Chapter 2

# Empathy machines

## Forgetting the body

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Digital culture is a culture of forgetting (Turkle, 2015). Most specifically, it tempts us to forget what it can only simulate: the body. In every relationship, digital culture challenges us to reaffirm our commitment to presence and the significance of "being there."

One might think that psychoanalysis – so profoundly rooted in things of the body – would be immune from such temptations. But it is not. Today, many analysts do psychotherapy, psychoanalysis, and even training analyses (analytic sessions in which analysands are trained to become analysts themselves) using Skype and FaceTime. This may begin as a convenience – for example, a large market for classical analysis opened in China just as the market for it was closing down in the United States. Skype sessions were first presented as better than nothing–the patient was at a distance and other options were not available – but they ended up being justified as simply better, a method that frees and disinhibits analytic interaction.

Indeed, analysts have joined the culture of forgetting, to the point where it makes sense to ask if they will defend physical presence as the gold standard for the development and expression of intimacy and empathy. This question takes on greater importance because, in the larger culture, empathy has become a contested terrain. Some psychologists contrast it unfavorably with concern and rational compassion, presented as more global and less discriminatory (see Bloom, 2016). In the day-to-day, we subvert empathy by using technology to distract ourselves from the conversations that nurture it. And taking a longer view, technologists propose machines as relational substitutes for people, machines that could only ever offer *as-if* empathic connection (see Turkle, 2015).

Who are we becoming as we become drawn to a life without contingency, one that seeks connection without physicality, one that my engineering colleagues like to talk about with the phrase "friction free?"

As I ask this question, I note this paradox: Our society seems eager to put aside our bodies when we communicate with intimates, yet we are ever more concerned with our bodies' upkeep. Across generations and gender lines, we care more about fashion, fitness, make up, and cosmetic surgery than ever before, while caring

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less about the body's presence in relationships. We have a stake in our bodies becoming ever more perfect so that we can "wear" them, and healthily, but we are alienated from what they do for us relationally, where we become content with stand-ins for physical presence.

## The robotic moment

I talk about our reaching *the robotic moment* (Turkle, 2011), not because we have built machines worthy of talking to us about personal matters (because we have not) but because we are willing to talk to unworthy machines. We become accustomed to digital interlocutors, from robot dolls to online agents. We take machines that have not lived the arc of a human life, that have not lived in a human body, and treat them as if they could fully share our human experience.

We invest in what people readily call "empathy machines," a phrase that undermines the meaning of empathy because it has no room for embodied experience. So, for example, we are tempted by companionship and even therapeutic dialogue with computer programs that are designed to pass a new kind of Turing test. This time we are not fussing about whether a computer is intelligent (that was so 20th century!); the new test is whether a machine can simulate affect. In Turing's behavioral test, seeming to be intelligent was intelligence enough. Now, seeming to have empathy is proposed as what it will take to qualify you as empathic enough to serve as a companion and even as a psychotherapist. The psychotherapist programs are still primitive but in the robotic moment, we declare ourselves ready for them before they are ready for us.

## The assault on empathy

The "silent spring" is a phrase that Rachel Carson coined to denote a shared recognition that technology, despite its many marvels, was contributing to an assault on the environment (Carson, 1962). Now, we recognize its assault on empathy. The research is compelling. One study that reviewed thirty years of studies that measured empathy among college students found a 40-percent decline (Konrath, O'Brien, & Hsing, 2011). Since most of the change was in the final decade of the study, the researchers linked the empathy gap to the presence of mobile communication. Indeed, research shows that the presence of a phone on a table during a conversation, even a phone turned off, does two things: the conversation turns to more trivial matters and the people in the conversation feel less connected to each other (see for example Przybyliski & Weinstein, 2012).

Even a silenced phone creates distance between us. Our phones also undermine our connection to ourselves, our capacity for solitude, and this from the earliest ages. There are baby bouncers and potty trainers with a slot for a phone or a tablet. By the time people are in college, solitude has become painful, almost impossible to sustain.

In one experiment, college students were asked to sit alone without a book or a phone for fifteen minutes (see Wilson, Reinhard, Westgate, Gilbert, Ellerbeck, Hahn, Brown, & Shaked, 2014). Although the students began the experiment saying they would never consider it, after six minutes a significant number delivered electroshocks to themselves rather than spend those minutes in quiet reflection. These results are not surprising. When people are alone, for even a few moments, in a line at the supermarket or at a stop sign, we see that they reach for a device.

We struggle to pay attention to ourselves just as we struggle to pay attention to each other. The two go together. We need the capacity to be alone to be able to fully attend to each other. If you can't gather yourself to yourself, you can't come to another person and really hear them, you can't see them as an individual rather than projecting onto them what you need them to be. Without the ability to be content in solitude, we risk using other people almost as spare parts to buttress our fragile sense of self (see Ornstein, 1978).

Human relationships are rich; they're messy and demanding. These days, when we flee conversation to communicate behind the safety of a screen or divide our attention between the people we are with and the people "in the phone," we try to clean up our relationships with technology. We forget the difference between conversation and mere connection. *This isn't just a side effect. We have to consider that it has become the desired effect.*

## What our phones allow us to avoid

People talk about being addicted to their devices; it is important to remember that their attachments express both what they want their phones to provide and what they want their phones to help them avoid. What I hear most is that a phone allows you to avoid moments of boredom and anxiety. One young woman I interview talked to me about her "seven-minute rule." She explained that it takes seven or eight minutes to know if a conversation is going to be interesting. As she spoke she seemed so wise. But she quickly explained that she doesn't have the patience to put in that time. She doesn't like "the boring bits" in conversation. She goes to her phone as soon as there is a lull in a conversation. The "lull" makes her anxious.

But research is making it ever more clear that what people are now experiencing as a moment of "feared boredom" (that "lull") can be a driver to reach within yourself or to look deeper into others. Anxiety may signal that you are stretching yourself in a new direction (for an overview see Schooler, 2009); it may signal that you're learning something new, something disruptive, something alive. And, of course, it is often when we stumble, or are silent, that we reveal ourselves most to each other. We lose each other if we can't tolerate silence or the "boring bits."

But these days, we become accustomed – on social media – to seeing life as a kind of steady feed. *It is always changing, always new.* We turn a lull or a moment alone into problems that need to be solved. And people try to solve them with technology. 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. Here, the psychoanalytic tradition offers a formulation that captures our risk: If we don't teach our children to be alone, they will only know how to be lonely (for elaboration see Winnicott, 1958).

The researcher who led the study that found that empathy was down 40-percent among college students was depressed by her findings. She told me that she wanted to do something constructive, so when the empathy study was over she went on to make "empathy apps" for the iPhone. The notion here is that technology has created a problem that technology can solve. So, if children can't relate, there might be an app for that. Or they might do well with machine confidants, or programs that will serve as psychotherapists, or robots that will read to them, or dolls that can befriend them. All of these are "empathy machines."

## Empathy machines: machine confidants

In 2011, when Siri was introduced, I was on a radio show discussing it with a panel of engineers and social scientists. The conversation began with how this computer agent was able to answer factual questions but was also programmed to give shockingly lifelike answers to questions about one's emotional life – many of these were responses pre-programmed into the system by Apple to make Siri seem smarter than it was. The topic turned to how much people like to talk to Siri, part of the general phenomena that allows people to feel uninhibited when they talk to a machine; they like the feeling of no judgment. One of the social scientists on the program suggested that soon a somewhat smoothed out Siri could serve as a psychiatrist. It didn't seem to bother him that Siri, in the role of psychiatrist, would be counseling people about their lives without having actually lived one. If a program can *behave* like a psychiatrist, he said, it could *be* a psychiatrist. If no one minded the difference between the "as if" and the real thing, let the machine take the place of the person. This is the new pragmatism of "the robotic moment."

These days, we are close to living in the world that social scientist envisaged. Conversational programs have matured. They are better at behaving as if they were psychiatrists, but one thing has stayed constant – for all that they are able to pretend, machines that talk to us as though they care about us do not know the arc of a human life. They can only deliver performances of empathy and connection, and yet people persist with the idea that we can get empathy and connection from the world of apps – things that have no bodies and lives. *The assault on empathy and its connection to human embodiment does not come from what computers can do but from how the very prospect of artificial intelligence has changed who we are as people and what we consider essential to our humanity.*

Consider a mother who tells me that she is pleased that her daughter, a ten-year-old, "vents" to Siri. The girl feels free to let her feelings out to the computer agent. The mother continues: With people, her daughter is more likely to play the role of the "good girl." Isn't her self-expression with technology a good thing? There is no simple story to tell here: One of the most important lessons of childhood is that

saying something angry to a parent doesn't destroy a parent; that the fantasy that one can destroy a parent with words is only that, a fantasy. This lesson, that words don't destroy, frees up the capacity for feeling and expressing emotion. You risk sidestepping this crucial lesson if you suggest that you can only say hard things if you express yourself to a machine. That's exactly what this mother does not want to teach her daughter. And yet to many it seems a clean solution.

Now consider "Hello Barbie," a sociable toy robot that comes out of the box, announces that it is your friend and has been pre-programmed to know that you have a sister and to say that it has a sister too. The doll may go on to share that "she" is often angry at "her" sister. What about you? And how are things at school? In all of this, the child is asked to enter a pretend world of feelings. An as-if world of a doll pretending to have a life in a body, a life born of a mother. Perhaps, even, a life in conflict with that mother or with a father. Hello Barbie pretends empathy but has none to give. And it does not allow the space for imaginative, projective play that the old fashioned, silent Barbie did. With a traditional doll, a young girl who had just broken her mother's crystal might put her dolls in detention. Play space was a way to work through the turmoil of one's inner life. Hello Barbie has its own agenda.

Like all sociable robots, Hello Barbie connects with people not so much through its smarts, but by the way it gives us clues that it understands and cares about us. These days, sociable robots are targeted for the very young (this year the big toy craze is the Hatchimal, a robot that seems to develop under your care) and the very old. For years I brought sociable robots (most in the shape of robotic pets) to nursing homes. The robots were able to fool older people into thinking they were recognized and understood (Turkle, 2011). In that setting, I had a moment of reckoning. To an older woman who had lost a child, I gave a "Paro," a robot in the shape of a baby seal. The Paro made sounds and movements that convinced this grieving mother that the robot understood her problem. She began to confide in it, and to comfort it when it showed sadness, because she thought it was grieving for her. As all of this unfolded, those of us who had brought the robot into her life stood around amazed. Spectators. But we were so pleased that this woman was talking to the robot that we had stopped asking: Who was listening to this woman? Isn't that the question that defines the compact among generations? *That we will listen to each other.* To understand her problem, a death, you had to live in a body. You had to understand mortality. And loss. I think you had to have had a mother.

We forget this compact between generations, a compact that implicates our bodies, when we imagine robotic companions for the elderly. In my research, I've found that in considering robotic companions, people begin with the idea that there is "nobody there to do those jobs." The robot is better than nothing. And then we begin to argue that the robot is better than something: It is always available. So handy. No older person ever need feel alone. And then, people take a critical step. They change their criteria about what is valuable. Efficiency and cost become the new metrics and the inanimate creature becomes better than anything,

more reliable than what life could ever provide. But life, embodied human life, can provide what robots cannot: a person who has lived a life, a person who can be empathic.

The same "better than nothing to better than something" argument is used to consider how artificial intelligence might come into other aspects of our affective lives. For example, it is used to argue the merits of robots reading to children: the robot readers will always be there. Many children have no one to read to them, so the robots are better than nothing. But once developed, we are drawn to substitutions. We change our metric for assigning value and place a higher and higher value on what is always available. And that will always be a machine. We forget that reading to a child is an occasion to talk about the human stories in books, conversations that can only take place with a reader who has lived a human life. Reading to a child is a chance to talk about your feelings about the stories. It is a chance to talk about your family, your history. It is a chance to teach about the embodied life. On some level we know this. And yet we are drawn to fantasies of a world of automatic readers. Technology can make us forget what we know about life.

## Avoiding presence: fighting by text

People turn texting, email, and chat into empathy machines when they use them for "conversations" that only a few years ago would have been considered the kind of conversations that a dining room table was made for: the conversations of family discord. I study families who take presence out of difficult family conversations and prefer to "fight by text." By this they mean that they air family grievances online. When they do this, as my colleagues at MIT would say, life proceeds in a manner that is more "friction free."

So, for example, parents and children who "fight by text" tell me that if they don't meet face-to-face they stand a better chance of being "heard out," and so they are more open in expressing their feelings. It's easier to express yourself, they say, if the other person isn't in the room. It's worth pausing on this: It is, after all, the presence of the other person and learning how our words affect them that teaches us how to put ourselves in the place of the other. And for children, watching how this unfolds (and that their elders *care* about how this unfolds), teaches that empathy is a value.

Telling a family member that you will get back to them when you have composed yourself is a time-honored way of handling a difficult turn in a relationship. What is different in the many families who talk to me about "fighting by text" is that what was once a moment now becomes a method. My concern is that it may send the message to family members that in general, you are so reactive you won't try to process your feelings in real time, and perhaps you don't think they can. And even if you don't think you are saying these things, this may be what your child or spouse or partner may hear.

Fighting by text, where you put the emphasis on getting the "right" message out, also sets the expectation that you, too, will require crafted responses. It suggests that you are trying for some perfect response. Indeed, it implies that you think there is a way for people to talk to each other in which each party will say the *right* thing.

## Analysts fall for an empathy machine

Families take presence out of family meetings and argue that this is a good thing because it opens up the conversation. These days, therapists, too, from cognitive behavioral therapists to analysts, have also taken their bodies out of the room. They've been tempted (because it is *so* tempting) to move from occasionally doing a session by phone or Skype with a traveling patient to doing more and more of it and envisaging whole treatments using it.

On one level, the enthusiasm of analysts makes no sense at all. Analysts have been the most eloquent champions of presence. Their tradition explores how when people deeply listen to each other, they have bodily experiences of each other's words. So, in sessions, analysts and analysands get sleepy, get headaches, want to get up and stretch. That bodily experience is in part a reaction that demonstrates the deep connections and complexity of the work. As a treatment unfolds, it is explicitly part of understanding the transference and countertransference. But beyond the therapeutic context, that understanding of how bodily experience is part of intimate conversation is part of how the psychoanalytic tradition contributes to the culture: We are with each other body and mind, words and bodies, all tied together. Yet even analysts, who have brought us the most moving writing about the importance of presence and the body in treatment, have been quick to forget its importance (On this point, see Isaacs Russell, 2015; Miller, 2014).

Within the analytic community, the idea of analysis by Skype has become increasingly banal. A recent webinar on virtual practice sponsored by the International Psychoanalytic Association was almost celebratory in tone. To listen to the presenters, there was not much reason to treat the doors opened by new technology as anything but a gift (www.ipa.world). As one strained to connect with the image of the presenters on the screen, it was hard to believe that they were arguing for the virtues of electronic presence. And yet they were: the preoccupations of the webinar were mostly logistical. We have normalized machine-mediated psychoanalysis. But we must step back to understand what is being lost. It is not too late to make the corrections.

Here we have a profession that has given us some of the most sophisticated writing on the relationship between words and the body. And yet, faced with technology, it can become naïve. One analyst told me that on Skype she feels a quickening, things feel more intense than when the patient is with her in the room. I felt sad when I pointed out to her the significant literature on online life and hypervigilance. Online, we are put into a state of hypervigilance. It is natural to feel that quickening. It's exhilarating, but it is very precisely not the relaxed, free

floating attention that psychoanalysis suggests as the necessary path to access her patient's unconscious process and her own.

Why are the princes of the relationship between mind and body so quick to abandon the body and what it brings to our understanding? We know that there is a financial incentive to analyze people and even do training analysis at a distance. One can reach people in far-flung locations. But is there something more? *Perhaps we have always wanted to run from our bodies, from the anxieties of embodied empathy, of being together in this messy way, and now we are given a chance?* Psychoanalysis, in all of its "impossibility," is stressful on the mind and the body of the analyst. Distancing oneself makes it easier. And so now we allow ourselves a high-tech way out, a way to think that we are doing more or less the same thing as before. Indeed, perhaps *better* than we have done before, by certain metrics. Better, because with distance we can focus on the words. We can easily and unobtrusively record sessions and have an exact transcription of what occurred. We can work even when illness or travel or vacations might have impeded treatment. If these become our metrics, analysis on Skype or FaceTime isn't just better than nothing, it can be better than anything.

Technology encourages us to change our metrics for evaluation, and to forget the original nature of our enterprise. This was the logic by which robot pets became better than "real" pets. The robot pets will always be there, they will always be loving in their behavior, they will never die. And this is the logic by which machine psychotherapists will be better than people. They will be available to everyone. They will be democratic, scientific, and, of course, they build on the behaviorism and pragmatism of the robotic moment: If the programs can fake conversation, they can do the job. A human body and its experiences are not required. An as-if relationship is relationship enough (Morris & Picard, 2012).

## The larger culture: fantasies of the friction-free

Over decades, and across generations, I have been talking to people about their lives with technology. I ask them, always, to tell me if they have any ideas about how they would like technology to change their lives. The conversation comes back, again and again, to images of a life with less emotional wear and tear. Among engineers, I have said that the phrase that comes up to describe this life of less stress is "friction free."

So, for example, in my MIT world, there has for decades been talk about how wiring up every object on the Internet ("the Internet of things") would make life easier. Now that this program is fast becoming everyday reality, I am reminded of an early demo that showed how one could order coffee on the network and the barista at your favorite coffee shop would have it prepared to your exact taste when you arrived. Meanwhile, you would get to the shop on a route mapped out by your phone that would avoid your ex-lovers, ex-spouses, and anyone you had tagged as a difficult person. Only a few years ago, that was a demo. Now, there

is *Cloak*, an app for your phone. *Cloak's* tagline is "Incognito mode for real life," and it offers its users the ability to "avoid exes, co-workers, that guy who likes to stop and chat – anyone you'd rather not run into." It is the beginning of the friction-free life because the real world is mapped onto a virtual grid and your body only travels in non-confrontational space. But who said that a life without conflict, without dealing with the past, or without rubbing up against the troublesome people in it was good? Who said that not having to be reminded of past mistakes, with past pain, made up the good life? Was it the same person who said that life shouldn't have boring bits? When did these images of life without boring bits become our aesthetic? When did we decide that these were problems that we wanted technology to help us solve?

That's a trend: the idea that just because technology can help us solve a problem means that it was a problem in the first place. What technology critic Evgeny Morozov calls "solutionism," suggests a methodology for understanding our moment: What are the problems we imagine that we want technology to help us solve? (Morozov, 2012). These days we seem vexed by the body's role in generating empathy and intimacy. We'd rather relate on our screens. If only empathy could bypass bodies! If only machines could generate it! Perhaps possess it. Or at least facilitate it. For me, virtual reality, by definition, takes the body as a problem it can solve. It accelerates the move to take empathy (an offer of understanding in the particular case, an offer that demands conversation) and replace it with concern or compassion, something you can feel when you project yourself into the world in the machine.

## Being there

These days we are most likely to meet virtual reality (VR) in the form of films to watch with goggles that make us feel that we are "there." For example, the filmmaker Chris Milk has made a VR film, *Clouds Over Sidra*, in which you feel you are sitting on the floor next to a twelve year old girl in a Syrian refugee camp in Jordan. Milk says: "Virtual reality makes anyone, anywhere, feel local. It works like an empathy system." (Milk, TED Talk).

Virtual reality begins with a certain humility. It presents itself as something that is better than nothing. Right now, all of us can't be in a refugee camp, so VR lets us experience the camp. But VR moves quickly away from humility. *An empathy system*. Milk says that *Clouds Over Sidra* provides "an empathic experience" that will make us understand, connect, and feel at one with Syrian refugees.

Milk showed *Clouds Over Sidra* at the 2016 World Economic Forum in Davos. And following that, he gave a TED talk that included a film of him showing the VR film at Davos. In the TED talk, we see rows of men in suits in a climate controlled room wearing goggles. The men are not cold or tired or hungry. They have not travelled to a refugee camp. They are not meeting any refugees, talking to

them, or sharing their food. But through their goggles, they have the VR experience of being among them.

Over the past decades, social media enabled the development of social norms that discouraged friends from visiting each other and excused colleagues from showing up to what used to be shared work spaces. Then, we began to use smartphones as a way not to look at each other when we gathered together. Phones relieved the anxiety of conversation and physical presence. Now, we are enthralled because VR use makes us feel "as if" we are in a refugee camp. Substitution isn't the intent. But we have learned that substitution is always a subtext.

As Milk puts it, "VR makes anyone, anywhere, feel local." Here is what needs vigilance: The feeling of local becomes local enough. Just as when you talk to a computer program that passes the Turing test for a psychotherapist, the feeling of being in a conversation becomes conversation enough.

Milk's film is a technical wonder. But Milk says that films such as these "will make us more human." That is not clear at all. VR makes it easier for us to *see* classes of people up close, people who would have been distant from us. But we are quickly learning the limits of disembodied seeing. On March 16, 2016, the ravaged city of Aleppo was presented to the world in a virtual reality film. Naturally, news stories about this wrenching film cited Chris Milk. This film, said the critics, would be the "ultimate empathy machine." (Nudd, 2016). But clearly, our technological fantasies are just that. It will take more to realize our humanity.

The fantasies around VR as an empathy machine remind me of my studies of the first generation of people who wore Google glass. They talked about their hope that if their spouses, boyfriends, and partners had Google glass, they could watch a recording of the world from their point of view and how sharing a perspective would improve their relationship. They told me that talking was so hard, so emotionally fraught, and that they loved the idea that they could just hand over how they saw the world – their actual perspective – on tape so they wouldn't have to explain.

And they talked about political hopes for glass as an empathy machine. Some said that if a white person could see the world from the point of view of a person of color, even if they didn't know a person of color, the white person could understand their experience. It would be like being there, certainly better than trying to get into someone else's head by talking with them. "Talking," said one young man, "is so complicated, unscientific and subjective." Glass could make empathy objective. These are similar fantasies to those I hear when people talk about virtual reality. And they are not so far from new musings about what "rational compassion" has over empathy. Rational compassion has a surgical precision. Empathy is sloppy. It leads us to odd preferences; the odd human preferences of embodied selves, subject to fatigue, infatuation, arousal. Empathy is a local, particular, uncomfortable emotion. Perhaps VR fails as an empathy system because, disembodied, we are left with compassion, a more global and feel-good feeling – or a feel-bad feeling. Either way, we get to it without being there or by connecting to a person we care about.

I think of the researcher who was depressed when she found an empathy gap and wanted to build apps for the iPhone. It is always easier to build an app than

it is to have a conversation, and no matter how impressive the art, it is always easier to make a movie than it is to visit those refugees. *But tempted by empathy machines, it is important to remember that we, embodied, are the empathy app.*

Every technology challenges our human values, which is a good thing, because it causes us to reflect on what these values are. Empathy machines raise the concern that we will model who we are on their limitations and human absence will come to seem sufficient unto the day.

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