

to talk to one another about what really matters. Employees asked for casual Fridays; perhaps managers should introduce conversational Thursdays. Most of all, we need to remember — in between text and e-mails and Facebook posts — to listen to one another, even to the boring bits, because it is often in unedited moments, moments in which we hesitate and stutter and go silent, that we reveal ourselves to one another.

I spend the summers at a cottage on Cape Cod, and for decades I walked the same dunes that Thoreau once walked. Not too long ago, people walked with their heads up, looking at the sky, the sand and at one another, talking. Now they often walk with their heads down, typing. Even when they are with friends, partners, children, everyone is on their own devices.

So I say, look up, look at one another, and let’s start the conversation.

Source: Turtle, Sherry. “The Flight from Conversation.” *The New York Times*, April 21, 2012. <http://www.nytimes.com/2012/04/22/opinion/sunday/the-flight-from-conversation.html>.

so many automatic listeners. And it helps explain why — against all reason — so many of us are willing to talk to machines that seem to care about us. Researchers around the world are busy inventing sociable robots, designed to be companions to the elderly, to children, to all of us.

One of the most haunting experiences during my research came when I brought one of these robots, designed in the shape of a baby seal, to an elder-care facility, and an older woman began to talk to it about the loss of her child. The robot seemed to be looking into her eyes. It seemed to be following the conversation. The woman was comforted.

And so many people found this amazing. Like the sophomore who wants advice about dating from artificial intelligence and those who look forward to computer psychiatry, this enthusiasm speaks to how much we have confused conversation with connection and collectively seem to have embraced a new kind of delusion that accepts the simulation of compassion as sufficient unto the day. And why would we want to talk about love and loss with a machine that has no experience of the arc of human life? Have we so lost confidence that we will be there for one another?

We expect more from technology and less from one another and seem increasingly drawn to technologies that provide the illusion of companionship without the demands of relationship. Always-on/always-on-you devices provide three powerful fantasies: that we will always be heard; that we can put our attention wherever we want it to be; and that we never

Texting and e-mail and posting let each of us present the self we want to be. This means we can edit. And if we do, we can delete. Or retouch: the voice, the flesh, the face, the body.

Not too much, not too little — just right.

Human relationships are rich; they’re messy and demanding. We have learned the habit of cleaning them up with technology. And the move from conversation to connection is part of this. But it’s a process in which we shortchange ourselves. Worse, it seems that over time we stop caring, we forget that there is a difference.

We are tempted to think that our little “sips” of online connection add up to a big gulp of real conversation. But they don’t. E-mail, Twitter, Facebook, all of these have their places — in politics, commerce, romance and friendship. But no matter how valuable, they do not substitute for 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 as well when it comes to understanding and knowing one another. In conversation we tend to one another. (The word itself is kinetic; it’s derived from words that mean to move, together.) We can attend to tone and nuance. In conversation, we are called upon to see things from another’s point of view.

Face-to-face conversation unfolds slowly. It teaches patience. When we communicate on our digital devices, we learn different habits. As we ramp up the volume and velocity of

We live in a technological universe in which we are always communicating. And yet we have sacrificed conversation for mere connection.

At home, families sit together, texting and reading e-mail. At work executives text during board meetings. We text (and shop and go on Facebook) during classes and when we're on dates. My students tell me about an important new skill: it involves maintaining eye contact with someone while you text someone else; it's hard, but it can be done.

Over the past 15 years, I've studied technologies of mobile connection and talked to hundreds of people of all ages and circumstances about their plugged-in lives. I've learned that the little devices most of us carry around are so powerful that they change not only what we do, but also who we are.

We've become accustomed to a new way of being “alone together.” Technology-enabled, we are able to be with one another, and also elsewhere, connected to wherever we want to be. We want to customize our lives. We want to move in and out of where we are because the thing we value most is control over where we focus our attention. We have gotten used to the idea of being in a tribe of one, loyal to our own party.

Our colleagues want to go to that board meeting but pay attention only to what interests them. To some this seems like a good idea, but we can end up hiding from one another, even as we are constantly connected to one another.

classmates are losing their ability for conversation, let alone the soul-searching discussions that can enrich the college years. And, he says, “no birthday, concert, hangout session, or party can be enjoyed without taking the time to distance yourself from what you are doing” to make sure that those in your digital world know instantly how much fun you are having.

Then there are the basics of attention, the cognitive muscle that lets us follow a story, see a task through to the end, learn, or create. In some ways, as we’ll see, the endless hours young people spend staring at electromagnetic gadgets may help them acquire specific cognitive skills. But there are concerns and questions about how those same hours may lead to deficits in core mental skills.

An eighth-grade teacher tells me that for many years she has had successive classes of students read the same book, Edith Hamilton’s *Mythology*. Her students loved it—until five years or so ago. “I started to see kids not so excited—even high-achieving groups could not get engaged with it,” she told me. “They say the reading is too hard; the sentences are too complicated; it takes a long time to read a page.”

She wonders if perhaps her students’ ability to read has been somehow compromised by the short, choppy messages they get in texts. One student confessed he’d spent two thousand hours in the last year playing video games. She adds, “It’s hard to teach comma rules when you are competing with World of WarCraft.”

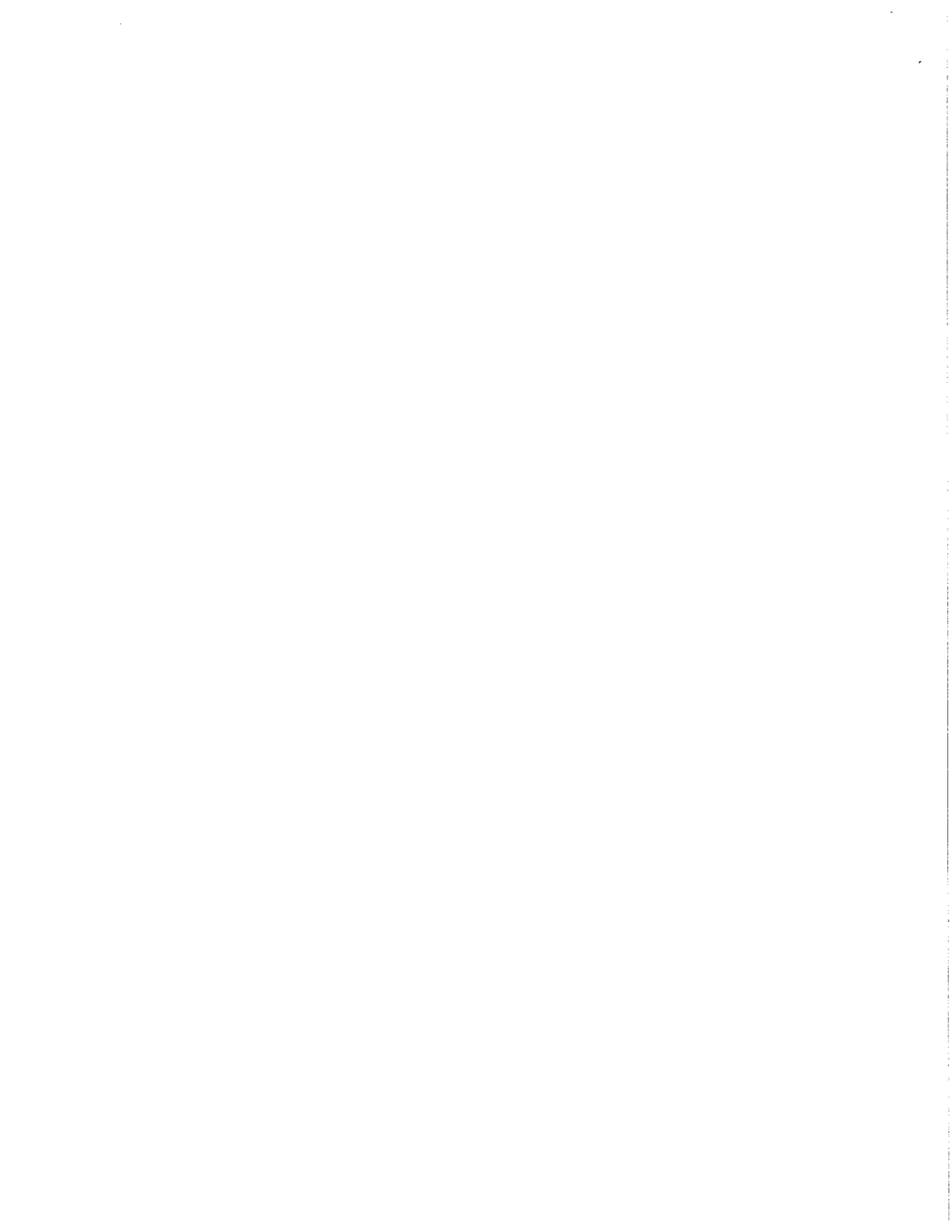
The Endangered Human Moment

The little girl's head came only up to her mother's waist as she hugged her mom and held on fiercely as they rode a ferry to a vacation island. The mother, though, didn't respond to her, or even seem to notice: she was absorbed in her iPad all the while.

There was a reprise a few moments later, as I was getting into a shared taxi van with nine sorority sisters who that night were journeying to a weekend getaway. Within a minute of taking their seats in the dark van, dim lights flicked on as every one of the sisters checked an iPhone or tablet. Desultory conversations sputtered along while they texted or scrolled through Facebook. But mostly there was silence.

The indifference of that mother and the silence among the sisters are symptoms of how technology captures our attention and disrupts our connections. In 2006 the word *pizzled* entered our lexicon; a combination of *puzzled* and *pissed*, it captured the feeling people had when the person they were with whipped out a BlackBerry and started talking with someone else. Back then, people felt hurt and indignant in such moments. Today it's the norm.

Teens, the vanguard of our future, are the epicenter. In the early years of this decade their monthly text message count soared to 3,417, double the number just a few years earlier. Meanwhile their time on the phone dropped. The average American teen gets and sends more than a hundred texts a day, about ten every waking hour. I've seen a kid texting while he rode



purposeful lives—remain the same. So at IFTF we like to say, “To understand the future, you have to look back at least twice as far as you’re looking ahead.” Fortunately, when it comes to games, we can look even farther back than that. Games have been a fundamental part of human civilization for thousands of years.

In the opening book of *The Histories*, Herodotus writes:

When Atys was king of Lydia in Asia Minor some three thousand years ago, a great scarcity threatened his realm. For a while people accepted their lot without complaining, in the hope that times of plenty would return. But when things failed to get better, the Lydians devised a strange remedy for their problem. The plan adopted against the famine was to engage in games one day so entirely as not to feel any craving for food . . . and the next day to eat and abstain from games. In this way they passed eighteen years, and along the way they invented the dice, knuckle-bones, the ball, and all the games which are common.

What do ancient dice made from sheep’s knuckles have to do with the future of computer and video games? More than you might expect.

Herodotus invented history as we know it, and he has described the goal of history as uncovering moral problems and moral truths in the concrete data of experience. Whether Herodotus’ story of an eighteen-year famine survived through gameplay is true or, as some modern historians believe, apocryphal, its moral truths reveal something important about the essence of games.

industry annually by the year 2012. And we are creating a massive virtual silo of cognitive effort, emotional energy, and collective attention lavished on game worlds instead of the real world.

The ever-skyrocketing amounts of time and money spent on games are being observed with alarm by some—concerned parents, teachers, and politicians—and eagerness by others—the many technology industries that expect to profit greatly from the game boom. Meanwhile, they are met with bewilderment and more than a few nongamers, who still make up nearly half of the U.S. population, although their numbers are rapidly decreasing. Many of them deem gaming a clear waste of time.

As we make these value judgments, hold moral debates over the addictive quality of games, and simultaneously rush to achieve massive industry expansion, a vital point is being missed. The fact that so many people of all ages, all over the world, are choosing to spend so much time in game worlds is a sign of something important, a truth that we urgently need to recognize.

The truth is this: in today's society, computer and video games are fulfilling *genuine human needs* that the real world is currently unable to satisfy. Games are providing rewards that reality is not. They are teaching and inspiring and engaging us in ways that reality is not. They are bringing us together in ways that reality is not.

And unless something dramatic happens to reverse the resulting exodus, we're fast on our way to becoming a society in which a substantial portion of our population devotes its

week to burnishing *Halo 3* in-game service record that earning virtual combat medals is widely known as the most popular activity for off-duty soldiers. They're the young adults in China who have spent so much play money or "QQ coins," on magical swords and other powerful game objects that the People's Bank of China intervened to prevent the devaluation of the yuan, China's real-world currency.

Most of all, they're kids and teenagers worldwide who would rather spend hours in front of any computer game or video game than do anything else.

These gamers aren't rejecting reality entirely. They have jobs, goals, schoolwork, families, commitments, and real lives that they care about. But as they devote more and more of their free time to game worlds, the *real* world increasingly feels like it's missing something.

Gamers want to know: Where, in the real world, is that gamer sense of being fully alive, focused, and engaged in every moment? Where is the gamer feeling of power, heroic purpose, and community? Where are the bursts of expanding thrill of success and team victory? While gamers may experience these pleasures occasionally in their real lives, they experience them almost constantly when they're playing their favorite games.

The real world just doesn't offer up as easily the carefully designed pleasures, the thrilling challenges, and the powerful social bonding afforded by virtual environments. Reality doesn't motivate us effectively. Reality isn't engineered to maximize our potential. Reality wasn't designed from the bottom up to make us happy.

INTRODUCTION

Anyone who sees a hurricane coming should warn others. I see a hurricane coming.

Over the next generation or two, ever larger numbers of people, hundreds of millions, will become immersed in virtual worlds and online games. While we are playing, things we used to do on the outside, in “reality,” won’t be happening anymore, or won’t be happening in the same way. You can’t pull millions of person-hours out of a society without creating an atmospheric-level event.

If it happens in a generation, I think the twenty-first century will see a social cataclysm larger than that caused by cars, radios, and TV, combined. . . . The exodus of these people from the real world, from our normal daily life, will create a change in social climate that makes global warming look like a tempest in a teacup.

—Edward Castronova,

Exodus to the Virtual World

