

Avatar's aesthetic within 3D Persistent Worlds  
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## Introduction to Persistent Worlds

Persistent universes are online virtual environments, usually presented with 3D graphics. They are used for role playing games, parallel worlds, political presentations, etc.

These universes are called « persistent » because they don't stop when users exit them. They are always accessible and continually evolve. (1, p21) The precursor of persistent universes is Habitat and has been released in 1985. This type of online application appeared in its current form around 1996 with Meridian59 and Ultima Online.



Screenshot of Ultima Online

There are two main types of persistent universes:

– The MMOs: Massively Multiplayer Online games (5). Most of the time, these will be based off Sci-Fi or Fantasy settings. There are several types of MMOs : MMORPG (Massively Multiplayer Online Role Playing Game), MMOFPS (Massively Multiplayer Online First Person Shooter), MMORTS (Massively Multiplayer Online Real Time Strategy), etc. MMORPG is the more represented type of MMOs, therefore this paper will focus on it. The most popular MMORPG is World of Warcraft, which has about 11 millions of subscribers. MMORPG come from pen-and-paper role playing game, using a simplified version of their rule system. However, traditional role playing games are made for little groups of players, whereas of MMOs which allow hundreds to thousands of players to meet at the same moment at the same place in a persistent universe.

Such examples: Everquest (first 3D MMORPG with a large success), Dark Age Of Camelot (realm versus realm oriented gameplay, instead of player versus environment), Star Wars Galaxies (very social) and Eve Online (restricted to experienced players). Most of them are commercial games made by large development studios. (1, p186-187)



**Screenshots of World of Warcraft (on the left) and Eve Online (on the right)**

– Virtual worlds: These are persistent universes that are not made for playing specifically. Their environment is inspired by real life most of the time. Second life is the virtual world that has the larger success. It benefited of an enormous media exposure, despite a small success compared to MMOs; the lack of viable data about the number of users does not offer any base of comparison either. Virtual world are generally more open to user generated content. They come to these universes for different reasons: curiosity, artistic creation, politics, cybersex, education, user created games...

Most of the non-commercial persistent universes (open source in general) belong to the virtual world category (like OpenSim and RealxTend).



**Screenshots of Second Life**

## Avatars : General information

Avatars are virtual characters representing users within the persistent universe. These are the interface that allows the player to interact with the virtual environment and with each other. An avatar is usually made of a 3D model, an inventory and a lot of gameplay characteristics: faction, strength, health and occupations of the avatar, etc.



**Screenshots of Everquest II : 3D model integrated in the 3D environment, characteristics of the avatar and its inventory**

The creation of an avatar is the first step players need to take before entering a persistent universe. Later, the user will have to choose to either continue playing with this avatar and make it evolve or create some new avatars. Character creation has become increasingly a game on its own with sometimes very vast possibilities of customization and, sometimes, a first step into the persistent universe's story.



**Screenshot of character creation in AION**

In a persistent universe, players often stay several months or even years on the same game, with the same avatar. Therefore, it is important for users to create rich characters, to which they will develop a bond with, because they will come with them all along their travel in the virtual universe. The choice of the character is even more important in MMORPG, where it defines the gameplay: a magician, an archer or a healer won't have the same way of playing. The class also gives a basic role to the character.

According to Edward Castronova: "The deepest source of value in virtual world lies within the self-construction. In economic terms, this appears directly in the avatar appearance. The face, the hairs, the body, the gender, the clothes, the eyes. I think this economy will be revolving around the evolution of the most rares and most beautiful ways of self-figuration."(1, p209, translated from french)

## **Aesthetic of avatars**

Aesthetic, in a persistent universe is the game experience in its entirety: of course graphics, but also sounds, the narration and the interactivity.

Avatars are mainly designed to reinforce 3 aspects of persistent universes: a/ the social, b/ the universe and its background, c/ the gameplay. Some universes are focused on only one of these aspects, instead of others which tend to be more balanced. The design of the avatars can greatly influence the aesthetic experience of the player and also help define the style of the persistent universe. (6)

## **A/ Social interfaces**

A persistent universe which is designed to allow player to develop social relationships (like meeting and chatting with other players, role-playing) generally offers:

- avatars with deeply customizable appearance : it is possible to recognize an avatar only through its visual aspects, without the help of its name. Each avatar is unique (or almost), therefore it is much easier for a player to identify themselves with this character and to feel involved socially into it.

- a lot of clothes, some only decorative, to allow the player to distinguish themselves, to adapt to different situations, play different roles with the same avatar, etc.

– avatars with a lot of animations, including facial animations to express the mood of the character and give it an unique attitude.



**Screenshots of facial animations in Star Wars Galaxies**

## **B/ Entrance to the universe and its background story**

Avatars are designed to blend in with the background story of the universe and its aesthetic. " Avatars exist in context. The online environment sets expectations how avatars should look like in there. "(2)

– Virtual worlds offer either realistic avatars, for real implications on life (politics, advertising, education, etc.), or a deep customization, even after the initial creation of the avatar. Indeed, the background story and the atmosphere may change a lot inside a same virtual world. It is especially true for Second Life and OpenSim. Then, it is required to let player adapt their avatar to new situations. Consequently, it is harder to identify someone only through its appearance and behavior, as it may change all the time.

– In MMORPG, avatars have a easily recognizable appearance, which is well defined by the background story of the universe. In heroic-fantasy universes, dwarfs are small, rounded, bearded, the elves are slender and have pointed ears, orcs are green. In science-fiction universes, there are often futuristic technologies and aliens. Target audience is also clearly recognizable thanks to the aesthetic. A cartoon style with a friendly interface is targeted to general audience as opposed to a dark and realistic style with very complex interactions targeted to an adult audience.



Screenshots of Fly for Fun (on the left) and Age of Conan (on the right)

– In some MMORPG, the players have the ability to attach a story they have written themselves to their avatar. It can be seen by other players.

### **C/ Aid for the gameplay**

In the case of MMORPG, the gameplay is really important for the aesthetic choices, especially avatars. A persistent universe based on permanent action and fun requires strategic informations related to competition between players to be easily accessible. It is then an aesthetic of efficiency.

If a large part of this information is limited to the avatar interface, another part is also integrated in the 3D representation of the avatar and its equipment.

– It is important to differentiate between friends and enemies at the first glance. Therefore, characters generally have a very different appearance.

– It is also important to know if a player belongs to a guild (group of players). In addition to the name of the guild, below the avatar's name, most MMORPG offer items (often, cloak) which can be customized with the guild's logo. These objects can be worn by the avatar and allow identifying to which group they belongs to.

– Finally, it's important to gauge quickly the power of an enemy. Beyond interface, indicating the difficulty of the fight, the equipment of another player's avatar allow the player to know what challenge they represent: between the clothes of a beginner and the armor obtained after hundred hours of player, the visual difference is clear.



**Screenshots of World of Warcraft : novice character (on the left)  
and experienced character(on the right)**

A part of the fun in MMORPG is related to competition. Beyond open competition (fights), there is also a passive competition. This is made by comparing players' avatars: it is necessary to have the best "stats" (characteristics), the best equipment. The rarity of an object gives it a lot of value. For instance, the "dragon shield", which exists only in a few copies on the same server, is very gratifying. Most players will be able to recognize such rare items thanks to their flashy appearances. Statistics of the objects can then confirm that.

## Ideas to enhance persistent worlds' avatars

There is an important paradox concerning persistent universes avatars: whereas it is important for players to be attached to their avatars, for years generally, in these universes, it is really hard to make avatars unique, due to their very important quantity and the technical constraints resulting.

A unique avatar allows a much more immersive aesthetic experience. A track to solve this paradox lies in customization, not only graphic.

There are some proposals to enhance aesthetic experience in persistent universes thanks to avatars:

- Limit interface related to avatars: no name, no level, no guild name in the form of 2D text above the avatar's head, no life or magical bars. It can be directly displayed in 3D on the character. It gives more mystery and encourages players to look at the character rather than at the interface.

- Control the avatar a different way. Currently, it is mostly about moving the avatar with keyboard and start aptitudes with a click of the mouse on the interface. A gameplay closest to the traditional fight games can be a first step: if the game requires more attention and reflex, the player's skill will be more tested. Interfaces other than the classical duo keyboard/mouse (like facial muscle sensors, tracking devices) can also be interesting.

- Narrow down clichés and increase available character variety. In addition to usual young athletic men and young women with big breast and endless legs, one can imagine that having child, old, big, thin characters would reinforce players' identification to their avatar. The survey made by the author from french-speaking MMORPG players tell us that more than 85% of the respondents don't want all avatars to be beautiful in their ideal MMORPG.

This has already been proposed in Star Wars Galaxies and worked fine, but has been used very rarely since that.

- Giving a basic background story to the avatars. It could either be chosen between several proposals or randomly assigned, with or without influence on the gameplay. It will improve characters and help players to identify to them. This is quite common in pen and paper role playing games, like Vampire, Warhammer or Guildes, for instance. In this regard, Dille and Platten follow the same line: "In most storytelling, characters are the main figures we follow through the narrative. What makes games unique is that the player is the character. What is happening to the character on-screen is happening to us. Therefore, we can create even stronger connections, and get our players more emotionally invested in their hero with effective storytelling. Breaking down the barrier that exists between the player and the character is a big part of creating the kind of compelling experience we are striving to achieve." (3, p31,32)

– Customize avatar's animations. Animations of a character express often more than its words and this fact is very utilized in animated film since more than a century. However, it has never been possible to choose subtlety of the avatars' animations. At best, and it is extremely rare, one can to pick one animation among a limited amount for its character. It would be much better to have the possibility to mix several animations to create a unique set, representing the temperament and the style of the avatar, like it is usually possible for character's head shape.

## Conclusion

Avatars seems to a be a privileged track to modify the aesthetic experience in persistent universes. They are the cornerstone of these online worlds, even more than in traditional games.

Another part of the avatars is related to their relationships with other players'. The image that players have of their own avatar is also forged upon what other players see in them. But the community and its impact on the aesthetic experience in persistent universes users is much more difficult to control than graphics, interactivity or sounds.

A part of the proposals in the fourth part will be tested in the author PhD. project: Delta Lyrae 6. It is an experimental persistent universe, focused on role playing and relationships between players. Its creation is now in progress, more information about it can be found on the blog: [www.armaghia.fr/DeltaLyrae6](http://www.armaghia.fr/DeltaLyrae6)



Screenshot of Delta Lyrae 6

## **Bibliography :**

1. Beau, Frank, et Daniel Kaplan. *Culture d'univers : jeux en réseau, mondes virtuels, le nouvel âge de la société numérique*. Innovation (Limoges), ISSN 1961-8328. Limoges: FYP, 2007.
2. Boberg, Marion, Petri Piippo, et Elina Ollila. "Designing Avatars." *Proceedings of the 3rd international conference on Digital Interactive Media in Entertainment and Arts* (2008).
3. Dille, Flint, et John Zuur Platten. *The Ultimate Guide to Video Game Writing and Design*. Lone Eagle, 2008.
4. "Le lexique des MMORPG, MMOG et MMO - JeuxOnLine." <http://www.jeuxonline.info/article/lexique>.
5. Pfeffer, Aurélien. "MMORPG et MMOG, critères de définition - JeuxOnLine," 2006. <http://www.jeuxonline.info/article/2565/mmorpg-mmog-criteres-definition>.
6. Yee, Nick. "Avatar and Identity in MMORPGs." *The Daedalus Project*. [http://www.nickyee.com/daedalus/gateway\\_identity.html](http://www.nickyee.com/daedalus/gateway_identity.html).

## **Univers persistants cités :**

- AION, Ncsoft, 2008
- Dark Age Of Camelot, Mythic Entertainment, 2001
- Eve Online, CCP Games, 2003
- Everquest, Sony Online Entertainment, 1999
- Everquest II, Sony Online Entertainment, 2004
- Fly For Fun, Gala-Net, 2003
- Meridian59, The 3DO Company, 1996
- OpenSim (OpenSimulator), projet de plateforme open source
- Realxend, projet de plateforme open source
- Second Life, Linden Lab, 2003
- Star Wars Galaxies, Lucas Arts, 2003
- Ultima Online, Electronic Arts, 1997
- World of Warcraft, Blizzard Entertainment, 2004