

Kember, Sarah.

Cyberfeminism and Artificial Life.

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Scientificallly-literate readers interested in the ethical and cultural implications of the technoscientific revolution, of the convergence of biology and computer science, and of the attempts to create artificial life forms with a synthetic consciousness will find Kember's book informative and challenging. Partly an attempt to prove that feminist academics *can* examine critically and rationally biological paradigms without resorting to an anti-scientific stance and to the so-called "excesses" of feminist epistemology, the book promotes a "strategic dialogue" (ix) between cyberfeminism and the post-cold-war discipline of Artificial Life (both as a discipline and a discourse). Choosing a Bakhtinian-based dialogism as "critical methodology" through which to extend the current debate (about the significance and the dangers of the emerging biocultures) beyond the oppositional and confrontational tactic, Kember speaks from a situated, feminist, constrained-constructivist, posthumanist position. Because her goal is to forge a critical alliance between feminism and the new biology, Kember chides cyberfeminists for their "distant gaze" and their "complacency of a secure, well-rehearsed oppositional stance" (7, 176), rebuking at the same time "the foundational antibiologism in feminist theory" (211). Although she is aware of the dangers lurking in the subsumption of cultural into biological explanations of life, and agrees with Alison Adam that ALife may be "sociobiology in computational clothing" (3), Kember believes that anti-essentialism has become "too much of a mantra" (181).

For Kember, cyberfeminism has failed to recognize "the plurality of positions in biological discourses which simultaneously undermine and strengthen" (viii) its case. Since "there is no 'biology' any more than there is a homogenous 'feminism'" (viii), Kember welcomes the strong, internal critiques of evolutionary psychology and Darwinian-based biology, for such critiques render the "enemy" non-unified and non-static. In her view, feminists must accept that "biology is not reducible to biological essentialism" (175) and that "feminism does not preside over a pure, abstract extrapolation of nurture called 'culture'" (176). To avert the stalemate of the science wars, stemming from the problem of polarization, Kember asks cyberfeminists to abandon their singular anti-biology stance ("Biophobia may be costly" [46]) and their "residual technophobia" (7), and exploit the fact that biology is highly contested internally. Embracing N. Katherine Hayles's claim of the "inevitability of perspective" of the 'enculturated' observer/scientist (213) and Donna Haraway's "naturecultural" products/figurations as the best models for a posthuman identity, Kember proceeds to critically examine the concepts, forms, narratives and disciplines which contribute to the construction of life-as-it-could-be in software, hardware and wetware.

The book resonates with the call to approach biology and technology “as an opportunity rather than merely a problem” (ix). Since Kember prefers a dynamic dialogic relationship rather than “resolution or equilibrium,” she advises cyber-feminists to take “the risk of relinquishing some long-held conceptual ground mapped and divided by the opposition between essentialism and constructivism, ontology and epistemology, nature and culture” (ix). Such a call insinuates that risk-taking cyber-feminism, in contrast to opposition-and-resistance feminism, is better suited to engaging prominent scientists in debate and contribute to “a bioethics of posthumanism which is yet to be articulated” (vii). By endangering its foundational basis (a prerequisite in making the enemy listen), cyberfeminism supposedly gains the status of a legitimate and serious partner in cultural conversations. Dismissing resistance and opposition as “only rhetorics” (viii) of a “pristine” stance, Kember favors a “doubly contaminated” (177) dialogic position as the best way to be enmeshed in scientific conversations with the male minds promising to revolutionize our lives. Siding with Donna Haraway’s strategy of diffraction rather than with Sadie Plant’s “technologically determined apocalypticism and biological essentialism” (178), Kember finds unappealing “a teleology of feminist engagement with alife” (177) and considers irrelevant the degrees of assent or dissent between the values of feminism and this discipline. The primary focus is on “the kinds of complexity opened up” (177) by the encounter of cyberfeminism with ALife, and on the gaps, inconsistencies, paradoxes, and contradictions of both camps.

Intrigued by the fact that few if any genetic and evolutionary ‘determinists’ adhere to an inevitable and unalterable behaviour, Kember places on feminism the burden to show how and why the re-emergence/return to Darwinism has been naturalized culturally, at a time when biotechnology is challenging the category of human nature. She detects a subsuming biological hegemony within ALife and a tendency to anthropomorphism (humanizing HAL, the smart computer in Kubrick’s film and Arthur C. Clarke’s novel *2001. A Space Odyssey*); nevertheless, Kember seems convinced that the discipline’s anti-humanist and anti-instrumentalist stance is fostering a “latent” critical potential. ALife can offer both a means of deconstructing biological science and a critique of the wider technoscientific culture, provided that it abandons the informational and computational concepts of life, its heterosexual basis, and its obsession with sex and reproduction. Presently, ALife and genetic engineering are creationist and colonialist projects, characterized by an underlying “digital naturalization” of conventional visions of life. However, Kember urges cyber-feminists to take advantage of the heteroglossia of biological discourses and of the fact that artificial life projects privilege the biological rather than the psychological, the connectionist rather than the cognitive processes.

The post-cold-war transition from Artificial Intelligence to ALife

technologies rests, according to Kember, on the emergent biotechnological processes, which tend to be characterized as “feminine rather than masculine because they are more distributed, more co-operative, more chaotic, more based on the corporeal than the conceptual and more about growing and nurturing than programming life” (208). In fact, biology is considered a “softer” more feminine epistemology than physics; that is why “ALife’s feminism is a kind of essentialist eco-feminism” (208) in direct contrast to the industrialist-militarist patriarchal cybernetics. This gendering of scientific disciplines and technologies which accompanies the shift from cyborg politics to the politics of a(lien) life is presented as a genealogical side-effect (perhaps welcome) to Kember, who hails the advent of an evolving, emergent and self-producing, global bioculture. ALife has rejected the militarist top-down command and control and the masculinist instrumental principles of artificial intelligence research and is based on the principles of decentralized, distributed control, bottom-up self-organization and emergence. It is this fundamental anti-instrumentalism at the heart of the posthuman product of artificial life which seduces her.

For Kember, artificial life forms—as software (embodied computer programs), hardware (situated autonomous robots) and wetware (transgenic organisms co-existing in the global network)—stand, by definition, at the boundary offering a new kind of kinship. Their provisional, experimental nature and their indeterminate status are for Kember the key parameters of posthuman identity. Having embraced the idea that “the individual and species-self is becoming other, is becoming a(lien) life (208), she welcomes the steps taken toward posthumanity, which “is autopoietically self-producing and creating the conditions for posthumanism” (208). In this context, the cultural icon which best represents the current ideological transmutation is *Star Trek’s* Commander Data and not Kubrick’s HAL 9000.

Seeing our era as a “supposedly classless, post-feminist (if not yet antiracist) present” (42), Kember wants cyberfeminists to exploit the convergence of biology and computer science as a culturally productive key, so as not to miss out on the potential compatibility of biological and social explanations. How cyberfeminism can avoid the trap of a double determinism (biological and technological) from this convergence remains an enigma. Unless we assume that a naturecultural stance acts as the equalizer of the power and influence of the two forces. To salvage the complexity of epistemologies, ameliorate the science wars, and purge technoscience from the stigma of reductionism and essentialism, feminists are asked to pay the price, that is to defer the question of sex and gender in discussions about subjectivity and to rid themselves of the distinction between culture and nature. As if dispensing with the patriarchal binary oppositional structures of sex/gender and nature/culture automatically

liberates us from cultural dualisms and guarantees the disempowerment of authoritative conceptualizations of life.

Kember invents a pseudo-dilemma: the "choice is between making a difference and making no difference" (ix) in the construction of ideas and artefacts of ALife. What she does not clarify is the nature and the degree of this "difference," and who in particular is qualified to imbue artificial life forms with such a difference. The benefits (euphoria from conversations with leading male scientists and perhaps scholarly respect from an interactionist rather than a confrontational approach) of a risk-taking feminism remain intellectual rather than material, since the tension between biological determinism and social constructivism remains irresolvable and the dialogue is "partial, minimal, unfinished and merely indicative" (13). Writing out of an intensely Anglo-American perspective, Kember never questions the primary dichotomy upon which ALife constructs its projects. The dichotomy life-as-we-know-it/life-as-it could-be is based on the assumption that we (who exactly?) actually "know" beyond doubt what life is and having demystified this state of being, force and/or process, we can now proceed to construct alternative artificial life forms, which are to be perceived as "entities or beings" (viii). It is also unclear how the hybridization of organic and inorganic forms and processes automatically precludes the reign of culture and technology over nature and biology. Experimental transgressions in the controlled setting of a laboratory must not be mistaken as destabilizers of the political status quo. It takes radical political action and not mere discursive or computational subversion games to bring about tangible social changes.

A theory-laden narrative, Kember's book is rich in information and vibrates with the viewpoints of prominent scholars and scientists. It is a masterful synthesis of diverse disciplines, but reading it is a daunting task for the uninitiated. It requires a slow pace as well as a cultivated patience, for the scholarly trend is to recount the ideological positions of numerous cultural critics in order to situate one's arguments within an "informed" context of postmodern and posthuman controversies. It is a laudable task to engage the new "monsters" of biotechnology in order to open up new ground for feminism and lead the way to uncharted ethical territory. However, projects like these barely hide behind their techno-friendly approach the seduction of an ultra-technological environment and posthuman world. Rarely do they question the necessity of creating and inhabiting one in the first place.

At the dawn of the new millennium, one can detect weariness with life as an unadulterated biological phenomenon and fascination with life either as a discursive construct or a mongrelized artefact. The desire to participate, at least cognitively if not practically, in the shaping of a techno-universe requires the premature burial of oppositional and confrontational tactics in favor of a risk-

taking strategy. What feminism gains from approaching the “enemy” with a non-threatening and sex-gender-blind stance in discussions about subjectivity remains unclear. But one thing is certain; the emphasis on feminist political consensus and ensuing tangible solutions has been superseded by the heteroglossia and pluralism of scholarly intellectual activity. Suspending cynicism, grounding critical analysis in fashionable theories, and thus entering the game according to the house rules are the steps feminists must take if they want to converse as serious partners with the “in” group (influential male scientists) and not remain “outside” the techno-walls. Since posthumanism and postmodernism are the new values in techno-town, it is only logical to ask feminists to become converts. Obviously, a feminist criticism which (in the words of Adrienne Rich) renounces “the temptation to be graceful, pleasing and respectable” and strives instead to “be strong-minded, rash, and dangerous” is too radical an approach for ALife projects. Perhaps in the postmodern, urban, techno-space of academia, the narcotic promise of interdisciplinary truce talks and collegial respectability has a stronger grip than any need for a direct struggle against the prestigious male authorities who are busy envisioning life-as-it-could be.

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