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Life: Coming to a Screen Near You

Jamie F. Metzl

In Jorge Luis Borges' famous story "Tlon, Uqbar, Orbis Tertius," a group of scholars come together in secret meetings over a number of years to invent an imaginary world. Over time, however, records of this world begin to show up increasingly in reference books until the world eventually becomes real.

Today, hundreds of thousands of people across the globe are regular participants in online virtual worlds such as Second Life, Google Lively, Twinity, and There. Twenty-five years from now, the hundreds of millions of participants in such virtual worlds such as these will come to regard them as a primary medium through which their normal daily transactions are carried out. At that point, these fantasy-filled virtual worlds will, like the imaginary world of Borges' scholars, become, for all intents and purposes, real.

For today's casual participant, entering one of these virtual worlds feels very much like joining a multi-player video game. The participant designs a three-dimensional cartoonish character, commonly called an avatar, from a set of possible characteristics. The avatar can be tall or short, with any color of hair and any number of other features and qualities selected from a range of available options. The participant then controls the avatar just as they would a character in a video game, only with far greater means of communication and expression. The avatar can enter buildings, interact with other avatars by text, speech, or gesture, visit restaurants, bars, schools, churches, and nightclubs, stroll through art exhibitions, attend balls, and go to press conferences. All of these structures and spaces are created by other participants in the virtual world.

Today's virtual worlds remain primarily domains of fantasy. Many, if not most, people engaged in online worlds do so under the guise of an alter-ego. It may be true that virtually all users of Second Life are tall, gorgeous and fit in real life, but it is probably more likely that these beautiful avatars represent an alternative fantasy life projected by their creators.

But when technological developments already in the works transform the virtual worlds of today into more sophisticated and inviting spaces far more capable of capturing the range of complexity and expression in human communication, virtual worlds will, by 2033, have overtaken the two-dimensional Internet as the predominant system of non face-to-face human interaction. Communication that now takes place by phone or e-mail will by then be carried

out largely in these three-dimensional interactive spaces.

Your Avatar and You

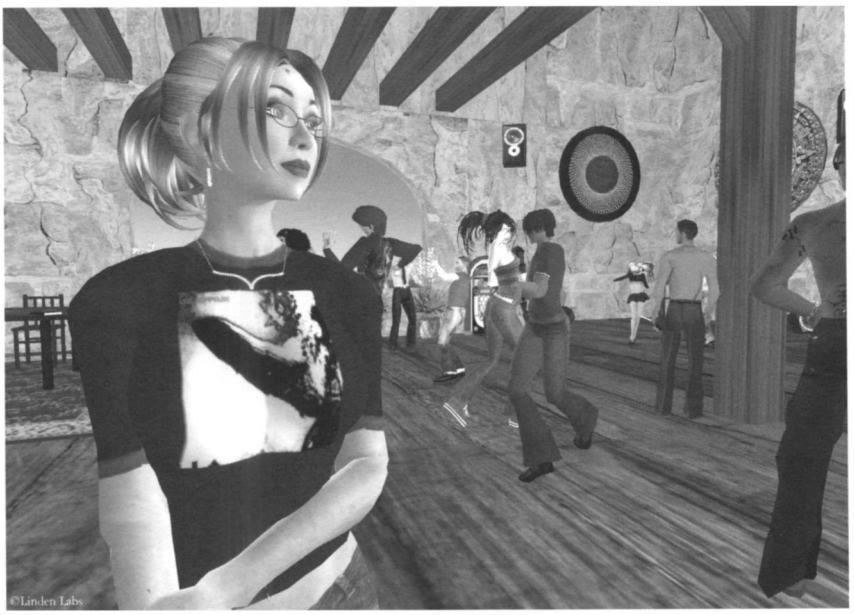
When avatars in virtual worlds become able to communicate with each other by voice instead of or in addition to text (which has already begun in crude form in Second Life), to project real facial expressions, and have movement and hand gestures controlled by each participant through their thoughts and wireless electronic gloves (the latter is possible today in nascent form), human interactions in virtual worlds will become ever more meaningful and familiar. Book clubs, for example, will form allowing readers from across the world to meet and discuss even the most obscure books as a group in front of a virtual fireplace. Business meetings will seat people across the world around three-dimensional (3-D) tables in a manner that will very closely replicates the look, feel, and experience of real world meetings. These simple scenarios do not even begin to explore the implications of current research on transmitting digitally simulating sexual experience between two real people in different physical locations through an online interface, the much-too graphically named field of teledildonics.

As the intimacy levels of these types of interactions grow, the Internet will merge with what we now call the multi-player gaming world and we will come to interact seamlessly both within specific three-dimensional virtual worlds and between the virtual and real worlds. As this happens, virtual worlds will become less a playground of fantasy and more the primary environment in which humans interact under their own identities when not doing so in person. We are already seeing glimpses of how the online experience is not only closely modeling real world human interactions, but even becoming significant extensions of them, and why this is happening, in places like Korea and Japan, which are years ahead of the United States in terms of broadband penetration and applications.

Over 90 percent of Koreans in their 20s are regular occupants of a virtual world called Cyworld, for example, which is something of a mix of Facebook, Second Life, and YouTube. Users create avatars for themselves, build three-dimensional home rooms called minihompies, and fill those rooms with photos, videos, songs, decorations, and texts, all of which can be updated directly from cell phones. Unlike the virtual world of Second Life, where avatars prowl anonymously and often exist as fantasy figures like purple-headed monsters, the "characters" of Cyworld often look like the people they represent, retain their real names, and are seen as extensions of them. Friends making a plan to meet for real world dinner or trying to figure out which real world concert to attend by listening to the music of different artists are just as likely to do this on Cyworld, represented by their characters, as they are to do this by phone. The line between the real and virtual worlds, and what does and does not happen in each, is beginning to blur.

Over the next quarter century, as digital avatars in these evolving virtual worlds become more consistent extensions of the people controlling them rather than whimsical expressions of fantasy, they will require and demand new rights in the worlds they inhabit. An avatar entering a virtual clothing store, for example, will have embedded in it details such as the user's credit card information and the exact physical measurements of the real world user it represents. Style and taste preferences will be deduced by the user's buying history, (an extension of the preferences that are currently generated when a user returns to amazon.com), and as the avatar walks through the virtual store, the store merchandise will constantly

change to match the user's sensibilities and desires, offering every individual user a customized experience. Virtual museums will similarly recalibrate to align with each individual user's interests, and will build communities of people with similar artistic interests to jointly enter 3-D discussion forums about potential projects or collaborations. These museums will not be reflections of real world institutions, but institutions in and of themselves that present digital art designed for this platform and create new types of communities around it.



Second Life: as boring as the first?

Personal Protection

With avatars ever more closely connected to the people they represent and containing far more information about them, users will fear that the personal information contained in their digital profile could potentially be abused if not sufficiently protected. The necessary loss of anonymity that accompanies the upgrade of avatars from fantasy characters to complex entities carrying within them the digital representation of their users' preferences, attitudes, and experiences will inevitably lead to demands for greater levels of security.

As these virtual communities become more intimate, the trust requirements for participating in them will in time become ever higher. Just as few people would host a book club in their homes to which anyone could come, or open their door to grisly ghouls on any day other than Halloween, most people will feel uncomfortable interacting freely with an unfiltered, undifferentiated, and unverified general mass of Internet users. Instead, they will do virtually what they have been doing in the real world since the early Middle Ages, when a small group's perceived need for security becomes greater than what the society around them is willing to provide—they will build walls around their communities.

Within these virtual walls will be found all of the advantages that a community of trust affords—goods will flow freely, people will interact in meaningful ways, and relationships will flourish. Outside, barriers will multiply, navigation will be difficult, and relationships will be momentary and fleeting. To get in, users will need to sacrifice enough anonymity to ensure meaningful accountability, and submit to a set of rules that will govern interaction among those inside the walls. They will have to agree about how rules are to be set, who decides if they should be changed, how disputes are resolved, and how common goods should be distributed. In short, they will need to either develop and perform the functions of government, or submit to

the rules created by corporations or other entities that can address these needs.

The initial contours of efforts to create these types of democratic structures in virtual worlds can be seen in communities that already exist online today. A colony called Neufreistadt, housed in the Second Life virtual world, is one excellent example of this. To become a citizen of Neufreistadt, Second Life users must purchase virtual land (with real money) in the colony from Linden Labs, the parent company of Second Life. Each citizen must then agree to submit to a democratically elected government and must vote in legislative elections held every six months.

The colony's constitution outlines the responsibilities of citizens, as well as the roles of the quasi-judicial Scientific Council that can veto bills passed in the assembly but deemed unconstitutional, and of the Chancellor, who heads the executive branch. Under this constitutional structure, real commerce takes place. Citizens of Neufreistadt have set up businesses selling goods that other users pay for with real money. A number of people have already made over $1 million (in real money) through virtual commerce in Second Life, and banks have been created to sustain this virtual economy.

Given these stakes, it is not surprising that virtual fights have broken out among Neufreistadt citizens, strikes have been called, and citizens have left to form new colonies. What has perhaps been more surprising is that all of these conflicts have been dealt with successfully through the democratic process. Like the scholars in the Borges story, the citizens of Neufreistadt are the vanguard of a new mode of societal creation and interaction that will eventually draw many more of us in and change the way we think about what it means to be part of a community and subject to its rules.

A second and less democratic form of virtual world creation will also be carried out by companies that will build secure virtual worlds which people, represented by their avatars, will opt into. Like developers of gated communities who use walls and guards to establish safe havens in a world fraught with risk, companies that create virtual walled communities will establish standards for disclosure, transparency, dispute resolution, ethical behavior, and commerce that those who choose to join the community will be required to accept.

Community Engagement

But no matter who sets the rules—democratic groups of users or corporations anticipating the needs of such users—new and discrete virtual worlds will emerge where common standards form the foundation of community engagement. These new virtual worlds will evolve as separate, or at least overlapping, islands. As increasing numbers of new social contracts are formed online among participants who come together based on commonality of interests, the regulatory framework of national legislation may well become increasingly less relevant in offering protection for individuals actively engaged in these virtual worlds.

With an increasing amount at stake in the virtual worlds, and as different groups of users set out to build their own virtual worlds based on their common interests, the desire for more involvement in community governance will inevitably become stronger. Users will demand ever more say in determining the rules of the virtual worlds in which they choose to participate, as well as some form of representation to ensure the legitimacy, stability, and viability of governance in these spaces. People will become citizens not of a globalized world or of the virtual world generally, but of specific domains in cyberspace whose rules they accept and help shape.

Nation-states, of course, will not go away, but they will not individually be able

to enforce protective standards in these truly transitional spaces where the meaningful interactions will take place. Although it is possible that states could develop an international law of virtual worlds, it is far more likely that governance structures will primarily develop from the ground up in response to the real and growing needs of participants in a wide array of virtual worlds, especially if this desire for protection and security is greater or different than a community of discordant real world states is able to provide.

Geography and governance have been partners for all of human history. Yet as our non face-to-face lives become increasingly virtual over the next quarter century, the new societal landscape of virtual space will be shaped and defined less by physical geography, and more by spontaneous, community-driven rules and institutions, realized in virtual worlds. Borges' scholars would be proud. ●