

Christian juxtapositions: *How We Became Posthuman*

reviewed by [Philip R. Meadows](#) in the [July 28, 1999](#) issue

**How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics.**

*By N. Katherine Hayles. University of Chicago Press, 350 pp.*

There is a good chance that you are a cyborg. A cyborg is a cybernated organism—which is anyone whose normal biological systems are enhanced or extended by technological mechanisms, especially electronic and communication devices. The word "cybernetics" comes from the Greek word for "steersman" (*kubernetes*) and describes one who is in control, who is both flexible and agile in response to a given environment and who can tame it to certain ends. To the extent that we exercise such control through technological devices, our lives have become cybernated. If you have a hearing aid, a pacemaker or an artificial limb, if you use a computer or telephone or drive a car, you are a cyborg.

But cybernetics is also about exploring the similarities and differences between the way biological organisms and artificial mechanisms function. What is the relationship between computer-based artificial intelligence and human intelligence? On what basis can cyberneticists refer to their mechanisms as "artificial life"? In what sense are robots and humans really cousins under the skin?

At one time questions like "What does it mean to be human?" belonged to the realms of philosophy and theology, but cybernetics and information technology are fast becoming potent forces for providing credible answers. Katherine Hayles maps these relatively new sciences and carefully plots changes in the concept of human subjectivity. Through a detailed examination of theoretical concepts and the way they have been presented in popular (science fiction) literature, she demonstrates the power of the technological sciences in shaping how we think of ourselves, our place in the world and our relationship to other humans and to machines.

Hayles weaves together three interrelated themes: the problem of disembodiment; the idea of the cyborg as technological artifact and cultural icon; and the shift in conceptions of selfhood, from "liberal humanism" to "posthumanism." All are

consequences of viewing human beings cybernetically. Hayles describes this as the "rhetorical transformation" that occurs when the analogical relationship between human and machine becomes the basis for reinterpreting human beings as mechanistic systems and information processes. Although she criticizes certain aspects of this method and many of the conclusions drawn from it, she continues to read human beings cybernetically.

Hayles seeks to deconstruct the idea of what she calls "liberal human subjectivity," rooted in mind-body dualism, which privileges autonomous agency and individual freedom. The liberal human subject is bounded by physical embodiment and exerts self-possession through domination and control. By reducing consciousness to patterns of information, however, the posthuman condition dissolves the boundaries of embodiment and challenges the concept of human subjectivity. So those early scientists who feared that cybernetics would lead to dehumanization (through the loss of self-control or even through being controlled by our own artifacts) were clinging to an inadequate understanding of what it means to be human.

The assumption that has driven the construction of the posthuman and that marks Hayles's own perspective is the ineluctable cybernation of life: the vision of a future in which people share the world with new forms of artificial life and in which human evolution is dependent upon the intimate articulation of human and machine.

Hayles's concern is that this posthuman future-in-the-making be rescued from the cyberneticists and the information scientists who would hold onto the specter of liberal human subjectivity while disembodimenting it, thus threatening to universalize its demonic qualities. Rather, the new situation should both liberate us from this problematic dualism and present us with an alternative for rethinking human subjectivity as emerging from, distributed across and embodied in a mutually conditioned human-machine reality.

This book belongs to an expanding genre of critical studies, particularly arising from feminist scholars who challenge secular thinking about the shape and shaping power of the technological worldview. By calling for a variety of voices to inform the wider discussion, Hayles awakens us to the lack of serious theological engagement with these issues. The dialogue between science and theology has been largely dominated by physicists doing cosmology, biologists preoccupied with evolution, and ethicists debating points of medical practice and genetic engineering.

Christians need to take up the challenge to offer another narrative within which the meaning and future of our increasingly cybernated lives can be envisioned and

shaped. Such a narrative should be informed by biblical and theological anthropologies that stimulate us to read human beings both cybernetically and in the image of God. Neither woeful jeremiads nor New Age optimism will serve the church.

*See also [Christian juxtapositions: Holy Things and Holy People](#) and [Christian juxtapositions: Peace in Northern Ireland](#).*