Three-dimensional virtual worlds, also known as multi-user virtual environments (MUVEs) and the 3D Web, are becoming increasingly popular. Predictions from Gartner Research and other trend-spotting organizations indicate that worldwide participation in one or more virtual worlds will continue to rise over the next 10 years. For example, in April 2007 Gartner predicted that by the end of 2011 approximately 80 percent of all active Internet users would be involved in one or more virtual worlds. If we get anywhere near that percentage in the next three years, hundreds of millions of people worldwide will be using virtual worlds for work, play, commerce, information seeking, amore, and the other essential human pursuits and experiences.

Virtual worlds are also a hot-button issue that often elicits a strong response from people, librarians and non-librarians alike. Assuming the person queried does not respond with a quizzical look and ask, “What’s a virtual world?” responses to the idea of virtual worlds tend to be either negatively dismissive or alluringly positive.

Virtual Communities

While the novelty and surreality of experiences (I can fly!) may be what draws many people to virtual worlds, the sense of community may be what keeps them coming back. Just as virtual worlds are similar to the real world in many ways, yet radically different in others, so too are virtual communities like real-world communities in some ways (e.g., hooligans and mashers inhabit both), yet radically different in others.

Real-world organizations striving to develop a presence in one or more virtual worlds have a tough row to hoe. In May 2008, the Gartner Research Group released a report indicating that approximately 90 percent of business forays into virtual worlds fail within 18 months. The analysts found that one of the key reasons for the high number of failures is that many businesses focus on the technology and the coolness factor, rather than on understanding the demographics and expectations of these emerging VW communities. The Gartner press release about the research report notes that many of the attempts by businesses to create a presence in a virtual worlds were “closed down or abandoned by a lack of clear objectives and a limited understanding of the demographics, attitudes and expectations of virtual-world communities.”
This cautionary tale probably should be heeded by libraries and library-related organizations, too. The dictum “Know thy community” may be at least as important, if not more so, in virtual worlds than in the real world.

One challenge in knowing thy virtual community is that it is a rapidly changing, moving target. Virtual worlds morph with an amazing fluidity. This is true not only of the built space—the “buildings and grounds” of these virtual worlds—but also of the demographic makeup of the resident avatar population. For starters, people are either “in world” or they are not, even if they have created and registered an avatar for that virtual world. For example, although millions of people have registered at least one avatar—sometimes two or more—with the popular virtual world Second Life, at any given moment the number of avatars actually in world usually seems to range between 40,000 and 60,000. And the worldwide mix of people in world probably varies radically between 3 a.m. Eastern Time and 3 p.m.

VW communities, which are often communities of interest or intent, usually use the abilities of the virtual-world software to form groups and to communicate within the group as their primary vehicle for belonging and communicating. “Are you a member of that group?” is a frequently asked question at avatar cocktail parties. In a virtual world that draws people from all over the world, there are ways to identify and communicate with a select group of avatars. Groups in virtual worlds can co-locate individuals from existing real-world groups, such as all the students, faculty, and staff at a college or university; the instructor and students in a particular course; the employees of a company or a work group, or the residents of a library district. Although it is easy to form groups in virtual worlds and then communicate in world with all the members of the group, it may be more difficult to restrict access to in-world information resources and experiences to only those avatars associated with your real-world-based primary clientele.

### Four Components of the Metaverse

Depending on how you define metaverse, virtual worlds make up either the entire metaverse or a major portion of it. During his talk on June 28, 2008, at the conference program of the ALA VCL MIG (Virtual Communities and Libraries, Member Initiative Group), Joe Sanchez from the University of Texas at Austin made a useful division of the metaverse into four components. For the purposes of this report, I have adopted Sanchez’s scheme and treat the metaverse as having these four components:

- The first component, which Sanchez called *augmented reality*, includes all the ways we use technology to enhance the real experience of reality—via ear-mounted cell phones, for instance. These devices allow us to hear better (i.e., talk across great distances) and see better than we are able to when we experience reality in a traditional, unaugmented fashion.
- The second component, which Sanchez calls *life logging*, includes all the different Web 2.0 tools used to capture and share moments of our lives. These include Facebook, Twitter, YouTube, Flickr, and a host of others.
- The third component of the metaverse is the hundreds of virtual worlds, most of them three-dimensional, that enable us to have experiences that are reminiscent of real-world experiences, yet entirely different.
- The fourth component of the metaverse is what Sanchez terms *mirror worlds*—ways of overlaying “made-up” components onto maps and images of the real world. Trends in the development of Google Earth point the way toward augmenting reality via mirror worlds. For example, you could use Google Earth to envision that addition to your home you always wanted to build, without actually building it in real life.

The emerging and evolving sense of living in the metaverse, then, embraces one or more of these four components. As Sanchez pointed out, the metaverse opens up interesting new ways to experience familiar activities related to working, playing, and learning. For example, individuals may watch television (itself an early form of augmented reality) entirely in the real world, often alone, or they can watch TV in a virtual world, surrounded by friends and colleagues, with communication channels available to carry on side conversations about what is being viewed. Sanchez emphasized that virtual worlds allow us new opportunities to connect with each other in an era when the unadorned and unaugmented experience of real society is increasingly disconnected.

Sanchez argued that virtual worlds should be of keen interest to librarians, libraries, and library-related organizations such as the American Library Association because virtual worlds are a key part of the overall, four-fold development of the metaverse. On a percentage basis of their real-world populations, children and tweens are heavy users of social virtual worlds. When perusing the *Blue Book*, a directory of virtual worlds, published by the Association of Virtual Worlds, it becomes apparent that many virtual worlds are being created and launched specifically with kids in mind. As Sanchez pointed out, nearly half of the existing VW population of avatars resides in Neopets, a popular and heavily commercial virtual world for children and tweens where resident avatars care for their virtual pets, often by purchasing real-world goods and services. Although Second Life has received lots of
media attention recently, its population of avatars comprises just a small sliver of the overall pie representing the entire population of virtual worlds.

Sanchez also summarized four key emerging knowledge nodes about life in virtual worlds that behoove and define the development of librarianship in these worlds:

- First, users of virtual worlds tend to build strong in-world social relationships with other users, thus creating VW communities. VW librarianship is very similar to real-world librarianship in this regard: The mission is to serve a community of users.
- Second, users of virtual worlds are committed to the virtual worlds in which they participate. Just as nationalism exists in the real world, so too are many people very proud of the virtual worlds they inhabit. This may be due in part to the amount of time in world required to become acclimated to a virtual world.
- Third, VW property is usually a real-world commodity. People can own real estate in virtual worlds, and the connection between VW intellectual property rights and real-world intellectual property have interesting ramifications for the future of creativity and culture. Some VW currencies can be converted to real-world currencies.
- Fourth, the users of virtual worlds develop social conventions, mores, and full-blown cultures. In order to serve a VW population well, libraries will need to understand and become a part of these VW cultures.

Avatars

In the context of virtual worlds, an avatar usually is a representation of the real-world person who is active in a virtual world. Avatars often are three-dimensional and human in appearance, but two-dimensional and even invisible avatars are possible, and of course some avatars look like animals or objects. Some people have multiple avatars for a single virtual world. Each avatar may have a different role or purpose or personality in that particular virtual world. For example, in Second Life, some people have a “work” avatar, as well as a “play” avatar for when they want to have fun.

The relationship between a real-world person and his or her avatars in virtual worlds undoubtedly will spawn many a treatise and dissertation. For the purposes of this report, we can note that some people have strongly open relationships with their avatars (for example, I openly declare that Maxito Ricardo is my avatar in Second Life and Lively), while other people try to keep the relationships between their avatars and themselves private. This situation, where you sometimes know well (perhaps too well!) the real person behind the avatar, while other times you do not know who is behind an avatar, has interesting implications for building and maintaining reputations and relationships in virtual worlds.

MUVEs and MMORPGs

While they are one of the four components of the metaverse, virtual worlds can in turn be categorized either as MMORPGs (Massively Multiplayer Online Role-Playing Games) or as MUVEs (Multi-User Virtual Environments). While the definitions of, distinctions between, and conceptual boundary lines separating MMORPGs from MUVEs are hotly contested and debated, we can observe in general that, while both MMORPGs and MUVEs rely on persistent virtual worlds that continue to exist and evolve as individual avatars enter and leave the environment, MMORPGs tend to emphasize game-like qualities (e.g., predefined rules, goals, rewards, and statuses), while MUVEs tend to mimic life conditions in the real world, with avatars free to set their own goals, develop and maintain a reputation, and build their own things, all within the social and technological constraints of each particular MUVE. The focus of this report is on the prospects for librarianship in MUVEs.

Three Types of Libraries

Two working assumptions of this report need to be stated clearly. First, as mentioned in the introductory chapter, the assumption is made that virtual worlds are not some passing fad or fancy. For the foreseeable future, development of virtual worlds will continue, and people will continue to use virtual worlds for a wide variety of human activities, including seeking and interacting with information. Second, the assumption is made that, while librarianship as traditionally conceived and practiced has a role to play in virtual worlds, the notion of librarianship and how it is practiced will need to be expanded or modified somewhat to better match the affordances of virtual worlds.

Traditionally, libraries have been categorized into four types: public, academic, school, and special. While this fourfold scheme remains meaningful and useful, as we move farther into the Internet era, it may be increasingly meaningful and useful to think in terms of three types or “strains” of librarianship, manifested in how libraries develop, organize, deliver, and archive content, services, and systems in the real world of bricks and mortar, in the digital world of the two-dimensional Web and other computer networks, and in three-dimensional virtual worlds.

One of the interesting things about VW librarianship is that it forces us to think about the traditional aspects of librarianship—budgets, buildings, personnel, collections, services, archiving, even technology—in untradi-
tional ways. For example, in VW librarianship, collections seem to serve a different, perhaps more minor role in the overall mission of a VW library than they do for real-world libraries, while events and exhibits, which are peripheral activities in the life of a real-world library, often become key components of a VW library. In VW librarianship, reference service seems to be as big a hit as in the real world, but with interesting twists. In some virtual worlds, you can have a name and brief message hover over your avatar’s head at all times. This greatly facilitates the practice of the roving reference librarian. As far as sitting at a reference desk goes, however, that seems to be going the way of the dodo bird. Although some amazing, futuristic reference desks were constructed for the thriving reference service in Second Life, the librarians on reference duty rarely used the desk, and patron avatars rarely approached the reference desk as a point of service.

Being in the Real World, Online, and In World

If you accept the argument that there are now three strains of librarianship (real world, online, and virtual world), that seems to intimate that our entire lives as human beings are lived out in three basic environments: the real world of gravity, decay, hot and cold zones, etc.; the online world of digital information networks, resources, and services; and the emerging virtual world.

Notes

3. Ibid.