Interesting Complexity: Sid Meier and the Secrets of Game Design

by *Caio Camargo*

Firaxis Games is a game geek's Shangri-La. The company's office takes up the top floor of a high-rise in Hunt Valley, Maryland and hosts a team of designers, artists, sound technicians, and producers who put together, as the company slogan goes, "Games That Stand the Test of Time," a design principle that comes from one of the company's founders, the gaming great and creator of the celebrated *Civilization* series, Sid Meier. Meier sits behind his office door like the godfather of computer gaming, working on what is currently described only as a "secret project."

But Sid Meier, like the gaming industry itself, had humble beginnings. His history in game design begins in the early '80s when he founded MicroProse with Bill Stealey, his then coworker at General Instrument Corporation. Computer gaming was still in its infancy at the time, when two guys and a personal computer could put together a software business and make it work. MicroProse started out with a series of flight sims and war games, including *Kennedy Approach*, an airport control tower simulation, *Silent Service*, a submarine game that became Meier's first big success, and a few strategy war games like *NATO Commander* and *Conflict in Vietnam*.

After releasing a series of successful war games, Sid Meier had the idea to put together a pirate game. He met some resistance from Stealey, who wanted him to work on another war game. Upon Sid's insistence, Stealey agreed: "We'll put your name on the box, so that if they like the military games, maybe they'll give this one a try," Meier tells us. "Well, *Pirates!* did pretty well, so, from then on it had to be 'well, we have to put your name on the box because the last game had your name on it.' It was kind of a branding thing, and hopefully that identifies a certain kind of game the people like to play."

In 1987, MicroProse released *Sid Meier's Pirates!*, Sid Meier's response to adventure and RPG games. In *Pirates!*, players create their own story, pursue their own adventures, choose which side to take, and may or may not follow the main plot. It is a combination of adventure, action, and strategy, without a predetermined course, player stats, or levels. When MicroProse released *Sid Meier's Railroad Tycoon* and *Sid Meier's Civilization* in 1990 and 1991 respectively, Meier's name had become a trademark.

The idea for *Railroad Tycoon* was inspired by Will Wright's brainchild *SimCity*. The initial concept was to make a simulation game in which the player built railroads and tinkered with different things at his/her own leisure. Midway through making the game, Sid and co-designer Bruce Shelley (creator of *Age of Empires*) decided to add a new facet to the game by adding competition from other railroads. This made the game more challenging and gave it a different approach from Wright's games, which focus on building and creation rather than competition.

Railroad Tycoon paved the way for Meier's next opus, *Civilization*. The god game aesthetic, in which a player builds an empire from scratch and controls it, wasn't the only thing that *Civilization* inherited. More importantly, *Railroad Tycoon* was Sid's first experiment with the idea of combining a series of simple elements to create a complex system. The combination of building, expenditures, competition, and a stock market in *Railroad* created an economic system within the game where the possibilities were endless, each choice affecting the system and future choices that were to be made. The competition possessed solid AI, and each opponent was based on a real-world personality with a different style.

These complexities were taken to the next level with *Civilization*, in which the separate economies of each city affect the whole empire, as do resources, geography, and most importantly, the computer opponents. It is a game that is extremely broad, where combat is only one of the options for victory, along with diplomacy and a space race. Unlike other strategy games, it also spans the whole history of humankind, from the founding of the first cities to the present day, each age with its particular technologies, units, and buildings. This breadth makes the possibilities within the game enormous, and gives *Civilization* a tremendous amount of replayability in a way that is both interesting and addictive, causing players to declare that they will play "just one more turn," and end up playing for hours longer than they intended.

Civilization spawned a series that is now in its fourth installment, released October 2005. Each new *Civilization* game is an improvement on the previous release, and fans seem to think each is worth it. *Civilization IV* brings not only greatly improved graphics—the game has finally made the leap to 3-D—but also, having been made completely anew, it has improved AI with distinctive personalities, new elements such as religion, a much more elaborate diplomacy system, and innovations in the multiplayer options.

Meier recently released a remake of *Pirates!*, also 3-D, and taking advantage of all the technological advances since the release of the original. *Sid Meier's Railroads*, in the style of *Railroad Tycoon*, is scheduled for release in Fall 2006.

So what makes Sid Meier one of the Greats of Gaming? What Sid himself always stresses is love for games. He loved to play board games growing up, and today he still loves to play games—among his favorites are real-time simulation games like *WarCraft* and *StarCraft*.

But, although love for gaming is essential, it is not passion alone that makes Sid Meier a visionary. He also has an understanding of what makes games tick. His philosophy is that fun is the most important element in a game. Many games give priority to graphics, a dazzling spectacle, and in this they sometimes put fun behind glitter. Sid made a game with unimpressive graphics, *Civilization II*, wildly popular in its time. The distinguishing factor is that Sid Meier has profound insight on what makes a game fun.

"A game," says Sid, "is a series of interesting choices." It is essential in Sid Meier games that the user's options are not limited by the design. The game provides the user with possibilities. What makes the game fun is the interactive element. Some games, like adventure games or most first-person shooters, impose a narrative on the player. In Meier's games, from *Pirates!* to *Railroad Tycoon*, the elements are given, but the story is lived by the player rather than told to the player. And as the elements combine to form what Meier calls an "interesting complexity," more options are available to the player.

In a well-balanced game, there will be no incontrovertibly dominant strategy for winning. In *Civilization IV*, for example, there are six possible victory conditions, each viable, though not of equal difficulty. They all provide a good challenge though.

Moreover, the strategies in winning, whichever conditions the player might choose, are intricate and manifold. If a player attempts a military victory, he/she still needs to

keep up scientific research, or the units will become obsolete. A strong economy must be maintained or the player won't be able to support all of the military units. A variety of cities are necessary to build units, but cities not only require maintenance, they also need to be defended from enemies. Regardless of what path the player chooses, an appropriate balance must be struck. Within this framework, there are many options for the player to explore.

Another quality that sets Meier apart is that he knows how to play to the strengths of the medium. Many of his games are inspired by board games, not only because Sid was himself an avid board gamer when he was growing up, but also because he realized that computers and board games were superbly well matched. On a computer the players do not have to keep track of the rules, there are no messy dice to determine occurrences, and in games where certain things have to be kept from the players, there's nothing better than the computer. Having a turn-based game like *Civilization* works well because, although turns are necessary in board games to give everyone a chance to play, on the computer, the user can take as much time as desired, while the computer takes hardly any time at all (though this format does create some challenges for multiplayer games).

Sid also always stresses the interactive element, which is the strength that gaming has over other media. Narratives and special effects can be effective, but they don't take advantage of the most important and unique feature of gaming: the player interface.

That is why *Civilization* is not concerned with what actually happened in history and *Pirates!* does not have a pirate story ready for the player to enter. They provide the framework, the setting, and the character, and the adventures are there to be had. The player chooses what course to take, as in *Civilization*, where the player creates the history of the world.

Another striking quality of Sid Meier's games is their diversity. Although he is generally associated with turn-based strategy games because of *Civilization*, he has a wide variety of titles in different genres, from the early flight sims, *Pirates!*, and *Silent Service* to a couple of unique and exceptionally realistic real-time strategy games based on the Civil War (*Gettysburg!* and its sequel *Antietam!*), and an obscure game made for the failed 3DO console called *CPU Bach*, which would create music in the style of Bach according to specifications given by the player. "I think [the variety] keeps us excited and fresh, and I think people are looking for new ideas now and then," says

Meier. "We try some new things as well as updated versions of some of the classics, so we try to do a little bit of everything."

As for Meier's view of what's next in gaming: "It has a bright future." There's a lot going on at the present moment in the fastest-growing segment of the entertainment industry. "We've been driven by the technology."

It is certainly an exciting time to be in the gaming industry. I can just imagine Sid Meier's boyish grin as he says, "Making games for a living is probably the greatest job I could ever imagine. I can't imagine doing anything more fun."

Biography

Caio Camargo is a sophomore at Yale College, currently pursuing a degree in political science. He is a computer gaming enthusiast and has been a fan of Sid Meier's Civilization since he was in fifth grade.