Sherry Turkle is a professor of the Sociology of Science at the Massachusetts Institute of Technology and director of the MIT Initiative on Technology and Self. "Virtuality and Its Discontents" is a chapter from her ground-breaking book, *Life on the Screen: Identity in the Age of the Internet* (1995). As a sociologist of science, Turkle is particularly interested in the ways technology shapes social interactions and that human beings shape technologies.

*Life on the Screen* attracted wide attention upon its publication and continues to be influential today. Although the MUDs and MOOs Turkle discusses have to some extent been displaced by instant messaging and chat rooms, her models of computer users self-presentation in a virtual environment raise provocative questions about how technology influences identity. As you read, pay particular attention to Turkle's methods; she relies upon extensive interviews with users for her data.

The anthropologist Ray Oldenberg has written about the "great good place," a place where members of a community can gather for the pleasure of easy company, conversation, and a sense of belonging.\(^1\) He considers these places—the local bar, bistro, and coffee shops—to be at the heart of individual social integration and community vitality. Today, we see a resurgence of interest in coffee shops and bistros, but most often the new structures are merely nostalgic because they have not grown out of coherent communities or neighborhoods. Some people are trying to fill the gap with neighborhoods in cyberspace. Take Dred's Bar, for example, a watering hole on the MUD LambdaMOO. It is described as having a "castle decor" and a polished oak dance floor. Recently I (here represented by my character or persona "ST") visited Dred's Bar with Tony, a persona I had met on another MUD. After passing the bouncer, Tony and I encountered a man asking for a $5 cover charge, and once we paid it our hands were stamped.

The crowd opens up momentarily to reveal one corner of the club. A couple is there, making out madly. Friendly place. . . .

You sit down at the table. The waitress sees you and indicates that she will be there in a minute.

The waitress comes up to the table, "Can I get anyone anything from the bar?" she says as she puts down a few cocktail napkins.

Tony says, "When the waitress comes up, type order name of drink."
Abigail [a character at the bar] dries off a spot where some drink spilled on her dress.

The waitress nods to Tony and writes on her notepad.

Order margarita [I type this line, following Tony’s directions].

You order a margarita. [This is a result of the line I typed, causing this line to appear on my screen and “ST orders a margarita” to appear on the screens of everyone else in the room.]

The waitress nods to ST and writes on her notepad.

Tony sprinkles some salt on the back of his hand.

Tony remembers he ordered a margarita, not tequila, and brushes the salt off.

... You say, “I like salt on my margarita too.”

The DJ makes a smooth transition from The Cure into a song by 10,000 Maniacs.

After the arrival of the drinks comes the following interchange:

You say, “L’chaim.”

Tony says, “Excuse me?”

After some explanations, Tony says, “Ah . . . ,” smiles, and introduces me to several of his friends. Tony and I take briefly to the dance floor to try out some MUD features that allow us to waltz and tango, then we go to a private booth to continue our conversation.

**Main Street, Mall, and Virtual Café**

What changes when we move from Oldenberg’s great good places to something like Dred’s Bar on LambdaMOO? To answer this question, it helps to consider some intermediate steps, for example, the steps implied in moving from a sidewalk café to a food court in a suburban shopping mall or from Main Street in an American small town to Disneyland’s Main Street USA.

“Disneyland,” writes the French social theorist Jean Baudrillard, “is there to conceal that fact that it is the ‘real’ country, all of ‘real’ America, which is Disneyland.” Baudrillard means that once we experience the re-creations of Disneyland, Los Angeles will strike us as real. Once Disneyland’s Main Street, USA, is the standard for artifice, Los Angeles’s shopping malls seem authentic, even though they, too, are re-creations. The shopping malls enclose another dream: a golden age that never was of idyllic small-town life. What we have are dreams within dreams.

But as the shopping malls try to recreate the Main Streets of yesteryear, critical elements change in the process. Main Street is a public place; the shopping mall is planned to maximize purchasing. On Main Street you are a citizen; in the shopping mall, you are customer as citizen. Main Street has a certain disarray: there was a drunk, a panhandler, a traveling snake-oil salesman. In the mall, you are in a relatively controlled space; the street theater is planned and paid for in advance; the appearance of serendipity is part of the simulation.
Disneyland and shopping malls are elements of a way of life I have called the culture of simulation. Television is a major element as well. On any given evening, nearly eighty million people in the United States are watching television. The average American household has a television turned on more than six hours a day, reducing eye contact and conversation to a minimum. Computers and the virtual worlds they provide are adding another dimension to a mediated experience. Perhaps computers and virtuality in its various forms feel so natural because of their similarity to watching TV, our dominant media experience for the past forty years.

The bar featured for a decade in the television series Cheers no doubt figures so prominently in the American imagination at least partly because most of us don't have a neighborhood place where “everybody knows your name.” Instead, we identify with the place on the screen, and most recently have given it some life off the screen as well. Bars designed to look like the one on Cheers have sprung up all over the country, most poignantly in airports, our most anonymous of locales. Here, no one will know your name, but you can always buy a drink or a souvenir sweatshirt.

In the postwar atomization of American social life, the rise of middle-class suburbs created communities of neighbors who often remained strangers. Meanwhile, as the industrial economic base of urban life declined, downtown social spaces such as the neighborhood theater or diner were replaced by malls and cinema complexes in the outlying suburbs. In the recent past, we left our communities to commute to these distant entertainments; increasingly, we want entertainment (such as video on demand) that commutes right into our homes. In both cases, the neighborhood is bypassed. We seem to be in the process of retreating further into our homes, shopping for merchandise in catalogues or on television channels, shopping for companionship via personal ads.

Technological optimists think that computers will reverse some of this social atomization, touting virtual experience and virtual community as ways for people to widen their horizons. But is it really sensible to suggest that the way to revitalize community is to sit alone in our rooms, typing at our networked computers and filling our lives with virtual friends?

THE LOSS OF THE REAL

Which would you rather see—a Disney crocodile robot or a real crocodile? The Disney version has a certain vividness. It rolls its eyes, it moves from side to side, it disappears beneath the surface and rises again. It is designed to thrill us, to command our attention at all times. None of these qualities is necessarily visible in a real crocodile in a zoo, which seems to spend most of its time sleeping. And you may have neither the means nor the inclination to observe a real crocodile in the Nile or the River Gambia.

Compare a rafting trip down the Colorado River to an adolescent girl using an interactive CD-ROM to explore the same territory. In the physical rafting trip, there is likely to be physical danger and with it, a sense of real consequences. One may need to strain one's resources to survive. There might be a
rite of passage. What might await the girl who picks up an interactive CD-ROM called “Adventures on the Colorado”? A touch-sensitive screen lets her explore the virtual Colorado and its shoreline. Clicking a mouse brings up pictures and descriptions of local flora and fauna. She can have all the maps and literary references she wants. All this might be fun, perhaps useful. But it is hard to imagine it marking a transition to adulthood. But why not have both—the virtual Colorado and the real one? Not every exploration need be a rite of passage. The virtual and the real may provide different things. Why make them compete?

This question recalls the controversy about simulation that divided the MIT faculty during Project Athena. Those who wanted to keep their students away from simulations argued that once students have seen an experiment unfold perfectly in a simulation, the messiness of a real experiment—the imperfections of measurement, the crack in the equipment that means you have to repeat it, the rough edges on a hand sketch of a building site—all these come to seem like a waste of time. The seductiveness of simulation does not mean that it is a bad thing or something to be avoided at all cost, but it does mean that simulation carries certain risks. It is not retrograde to say that if we value certain aspects of life off the screen, we may need to do something to protect them.7

Searching for an easy fix, we are eager to believe that the Internet will provide an effective substitute for face-to-face interaction. But the move toward virtuality tends to skew our experience of the real in several ways. One way is to make denatured and artificial experiences seem real. Let’s call it the Disneyland effect. After a brunch on Disneyland’s Royal Street, a cappuccino at a restaurant chain called Bonjour Café may seem real by comparison. After playing a video game in which your opponent is a computer program, the social world of MUDs may seem real as well. At least there are real people playing most of the parts and the play space is relatively open. One player compares the roles he was able to play on video games and MUDs. “Nintendo has a good one [game] where you can play four characters. But even though they are very cool,” he says, “they are written up for you.” They seem artificial. In contrast, on the MUDs, he says, “There is nothing written up.” He says he feels free. MUDs are “for real” because you make them up yourself.

Such sentiments remind me of a comment by a high-school junior who was upset by what she described as the flight of her friends to the Internet. She complained, “Now they just want to talk online. It used to be that things weren’t so artificial. We phoned each other every afternoon.” To this young woman, phone calls represented the natural, intimate, and immediate. We build our ideas about what is real and what is natural with the cultural materials available. When I was in college and living in Paris, I stayed with a family who avoided the telephone for everything but emergency communications. An intimate communication would go by a *pneumatique*. One brought (or had delivered) a handwritten message to the local post office. There, it was placed in a cannister and sent through a series of underground tubes to another post office. It would then be hand delivered to its destination. I was taught that the *pneumatique* was the favored medium for love letters, significant apologies, or requests for an important meeting. Although mediated by significant amounts
of technology, the handwritten *pneumatique* bore the trace of the physical body of the person who sent it; it was physically taken from that person’s hand and put into the hand of the person to whom it was sent. The *pneumatique*'s insistence on physical presence may have ill-prepared me for the lessons of postmodernism, but is has made e-mail seem oddly natural.

Another effect — *simulation*, which I’ll call the artificial crocodile effect, makes the fake seem more compelling than the real. In *The Future Does Not Compute: Warnings from the Internet*, Stephen L. Talbott quotes educators who say that years of exciting nature programming have compromised wildlife experiences for children. The animals in the woods are unlikely to perform as dramatically as those captured on the camera. The world of direct, unmediated experience is thus devalued. I have a clear memory of a Brownie Scout field trip to the Brooklyn Botanical Gardens where I asked an attendant if she could make the flowers “open fast.” For a long while, no one understood what I was talking about. Then they figured it out: I was hoping that the attendant could make the flowers behave as they did in the time-lapse photography I had seen on *Walt Disney*.

I was reminded of this incident when several years ago I interviewed children about their experiences role-playing in the game Dungeons and Dragons. One ten-year-old boy explained that *Dungeons and Dragons was like history*, except that Dungeons and Dragons “is more complicated... There are hundreds and hundreds of books about Dungeons and Dragons.” As far as this boy knew, there was only one book about history, his textbook.

A similar point about the devaluation of direct experience is familiar to those who have followed the discussion about the effect of television on our sensibilities, including the developing sensibilities of children. Media critics have suggested that quick cuts, rapid transitions, changing camera angles, all heighten stimulation through editing, a hyperactive style that is shared by *Sesame Street* and MTV. For some, this rapid cycling of events spoils us for the real: “One can only guess at the effect upon viewers of these hyperactive images, aside from fixing attention on the television set... They must surely... contribute to the... inability to absorb information that comes muddling along at natural, real-life speed.” Direct experience is often messy; its meaning is never exactly clear. Interactive multimedia comes already interpreted. It is already someone else’s version of reality.

A third effect is that a virtual experience may be so compelling that we believe that within it we’ve achieved more than we have. Many of the people I interviewed claimed that virtual gender-swapping enabled them to understand what it’s like to be a person of the other gender, and I have no doubt that this is true, at least in part. But as I listened to this boast, my mind often traveled to my own experiences of living in a woman’s body. These include worry about physical vulnerability, fears of unwanted pregnancy and of infertility, fine-tuned decisions about how much makeup to wear to a job interview, and the difficulty of giving a professional seminar while doubled over with monthly cramps. To a certain extent, knowledge is inherently experiential, based on a physicality that we each experience differently.
Pavel Curtis, the founder of LambdaMOO, began his paper on its social dimensions with a quote from E. M. Forster: "The Machine did not transmit nuances of expression. It only gave a general idea of people—an idea that was good enough for all practical purposes." But what are practical purposes? And what about impractical purposes? To the question, "Why must virtuality and real life compete—why can't we have both?" The answer is of course that we will have both. The more important question is "How can we get the best of both?"

THE POLITICS OF VIRTUALITY

When I began exploring the world of MUDs in 1992, the Internet was open to a limited group of users, chiefly academics and researchers in affiliated commercial enterprises. The MUDders were mostly middle-class college students. They chiefly spoke of using MUDs as places of play and escape, though some used MUDs to address personal difficulties.

By late 1993, network access could easily be purchased commercially, and the number and diversity of people on the Internet had expanded dramatically. With many more people drawn to social virtual reality (MUDs, chat lines, bulletin boards, etc.) conversations with MUDders began to touch on new themes. Earlier interviews with participants in MUDs had touched on them as recreation and as an escape from RL experiences of broken homes, parental alcoholism, and physical and sexual abuse. While those earlier themes were still present, I heard about a new one. This was RL as a place of economic insecurity for young people trying to find meaningful work and trying to hold on to the middle-class status they had grown up in. Socially speaking, there was nowhere to go but down in RL, whereas MUDs were seen as a vehicle of virtual social mobility.

Josh is a twenty-three-year-old college graduate who lives in a small studio apartment in Chicago. After six months of looking for a job in marketing, the field in which he recently received his college degree, Josh has had to settle for a job working on the computer system that maintains inventory records at a large discount store. He considers this a dead end. When a friend told him about MUDs, he thought the game sounded diverting enough to try. Josh talked the friend into letting him borrow his computer account for one evening, and then for another. Within a week, MUDs had become more than a diversion. Josh had stepped into a new life.

Now, Josh spends as much time on MUDs as he can. He belongs to a class of players who sometimes call themselves Internet hobos. They solicit time on computer accounts the way panhandlers go after spare change. In contrast to his life in RL, which he sees as boring and without prospects, Josh's life inside MUDs seems rich and filled with promise. It has friends, safety, and space. "I live in a terrible part of town. I see a rat hole of an apartment, I see a dead-end job, I see AIDS. Down here [in the MUD] I see friends, I have something to offer, I see safe sex." His job taking inventory has him using computers in ways he finds boring. His programming on MUDs is intellectually challenging. Josh has worked on three MUDs, building large, elaborate living quarters in each. In ad-
dition, he has become a specialist at building virtual cafés in which bots serve as waiters and bartenders. Within MUDs, Josh serves as a programming consultant to many less-experienced players and has even become something of an entrepreneur. He “rents” ready-built rooms to people who are not as skilled in programming as he is. He has been granted wizard privileges on various MUDs in exchange for building food-service software. He dreams that such virtual commerce will someday lead to more—that someday, as MUDs become commercial enterprises, he will build them for a living. MUDs offer Josh a sense of participation in the American dream.

MUDs play a similar role for Thomas, twenty-four, whom I met after giving a public lecture in Washington, D.C. As I collected my notes, Thomas came up to the lectern, introduced himself as a dedicated MUD player and asked if we could talk. After graduating from college, Thomas entered a training program at a large department store. When he discovered that he didn’t like retailing, he quit the program, thinking that he would look for something in a different area of business. But things did not go well for him:

My grades had not been fantastic. Quitting the training program looked bad to people. . . . I would apply for a job and two hundred other people would be there. You better bet that in two hundred people there was someone who had made better grades and hadn’t quit his first job.

Finally, Thomas took a job as a bellhop in the hotel where I had just given my lecture. “I thought that working evening hours would let me continue looking for something that would get me back into the middle class,” Thomas says. “I haven’t found that job yet. But MUDs got me back into the middle class.”

Thomas sees himself as someone who should be headed for a desk job, a nice car, and life in the suburbs. “My family is like that,” he says, “and they spent a lot of money sending me to college. It wasn’t to see me bellhop, I can promise you that.” During the day Thomas carries luggage, but at night on MUDs he feels that he is with and recognized by his own kind. Thomas has a group of MUD friends who write well, program, and read science fiction. “I’m interested in MUD politics. Can there be democracy in cyberspace? Should MUDs be ruled by wizards or should they be democracies? I majored in political science in college. These are important questions for the future. I talk about these things with my friends. On MUDs.”

Thomas moves on to what has become an obvious conclusion. He says, “MUDs make me more what I really am. Off the MUD, I am not as much me.” Tanya, also twenty-four, a college graduate working as a nanny in rural Connecticut, expresses a similar aspiration for upward mobility. She says of the MUD on which she has built Japanese-style rooms and a bot to offer her guests a kimono, slippers, and tea, “I feel like I have more stuff on the MUD than I have off it.”

Josh, Thomas, and Tanya belong to a generation whose college years were marked by economic recession and a deadly sexually transmitted disease. They scramble for work; finances force them to live in neighborhoods they don’t
consider safe; they may end up back home living with parents. These young people are looking for a way back into the middle class. MUDs provide them with the sense of a middle-class peer group. So it is really not that surprising that it is in virtual social life they feel most like themselves.

If a patient on the antidepressant medication Prozac tells his therapist he feels like himself with the drug than without it, what does this do to our standard notions of a real self? Where does a medication end and a person begin? Where does real life end and a game begin? Is the real self always the naturally occurring one? Is the real self always the one in the physical world? As more and more real business gets done in cyberspace, could the real self be the one who functions best in that realm? Is the real Tanya the frustrated nanny or the energetic programmer on the MUD? The stories of these MUDders point to a whole set of issues about the political and social dimension of virtual community. These young people feel they have no political voice, and they look to cyberspace to help them find one.

ESCAPE OR RESISTANCE

In Reading the Romance, the literary scholar Janice Radway argues that when women read romance novels they are not escaping but building realities less limited than their own. Romance reading becomes a form of resistance, a challenge to the stultifying categories of everyday life. This perspective, sensitive to the ways people find to resist constraints of race, class, and gender, is widely shared in contemporary cultural studies. In a similar spirit, the media researcher Henry Jenkins has analyzed the cultures built by television fans as a form of resistance and as enriching for people whose possibilities for fulfillment in real life are seriously limited.

Jenkins quotes a song written by a science fiction fan, which describes how her “Weekend-Only World” at science fiction conventions has more reality for her than her impoverished “real-time life.”

\begin{verbatim}
In an hour of make-believe
In these warm convention halls
My mind is free to think
And feel so deeply
An intimacy never found
Inside their silent walls
In a year or more
Of what they call reality.\end{verbatim}

Jenkins writes that this song “expresses the fans’ recognition that fandom offers not so much an escape from reality as an alternative reality whose values may be more humane and democratic than those held by mundane society.” The author of the song, in Jenkins’s view, “gains power and identity from the time she spends within fan culture; fandom allows her to maintain her sanity
in the face of the indignity and alienation of everyday life." A similar perspective can be heard in the many online discussions of addictions to virtuality.

On an Internet mailing list discussing MUDding, one player reported on a role-playing conference in Finland that debated (among other things) whether "the time spent in [the] computer (yeah, IN it, not in front of it)" was a bad thing or what; the conclusion was, that it is at least better than watching "The Bald [sic] & The Beautiful" for 24H a day—and here we talked about MUDs or such mostly where people communicate with real people through the machine. . . . Well, hasty judging people might say that the escapists are weak and can't stand the reality—the truly wise see also the other side of the coin: there must be something wrong with Reality, if so many people want to escape from it. If we cannot change the reality, what can we do?15

One of the things that people I've interviewed have decided to do is change the reality of virtual reality. An example of this can be found in the history of the MUD LambdaMOO. LambdaMOO has recently undergone a major change in its form of governance. Instead of the MUD wizards (or system administrators) making policy decisions, there is a complex system of grass-roots petitions and collective voting. Thomas, the Washington, D.C., bellhop who sees himself as a yuppy manqué, says he is very involved in this experiment. He goes on at length about the political factions with which he must contend to "do politics" on LambdaMOO. Our conversation is taking place in the fall of 1994. His home state has an upcoming senatorial race, hotly contested, ideologically charged, but he hasn't registered to vote and doesn't plan to. I bring up the Senate race. He shrugs it off: "I'm not voting. Doesn't make a difference. Politicians are liars."

One might say that MUDs compensate individuals like Thomas for their sense of political impotence. Or, if we take the perspective sketched by Radaway and Jenkins, we can look at MUDs as places of resistance to many forms of alienation and to the silences they impose. Chat lines, e-mail, bulletin boards, and MUDs are like a weekend-only world in which people can participate every day. Are these activities best understood in terms of compensation or resistance? The logic of compensation suggests that the goal of virtual experience is to feel better; the logic of resistance suggests that it is political empowerment.

The question of how to situate users of seductive technology on a continuum between psychological escape and political empowerment is reminiscent of a similar question posed by the enthusiasm of personal computer hobbyists of the late 1970s. MUDders like Josh, Thomas, and Tanya—out of college and not yet in satisfying work—have much in common with these early computer hobbyists. Both groups express unfulfilled intellectual and political aspirations within computer microworlds. In the case of the home hobbyists, programmers who no longer had a sense of working with a whole problem on the job demanded a sense of the whole in their recreational computing. In the case of the MUDders, people who feel a loss of middle-class status find reassurance in
virtual space. Although the MUDs' extravagant settings—spaceships and medieval towns—may not seem likely places to reconstruct a sense of middle-class community, that is exactly the function they serve for some people who live in them. Many have commented that one appeal of LambdaMOO may be due to its being built as a home, modeled after the large, rambling house where its designer actually lives.

There is a special irony in bringing together the stories of pioneer personal computer owners and pioneer MUDders. The politics of the hobbyists had a grass-roots flavor. To their way of thinking, personal computers were a path to a new populism. Networks would allow citizens to band together to run decentralized schools and local governments. They thought that personal computers would create a more participatory political system because “people will get used to understanding things, to being in control of things, and they will demand more.” Hobbyists took what was most characteristic of their relationships with the computer—building safe microworlds of transparent understanding—and turned it into a political metaphor. When nearly twenty years later, another group of people has turned to computation as a resource for community building, the communities they are thinking of exist on and through the computer. When Thomas talks to me about his passion for politics, about his undergraduate political science major, and how being politically involved makes him feel more like himself, he is talking about the MUD, not about life in Washington, D.C.\(^\text{16}\)

Yet the Internet has become a potent symbol and organizational tool for current grass-roots movements—of both right and left. The hobbyists dreamed that the early personal computers would carry a political message about the importance of understanding how a system worked. The Internet carries a political message about the importance of direct, immediate action and interest-group mobilization. It is the symbol and tool of a postmodern politics.

The hobbyists I interviewed nearly two decades ago were excited, enthusiastic, and satisfied with what they were doing with their machines. As an ethnographer I thought it appropriate to report this enthusiasm and try to capture a sense of the pleasures and satisfactions that these individuals were deriving from their “non-alienated” relationships with their computers. In the same sense, it seems appropriate to report the enthusiasm of most MUD users. They take pleasure in building their virtual friendships and virtual spaces and taking on responsibility for virtual jobs. However, fifteen years ago, when reflecting on hobbyists’ deeply-felt populism, I also worried about a darker side:

Will the individual satisfactions of personal computation (which seem to derive some of their power from the fact that they are at least in part responsive to political dissatisfactions) take the individual away from collective politics? People will not change unresponsive political systems or intellectually deadening work environments by building machines that are responsive, fun, and intellectually challenging. They will not change the world of human relations by retreating into a world of things. It would certainly be inappropriate to rejoice at the holistic and
humanistic relationships that personal computers offer if it turns out that, when widespread, they replace religion as an opiate of the masses.\textsuperscript{17}

These words can easily be transposed into the current context, substituting MUDs for personal computers. My misgivings are similar: Instead of solving real problems—both personal and social—are we choosing to live in unreal places? Women and men tell me that the rooms and mazes on MUDs are safer than city streets, virtual sex is safer than sex anywhere, MUD friendships are more intense than real ones, and when things don’t work out you can always leave.\textsuperscript{18}

It is not hard to agree that MUDs provide an outlet for people to work through personal issues in a productive way; they offer a moratorium that can be turned to constructive purpose, and not only for adolescents. One can also respect the sense in which political activities in a MUD demonstrate resistance to what is unsatisfying about political life more generally. And yet, it is sobering that the personal computer revolution, once conceptualized as a tool to rebuild community, now tends to concentrate on building community inside a machine.

If the politics of virtuality means democracy online and apathy offline, there is reason for concern. There is also reason for concern when access to the new technology breaks down along traditional class lines.\textsuperscript{19} Although some inner-city communities have used computer-mediated communication as a tool for real-life community building,\textsuperscript{20} the overall trend seems to be the creation of an information elite at the same time that the walls around our society’s traditional underclass are maintained. Perhaps people are being even more surely excluded from participation, privilege, and responsibility in the information society than they have been from the dominant groups of the past.

Today many are looking to computers and virtual reality to counter social fragmentation and atomization; to extend democracy; to break down divisions of gender, race, and class; and to lead to a renaissance of learning. Others are convinced that these technologies will have negative effects. Dramatic stories supporting both points of view are always enticing, but most people who have tried to use computer-mediated communication to change their conditions of life and work have found things more complex. They have found themselves both tantalized and frustrated.

Vanessa, thirty-four, is one of the founding wizards of a large and successful MUD. She is a skilled computer programmer whose talents and energy have always enabled her to earn good money. But she has never been happy in the computer industry because she found little support for her creative style, which she characterizes as “thinking along with people.” She is the kind of person whose creativity emerges in conversation. Things went from bad to worse for her when she was forced to telework from home for a period of time. “I was going crazy. Now there was no one. I was so lonely I couldn’t get myself to work.” But then, a MUD-like chat window gave Vanessa some of what she wanted:

There was one woman I was working with . . . on a project and we would always have a chat and a talk window on our machines. There we could talk about the
project and the testing we were doing and say, "OK, type this," "OK, see if it works," "OK, you know I've changed this file now." . . . That talk window was an important piece of support to me.

That project and the chat sessions are over. When I meet her, Vanessa has no such intellectual companionship in her job. But she has it when she collaborates with others in MUDs. She comments, "So I think that's why I spend so much time on the MUD . . . I am looking for environments with that sort of support." Vanessa has not yet been able to take the work style she has carved out in a virtual world and use it to enlarge her real-world job. She does not find room for "that sort of support" in the company where she works. There, she describes the highly productive people as driven individualists while her preferred work style is seen as time-wasting.

Vanessa's story would not read as an escape into MUDs if she had found a way to use her experiences there to model a more fulfilling style of RL work. Her story points toward new possibilities for using MUDs to foster collaboration in work settings. These are early days for such experiments, but they are beginning. For example, Pavel Curtis, the designer of LambdaMOO, is creating a new virtual space—enhanced with audio and video—for Xerox PARC in Palo Alto, California, a research facility funded by the Xerox Corporation. The MUD is called Jupiter, and Xerox PARC employees will step in and out of it depending on whom they want to talk to and what tools they want to use. Jupiter is meant to pick up where the physical workplace leaves off. Smooth transitions back and forth are a key design principle.

Xerox PARC is not the only workplace where MUDs are either in operation or being planned. The MIT Media Lab has MediaMOO, a MUD built and maintained by Amy Bruckman and dedicated to collaboration and community building among media researchers all over the world. Some veteran MUDdiers are building similar environments for members of international corporations, to make it easier for them to participate in meetings with their colleagues. What these situations have in common is the permeable border between the real and the virtual.

On a more widespread level, chat windows in which collaborators "talk" while editing shared documents, take notes on shared "white boards," and manipulate shared data are becoming increasingly common. Three doctors at three different physical locations, all looking at the same CAT scan images on their screens, consult together about a young child with a tumor, but the subsequent conversation about the recommended treatment will take place at the child's bedside with the family members present. Similarly permeable are virtual communities such as the WELL. In The Virtual Community, Howard Rheingold describes how WELL members have been able to support one another in real life. They have elicited information and contacts that saved lives (for example, of an American Buddhist nun in Katmandu who developed an amoebic liver infection). They have brought electronic consolation and personal visits in times of grief (for example, to a WELL member dying of cancer). Rheingold himself believes that this permeability is essential for the word
“community” to be applied to our virtual social worlds. To make a community work “at least some of the people [must] reach out through that screen and affect each other’s lives.”

_Panopticon_

Much of the conversation about electronic mail, bulletin boards, and the information superhighway in general is steeped in a language of liberation and utopian possibility. It is easy to see why. I write these words in 1995. To date, a user’s experience of the Internet is of a dizzyingly free zone. On it information is easily accessible. One can say anything to anyone. Bulletin boards and information utilities are run by interested and motivated people—a graduate student in comparative literature here, an unemployed philosopher there, as well as insurance salesmen, housewives, and bellhops. These people obviously have something in common, access to the Internet and enough money or connections to buy or borrow a computer and modem, but they are a diverse enough group to foster fantasies about a new kind of social power. People who usually think of the world in materialist terms play with the idea that the somehow immaterial world of computer networks has created a new space for power without traditional forms of ownership. People who think of the world in bureaucratic terms play with the ways in which electronic communities undermine traditional forms of organization and status. Such musings are no longer restricted to professional social theorists. The August 1995 issue of _NetGuide_, a monthly magazine written for beginning Internet users, carries the cover story “Take Charge: Create Your Own Online Service.”

I am talking with Ray, an MIT freshman who is discussing his first Internet experiences (an Internet account comes as part of MIT’s registration package). Ray quickly turns the conversation to the issue of power and access. He is thrilled with how much there is to explore and about being able to connect with people who would otherwise be inaccessible. He says he would never dare to make an appointment to see one of his professors without something very specific to say, but would send off an e-mail to inquire about a difficult assignment. Ray is on an electronic mailing list with one of his intellectual heroes. “They say Marvin Minsky is actually on this list they let me join. He hasn’t posted anything yet. But as soon as he does, I feel like I could comment on something he said.” Ray comments that the idea that he and Marvin Minsky are receiving the same e-mail makes him feel like “the two of us are sharing a _New York Times_ over coffee and bagels on Sunday.” Ray has also discovered LambdaMOO and is impressed with its efforts at self-governance. He says, “This is what American democracy should be.”

Despite many people’s good intentions, there is much in recent social thought that casts a sobering light on such enthusiasms. Michel Foucault’s work, for example, elaborates a perspective on information, communication, and power that undermines any easy links between electronic communication and freedom. He argues that power in modern society is imposed not by the personal presence and brute force of an elite caste but by the way each individual learns the art of self-surveillance. Modern society must control the bodies
and behaviors of large numbers of people. Force could never be sufficiently distributed. Discourse substitutes and does a more effective job.

The social philosopher Jeremy Bentham, best known for his espousal of utilitarianism, proposed a device called the Panopticon which enabled a prison guard to see all prisoners without being seen. At any given moment, any one prisoner was perhaps being observed, perhaps not. Prisoners would have to assume they were being observed and would therefore behave according to the norms that the guard would impose, if watching. Individuals learn to look at themselves through the eyes of the prison guard. Foucault has pointed out that this same kind of self-surveillance has extended from the technologies of imprisonment to those of education and psychotherapy. We can learn to see ourselves from a teacher’s or a therapist’s point of view, even in their absence.

In our day, increasingly centralized databases provide a material basis for a vastly extended Panopticon that could include the Internet. Even now there is talk of network censorship, in part through (artificially) intelligent agents capable of surveillance. From Foucault’s perspective, the most important factor would not be how frequently the agents are used or censorship is enforced. Like the threat of a tax audit, what matters most is that people know that the possibility is always present.

Ray’s attitude about being online is totally positive. But Andy and Daniella, two other MIT freshmen, express reservations about computer-mediated communication. Neither knows about Foucault’s work, but their ideas resonate with his on the way social control operates through self-surveillance. Andy hangs out on a MUD on which wizards have the power to enter any room without being seen. This means that they can “overhear” private conversations. He is organizing a petition to put a stop to this practice. Although he has been successful in marshaling support, he does not think his efforts will succeed. “We need the wizards. They are the ones willing to do the work. Without them, there would be no MUD.” His comment provokes the following remark from Daniella: “Do you know that if you type the finger command, you can see the last time someone got online? So you are responsible for your e-mail if you log on to your computer, because everybody can know that you got your messages. But you don’t know who asked about [that is, who has fingered] you.” Andy nods his assent and replies, “I don’t think that’s the worst.” He continues:

I subscribed to a list about cyberpunk and I wrote every day. It was such a release. My ideas were pretty wild. Then I found out that the list is archived in three places. E-mail makes you feel as though you are just talking. Like it will evaporate. And then what you say is archived. It won’t evaporate. It’s like somebody’s always putting it on your permanent record. You learn to watch yourself.

Such consideration about power, discourse, and domination have been the province of social theorists. The experience of the Internet, that most ephemeral of objects, has made these considerations more concrete. Of course, people have known for decades that each time they place an order from
a mail-order catalogue or contribute to a political cause, they are adding information to a database. New catalogues and new requests for political contributions arrive that are more and more finely tuned to the profile of the electronic personae they have created through their transactions. But people are isolated in their reflections about their electronic personae. On the Internet, such matters are more likely to find a collective voice.

In discussing the parallels between lobbyists and MUDders, I have balanced a language of psychological compensation (people without power and resources in the real find a compensatory experience in the virtual) with a language of political criticism (the satisfactions that people experience in virtual communities underscore the failures of our real ones). Both approaches give precedence to events in the real world. Do MUDs oblige us to find a new language that does not judge virtual experiences purely in terms of how far they facilitate or encumber "real" ones? Perhaps the virtual experiences are "real enough."

When people pursue relationships through letter writing, we are not concerned that they are abandoning their real lives. Relationships via correspondence seem romantic to people for whom MUDding seems vaguely unsavory. Some envisage letter writing as a step toward physical presence rather than as an alternative to it. Some imagine the letter writers speaking in their own voice rather than role playing. But neither of these ideas is necessarily true of letter writing or untrue of MUDding. In MUDs it is hard not to play an aspect of oneself, and virtual encounters often lead to physical ones. What makes an eighty-hour work week in investment banking something a parent can be proud of while Robert's eighty hours a week building and administering his MUD raises fears of addiction? Would Robert seem less addicted to his MUD activities if he were being paid for them? Would they have a different feel if his relationship with Kasha—the fellow MUDder he traveled cross-country to meet—had blossomed, as some MUD friendships do, into marriage and family? In an electronic discussion group on virtual community, Barry Kort, one of the founders of a MUD for children, argued in a similar vein: "I don't think anyone would have said that Socrates, Plato, and Aristotle were addicted to the Agora. The computer nets are the modern Agora, serving a role similar to talk radio and tabloid journalism, but with more participation, less sensationalism, and more thinking between remarks."

What are the social implications of spinning off virtual personae that can run around with names and genders of our choosing, unhindered by the weight and physicality of embodiment? From their earliest days, MUDs have been evocative objects for thinking about virtuality and accountability.

Habitat was an early MUD, initially built to run on Commodore 64 personal computers in the early 1980s. It had a short run in the United States before it was bought and transferred to Japan. Its designers, Chip Morningstar and F. Randall Farmer, have written about how its players struggled to establish the rights and responsibilities of virtual selves. On Habitat, players were originally allowed to have guns and other weapons. Morningstar and Farmer say
that they “included these because we felt that players should be able to ‘materially’ affect each other in ways that went beyond simply talking, ways that required real moral choices to be made by the participants.” However, death in Habitat had little in common with the variety. “When an Avatar is killed, he or she is teleported back home, head in hands (literally), pockets empty, and any object in hand at the time dropped on the ground at the scene of the crime.” This eventuality was more like a setback in a game Chutes and Ladders than real mortality, and for some players thievery and murder became the highlights of the game. For others, these activities were a violent intrusion on their peaceful world. An intense debate ensued.

Some players argued that guns should be eliminated, for in a virtual world a few lines of code can translate into an absolute gun ban. Others argued that what was dangerous in virtual reality was not violence but its trivialization. These individuals maintained that guns should be allowed, but their consequences should be made more serious; when you are killed, your character should cease to exist and not simply be sent home. Still others believed that since Habitat was just a game and playing assassin was part of the fun, there could be no harm in a little virtual violence.

As the debate continued, a player who was a Greek Orthodox priest in real life founded the first Habitat church, the “Order of the Holy Walnut,” whose members pledged not to carry guns, steal, or engage in virtual violence of any kind. In the end, the game designers divided the world into two parts. In town, violence was prohibited. In the wilds outside of town, it was allowed. Eventually a democratic voting process was installed and a sheriff elected. Participants then took up discussion on the nature of Habitat laws and the proper balance between law and order and individual freedom. It was a remarkable situation. Participants in Habitat were seeing themselves as citizens; and they were spending their leisure time debating pacifism, the nature of good government, and the relationship between representations and reality. In the nineteenth century, utopians built communities in which political thought could be lived out as practice. On the cusp of the twenty-first century, we are building MUDs, possible worlds that can provoke a new critical discourse about the real.

**MUD RAPE: ONLY WORDS?**

Consider the first moments of a consensual encounter between the characters Backlash and Targa. The player behind Backlash, Ronald, a mathematics graduate student in Memphis, types “emote fondles Targa’s breast” and “say You are beautiful Targa.” Elisabeth, Targa’s player, sees on her screen:

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Backslash fondles Targa’s breast.
You are beautiful Targa.
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Elisabeth responds with “Say Touch me again, and harder. Please. Now. That’s how I like it.” Ronald’s screen shows:
Targa says, "Touch me again, and harder. Please. Now. That's how I like it."

But consensual relationships are only one facet of virtual sex. Virtual rape can occur within a MUD if one player finds a way to control the actions of another player's character and can thus "force" that character to have sex. The coercion depends on being able to direct the actions and reactions of characters independent of the desire of their players. So if Ronald were such a culprit, he would be the only one typing, having gained control of Targa's character. In this case Elisabeth, who plays Targa, would sit at her computer, shocked to find herself, or rather her "self," begging Backslash for more urgent caresses and ultimately violent intercourse.

In March 1992, a character calling himself Mr. Bungle, "an oleaginous, Bisquick-faced clown dressed in cum-stained harlequin garb and girdled with a mistletoe-and-hemlock belt whose buckle bore the inscription 'KISS ME UNDER THIS, BITCH!'") appeared in the LambdaMOO living room. Creating a phantom that masquerades as another player's character is a MUD programming trick often referred to as creating a voodoo doll. The "doll" is said to possess the character, so that the character must do whatever the doll does. Bungle used such a voodoo doll to force one and then another of the room's occupants to perform sexual acts on him. Bungle's first victim in cyberspace was legba, a character described as "a Haitian trickster spirit of indeterminate gender, brown-skinned and wearing an expensive pearl gray suit, top hat, and dark glasses." Even when ejected from the room, Bungle was able to continue his sexual assaults. He forced various players to have sex with each other and then forced legba to swallow his (or her?) own pubic hair and made a character called Starsinger attack herself sexually with a knife. Finally, Bungle was immobilized by a MOO wizard who "toaded" the perpetrator (erased the character from the system).

The next day, legba took the matter up on a widely read mailing list within LambdaMOO about social issues. Legba called both for "civility" and for "virtual castration." When chronicling this event, the journalist Julian Dibbell contrasted the cyberspace description of the event with what was going on in real life. The woman who played the character of legba told Dibbell that she cried as she wrote those words, but he points out their "precise tenor," mingling "murderous rage and eyeball-rolling annoyance was a curious amalgam that neither the RL nor the VR facts alone can quite account for."

Where virtual reality and its conventions would have us believe that legba and Starsinger were brutally raped in their own living room, here was the victim legba scolding Mr. Bungle for a breach of "civility." Where real life, on the other hand, insists the incident was only an episode in a free-form version of Dungeons and Dragons, confined to the realm of the symbolic and at no point threatening any player's life, limb, or material well-being, here now was the player legba issuing aggrieved and heartfelt calls for Mr. Bungle's dismemberment. Ludicrously excessive by RL's lights, woefully understated by VR's, the tone of legba's response made sense only in the buzzing, dissonant gap between them.28
Dibbell points out that although the RL and the VR description of the event may seem to “march in straight, tandem lines separated neatly into the virtual and the real, its meaning lies always in that gap.” He describes the way MUD players tend to learn this lesson during their early sexual encounters in MUDs.

Amid flurries of even the most cursorily described caresses, sighs, and penetrations, the glands do engage, and often as throbbingly as they would in a real-life assignation—sometimes even more so, given the combined power of anonymity and textual suggestiveness to unshackle deep-seated fantasies. And if the virtual setting and the interplayer vibes are right, who knows? The heart may engage as well, stirring up passions as strong as many that bind lovers who observe the formality of trysting in the flesh.

The issue of MUD rape and violence has become a focal point of conversation on discussion lists, bulletin boards, and newsgroups to which MUD players regularly post. In these forums one has the opportunity to hear from those who believe that MUDs should be considered as games and that therefore virtual rape should be allowed. One posting defending MUD rape was from someone who admitted to being a MUD rapist.

MUDs are Fantasy. MUDs are somewhere you can have fun and let your “hidden” self out. Just to let you all in on what happened, here is the story:

On a MUD (who’s [sic] name I will not release, like I said, you know who you are) a friend of mine and myself were reprimanded for actions we took. We have a little thing we do, he uses emote . . . to emote” <his name> holds <victim’s name> down for <my name> to rape.” Then I use emote and type <my name> rapes the held down <victim’s name>.”

Now this may be an odd thing to do, but is done in a free non-meaningful manner. We don't do it to make people feel victimized, (like this GOD said we were doing) we do it for fun. OK, it is plain out sick, but that isn't the point. On this MUD the victim isn’t the one who complained. It was several other PCs who complained about what we did. Let the victim complain about it. It happened to the victim, not the bystanders. The victim didn't actually mind, she thought it was somewhat humorous. Well, along comes Mr. GOD saying, “raping the Player's character, is the same as raping the player.”

BULL SHIT

This is a GAME, nothing more. This particular GOD needs to chill out and stop being so serious. MUDs are supposed to be fun, not uptight. I will never return to this MUD of my own choice. There are other MUDs where we have done the same thing and even though the victim didn't like it, the GODs told the victim, “too bad, it’s not like they killed you.” [This refers to “player killing,” in which one player kills another player. It is often considered different in nature from being “toaded.”]29
There was a postscript after the signature on this communication. The author asks his readers to "Please excuse my gramer [sic] as I am a Computer Science Major, not an English Major. Also excuse the no indenting as our net-news poster eats posts that have indents in them. Argh." Rape was not all that was on this MUDders mind. Grammar and the limitations of his text formatting system also loomed large.

Discussion of the MUD rape occupied LambdaMOO for some time. In one of a series of online meetings that followed it, one character asked, "Where does the body end and the mind begin? Is not the mind a part of the body?" Another answered, "In MOO, the body is the mind." MUD rape occurred without physical contact. Is rape, then, a crime against the mind? If we say that it is, we begin to approach the position taken by the feminist legal theorist Catharine MacKinnon, who has argued that some words describing acts of violence toward women are social actions. Thus, some pornography should be banned because it is not "only words." Dibbell says that he began his research on MUDs with little sympathy for this point of view but admits that "the more seriously I took the notion of virtual rape, the less seriously I was able to take the notion of freedom of speech, with its tidy division of the world into the symbolic and the real." While legal scholars might disagree that any such "tidy division" is to be found in American law, no one can doubt that examples of MUD rape—of which the incident of LambdaMOO was only one—raise the question of accountability for the actions of virtual personae who have only words at their command.

Similar issues of accountability arise in the case of virtual murder. If your MUD character erases the computer database on which I have over many months built up a richly described character and goes on to announce to the community that my character is deceased, what exactly have you, the you that exists in real life, done? What if my virtual apartment is destroyed along with all its furniture, VCR, kitchen equipment, and stereo system? What if you kidnap my virtual dog (the bot Rover, which I have trained to perform tricks on demand)? What if you destroy him and leave his dismembered body in the MUD?

In the physically embodied world, we have no choice but to assume responsibility for our body’s actions. The rare exceptions simply prove the rule as when someone with multiple personality disorder claims that a crime was committed by an "alter" personality over which he or she has no control or we rule someone mentally incompetent to stand trial. The possibilities inherent in virtuality, on the other hand, may provide some people with an excuse for irresponsibility, just as they may enable creative expressions that would otherwise have been repressed. When society supported people in unitary experiences of self, it often maintained a narrowness of outlook that could be suffocating. There were perhaps great good places, but there was also a tendency to exclude difference as deviance. Turning back provides no solutions. The challenge is to integrate some meaningful personal responsibility in virtual environments. Virtual environments are valuable as places where we can acknowledge our inner diversity. But we still want an authentic experience of self.

One’s fear is, of course, that in the culture of simulation, a word like authenticity can no longer apply. So even as we try to make the most of virtual
environments, a haunting question remains. For me, that question is raised every time I use the MUD command for taking an action. The command is "emote." If while at Dred's bar on LambdaMOO, I type "emote waves," the screens of all players in the MUD room will flash "ST waves." If I type "emote feels a complicated mixture of desire and expectation," all screens will flash "ST feels a complicated mixture of desire and expectation." But what exactly do I feel? Or, what exactly do I feel? When we get our MUD persona to "emote" something and observe the effect, do we gain a better understanding of our real emotions, which can't be switched on and off so easily, and which we may not even be able to describe? Or is the emote command and all that it stands for a reflection of what Frederic Jameson called the flattening of affect in post-modern life?

**Notes**

2. The dance sequence of LambdaMOO proceeds as follows:

   Tony hands you a rose which you place between your teeth. Then Tony leads you through a rhythmic tango, stepping across the floor and ending with Tony holding you in a low dip. Tony smiles.
   You say, "I love the tango."
   Tony says, "Type @addfeature #5490"
   [I do so].
   Tony holds his arm out to you, taking you by the hand, and leads you through a graceful waltz with all the style of Fred Astair and Ginger Rogers.

3. I thank my student Jennifer Light for this helpful analogy.
6. This critical comment appeared in a discussion group on The WELL:

   On the one hand, like most everyone else here, my life has been very positively impacted by my on-line experiences (I've been on-line in one form or another since 1983—remember 300 baud?). I think of this technology as a kind of mental and social amplifier, giving me access to a far wider range of people, viewpoints, and knowledge than I would have otherwise. Yet, on many, perhaps most, days, I feel that the costs are greater than the benefits.

   For example, virtuality seems to me to represent the culmination of a several-thousand-year-old trend in Western culture to separate the mind from the body, thought from physicality, man from nature. This trend lies behind the environmental problems we're facing right now, IMO [online slang for "in my opinion"]. Virtuality seems to portend an even greater disregard for the physical environment which nevertheless still does sustain us, and I don't think that's good at all.

   Virtuality also implies to me a privileging of the global at the expense of the local. Yes, it's great to be able to get to know people from all over the planet, without regard for their actual geographic location. I really do think that's good. But it seems to me that in