Lord of the Hackers

By SHERRY TURKLE

"The Lord of the Rings: The Fellowship of the Ring" is a brainy and beautiful film that has received more Academy Award nominations than any other film this year. It takes nothing away from its artistry to allow that its appeal, like that of the books on which it is based, owes much to the computer culture that made J. R. R. Tolkien’s fantasy world its own.

That culture has a particular way of using the computer to think about the world, a binary perspective that is appealing but problematic. Our fascination with Tolkien’s work says more about us than it does about Tolkien.

In many ways, Middle Earth, the universe of "The Lord of the Rings," is like a computer program, rule-driven and bounded. In the early 1970's, the computer scientists at Stanford University’s Artificial Intelligence Laboratory were so enamored of the books (they were first published in the 1950's, but did not gain popularity in America until a decade later) that they designed three elfin fonts for their printers. Two of the researchers wrote a Tolkinensque, single-player quest game that became known as "Adventure," it spread worldwide via the nascent Internet.

The personal computer movement of the 1970’s and early 1980’s was deeply immersed in Middle Earth and translated it into hugely popular (and enduring) role-playing games like "Dungeons and Dragons." When the pioneers of personal computing organized their conferences, they used the metaphor of medieval "faires." In 1993, a computer science student who now works for Microsoft put up the first Web site about Tolkien. Today there are about 856,000 sites devoted to the author and his work.

These days computer programmers appropriate the standard Tolkien palette of elves, knights, wizards and dwarves to build their online fantasy games. They also use computational metaphors to reinterpret Tolkien, who is read as the programmer of Middle Earth. One online contributor theorizes that the rings, the central metaphor and driving force of the story — they empower and corrupt all who wear them — "hardwire-only" computers "with all their operating code permanently burned into their structure."

Like the rings, the inhabitants of Middle Earth behave according to a set of rules. This is part of what makes it so easy to translate Tolkien's work into game worlds. In "Dungeons and Dragons," for instance, character attributes like charisma or strength are assigned according to a point system. There is little room for psychological ambivalence or complex motivations in such a personality.

Frodo, the hero of "The Lord of the Rings," is part of a fellowship, although it is more properly called a fraternity: in Tolkien's world, the men bond. The few females are loved and feared as icons or charms.

And the computer culture, by and large, is a world built by engineers for engineers, by men for men. (This is a culture that found it natural to have "abort, terminate, and fail" as three choices on a screen prompt.) Like Tolken's world, most computer games are about mastery through violence; they serve as a socialization into the computer culture for adolescent boys.

It's not surprising that fewer girls decide to cross the threshold. My 10-year-old daughter has noticed the resemblance between "The Lord of the Rings" and computer games — in both substance and form. There are no girls in either, she says, because "girls don't do these kinds of adventures."

Adolescents are wise in the psychology of computer games and Middle Earth. They live in a world they can't control, in a body that seems increasingly alien. To them the computer world is soothing, offering re assurance through mastery. Just as each episode of "The Lord of the Rings" presents a danger and each has its resolution, so may adolescent boys move from one block of intransigent code to another, from one screen to the next, declaring victory as they go.

But this distinction is about more than gender; it is about ways of looking at the world — real, imagined or computer-generated. Some pioneers of computing had a style of working that rewarded risk. They spoke of programming itself as though it were a dangerous quest. At M.I.T. computer hackers even had a name for it: "sport death." To pull back from the impending doom of a system crash required near magic, an almost empathetic knowledge of the intricacies of code. For this community, a certain bravado came to be seen as valuable, even necessary, beyond the world of programming.

Middle Earth offers its own version of "sport death." In the movies or on the computer, life is danger and triumph, screen by screen. In the fellowship of the microchip, you may crash but ultimately you win. In computer games the goal is to overpower the enemy. There is no place for negotiation or compromise.

Hackers used to be known simply as computer people. But if we take the computer as representative of a way of knowing, a way of seeing
the world, then we are all computer people now. We use computers in different ways, of course, and they can offer more than one perspective on our lives.

But the work of J. R. R. Tolkien captures a certain computational aesthetic that is reflected in the mass culture. This sensibility tends to be binary. Perhaps such simplicity helps explain the current popularity of "The Lord of the Rings"; at a time when friends and enemies are sometimes indistinguishable, the black-and-white world of fantasy holds a particular allure.

The computer world owes its simple clarities to the fact that it is not real. Tolkien's Middle Earth and the world of the computer screen leave little room for ambiguity, ambivalence or contradiction. But the real world demands that we be comfortable with them.

Sherry Turkle is a professor of the sociology of science at the Massachusetts Institute of Technology and author of "Life on the Screen: Identity in the Age of the Internet."