Video Games: Realism vs. Style in Graphics

Thomas Constantine

As video and computer games improve over the years, there has been a fairly steady trend in terms of their graphics; not just in terms of sheer quality, but also in stylistic choices. Specifically, time and again, the usual consensus is that "the more realistic, the better." As rendering techniques improve in both speed and power, developers are eager to show off how realistically they can depict their subjects. Shadows cast by objects evolve from generic circular blobs to accurately-shaped polygons, to self-shadows. Shiny, metallic surfaces that once merely had high specularity started having environment reflection maps, with many games in development now doing real-time, realistic reflections. Everywhere you look, it seems, "better graphics" means "more realistic graphics." But is this necessarily the case?

As an example, consider the Legend of Zelda series. In 1998, The Legend of Zelda: Ocarina of Time was released for the Nintendo 64 to critical acclaim. Critics praised this game for many reasons, one of which was the graphical quality; the clarity of the textures, the beauty of the environment, the detail in the monsters. The series had taken a major leap forward from the two-dimensional sprites on the Super Nintendo, and the more realistic graphics let them set a convincingly dark tone throughout the story. It seemed like this was the natural direction for the Zelda series, and when Nintendo demonstrated its new Gamecube system in 2000 with an even more detailed and realistic Zelda demo, expectations were high.





Image from The Legend of Zelda: Ocarina of Time

Image from Gamecube Zelda demo, 2000

Nintendo then shocked the world the next year by announcing a completely new graphical direction for the next Zelda game, abandoning the "realistic" path they were taking before. The new Zelda was be entirely cel-shaded, and looked like a cartoon for kids. The uproar caused by this was enormous; many dedicated fans of the previous Zelda games felt betrayed by Nintendo's decision, and derisively referred to the new game as "Cel-da." They declared that the graphics looked ridiculous and nothing like the quality that "should" be capable with modern technology, and many claimed that they would refuse to buy the game outright. Despite this outcry, Nintendo forged ahead and published the game.

Once more, the game was a critical success. Once people actually sat down to play the game, it became clear that the highly-stylized graphics were of very high quality, and added a great deal to the experience. The little details made a difference; for example, a key part of the gameplay revolved around controlling the wind and navigating a sailing ship. With the stylized design, the game could seamlessly tell the player which direction the wind was blowing with little, cartoonish streaks of air; something that would look completely out of place in a "realistic" image. As said by Shigeru Miyamoto, one of the creators of the Zelda franchise, "Actually, for a long time we've wanted to be able to express wind in games. Sometimes we've had windy stages in the Super Mario

games before, but really it wasn't until we were able to take the technology of the GameCube and some of the visual styles we can represent with it that we were able to finally really show wind blowing in a videogame."





Images from The Legend of Zelda: The Wind Waker, showing the flat cel-shading effects

Similarly, other gameplay issues, such as the question of how the main character could carry a wide variety objects without any place to store them, felt more natural in this setting. To quote Miyamoto again, "I don't mean to deny the value of the more photorealistic graphics, but the more realistic graphics get the more unrealistic things such as bumping into a wall or getting hurt might be. If not expressed properly, it will seem out of place." The stylized graphics created, in some senses, a more believable world for the game to take place in.

As Miyamoto suggests, using stylized graphics in games allows for more stylistic license elsewhere. In a photorealistic game, the instant your character runs at full speed into a wall without breaking his nose, or starts carrying around a dozen different weapons simultaneously with no difficulty, or gets punched and kicked fifteen times without developing any bruises or torn clothing, the incongruity can be jarringly surreal. Likewise, stylized graphics can convey more information to the player; a sickly green color can indicate that a character is poisoned. A villain wielding a ridiculously-oversized battleaxe instantly suggests that he is a dangerous opponent. A multiplayer

character with bright colors and exaggerated features is more easily recognizable, especially at a distance.

Let's consider a few more examples. Two competing games in the Massively Multiplayer Online Roleplaying Game market are Everquest II and World of Warcraft. Everquest II is more recent and, thus, has a higher graphical quality in some senses. It is certainly more realistic than World of Warcraft, with its comparatively low-polygon models and exaggerated, cartoonish style. Yet debate is still common over which has better graphics; in comparing three major reviewer's takes on the games (IGN, Gamespot, and Gamespy,) I found that the Gamespot reviewers gave World of Warcraft a higher score in the graphics category, and IGN and Gamespy's reviewers both declared that they were not enthralled with Everquest II's visual style, despite its enhanced realism. The common opinion seems to be that World of Warcraft's exaggerated dimensions, over-the-top characters, and colorful designs contribute to an immersive experience, despite their surreal quality, while Everquest II's graphics are technically impressive but not very interesting.





World of Warcraft and Everquest II, respectively. Note the oversized architecture in World of Warcraft.

Granted, realism is important for many games. A video game set in World War II strives to be as realistic as possible because the authenticity of the experience demands it.

Likewise, many sports games benefit from photorealism, as they try to create the visual impression of watching a real game on TV. However, it seems that, in general, the automatic assumption that "better graphics" and "more realistic graphics" are synonymous is not a safe bet. Stylized video game graphics provide a wide variety of benefits to their games, and let's face it: when the purpose of playing a video game is to momentarily escape from the real world, do you really want that video game to be just like reality?

References:

Images from IGN.com and Gamespot.com

Quotes from "Miyamoto and Aonuma on Zelda,"

http://cube.ign.com/articles/379/379358p1.html

Game reviews:

http://pc.ign.com/articles/569/569141p1.html

http://pc.ign.com/articles/572/572070p1.html

http://www.gamespot.com/pc/rpg/everquest2/review.html?page=1

http://www.gamespot.com/pc/rpg/worldofwarcraft/review.html?page=1

http://pc.gamespy.com/pc/world-of-warcraft/571585p1.html

http://pc.gamespy.com/pc/everquest-ii/568257p1.html