resources available through cyberspace, would not be possible. In 2000, research by the Pew Research Center for its Internet and American Life Project found that women use cyberspace to establish and maintain relationships, and a study by Brian Solis in 2009 found that online services such as Facebook, Flikr, FriendFeed, DocStoc, Myspace, and Twitter were used more often by women than by men.

The possibilities that women and men have for communicating, for creating groups related to their interests, and for addressing issues that concern them make cyberculture a revolutionary mode of communication in contrast to the dominant, one-way broadcast mode of the 20th century, in which few people had a voice. Different ideas and types of content now have visibility, and more people have access to a multitude of resources to inform and satisfy their varied interests. Cyberculture thus plays an important role in the pursuit of gender equality by allowing women and men from different places of the world to share their ideas, thoughts, and experiences.

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See also Audiences: Producers of New Media; Empowerment; Gender Media Monitoring; Massively Multiplayer Online Role-Playing Games; Media Globalization; Minority Rights; Multi-User Dimensions; Social Construction of Gender; Social Inequality; Social Media; Social Networking Sites: Facebook; Social Networking Sites: Myspace; Twitter; Web 2.0; Wiki; YouTube

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## **C**YBORG

A cyborg is a cybernetic organism, an entity that is a hybrid of organic material and machinery or technology. Manfred Clynes and Nathan Kline first proposed the term cyborg in considering how to adapt humans to the environment of space travel, rather than adapting the environment to the needs of the body. In a sense, most living humans are already cyborgs, to the degree that they are technologically modified organisms. Individuals who use prosthetic limbs, pacemakers, pain pumps, and such commonplace enhancements as eyeglasses, contact lenses, and hearing aids would technically fall into this category. Few individuals today exist as purely organic individuals who have remained technologically and mechanically unaltered from the womb. However, there are other elements of cyborg life that have less to do with the physical embodiment of the cyborg than with the connection to information systems.

Feminists have challenged patriarchal and phallocentric ideals, calling attention to how the physical body (sex) is often presumed to be the defining factor in a person's gender. More recently, feminists have also drawn on the idea of the cyborg as a liberatory concept, suggesting that one way to escape issues of sexual inequality is to escape sex itself, assuming a posthuman, or cyborg, body that defies categorization into clear binaries. This has led to a strand of cyberfeminism that exults in the potential subversion of power structures through technology. The clearest incarnation of this stance is found in the often quoted final line of Donna Haraway's essay, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century": "Though both are bound in the spiral dance, I would rather be a cyborg than a goddess." For Haraway, what makes the cyborg particularly useful is its postmodern nature, that it is neither male nor female, and that it challenges traditional binaries. Some have critiqued Haraway's notion of the cyborg, arguing that it assumes a privileged, Western, educated stance and that cyborg life is not necessarily a liberatory condition of being. Others observe that despite Haraway's celebration of the end of dualities, she instead reinforces other dualities.

Although often used metaphorically in feminist discourse, the notion of the cyborg has become almost commonplace in popular culture, especially in science fiction. Images of the Borg in Star Trek: The Next Generation (1987-94) and of Darth Vader in the Star Wars movies (1977-2005), as well as films such as The Terminator (1984), Blade Runner (1982), and Robocop (1987), depict a decidedly dystopian view of the cyborg as at once dangerous, murderous, and imbued with a deep disdain for weaker species such as completely organic humans. Indeed, many films, such as the Matrix series (1999-2003) and The Terminator depict technology's eventual war and victory over humankind—a notion that goes back to Fritz Lang's 1927 film Metropolis, complete with its own feminine robot.

Some films and television shows demonstrate a particularly feminine view of the dangers of cyborg existence, such as the Borg, with its queen and hive mind. Others depict female cyborgs, or gynoids, mainly as sex objects either for their creators' pleasure or for sale, as in the case of *Cherry* 2000 (1987) and Pris in *Blade Runner* (1982). Perhaps the ultimate dystopian vision of the female cyborg is found



While the concept of a cyborg, a being composed of both human and artificial matter, is still a fictional creature, today's human beings are often technologically and mechanically altered from their original state. (Photos.com)

in *The Stepford Wives* (1975), in which intelligent, independent women are replaced by subservient, submissive gynoids. However, there are also strong feminine cyborgs in popular culture, such as Molly in William Gibson's cyberpunk novel *Neuromancer* (1984), T-X in *Terminator 3: Rise of the Machines* (2003), and the 1970s television series (reprised in 2007) *The Bionic Woman* (although the latter seemed mainly to be a spinoff of *The Six Million Dollar Man*).

Still, some cyberfeminists maintain a hope that technology can erase harmful social phenomena such as racism and misogyny. For example, Haraway argues that communication and biotechnologies can provide a means of restructuring existing social structures and power dynamics for women. By

altering one's body, one can, in essence, alter one's world. Such an impulse can also be seen in other futurists. Stelarc, a performance artist whose work has explored the nature of the body as it relates to prosthetics and information technologies, declares that the body is "obsolete." Many of these futurists, including Haraway and Stelarc, observe that it is not merely the mechanical elements of cyborg existence that bear promise but also information technologies.

All of this points to a desire for a posthuman future in which the body is overcome through technology. This notion can be found in popular culture as well. For example, the protagonists in Gibson's cyberpunk novels profess a disdain for the "meat" and exult in the disembodiment of cyberspace, sentiments that are shared by the hacker community as seen in The Mentor's "The Conscience of a Hacker," commonly referred to as the "Hacker Manifesto." In other words, true liberation from the problems of the world can be found in the realm of cyberspace. Connection with individuals while removing the biological markers of race, sex, gender, and class is viewed as a potential means by which society can progress. This ambiguity is the hope of cyberfeminists who have adopted Haraway's vision of the cyborg. Still, despite the potential for individuals to exist in a world devoid of gender and physical identifiers, it is clear that even as individuals have become more connected through information technologies, such embodiment has not moved toward hybridity—as can be observed through the ubiquitous query in chat rooms, "a/s/l?" (What is your age, sex, and location?).

In short, the ideal of the cyborg is taking place, although perhaps not as some scholars would hope. To see the beginnings of cyborg existence, one need only look to the ubiquitous need for connection, the Bluetooth headsets that are continually at the ready for incoming information, the desire constantly to

broadcast information about one's day through Twitter, Facebook, and other social media networks. People already willingly integrate technologies into their bodies through plastic surgery, joint replacements, and prosthetics. Perhaps such actions are not viewed as cyborg existence because they do not measure up to the complete integration found in popular media, but when carefully considered, many people have already become part machine and technology and part flesh. In other words, the technological embodiment of cyborg life seems already to be here. Whether or not such embodiment has the liberatory potential imagined by cyberfeminists, however, remains to be seen.

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See also Cyberpunk; Cyberspace and Cyberculture; Feminism; Identity; Postmodernism; Virtuality

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