

Review

Sid Meier's CIVILIZATION III. Infogrames Publishing (2001). Developed by Firaxis. C/O Infogrames, Inc. (417 Fifth Avenue, New York, NY 10016, USA).

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Basic Data:

Objectives: To build and lead a civilization from 4000 B.C. to 2050 A.D., winning through a combination of military, political, cultural, or scientific conquest.

Target audience: Rated "E" for Everyone by the ESRB (The United States Digital Entertainment Ratings Board), CIVILIZATION III is a commercial entertainment computer game aimed at adults. The game has also been used as an instructional resource in middle school, high school, and university classes.

Playing time: The duration of game play depends on the size of the world and users' speed, but most games range from 12 to 36 hours.

Number of players: Single player. A multiplayer expansion pack is scheduled for the fall of 2003.

Materials included: CD-ROM, game-editing tool, game manual, WWW support.

Equipment required: Operating system: Windows® 95/98/Me/2000; Processor: Pentium® II 300MHz; Memory: 32 MB RAM; Hard disk space: 400 MB free hard drive; CD-ROM drive; Video: DirectX® 8.0a-compatible video card (must be able to display 1,024 × 768 × 16 bit); Sound: DirectX® 8.0a-compatible sound card.

Price: Current retail price: \$39.99.

From Hammurabi to Napoleon to Bush, building empires, dominating global politics, and pioneering scientific achievement seem to be universal urges. Sid Meier, the legendary designer, returns with Sid Meier's CIVILIZATION III, the latest installment in the CIVILIZATION series. For the uninitiated, CIVILIZATION is the top-selling game franchise that lets you command a civilization from 4,000 B.C. to the present; it has sold more than 4 million copies worldwide. Sid Meier, who is hailed as "the Grandfather of PC gaming" and also the designer of masterpieces such as RAILROAD TYCOON, PIRATES!, and ALPHA CENTAURI, is the creator of the CIVILIZATION series, which is considered by most game critics one of the most important computer games of all time.¹ Developed by Firaxis and published by Infogrames, CIVILIZATION III is a turn-based strategy game where the player manages a civilization's natural resources, finances and trade, scientific research, cultural orientation, political policies, and military.

The original CIVILIZATION manual introduces the game:

CIVILIZATION casts you in the role of the ruler of an entire civilization through many generations, from the founding of the world's first cities 6000 years in the past to the imminent colonization of space. It combines the forces that shaped history and the evolution of technology in a competitive environment. . . . If you prove an able ruler, your civilization grows larger and even more interesting to manage. Inevitable contact with neighbors opens new doors of opportunity: treaties, embassies, sabotage, trade and war (Shelley 1991, 7), quoted in Friedman, (1999).

CIVILIZATION III updates the franchise, adding in several new game play dynamics while simplifying others. Overall, CIVILIZATION III represents incremental rather than radical innovation, but the additions should be enough to keep "CIV" fans interested while also appealing to the uninitiated.

Game play

The game play behind CIVILIZATION is notoriously deep; CIVILIZATION III ships with a 231-page manual. A single game can take longer than 20 hours; an expert player might have logged thousands of hours of game play. CIVILIZATION III has six different win conditions (two are new):

- conquering all rivals;
- constructing a spaceship and successfully colonizing Alpha Centauri;
- controlling the United Nations and being voted the victor;
- dominating the world through controlling a vast majority of the planet's land, population, and resources;
- culturally dominating the world through cultural hegemony; and
- achieving the highest score if no other win conditions are met.

The game play is robust enough to support multiple strategies, and players can approach the game quite differently, according to their values and tastes.

The game play of CIVILIZATION III can be summarized in terms of the three game screens where players spend most of their time: (a) the global map screen, (b) the city management screen, and (c) the advisors screens. On the global map, players use their units to explore the landscape, meet other civilizations, attack enemies' units, and improve the land through building roads, mines, irrigation, railroads, and fortresses. On the city management screen, players can manage how their citizens use the surrounding countryside (i.e., farming vs. mining), allocate citizens toward specialized roles (i.e., laborers, entertainers, scientists, and tax collectors), and build military units, city improvements (such as libraries, barracks, or banks), or Wonders of the World. Finally, players have a set of advisors' screens where they can manage their cities' government type, tax, scientific research, and luxury rates, and negotiations with other civilizations.

The player begins in an unknown corner of the planet, which can be on Earth or on fictitious planets. The player begins by choosing where to build his or her capital city, considering the relative potential for exploiting natural resources and strategic land barriers. The player also controls a worker unit that can irrigate fields, build roads, or mine the land. Once the player has established a city, he or she gathers and manages natural resources, which are abstracted into the game's four primary game economies: food, natural resource production (shields), trade, and culture. Veteran CIVILIZATION players will note that culture is a variable new to CIVILIZATION III. Building libraries, temples, cathedrals, or Wonders of the World all add to a civilization's cultural influence. The higher a civilization's cultural influence, the farther its borders will extend beyond its cities and into the countryside, and the greater the likelihood that villagers or neighboring cities will join the civilization. In CIVILIZATION III, other civilizations can spontaneously join the player's civilization if its cultural influence is sufficiently greater than that of neighboring civilizations.

As the game progresses, other game variables come into play. Players must control political corruption, interact with other civilizations (played by the computer), secure strategic and luxury resources, and even monitor global warming. The addition of strategic and luxury resources in CIVILIZATION III adds to the game play in subtle but important ways. Players must now have access to key strategic resources, such as horses, saltpeter, oil, or rubber to create special units. Luxury resources such as silks, fur, or gems add to citizens' happiness. It is unlikely that any one civilization will have significant access to all of these resources, so trade with other civilizations becomes even more critical in CIVILIZATION III. Furthermore, the AI has been improved so that computer-controlled civilizations trade technologies much more readily, making it unlikely that the player will dominate through technological superiority alone.

CIVILIZATION III also ships with a robust-level editing tool that allows players to change nearly every variable of the game. Players can build custom maps, create new graphics, change the underlying rules, add or delete civilizations, or change the text of the Civlopedia. Not only have game players created modifications (or "mods") of historical scenarios (such as the Civil War), but ambitious game players have made what in the games industry are called "total conversion mods," mods that use the game engine to create an entirely new game, such as STAR WARS or THE HOBBIT. The CIVILIZATION III community contains hundreds of developers working on these custom mods, as well as development tools for more easily tracking art assets and debugging games. Most of these activities are based at CIVILIZATION III fan sites, such as <http://apolyton.net>, which work in close collaboration with Firaxis providing developer updates and assistance.

CIVILIZATION III as an educational tool

As Ted Friedman (1999) argues in "CIVILIZATION and Its Discontents: Simulation, Subjectivity, and Space," much of the appeal of playing civilization comes in

exploring the game microworld. Players enjoy mastering the game system, building empires, and exploiting resources, developing a fluency in thinking with the game system. Inasmuch as this system is a model of how civilizations grow and evolve, opportunities exist for using the game as a model for gaining new insights into social phenomena. Players might develop a new appreciation for the historical importance of the Gaza Strip or the Panama Canal, or for the strategic importance of horses, particularly their absence in North America. Although *CIVILIZATION* offers intriguing opportunities for introducing social studies concepts such as despotism, monarchy, or monotheism, its greatest value as an educational resource may be in its ability to immerse players in the middle of a simulated historical microworld where they can develop system-level understandings of geography, economics, politics, and history.

CIVILIZATION III may be one of the most underutilized educational resources of the past decade. Although *CIVILIZATION* was designed as an entertainment game, the historical, geographic, and political simulation elements of *CIVILIZATION* make it an intriguing educational resource.² Success in the game demands that players master geography, focusing food production in agriculturally advantageous areas, using physical boundaries as natural borders, and securing natural resources. Players confront political dilemmas, such as whether to pursue isolationist politics, enter complex alliances for protection, or gain precious resources through military force (which may also mean waging war to protect an ally). Finally, players can use the visualization tools in the game to see how their history grows culturally, geographically, scientifically, and politically through maps, charts, and graphs. The open-ended nature of the game provides excellent opportunities for comparing games and reflecting critically on the assumptions underlying the simulation.

In the spring of 2002, I taught social studies with *CIVILIZATION III* at two secondary schools. Generally speaking, students enjoyed playing the game and developed deeper understandings of social science concepts introduced in the game, such as monarchy and monotheism. Students could explain the role of geographic features such as river valleys, oceans, and mountain ranges in the growth of civilizations with greater depth. Students developed an appreciation of the importance of specific geographic features such as the Panama Canal. A few students developed deeper understandings of relationships between physical geography, political geography, foreign policy, economics, and history. As one student explained, he learned how a civilization's natural resources, physical geography, economic strength, and approach to diplomacy all are related.

However, my experiences also highlighted several difficulties in using *CIVILIZATION III* to teach in formal school settings. A single game can take longer than 20 hours. The prepackaged scenarios contain inaccuracies that could foster misconceptions, such as the presence of horses in North America or the existence of the United States in 4,000 B.C. *CIVILIZATION III* is heavily biased toward geographic and civic readings of history, and favors technological superiority, potentially at the expense of the arts or humanities. *CIVILIZATION III* attempts to account for the role of culture in the growth of civilizations, but the way that culture is operationalized is ultimately unsatisfying (Barkin, 2002). Nevertheless, good instructional practice

setting up the activity, providing just-in-time lectures during game play, and debriefing with students can ameliorate many of these problems. My experience was that game players understood that the game was not a simulation of reality, but rather a model of how civilizations grow that could be used as a resource for thinking about social studies. When used in this context—as an instructional resource within a broader inquiry-based framework—CIVILIZATION III is an intriguing game that warrants further use and study in instructional contexts.

The most exciting aspects of CIVILIZATION III may be the opportunities in using the scenario and map editing tools to make custom scenarios. CIVILIZATION III's editing tools makes it possible to create highly customized scenarios to cover very specific historical situations without any previous programming experience. A full set of scenarios might allow students to explore ancient Greece, Rome, or Egypt in greater depth. Indeed, the dynamic community of amateur CIVILIZATION III developers are an invaluable resource in helping develop, debug, and play-test these scenarios.

Games such as CIVILIZATION III seem finally to be realizing the dream of edutainment, creating a playspace where people can use gaming technologies to think about history and social studies in new ways, and maybe even learn something in the process. In November 2002, Firaxis will release the multiplayer expansion for CIVILIZATION III: PLAY THE WORLD, allowing players to compete online, opening new entertainment and pedagogical opportunities. When it releases, I hope to see you online.

Notes

1. For those unfamiliar with Meier's work, he is widely recognized for his innovation in gaming and may be one of the most important creators of popular culture in the late 20th century. In the late 1980s and early 1990s, Meier released three games that would radically alter gaming: RAILROAD TYCOON, which brought about the birth of the TYCOON genre of games, which have spawned countless derivative titles and millions in sales; PIRATES!, one of the first real-time-action role-playing games; and CIVILIZATION, by far the most ambitious strategy games ever created. Meier and colleagues are credited with not only creating compelling games but entire game genres.

2. Indeed, several scholars have called for using CIVILIZATION III in social studies classes, but there has been little academic study of the phenomena. See Squire (2002) for a more thorough discussion of this topic.

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