency to take what begins as a supplement and turn it into a way of life. Text messages weren't meant to disrupt dinner table conversations, but this supplement to talk became a substitution.

But it is a substitution that doesn't provide the essential. George Eliot referred to what the mother gives a child with her gaze as "the meeting eyes of love." Research supports what literature and philosophy have told us for a long time. The development of empathy needs face-to-face conversation. And it needs eye contact.

The work of psychiatrist Daniel Siegel has taught us that children need eye contact to develop parts of the brain that are involved with attachment. Without eye contact, there is a persistent sense of disconnection and problems with empathy. Siegel sums up what a moment of eye contact accomplishes: "Repeated tens of thousands of times in the child's life, these small moments of mutual rapport [serve to] transmit the best part of our humanity—our capacity for love—from one generation to the next." Atsushi Senju, a cognitive neuroscientist, studies this mechanism through adulthood, showing that the parts of the brain that allow us to process another person's feelings and intentions are activated by eye contact. Emoticons on texts and emails, Senju found, don't have the same effect. He says, "A richer mode of communication is possible right

after making eye contact. It amplifies your ability to compute all the signals so you are able to read the other person's brain."

With all of this to consider, what are we to make of the fact that when we have our phones out, our eyes are downward? (And of course, with Glass, our eyes are often busy reading what is on our screen display.) We've seen more and more research suggest that the always-on life erodes our capacity for empathy. Most dramatic to me is the study that found a 40 percent drop in empathy among college students in the past twenty years, as measured by standard psychological tests, a decline its authors suggested was due to students having less direct face-to-face contact with each other. We pay a price when we live our lives at a remove.

Some believe that children cope with the challenges of today's technology just as young people have coped with the new technologies that have come before. They are changing their styles of communication and will find their own balance. If adults worry, it is because we do not fully appreciate the resourcefulness of the young. I do think the young are resourceful, but there is also this: Phones, tablets, and the always-on-us wearables of our futures—all of these technologies of partial attention and downturned eyes—touch the most intimate moments in human development. They are poised to accompany children as they try to develop the capacity for attachment, solitude, and empathy. What looks like coping can take its toll.

I've said that to keep what we cherish about conversation, we have to design for our vulnerability. This has at least two aspects. A first is technical. If we don't want to be captured by our phones, we can, for example, design phones that intentionally "release" us after each transaction. And we can construct social environments that support our intentions. If we want to lose weight, we don't take for granted that the desire to go on a diet will lead to weight loss. It helps to diet with a friend. It helps to stock the right foods in the kitchen and to schedule regular meals. We'll go further in reclaiming conversation if we create environments that support conversation.

Since Socrates lamented the movement from speech to writing, ob-

servers have warned against each new mode of communication as destructive to a cherished mode of thought. I see mobile phones as having a distinctive quality that makes them stand out in this long historical conversation. When we write instead of speak, we are aware that we are making a choice, writing instead of speaking. In contrast, when we have our phones with us, we don't consider that by this fact we have compromised our face-to-face conversations. On the contrary, we defend the idea that we can text loving exchanges and catch-ups with friends as we have (parallel) conversations with the people around us. We find it hard to give up the idea that our phones are an accessory, a harmless, helpful supplement. But our technologies have not only changed what we do; they have changed who we are. And nowhere as profoundly as in our capacity for empathy.

In a series of 2014 lectures, Rowan Williams, the former archbishop of Canterbury, took empathy out of its accustomed place in a discussion of how to treat others and focused instead on what it does to the development of the individual who offers it.

For Williams, the empathic relationship does not begin with "I know how you feel." It begins with the realization that you *don't* know how another feels. In that ignorance, you begin with an offer of conversation: "Tell me how you feel." Empathy, for Williams, is an offer of accompaniment and commitment. And making the offer changes you. When you have a growing awareness of how much you don't know about someone else, you begin to understand how much you don't know about yourself. You learn, says Williams, "a more demanding kind of attention. You learn patience and a new skill and habit of perspective."

When you give someone a thumbs-up or respond to a question posed on Instagram, these can be first steps in an empathic process. In the online exchange, you might be saying to someone else, "I want to hear you. I'm with you." Like the consolation texts that Natalie receives, they are a beginning. Everything depends on what happens next.

The Sense of Empathy

So many of us have friendships with people we could, with planning, see face-to-face but choose instead to "see" online. We become accustomed to experiencing this "convenience" as the normal way to spend time together.

Across generations, we get used to rerouting conversations—from sharing birthday wishes to sending condolences—to our screens. We no longer expect friends to show up and may not want them to. It starts to feel like too much emotional work.

There is so much positive in what online relationships can bring us. Someone like Alli, socially isolated, distant from her parents, can use the Internet to reach out—to try to find someone who speaks directly to her problem. But perhaps not to her. Empathy is not merely about giving someone information or helping them find a support group. It's about convincing another person that you are there for the duration. Empathy means staying long enough for someone to believe that you want to know how they feel, not that you want to tell them what you would do in their circumstance. Empathy requires time and emotional discipline.

The essayist William Deresiewicz said that as our communities have atrophied, we have moved from living in actual communities to making efforts to feel as though we are living in them. So, when we talk about communities now, we have moved "from a relationship to a feeling." We have moved from *being* in a community to having a *sense* of community. Have we moved from empathy to a *sense* of empathy? From friendship to a *sense* of friendship? We need to pay close attention here. Artificial intelligences are being offered to us as sociable companions. They are being called a new kind of friend. If we are settling for a "sense of friendship" from people, the idea of machine companionship does not seem like much of a fall. But what is at stake is precious, the most precious things that people know how to offer each other.

Next Generations

As I write this chapter, my computer develops a glitch and I make my way to the Apple Store. My problem is so minor that I don't even need the Genius Bar—an Apple salesperson knows how to help. I sit alongside a twenty-six-year-old graduate student in design who teaches me how to make my computer hum. He asks what I do and when I tell him I'm writing a book about conversation, he says, speaking of his clients at the store, "I worry about the young kids. Some seem so desensitized. It's like they have never had a conversation without their phones out. But some—well, some—give me hope. Like they're over it."

I know what he means. I also see a next generation that shows some evidence of pulling back from where momentum would take them. A few fourteen-year-old girls share their reservations about texting and the bonds of friendship. Liz says that "memories don't happen when you get a text. It's the stories you can tell." Ginger appreciates that "when you text and message, you don't mess up." But then she adds that the important moments with her friends, "the funny moments," come precisely from messing up and making mistakes. "The best stuff," she says, "is friends making mistakes together. . . . If you're talking you can mess up and it turns into something really funny. That's how people bond. . . . It's not like everything is made to be perfect. It's like you should make mistakes and you should—well, with friends, it's good to see their faces." For Ginger's classmate Sabrina, the "perfect" exchanges of texting aren't "conversations that mean anything real."

The psychologist Mihaly Csikszentmihalyi has studied the "real" conversations of friendship. Some friendships, he says, are built around conversations that provide validation. He calls these "reinforcement friendships": They accomplish "what everyone likes . . . reciprocal attention paid to one another's ideas and idiosyncrasies." These are perhaps Haley's "hoarded" friends, who will text her if she texts them first. These are perhaps her Facebook friends: If you "like" what is on their wall, they will "like" what is on yours. Csikszentmihalyi says that what these

friendships do best is support a self that needs to use other people as a mirror, a self that has not found itself.

But Thoreau spoke of more ("My friend is one . . . who takes me for what I am"), and Csikszentmihalyi writes about the possibility of more. There are friends who question each other's dreams and desires, who encourage each other to try out the new. "A true friend is someone we can occasionally be crazy with, someone who does not expect us to be always true to form. It is someone who shares our goal of self-realization, and therefore is willing to share the risks that any increase in complexity entails."

Tellingly, Csikszentmihalyi describes a "true friend" by describing friendship in action—among other things, in conversation. He is describing intimacy.

Again, I think of the "young kids" who gave hope to my Apple consultant. I think they take their devices for granted and for that are perhaps less enamored with them than their parents and many of their only slightly older peers.

One fifteen-year-old reflects on how hard it is to talk to the kids at school. Right now, he is at summer camp. There will be no phones for the six weeks he'll be there. He's okay with that.

When I am at home and in the car with a friend or on the bus and I am trying to make conversation [with other kids] . . . they could be on their phones. And the conversation could be kind of spotty. They're drifting in and out of what they're talking about. They aren't really focusing, so the conversation kind of breaks down. But when you're here, you have each other to focus on . . . and not just your electronics. So I think you can really focus on what people say and then add on more to the conversation— you have more thoughts shared than in those conversations where you have your phones out and you are taking the fullness out of the conversation.

His bunkmates support his point by bringing up a recent wilderness hike, a three-day trek where they had each other's company without any

hope of phones. One of them remarks on how much, at home, he talks with his friends about what is on their phones. On the hike, he says, "What I noticed was that we were only focusing on ourselves and what was right in front of us and in the moment." Another remarks that while he was on the hike, the people he was with were not competing with the people he could potentially reach on his phone. "When I am at home, I don't really get to sit down next to someone . . . and just talk with them. There are always other things going on, their phone is always out, they're talking to other people." For this young man, conversation itself seemed a revelation—a large, new space. He says, "It was a stream, very ongoing. It wouldn't break apart."