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Virtual Museums: When Do They Become "Real"?
By Annie Platoff

Introduction

With the introduction of massively multiplayer online role-playing games (MMORPGs) players were given the opportunity to build their own communities within the confines of virtual worlds created by game developers. When *Star Wars Galaxies* was launched in June 2003, players were also given the opportunity to manipulate their environment. *SWG* Developers not only allowed players to place structures within the landscape of the game, but also gave them the opportunity to decorate the interiors of their buildings. It wasn't long before players began to open their own museums. At first, the museums were nothing more than decorated houses containing developer-made paintings and objects. Eventually, however, the museums evolved and now there are many that include interpretive labels, thematic exhibits, and more. While some of these museums are quite well known within their communities, they are virtually unknown by those who do not play the game.

That is not the case for the museums in another virtual community, however. The emergence of museums in the virtual world of *Second Life* has been the topic of much discussion in the museum community. Also launched in June 2003, *Second Life* presents itself as a 3-D virtual world rather than a game. In the world of *Second Life* players can create just about anything they can imagine and add it to the environment. This includes, of course, museums. Some of those museums have been replicas of real-life museums created by private individuals. Other museums in this virtual environment were created as initiatives of established real-world museums. But there are some museums in *Second Life* that exist only in that virtual landscape.

All of this activity in virtual museums brings with it some interesting questions for members of the museum community. Are virtual museums "real" museums? And if they are, what are the implications for established real-life museums? This paper will examine a variety of museums in two virtual environments ― the MMORPG *Star Wars Galaxies* and the virtual world of *Second Life*. It will apply established definitions of what is a museum and determine which of those virtual museums appear to meet the criteria. Finally, it will draw conclusions about the "realness" of virtual museums and the potential of these institutions for reaching new audiences.

Museums in the Virtual World of *Star Wars Galaxies*

Star Wars Galaxies (*SWG*) is a massively multiplayer online role-playing game set in the Star Wars universe. From the time when the game was launched on June 23, 2003, players have had the ability to create houses and place them in the game

environment. Special commands allow the players to drop items inside of their house and move them around. Through an intricate process of movements, players are able to hang paintings and objects on walls, place items on top of other items, and create new "objects" through the creative arrangement of multiple objects.[1]

Since launch, players have worked to establish their own communities and cities, including many of the types of public spaces that they find in the real world. This has led to the development of a number of player-created museums. Initially, the player museums in *Star Wars Galaxies* were basically just houses or guild halls with objects placed in them. While some early museums had themes, they rarely included interpretation. Many of the early museum creators did not include interpretation either to save space, or because they did not understand that one of the fundamental roles of a museum is to educate and inform the visitors. Eventually, however, museums were created which did include interpretive material for the visitors.

In *Star Wars Galaxies* there are a number of constraints placed on museum creators. First, there is a finite set of floor plans and building styles available for players to use on each planet. In addition, each structure has a limit of how many items can be placed inside. The limit is usually proportional to the number of "lots" that the structure uses (generally 100 items per lot). Houses can occupy 1, 2, or 4 of a character's 10 lots. There are other structures such as guild halls and cantinas which are also commonly used for museums. Guild halls, in particular, have floor plans that are very "museum like". These structures occupy 5 lots and can have a base capacity of 400 items. In recent years the game developers have added objects that allow players to expand the capacity of their structures, so the limitation on the number of items a building can hold is not as much of an issue for in-game curators as it once was.

In addition to space limitations, it can also be a bit complicated to add interpretation to an exhibit in an *SWG* museum. There is no craftable object in game that is specifically designed to hold blocks of text. In spite of this, players have developed a method to create regular craftable objects and rename them with the label text. The items that make the best-looking labels are armor segments, which are components that are used to make armor. In order to make an armor segment, the player must have a character which is a munitions trader and has reached a sufficient level to be able to craft the item. Once those requirements are met, the player must remap the keyboard options of their user interface to allow them to cut and paste text. Next, the player opens up the in-game notepad and writes their text. This is where it becomes important to understand two other significant constraints – the first is that only three lines of text display when an item is placed in a house; the second is that the object name field can only hold 123 characters or spaces. Needless to say, writing labels for exhibits in *SWG* requires the player to exercise a lot of skill in writing brief and concise text. Once the text is written and laid out in the in-game notepad, the crafter then copies it and begins the crafting process to make the armor segment. When the crafting system gives the opportunity to make the object, the player renames it with the pasted text from the notepad. The finished product is an armor segment which, when the visitor places their cursor over it or clicks on it, will display the label text.[2]

Overall, the vast majority of museums in *Star Wars Galaxies* display artwork, rare items, or a combination of the two. Many of these museums include thematic exhibits where related items are exhibited together, but for the most part the majority of museums do not include interpretation for the visitors. There are some museums in *SWG*, however, that are interpretive. These are the museums that are of the most interest for the purpose of this discussion.

The Wookiee Cultural Center

One of the best examples of an interpretive museum on the Intrepid galaxy[*] of *SWG* is the Wookiee Cultural Center (WCC). The museum's mission states that "the purpose of the WCC is to preserve Wookiee culture, and to teach other species about the people of Kashyyyk." As the creator of the Wookiee Cultural Center, I wanted to see if I could actually create an in-game museum that contained the elements of a real-life museum. For the past four years, I have collected in-game objects related to Wookiees and Kashyyyk, and used those objects in interpretive exhibits to fulfill the museum's educational mission. In addition, the WCC sponsors programs and events for the community. Since its creation in late 2003, the WCC has grown into a network of museums which includes the original Wookiee Cultural Center, the Wookiee Hall of Fame, the Kashyyykian Natural History Museum, the Kashyyykian Museum of Tatooine, the Kashyyykian Museum of Wook's Rest, and a traveling museum called The Kashyyykian Roadshow.[3]

In my work with the Wookiee Cultural Center, I have always tried to apply professional standards to managing the museums and their collections. The WCC has acquired most of its objects through item donations, or using credits donated by other characters, and all donations are recorded so that it is clear what belongs to the Wookiee Center. The list of donors totals over 300 individual characters, guilds, or cities which have supported the museums. In this sense, I have always considered the WCC museums to be in the public trust. Each time I create a new exhibit (or museum), I determine a theme and prepare a list of items required to create the exhibit. After acquiring the objects, I create the text labels to tie it all together. Finally there is the task of installation which requires a great deal of effort to place all the objects in appropriate locations within the structure. In all, it can take many hours of game time to complete the work for one exhibit.

What has surprised me about my experiment with the Wookiee Cultural Center is just how successful it has become. First, considering the constraints of exhibit creation, I have been able to create exhibits that tell a story, are visually interesting to the visitors, and contain informative labels that enhance the visitor's experience and contribute to the museum's mission. Even more surprising has been the amount of support the museums have received from the community. The fact that other gamers find the museums worthwhile to support and visit is a testament to the WCC's success as a virtual museum.

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[*] Each galaxy in *SWG* is a separate community. All galaxies share a common set of developer-created planets and locations. However, the player-created cities and locations vary from galaxy to galaxy.

In fact, it is not uncommon to hear from players who have created characters on the Intrepid galaxy specifically for the purpose of visiting the WCC museums. The ultimate recognition came when the Wookiee Cultural Center was named a "Galactic Hot Spot" by the SOE's *SWG* community management team.[4]

Admittedly, the idea of the Wookiee Cultural Center can seem a bit silly to those who do not play *Star Wars Galaxies*. Obviously, Wookiees are fictional beings and it would be difficult to claim that the WCC is, indeed, a "real" museum. But the WCC, and the museums in *SWG* are of interest in a discussion of virtual museums because they clearly illustrate that the phenomenon of virtual museums is not limited to just a single virtual environment. If a virtual world is flexible enough to allow participants to create their own distinctive spaces, then it is possible to create a virtual museum.

Figures 1 and 2: Views of the Wookiee Cultural Center museums showing the exhibits.

Museums in the Virtual World of *Second Life*

Second Life (*SL*) was launched in June 2003, just several days before *SWG*. However, unlike *Star Wars Galaxies*, *Second Life* is not considered a game. There are no quests or objectives designed for the participants to pursue. Instead, *SL* is a "3-D virtual world entirely created by its Residents." What is unique about *Second Life* is that the developers have included a unique building system that allows users to create just about anything they can imagine to add to the environment. One has only to create an avatar and begin exploring the virtual world of *Second Life* to discover just how unique this environment really is.[5]

To create a museum (or any other location) in *Second Life* requires several things: a real-life investment to purchase "land" in the virtual world, an understanding and mastery of the building system provided for residents, additional funding to cover the expense of importing "textures" and other necessary elements into the world, and a large investment of time to create not only artifacts and exhibits, but also the environment within which they are presented. Add to this the intellectual processes of researching and planning an exhibit and it becomes clear that good museums cannot be created "over night". In addition, there is a unique scripting language called "Linden Script Language" that allows residents to control the behavior of objects within the in-world environment. Residents have created numerous resources to share what they have learned from their building experiences, providing a valuable guide for those new to the virtual world.[6]

Even with the real-life cost required, it is not surprising that there is an abundance of in-world museums in *Second Life*. Just as in *Star Wars Galaxies*, it reflects the importance of museums in our society and the desire of the residents to replicate this element of the real world in their virtual communities. An exploration of just a few *Second Life* Museums clearing illustrated the diversity of in-world institutions and the achievements of their creators. As with real-world museums, *Second Life* museums deal with a variety of topics and each offers a unique experience for the visitors.

The Crescent Moon Museum

Perhaps the most populous category of museums in *Second Life* is the art museum. Some of the museums are Second-Life extensions of real-life art museums. Others present original art within a replica of a real world museum (such as the Second Louvre). There are some art museums that exist specifically to exhibit the artwork that has been created specifically for the environment of the virtual world. The Crescent Moon Museum is an excellent example of a museum which was established to exhibit the artwork of *Second Life* residents.

According to a mini history available at the museum, the Crescent Moon Museum is the "longest continuously running museum in *Second Life*", having been created in August 2004. Visitors can wander through the main building and experience a variety of art styles. Changing exhibits insure that this is a museum that can be visited multiple times without it getting old. The sculpture garden is a wonderful spot to explore and take in the complexity of the virtual world that *Second Life* has become. In all, the museum provides a pleasant atmosphere in which to view some of the unique art work that has come out of the *SL* experience.[7]
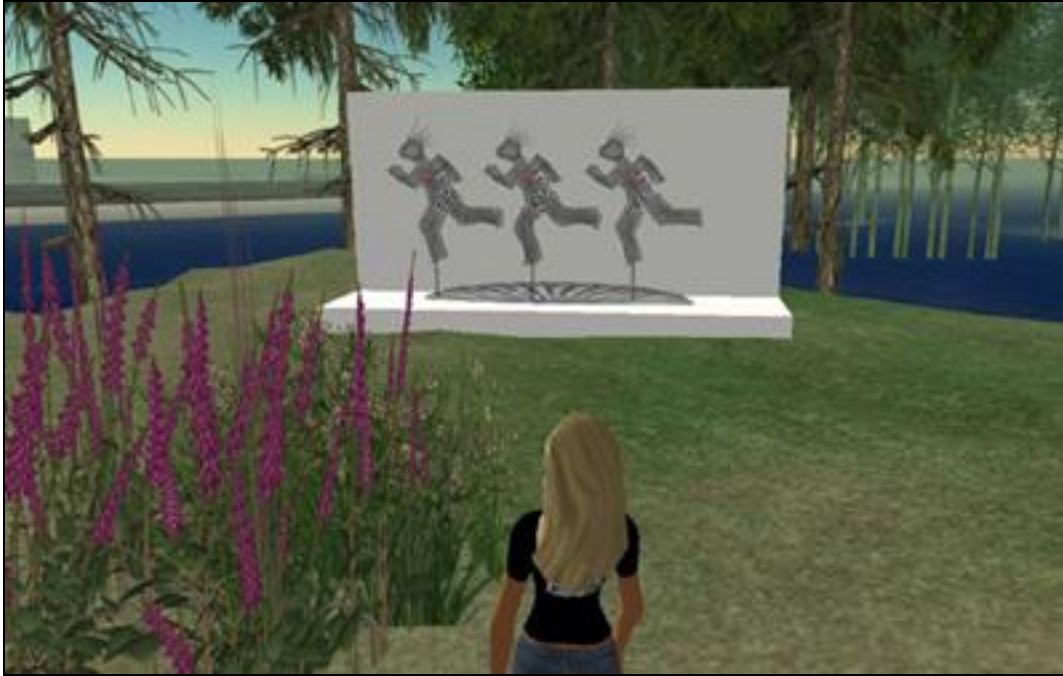
Figure 3: Sculpture garden at the Crescent Moon Museum.

The Gay History Museum

Another interesting museum is the Gay History Museum on Fire Island. This museum was established in March 2007. The mission of the museum is "to educate the inhabitants of *Second Life* about important historical information of the GLBT (Gay/Lesbian/Bisexual/Transgendered) community". Exhibits are distributed throughout three levels. The museum includes exhibits on topics such as "Influential People", AIDS, the real-life group "ACT UP!", the Gay Pride Flag, the Stonewall riots, heroes of the 9/11 attacks, and GLBT activism.

As with other museums in *Second Life*, the creators mixed virtual objects with static signs to make exhibits. Visitors can click and "touch" the signs to read more information provided through the use of an in-world notecard. For example, in the Influential People exhibit, there are displays with photos of different individuals labeled with their names and vital information. Touching the displays gives the visitor a notecard with a biography of that individual from the *Wikipedia* online. Though small, the museum is well designed, exhibits are visually interesting, and plenty of interpretation is provided to enhance the visitor's experience. The topics of the exhibits all deal with real-life subjects related to the GLBT community.[8]

Figure 4: Reading a label at the Gay History Museum.

The 'Splo

There are several examples of museums in *Second Life* that are the products of real-life museums. One of the most creative examples is the 'Splo, the virtual-world presence of the Exploratorium. The *SL* museum was founded on April 1, 2006. One of their first public events was a live webcast of a solar eclipse as it was occurring in the real world. Since then, the exhibit designers of the 'Splo have used their in-world museum as a "playground" to experiment with the potential that virtual worlds offer.

The variety of exhibits at the 'Splo is impressive. It would take a bit of time to see everything in the museum and fully experience what has been created there. Some of the exhibits deal with topics that might be addressed in a real-life setting. Others are quite silly, yet thoroughly enjoyable. There are many that could only exist in a virtual museum, such as those that rotate visitors around sideways to give them an unusual perspective on the exhibits. Throughout the museum, the sense of humor of the developers is as much on display as the topics they address in their work. As with other *Second Life* museums, the 'Splo uses the in-world notecard feature to offer additional text to the visitors on demand. Over all, visitors are sure to have an enjoyable experience.

The benefit of the 'Splo for its real-life counterpart goes beyond just creating something that is entertaining for *Second Life* residents. As several employees have mentioned when commenting on the 'Splo, "the ability to rapidly prototype objects in *Second Life* and view them makes this an excellent testing ground for real life exhibits."[9]

Figure 5: An overview of the "Thinking Inside the Box" exhibit at the 'Splo.
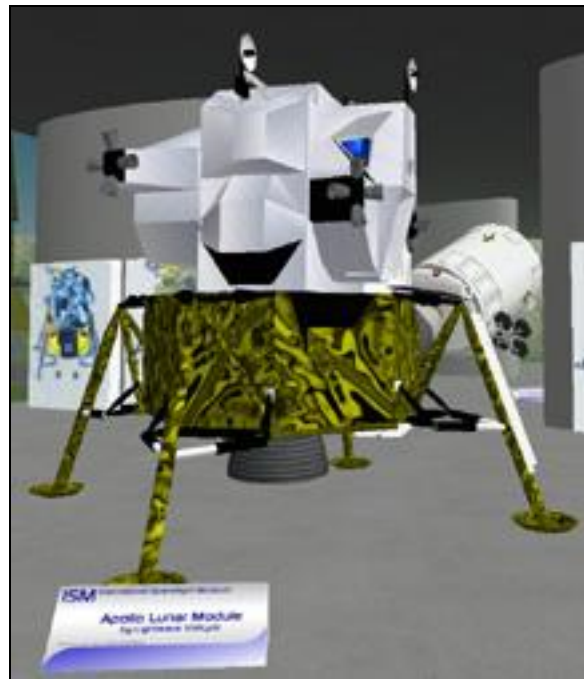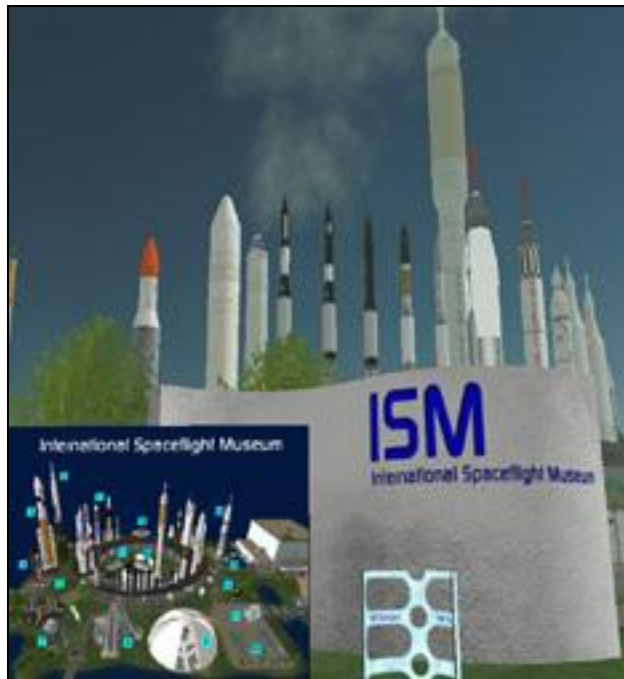
The International Spaceflight Museum

One of the best known museums in *Second Life* is the International Space Museum. This museum clearly indicates the advantages of operating a museum in a virtual world. The creators of the ISM have assembled a collection of rockets from around the world that far exceeds anything that could be exhibited in the real world. Full-scale examples of rockets from the majority of space-faring countries give the visitor an illustration of the current international nature of space exploration.

The museum also includes full-scale replicas of spacecraft and facilities associated with various space programs. Visitors can walk around inside virtual versions of the orbiter processing facility and the vehicle assembly building at NASA's Kennedy Space Center. Other exhibits allow visitors to experience the interior of a Mercury spacecraft, or to learn more about the early pioneers of modern rocketry. In addition, visitors can either teleport or ride a rocket to an orbital platform where they can get a close-up view of the Hubble Space Telescope or the International Space Station. An exhibit about the solar system transports the viewer to the positions of different planets, allowing them to have a unique perspective on the size of the entire system.

Perhaps the most remarkable thing about the International Spaceflight Museum is that it was created independent of a real-life museum. However, this does not mean that the creators consider their work to be just a hobby. Katherine Cochrane, one of the founders of the ISM, has said that "the International Spaceflight Museum is a real museum, with educational goals and high standards of building and scholarship, that happens to exist only within the virtual world of *Second Life*." The seriousness with

which the Spaceflight Museum Planning Group takes their work is evidenced by the fact that they have created a real-life non-profit organization to support the museum.[10]

Figures 6 and 7: Two views of the International Spaceflight Museum.

Virtual Museums and Established Definitions of "Museum"

Is Cochrane correct? Is the International Spaceflight Museum a "real museum"? Have virtual museums evolved beyond the point of being a curiosity within the museum community? To begin exploring these questions, it will require first assessing just what it takes to be considered "a museum." Over the past fifty years the word "museum" has been defined in a number of ways. In order to be considered "real" a virtual museum will need to prove that it meets the current definitions that are accepted by the museum community. In addition, there are more detailed standards that must be met to qualify a museum to achieve accreditation or to receive grant funding. An examination of the definitions and the criteria reveals something interesting about the state of virtual museums.

In its "Code of Ethics for Museums," the American Association of Museums (AAM) offers an extensive description of how the organization defines the term "museum":

> Museums make their unique contribution to the public by collecting, preserving, and interpreting the things of this world. Historically, they have owned and used natural objects, living and nonliving, and all manner of human artifacts to advance knowledge and nourish the human spirit. Today, the range of their special interests reflects the scope of human

vision. Their missions include collecting and preserving, as well as exhibiting and educating with materials not only owned but also borrowed and fabricated for these ends. Their numbers include both governmental and private museums of anthropology, art history and natural history, aquariums, arboreta, art centers, botanical gardens, children's museums, historic sites, nature centers, planetariums, science and technology centers, and zoos. The museum universe in the United States includes both collecting and noncollecting institutions. Although diverse in their missions, they have in common their nonprofit form of organization and a commitment of service to the public. Their collections and/or the objects they borrow or fabricate are the basis for research, exhibits, and programs that invite public participation.

Key elements of this definition in terms of virtual museums are the ideas of collecting and using objects in exhibits to education the public, as well as their non-profit status and public-service orientation. It is also important to note that the Code of Ethics acknowledges that it is acceptable to fabricate objects for exhibition. Since everything in a virtual museums is essentially "fabricated" this is a key distinction.[11]

The U.S. federal government also has its own definition of the term "museum" which was adopted as part of the "Museum and Library Services Act." This definition is used to determine eligibility of an institution to receive funding from the Institute of Museum and Library Services.

The term "museum" means a public or private nonprofit agency or institution organized on a permanent basis for essentially educational or aesthetic purposes, that utilizes a professional staff, owns or utilizes tangible objects, cares for the tangible objects, and exhibits the tangible objects to the public on a regular basis. Such term includes aquariums, arboretums, botanical gardens, art museums, children's museums, general museums, historic houses and sites, history museums, nature centers, natural history and anthropology museums, planetariums, science and technology centers, specialized museums, and zoological parks.

Like the AAM definition, the federal definition emphasizes the non-profit aspect of the organization, and its educational or aesthetic purpose. This definition, however, uses some terms that could be problematic for virtual museums. For example, what exactly does "tangible object" mean? If objects are "tangible" in the virtual world do they meet this definition? "Permanence" is also a term that is difficult to apply to virtual museums. Most are "permanent" relative to the stability of their virtual environment, but will cease to exist if the virtual world goes offline. And finally there is the concept of a "professional staff". Does professionalism imply that staff members are paid for their work, or does it apply to those with museum training and experience who work without compensation?[12]

The widely accepted international definition comes from the International Council of Museums. They define a museum as "a non-profit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environments." This definition is fairly broad and, with the exception of the "permanence" issue, can easily be applied to virtual museums as well as real-life museums.[13]

In order to evaluate the previously-discussed virtual museums by these definitions, a list of generally-accepted criteria of "what is a museum" was generated. All five museums fit the definitions in the majority of the criteria (see table below). Not surprisingly, the largest discrepancy was in the area of "permanence". It is difficult to accept a virtual museum as truly permanent, but in most cases these museums are only as permanent as their virtual worlds. Once the virtual world goes offline, it is likely that the museums within it will cease to exist unless the creators find a way to migrate to a new virtual world.

Criterion:	WCC	ISM	Splo	MGH	CMM
non-profit	●	●	●	●	●
permanent	?	?	?	?	?
educational or aesthetic	●	●	●	●	●
professional staff *	●	?	●	?	?
owns objects	●	●	●	●	●
exhibits objects	●	●	●	●	●
open to the public	●	●	●	●	●
public programs	●	●	●	?	?

Figure 8: Evaluation of Virtual Museums Based Upon Museum Definition Criteria

* For the purpose of this evaluation, "professional staff" is interpreted as either currently working in a real life museum, or having formal museum training and experience in the real world.

The real question is – does meeting the definition criteria really mean that a museum is "real"? Would this be enough for a museum to gain acceptance in the museum community as a whole? At this point in time, the answer is "probably not". The true test will be if a virtual museum can meet the accreditation standards of the American Association of Museums or if one can qualify for a federal grant.

Accreditation and Grants: the Final Test of "Realness"

Requirements for accreditation are more stringent than the widely-accepted definitions discussed in the previous section. In order to participate in the AAM Accreditation Program, a museum must:

- "be a legally organized nonprofit institution or part of a nonprofit organization or government entity;
- be essentially educational in nature;
- have a formally stated and approved mission;
- use and interpret objects and/or a site for the public presentation of regularly scheduled programs and exhibits;
- have a formal and appropriate program of documentation, care, and use of collections and/or objects;
- carry out the above functions primarily at a physical facility/site;
- have been open to the public for at least two years;
- be open to the public at least 1,000 hours a year;
- have accessioned 80 percent of its permanent collection;
- have at least one paid professional staff with museum knowledge and experience;
- have a full-time director to whom authority is delegated for day-to-day operations;
- have the financial resources sufficient to operate effectively; and
- demonstrate it meets the characteristics of an accreditable museum."

Several of these criteria would be problematic for virtual museums to meet. For example, the requirement of a "physical facility/site" is impossible to meet if "physical" refers to a location in the real world. In addition, unless a virtual museum is a project sponsored by a real-world museum, it is unlikely to have a full-time director and at least one paid professional staff member with museum knowledge and experience. It is interesting to note that virtual museums would have no problem meeting the requirement of being open at least 1,000 hours per year – they are usually "open" every hour that their host servers are online.[14]

The Institute of Museum and Library Services has very specific criteria for museums to qualify for federal grants. In order to be eligible, a museum must be:

- either a unit of state or local government or a private not-for-profit organization that has tax-exempt status under the Internal Revenue Code;
- located in one of the fifty states of the United States of America, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated states of Micronesia, or the Republic of Palau; and
- a museum that, using a professional staff, (1) is organized on a permanent basis for essentially educational or aesthetic purposes; (2) owns or uses tangible objects, either animate or inanimate; (3) cares for these objects; and (4) exhibits these objects to the general public on a regular basis through facilities which it owns or operates.

In addition, the IMLS defines "profession staff" as "at least one professional staff member, or the fulltime equivalent, whether paid or unpaid primarily engaged in the

acquisition, care, or exhibition to the public of objects owned or used by the institution." In looking at these specifications, there are several points that must be considered relevant to virtual museums. Most importantly, of the virtual museums not sponsored by a real-life museum, only the International Spaceflight Museum is known to have a real-life organization to support the museum. And at this time, they do not currently have tax-exempt status. Virtual museum creators would have to organize themselves into real-world tax-exempt organizations before they could even to attempt to get IMLS funding. In addition, none of the museums which are unaffiliated with real-life museums have a full-time staff member. "Permanency" and physical location are also problematic for virtual museums. When trying to meet IMLS criteria, would they list the state where the computer servers hosting the virtual museum are located? And, even more importantly, are the objects in a virtual museum considered "tangible"? It will be an interesting challenge for a virtual museum to obtain a federal grant, considering the current criteria.[15]

From the perspective of the residents in these virtual worlds the museums are "real", but for those on the outside they probably aren't. This will be a tremendous hurdle for virtual museums trying to gain recognition in the real-world museum community. It is important to note, however, that the definitions presented here are broad and were written without virtual museums in mind. The concept of "what is a museum" has changed over time, and can change again. What will be interesting to watch is if they change to include virtual museums, or if there is an effort made to specifically exclude them. In the end, it will be the accreditation and grant criteria that will prove most difficult to meet. The true test of "realness" will come when a virtual museum can achieve this kind of recognition.

Should Virtual Museums be Taken Seriously?

In the real world there are a number of places that call themselves "museums", but are really just a collection of poorly-kept objects thrown into cases for display. The same is true of virtual museums – not all of them are truly deserving of the title "museum". But the virtual nature of an institution, in itself, should not be enough to exclude it from being recognized as a legitimate museum. The International Spaceflight Museum is an excellent example of a virtual museum that is attempting to establish itself as a real museum. The fact that there is a real-life organization that has been formed to carry out the work is evidence that the creators see their work as something more than just something to do in their spare time.

Another interesting aspect of virtual museums is their ability to build a comprehensive collection of artifacts. For example, no real-life museum could possibly collect the diversity of rockets already on display at the ISM, let alone have the space to display them. Sometimes a comprehensive collection or exhibit is only possible in a virtual world. In addition, a virtual exhibit would also be an excellent way to exhibit an item which could not be exhibited permanently in the real world (because of conservation requirements, security, or lack of space). By exhibiting these items in the virtual world, the museum could allow the user to have a more realistic-feeling experience than they can with just static web pages.

With today's technology, it is easy to visit the museums in *Second Life*. People who might never be able to visit a museum in real life could visit its branch in the virtual world. This would allow for established museums to reach new audiences. People would no longer be constrained by their ability to visit a specific geographic location to benefit from the exhibits or programs offered at the physical museum. Virtual museums are also a way to reach out to a new generation of technologically-oriented consumers. Young people today are comfortable with technology. For them, it would not seem so strange to visit a museum in an online world and the whole concept of "reality" would likely not be an issue for this audience. And finally, it is possible that virtual museums might even generate renewed interest in visiting real-life museums. Most likely people will still desire to see the real thing in real life.

Notes:

[1] *Star Wars Galaxies* is created and produced by Sony Online Entertainment under a license from LucasArts. For more information about the game, or for a free trial, go to http://starwarsgalaxies.station.sony.com/.

[2] For more information on how to create a museum in *SWG*, see "Creating an In-game Museum: a Guide for Aspiring Curators" at http://forums.station.sony.com/swg/posts/list.m?topic_id=444611.

[3] For those not familiar with Wookiees, they are a tall, furry, species of sentient bipeds that are from the planet Kashyyyk. Perhaps the most famous of his species, Chewbacca appeared in episodes 3-6 of the Star Wars saga. There were also scenes in the third episode which took place on the Wookiee home world. For more information on the Wookiee Cultural Center, visit the website at http://www.wookieecenter.org/.

[4] "Wookiee Cultural Center" [hotspot announcement], http://starwarsgalaxies.station.sony.com/players/content.vm?id=60229&resource=hot_spot [accessed 11 March 2008].

[5] For more information about *Second Life*, see the web site at http://www.secondlife.com. The *SL* client can be downloaded from http://secondlife.com/community/downloads.php. Basic membership is free, so it is quite easy to visit the virtual museums of *Second Life*.

[6] Linden Labs, "Second Life: Community: Land," http://secondlife.com/community/land.php [accessed 16 March 2008]; Linden Labs, "Second Life: Building," http://secondlife.com/whatis/building.php [accessed 16 March 2008]; Linden Labs, "Second Life: Scripting," http://secondlife.com/whatis/scripting.php [accessed 16 March 2008].

[7] Red Randt, "The Crescent Moon Museum: a Mini History," [Second Life in-world notecard], obtained 4 March 2008.

[8] Morgan Kroll, "Life in 2D," *The Advocate* 985 (May 8, 2007), p. 22; "Gay History Museum General Information," [Second Life in-world notecard], obtained 4 March 2008.

[9] Paul Doherty, Rob Rothfarb, Dave Barker, "Building an Interactive Science Museum in Second Life," in *Proceedings of the Second Life Education Workshop at the Second Life Community Convention, San Francisco (August 20th, 2006)* p. 19-24, http://www.simteach.com/SLCC06/slcc2006-proceedings.pdf [accessed 27 February 2008]; "Exploratorium in Second Life: We've Got a Second Life."

http://www.exploratorium.edu/worlds/secondlife/index.html [accessed 3 March 2008]; "Exhibit Graphic Notecard: Thinking Inside the Box," [Second Life in-world notecard], obtained 3 March 2008.

[10] Katherine Cochrane, "Case Study: International Spaceflight Museum," ," in *Proceedings of the Second Life Education Workshop at the Second Life Community Convention, San Francisco (August 20th, 2006)* p. 2-5, http://www.simteach.com/SLCC06/slcc2006-proceedings.pdf [accessed 27 February 2008]; Aaron Davies, "Out of This World," *Museums Journal*, v. 107 #7 (July 2007): p. 34-35; Joelle Seligson, "My Raven-Haired Avatar Flies Through the Museum, Museum News, v. 86 #5 (Sept./Oct. 2007): p. 55-60; International Spaceflight Museum, "About Us," http://slispaceflightmuseum.org/drupal/node/56 [accessed 1 February 2008]; "Spaceport Alpha Visitors Guide," [Second Life in-world notecard], obtained 29 February 2008.

[11] American Association of Museums, "Code of Ethics for Museums," (2000) http://www.aam-us.org/museumresources/ethics/coe.cfm [accessed 15 January 2008].

[12] "Museum and Library Services Act," 20 USCS § 9172 (1), available in Cornell University Law School's "U.S. Code Collection" at http://www.law.cornell.edu/uscode/20/usc_sec_20_00009172----000-.html [accessed 5 March 2008].

[13] International Council of Museums, "ICOM Definition of a Museum." http://icom.museum/definition.html [accessed 19 February 2008].

[14] American Association of Museums, "What is a Museum?" http://www.aam.-us.org/aboutmuseums/whatis.cfm [accessed 15 January 2008]; AAM, "Accreditation Standards [webpage]", http://www.aam-us.org/museumresources/accred/standards.cfm [accessed 15 January 2008].

[15] Institute of Museum and Library Services, "Grant Applications: Eligibility Requirements: Museums," http://www.imls.gov/applicants/museums.shtm [accessed 13 March 2008].

About the Author: Annie Platoff is the web services librarian for the University of California, Santa Barbara Libraries. In addition to a master's degree in library science, she also has a graduate certificate in museum studies. As part of her formal museum education, she completed internships at the U.S. Cavalry Museum (Ft. Riley, KS) and at the Arizona Historical Society Museum at Papago Park (Tempe, AZ). In her virtual life, Annie plays a Wookiee museum curator on the Intrepid server in the game *Star Wars Galaxies*. Her characters operate eight museums including the six museums of the Wookiee Cultural Center, an art museum, and a wildlife museum. She served two 1-year terms as a player representative in the Galactic Senate and continues to be an active community leader for *SWG*. In *Second Life* she is enjoying her role as a tourist and has been traveling from museum to museum.

Author's Note (added 3 July 2018)

In the 10 years since this paper was presented the virtual worlds discussed have changed. First, the Intrepid galaxy (server) in *Star Wars Galaxy* was discontinued on October 15, 2009. Thanks to the "house packup" feature which allowed players to pack up a structure with all the decorations intact, the Wookiee Cultural Center survived the move to Wook's Rest, Rori on the Starsider galaxy. However, on December 15, 2011 the game was discontinued, thus bringing an end to the Wookiee Cultural Center as a virtual museum. However, *Second Life* is still online and a quick check in Google has shown that the International Spaceflight Museum still exists and the Splo was active at least until 2012.
- International Spaceflight Museum: http://www.ismuseum.org
- Exploratorium in Second Life: http://www.exploratorium.edu/worlds/secondlife/

The question still remains… Are they real museums?