



PISSN : 2571-9904 - EISSN : 2602-7763

Feminism and Readings of the Digital Age

The Feminist Dimension of the Cyborg

Abbane seyf eddine

University of tebessa (Algeria) Abbane.seyfaddine@univ-tebessa.dz

Rezaiguia Hichem

University of Algiers 3 (Algeria). hicham.rezaiguia@gmail.com

Received: 30 /11 / 2024

Accepted: 10 /01 / 2024

Published: 20 /01 / 2025

Abstract

Feminism, in its various forms—radical, liberal, cultural feminism, or others—represents subcultures that have emerged on the peripheries of the dominant culture, which traditionally dictates male superiority. The advent of cyberspace and new technologies has facilitated the articulation of feminist culture through the emergence of the cyborg, a fluid entity in terms of identity and gender. This phenomenon blurred the boundaries between humans and machines, and subsequently, between male and female. The feminist perspective on the structure of cyberspace posits that women, as cyber beings, not only require inclusion in the construction of electronic cultures as equal participants with men but also demand that new technologies promote human welfare and equality. This perspective argues that information technologies should not perpetuate existing power relations, injustices, or inequalities. Feminist readings emphasize not merely the use of cyberspace to disseminate feminist ideologies and politics but also its reconfiguration to serve women, the assumed primary users.

Keywords: Feminism, cyberspace, cyborg, digital age.

I. INTRODUCTION

"Feminism in cyberspace is the recognition that patriarchy is destined to perish ".

—Sadie Plant

Every technology emerges within a social context and is imbued with the relationships and structures of that context. Feminist studies of technology have demonstrated that technological advancements have historically been used to restrict women's roles. Social studies of technology further reveal how technology has played a significant role in developing and shaping what we now recognize as common or mainstream technology .

The relationship between women and technology has always been marked by tension. Traditional conceptions of technology often heavily favor men. According to Liz Tsilaki, a stereotypical portrayal of women as being disconnected from technology is often reproduced, with men perceived as the dominant force in technological realms. Women are frequently excluded from understanding the operational principles and material mechanics of machines .

However, the history of technological advancements shows that the intentional design of technologies and their unintended adaptation by unanticipated users have fostered new ideas about the ideal user. Judy Wajcman, in her book **Feminism Confronts Technology**, argues that technology designers and distributors can never fully predict or control the ultimate uses of their creations. Technology, she asserts, often develops a dual life of its own. (Tsaliki, 2000, p. 127)

Technologies do not merely establish traditional gender-based divisions of labor; they also shape the cultural meaning of spaces, such as the home, which is often designated as a woman's domain. They constrain women's mobility based on their role as consumers and dependents, rather than as contributors to technological development and leadership.

However, this dynamic has shifted with modern advancements, particularly with the advent of computers and smartphones. The rise of microelectronics and the diminishing relevance of physical strength in the heroic age of mechanization (when muscular power was essential for operating machinery) have led to expectations that gender stereotypes in the realm of technology would gradually fade. For instance, computers are ostensibly gender-neutral, meaning they do not differentiate between male and female users (Tsaliki, 2000)

At the same time, technology aligns with roles traditionally associated with women, emphasizing precision and attention to detail—qualities often attributed to their nature. Moreover, tools like smartphones, which rely primarily on finger movements, are well-suited to such attributes. As German researcher Jochen Hörisch remarked, *"If we take a closer look, we'll find that we don't use our mobile phones with our entire hands but with our fingers. Thus, it makes perfect sense to call our current era the 'Digital Era.' By tracing the etymology of the word 'digit,' we find its Latin root, 'digitus,' meaning 'finger.'* (Hörisch, 2021)

The role of social interaction, such as chatting and engaging in conversations facilitated by social media platforms, has provided women with an extension of a natural activity. Similarly, the display of beauty, once confined to homes and social occasions, has now shifted to the realm of visual technologies offered by platforms like Instagram, where women find themselves active participants rather than passive followers.

Donna Haraway's proposition of the cyborg concept and her feminist interpretation of it raises profound questions about the relationship between women and communication technologies. This scholarly paper centers around the following primary question: **From a feminist perspective, how does the relationship between the cyborg and the technologies of the digital age take shape?**

according on this central question, we pose a series of sub-questions to deconstruct and

analyze the research topic:

- What is feminism, and how do its ideas intersect with technologies in the digital age?
- What is the cyborg, and why is its concept closely linked to feminism and its principles?
- Are there differences in the ways men and women establish relationships of influence and interaction with technology?
- Are technological achievements gendered in terms of their design, functionality, and usage?

Feminism: Concept and Technology

Feminism is an intellectual, political, and social movement that has continued to spread globally for decades. Despite its clear goals and defined slogans, the practical and theoretical approaches of the feminist movement have made it challenging for Western researchers to provide a precise definition. Feminist writer Bell Hooks emphasizes this challenge, stating:

"A central problem in feminist discourse is our inability to reach a consensus on the meaning of feminism or to accept definitions that represent points of agreement among us. Without agreed-upon definitions, we lack the solid foundation necessary to theorize or even engage in a meaningful and comprehensive project." (الخریف, 2016)

The **Arab Sociological Encyclopedia** defines feminism as any movement, analysis, or individual or collective approach that revolves around the oppression or exploitation women have faced in the past or are currently experiencing (نخبة من علماء العرب, 2010)

Feminism is based on the belief that women are not treated equally solely because they are women, in societies organized and prioritized according to male perspectives and interests. Within this patriarchal framework, women are defined as everything that does not characterize men or everything men reject for themselves. Men are associated with strength, while women are associated with weakness; men with rationality, and women with emotion; men with action, and women with passivity (جامبل, 2002)

Feminism refers to the stance that women occupy a subordinate position compared to men in societies that categorize men and women into different economic or cultural roles. Feminism asserts that this injustice is neither permanent nor inevitable and that women can reshape the social, economic, and political systems through collective action. Thus, the ultimate goal of the feminist endeavor is to change the status of women in society.

The notion that men can adopt a feminist stance is, however, contentious. For instance, Tania Modleski distinguishes between a man's contribution that involves analyzing male power structures and a contribution that speaks on behalf of women or from a woman's perspective. As Maggie Humm notes in the introduction to *Feminist Directions: Selected Essays* (1992), feminism is a culturally and historically multifaceted movement. Its objectives have garnered support worldwide, and its effectiveness can be evaluated by examining feminist discourse and its penetration into everyday thought (جامبل, 2002)

Over time, feminism has evolved into a politically and intellectually organized movement. Supported by political systems in the West, it has attracted a significant number of sociologists, psychologists, and media scholars. In these fields, books and studies have emerged, forming a body of feminist literature through which researchers can analyze feminism's intellectual, psychological, behavioral, and even pathological components in some cases (بدر, 2009)

This perspective associates women everywhere with negativity, denying them the right to participate in public life or contribute equally with men in cultural fields. Therefore, feminism can be seen as a movement that strives to change these conditions to achieve the absent equality (جامبل, 2002)

When it comes to feminism and technology, the feminist approach to technology has always been a contentious issue. In her book *Feminism and the Technological Fix* (1994), Carol A. Stabile argues that feminist reactions in this regard fall into two main camps:

1. **The Feminist Camp Influenced by Essentialist or Environmentalist Perspectives:**
2. This camp tends to strongly reject technology, viewing it as a force that entrenches the separation of women from nature. It argues that technology is patriarchal at its core, replacing the principle of working in harmony with nature with a male-dominated principle of control and domination.
3. **The Pro-Technology Feminist Camp:**
4. Conversely, the pro-technology camp, as described by Stabile, sees the opposite as true. This perspective considers technology as offering utopian possibilities for women, including liberation from rigid, gender-based identities (whether male or female).

In 1970, the American feminist Shulamith Firestone published her book *The Dialectic of Sex*, in which she enthusiastically predicted a future where technological advancements could free women from the burden of childbearing (2002, جامبل).

2. The Concept of the Cyborg:

The concept of the cyborg, or cybernetic organisms, refers to a hybrid of machine and organism—a being that is part social reality and part imagination. The social reality represents the social relationships we live within, forming the most significant political structure, while imagination envisions changing the world. The cyborg represents both a fantastical and lived experience. According to Donna Haraway, the cyborg is a site where the boundaries between organism and machine, and other dualities, are blurred (2015, روتا).

The term "cyborg" is derived from the English words *cybernetic* and *organism*, and was coined by NASA researcher Manfred Clynes in 1960. However, the idea of cybernetic beings appeared decades earlier in science fiction literature. These beings range from humans who have replaced body parts with artificial components to humanoid robots covered with a thin layer of skin, as depicted in the *Terminator* film series.

Donna Haraway suggests that, to some extent, we are all cyborgs. She developed an ontology based on the concept of cybernetic beings, which challenges traditional boundaries associated with the body. Haraway's perspective highlights the systematic erosion of these boundaries, emphasizing the collapse of conventional dichotomies related to the human body (2002, جامبل).

Donna Haraway is a scholar and cultural philosopher who studied English literature, philosophy, and biology. By combining the humanities and natural sciences, she developed a distinctive tone evident in all her subsequent works, which she describes as "speculative critical fiction." Her doctoral research in philosophy focused on the history of science and biology, forming the foundation of her first book, *Crystals, Fabrics, and Fields: Metaphors of Organicism in Twentieth-Century Developmental Biology*.

The work that brought her widespread recognition, however, was her essay *A Cyborg Manifesto* (1985), in which she introduced the concept of the cyborg—a being that is part organic and part technological. She framed the cyborg as a model for postmodernist thought, systematically dismantling boundaries between nature and culture. Haraway argues that, in a nearly literal sense, we are all cyborgs because of our inextricable dependence on technological networks.

Moreover, she contends that we have reached an epistemological impasse where no single truth represents a comprehensive whole. The cyborg, therefore, symbolizes a playful amalgamation of contradictory ideas, characterized by ironic paradoxes and neutral meanings. While the cyborg does not replace dualism with unity, it easily navigates boundaries and contradictions. This offers a liberating potential for women, who are often

relegated to the position of "other" or subordinate within patriarchal dualistic thought. At times, *A Cyborg Manifesto*, which cemented Haraway's association with a feminist critique of technology, has been misinterpreted as a direct celebration of technology. In reality, Haraway seeks to highlight that while it is necessary to critically engage with technological and scientific claims, we cannot claim to adopt an entirely neutral and detached stance, as we are enmeshed within these networks. Therefore, criticism itself cannot be entirely pure.

In her later work, *Modest_WitnessSecond_Millennium* (1997), the cyborg evolves into the trademarked figure of "Oncomouse," representing not only the visible impact of technology on nature but also symbolizing the entanglement of technological sciences within capitalist practices (2002, جامبل).

In her *Cyborg Manifesto* (1985), Donna Haraway states that we live in a world of cyborgs—meaning a world of electronic communication—where the distinction between the artificial and the natural is no longer clear. *"Our machines... have become so extraordinarily vital that it is disturbing, while we have grown lazy and sluggish in a terrifying way."* The term thus refers to the blurring of boundaries and raises questions about the assumption of a singular self.

Not long ago, Haraway introduced the idea of the hybrid cyborg, representing a world where no one can escape the influence of technology (Gamble, 2002, p. 498).

The cyborg, or the augmented human, means vastly different things from a feminist perspective. In her essay *A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the 1980s*, Haraway treats the cyborg as a metaphor for new political alliances and coalitions. She opposed older ideas that technology was inherently biased towards men, which only reinforced gender inequalities. Instead, she argued that the cyborg, in its ambiguous human-machine form, could function as its own classificatory system—one that does not easily fit into the traditional dualities of human/machine or nature/machine. The cyborg confuses classifications because it contains many forms and disturbs identities, as it "includes" multiple identities: male/female, human/machine, white/non-white. Therefore, the cyborg is a politically potent image—a new form of politics—one that rejects binary identities advocated by proponents of essentialism and seeks to embrace multiple identities. Since women have traditionally been reduced to body/material (while men are associated with "mind"), the cyborg's new body disrupts these categories, fragmenting the category of "woman" itself. The cyborg also breaks the barrier between self (emotional humans) and "the other" (the machine). The cyborg represents a new turn in gender and the inevitability of identity. Haraway's theoretical concept of the cyborg and her feminist lens have inspired new readings of cyberspace and electronic technologies, grounded in gender.

Another important metaphor in this analysis is the metaphor of weaving. Mary Daly, in her book *Gyn/Ecology* (1978), was the first to use the image of weaving to describe and define feminine creativity. Daly suggested that both spiders and women weave networks of communication among themselves. Women and nature are connected through these networks. Daly writes in a notably evocative text: *"There is a crucial difference between the creative weaving of old women and the fabricated combinations—what is the inorganic assemblage of things that represents the 'genius' of male art, technology, and professionalism."*

One cannot also speak of the contrast between the creative deconstruction of knots done by old women and the violent, destructive male/feminine tearing apart of the networks of nature (pramod k, 2019)

From Daly's perspective, weaving signifies an alternative mode of thinking, epistemology, and creativity.

Building on Daly's work, British feminist theorist Sadie Plant began interpreting cyberspace as a "weaving" in her significant article *The Future Looms: Women Weavers and Electronic Control* (1995), where she explores several goals through the metaphor of weaving.

First: It is closely tied to the image of the "World Wide Web" (WWW), understood as a network of interconnected points.

Second: It builds upon the traditional stereotype of weaving as women's work ("weaving always intersects with the question of female identity," Plant 1995: 56). However, in electronic cultures, this image is extended to include connection and community-building among women. It suggests that a woven network is an act of "agency," where women consciously connect to affirm their subjectivity and identity.

Third: In stark contrast to patriarchal male visions of cyberspace, which are metaphorically portrayed as a "new frontier" awaiting conquest, and a "new territory" to be explored (again, a traditional image of male domination and control over the "virgin" natural landscape), the feminist metaphor of "weaving" suggests connection, mutual reliance, and community. Weaving, as an innate strategy for women, signifies reciprocity—where the network amplifies society rather than amplifying male exploration.

Finally: Weaving implies a parallel between handicrafts and electronic control technologies. From the poetic arts of women's woven crafts to the high-speed electronic control networks created by and linking women, this image assumes an alliance between art and technology—an "artistic style" in the true sense of the word, but one that enables women's agency.

Clearly, both Haraway's and Plant's views on electronic technologies are concerned with women's agency and empowerment. By focusing on power, identity, and agency, feminist studies of cyberspace explore the "material" (or "real"), "symbolic" (representations), and "virtual" (cyberspace) worlds without privileging one over the other. Avoiding material conditions in which women work with new technologies—such as gender-based labor division or exploitative industrial institutions in the global south—at the expense of celebrating fluid identities in cyberspace misses a crucial point: that, regardless of online work, women continue to live in exploitative and unjust conditions (pramod k, 2019)

This feminist discussion of the cyborg leads us into the topic of **Cyberfeminism** and feminism in the age of computers, a concept defined by Sadie Plant as a rebellion against products and materials of patriarchal origin, rooted in the connections that bind women to one another, women to computers, computers to communication links, and communication links to communication devices. This definition unveils the utopian idea behind the concept of feminism in the computer age, which asserts that technology is not inherently hostile to women and that women must take control of new information systems. Plant believes that information technology is always aligned with women. In her book *Zeros and Ones* (1997), she traces the hidden history of women's roles in developing computers and their programs, from Ada Lovelace to Captain Grace Hopper—chief programmer of the U.S. Army's Mark I computer project during World War II.

However, some feminists, like Rosi Braidotti, take a slightly different view in the context of feminism. She does not share Plant's belief in the traditional participation of women in the world of information technology but argues in *Feminism in the Age of Computers in a Different Way* that women's involvement in the development of computer technologies is now essential, at least to ensure that women do not use video game joysticks to perpetuate a male-centered mindset under the guise of plurality.

The feminist project in the age of computers is not monolithic. It spans from the individualistic, performative trends of *webgrrrls* or *cybergrrrls* to the more complex postmodern theories of academics like Donna Haraway. Computer feminism today

addresses numerous issues, such as the need to balance consistent political priorities with the utopian vision of a feminist cyberspace. The diversity of resources and feminist communication networks today indicates a growing female presence in the computer world, although it remains unclear whether this will lead to productive alliances and practical strategies in the real world, beyond the computer screen (2002, جامبل)

Information and communication technologies are also gendered technologies. From the roles of women entrepreneurs in software engineering to gender-based terms in cyberspace (such as the word *matrix*, derived from the Latin word *mater*, meaning "mother") and the design of interactive interfaces in Windows (the "desktop," not the "kitchen" or "home"), contemporary feminist readings of the digital age offer a new dimension to these emerging technologies. Feminist cultural theory has remained both captivated by and critical of the perspectives brought about by the digital revolution.

The changes in time and space, the potential for community building, the hope for "freedom" in cyberspace, new forms of identity and surveillance, and the threats of harassment and exploitation are all features of new technologies that have tangible material consequences for women (pramod k, 2019)

The Feminist Embodiment and Technology Issue:

Does cyberspace free women from their bodies? Does the ability to adopt multiple and different identities mean that the issues of embodiment in real life—such as oppression, harassment, exploitation, and pain—are resolved in cyberspace? While writings that celebrate the culture of cyberspace often embrace disembodiment as an escape, women who see liberation, equal rights, safety, and identity as "embodied" in the literal sense view this retreat into "virtual" bodies and "digital" identities as highly problematic.

Representations of gender, sexuality, and embodiment in electronic cultures are fraught with contradictions, which are fundamentally linked to the fascination with issues of enhanced bodies, their identities, their reproduction, and the aversion to these issues. Science fiction narratives distinguish technology as a means to either amplify the body or escape from it. However, there are also concerns about technology—concerns that are often displaced onto women, especially concerning the twin subjects of motherhood and reproduction. We are dealing here with "representations" of electronic cultures and technology as gendered institutions.

Bodies are the initial points of interaction with any technological achievement, whether adjusting to an escalator or learning how to use a video game controller. Identities begin with the body. This means that the study of any role or impact of technology must begin with how bodies interact with technological tools. When social, material, and cultural contexts are transformed into a digital format, the bodies integrated into these contexts are also transformed in significant ways.

No discussion of feminism and technology can avoid the topic of **Cyberpunk**, a term derived from "Cyber" and "punk," meaning a rebellious, anti-social attitude, primarily used to refer to a genre of stark science fiction that highlights the interaction between organic beings and technological devices. However, in any discussion of feminism, bullying, and the computer age, there is a distinction between the concept of women as characters and the concept of women as products. Female characters are an integral part of rebellious fiction in the computer age, yet they carry inherent contradictions. The first example in this genre is the character "Molly Millions" in William Gibson's first novel from 1984, where Molly is depicted as a strong, merciless, violent, and independent character, who can be seen as a positive female model. At the same time, however, she is designed to appeal to male readers in a subtle way.

However, female writers have addressed this genre boldly. Writers like Gwyneth Jones, Pat

Cadigan, and Melissa Scott, for example, use the idea of cyberpunk as a tool to question the roles assigned to women in technological society ((جامبل, 2002))

Cyberpunk represents an adaptation of electronic technologies with a countercultural character. However, despite its opposition, mainstream cyberpunk retains gender biases and patriarchal ideologies inherent in science fiction narratives and technological discourse. Feminist writers such as Pat Cadigan and Marge Piercy are rewriting cyberpunk from a feminist perspective. A key feature of this rewriting is the rejection of viewing the computer age and its technologies as merely liberating. Feminist cyberpunk sees a genuine connection between electronic culture, technology, capitalism, and patriarchy. From this viewpoint, electronic culture is the product of a financial system, technology, labor, and cultural stereotyping marked by inequality, where:

- Women's contributions are either ignored or undervalued.
- The focus on intellect and scientific nature disregards emotional responses to technology and relationships with it.
- The female body is still depicted as a sexual object for male consumption.
- Women's relationships with technology are never seen as central.

Feminist cyberpunk critiques these critical aspects of information and communication technologies. It assumes that the excessive focus on hacking and the abandonment of labor represents a male desire for power and control, this time through electronic circuits and computers. Thus, feminist cyberpunk seeks to create and adapt women's contributions to information and communication technologies.

1. **Feminist cyberpunk seeks greater inclusivity in its demographic dimensions.** Therefore, it calls for more representation of people of color, people with disabilities, and queer individuals—groups that, as they argue, have been marginalized in mainstream cyberpunk.
2. **Feminist cyberpunk views technology as rooted in a specific social and cultural context.** Information and communication technologies emerge in an era of globalization, transnational labor, and financial flows. The "networked world" is, more often than not, a "First World" phenomenon. Access to such technologies remains limited for people of color, even in the First World.
3. **Feminist cyberpunk redefines technology according to "its use."** It includes magic, spirituality, and emotions as equally important responses and images of how technology is adapted. For instance, Pat Cadigan's imaginative narrative translates cyberspace and its inherent features into a semi-mystical magical realm.
4. **Feminist cyberpunk problematizes the "alien" theme** commonly found in mainstream science fiction and cyberpunk. From a feminist theoretical perspective, feminist cyberpunk views women, people of color, and queers as always "the other." The concept of the alien, both in literary and cyberspace terms, reflects the daily life "truths" that these groups are always foreign to white cultures or from their perspective. In feminist cyberpunk, the cyborg alerts us to the socially constructed nature of categories like human, animal, and machine. Social and cultural discourses and facts are assumed to construct and reinforce certain categories as dominant, while others are constructed as subordinate and negative. Therefore, the cyborg identity of those who cross gender, racial, or ethnic boundaries represents a source of liberation from these classifications.
5. **For feminist cyberpunk writers like Cadigan, Piercy, and Melissa Scott,** the issue of bodily transcendence in cyberpunk is central to their critique. From the viewpoint of women (both white and women of color), the body remains central to systems of exploitation and freedom. Again, the transcendence of the body privileges the mind over

matter, a stereotypical concept that has been gendered since the early modern period (with the male as "mind" and the female as "matter"). Therefore, the escape from the body is a "male" fantasy, seeking a world of "pure" consciousness, while from the woman's perspective, the body is the center of the search for identity and liberation. Thus, feminist cyberpunk sees computers, information and communication technologies, and body modification technologies—not as a means of escaping embodiment but as an amplification and re-establishment of the body. Liberation must advance from the body, and the body must be considered. Denying the body in favor of the mind means deliberately ignoring the fact that material lives live through the body. This is particularly true in the case of women of color, where the body takes on a racial and gendered social character, and subjectivity is fully "emerged" from the body. Thus, for black women, "cyberspace grounds the black body's subjectivity in technology." It is necessary to feel the technology itself, either as a black female body or through a black female body (pramod k, 2019)

Conclusion

Gradually, the gap between women and men in computer usage and expertise is narrowing. The cyborg has become an extension of both the machine for women and men, and topics that were once considered male domains—whether in terms of study, profession, development, or even consumption—are now being embraced by women as well. Video games, once predominantly male territory and considered a boys' culture, now attract increasing numbers of female players, including those engaging in competitive games. The use of smartphones as a technological medium to take social, economic, or even political initiative is now equally available to women as it is to men. The cyborg has thus become a unifying figure of the male/female binary, just as it has unified the human/machine duality. It has drawn new contours for women's presence in cyberspace. The blurring of the boundaries between human and machine has led—and continues to lead—to the dissolution of the gender divide between male and female.

Bibliography

- Hörisch, J. (2021, may 23). "Wir entwickeln ein gestörtes Verhältnis zur Körperlichkeit". (W. Husmann, Interviewer)
- pramod k, n. (2019). *An Introduction to New Media and Cybercultures*. (ج. أ. علي, Trans.) المملكة المتحدة: هنداي.
- Tsaliki, L. (2000). In s. gamble, *the rootledge critical dictionary of feminism and postfeminism* (pp. 127-144). new york: rootledge.
- الرياض: باحثات لدراسات المرأة مفهوم النسوية دراسات نقدية في ضوء الإسلام. (2016). الخريف, أ. ب.
- دمشق: دار الفكر. الأسرة في الغرب أسباب تغيير مفهومها ووظيفتها - دراسة نقدية تحليلية (2009). بدر, خ. ك.
- (p. 127) /النسوية وما بعد النسوية دراسات ومعجم نقدي. س. جامبل. In المرأة والتكنولوجيا الجديدة. (2002). تساليكي, ل. القاهرة: المجلس الأعلى للثقافة.
- القاهرة: المجلس الأعلى للثقافة. (Trans. أ. الشامي). (1 ed.) /النسوية وما بعد النسوية. (2002). جامبل, س.

54-55. /ختبار. عدسات السايبورج: التكنولوجيا والتجسيد. (مارس, 2015). روتا, ف. ر

. دار العالم العربي. الموسوعة العربية لعلم الاجتماع. (2010). نخبة من علماء العرب, ن. م