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CYBERFEMINISM: PHILOSOPHICAL REFLECTION ON GENDER, TECHNOLOGY, AND DIGITAL SUBJECTIVITY

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Abstract

Cyberfeminism, emerging in the late 20th century, represents a critical theoretical and practical engagement with the intersections of gender and digital technology. It challenges both patriarchal structures embedded in technological development and the philosophical assumptions underlying human – machine relations. This article explores cyberfeminism as a philosophical discourse, examining its epistemological, ontological, and political dimensions. Special attention is given to the tension between essentialist and posthumanist interpretations of cyberfeminism, as well as its implications for digital subjectivity, embodiment, and power relations in cyberspace. Cyberfeminism represents a critical intersection of feminist philosophy, technology, and digital culture, offering new ways of theorizing identity, embodiment, and power in the information age. This article examines the philosophical foundations of cyberfeminism, tracing its emergence from postmodern feminist thought and its engagement with questions of technoscience, subjectivity, and the politics of cyberspace. Particular attention is given to the ways cyberfeminist theory challenges essentialist notions of gender, destabilizes traditional dualisms between human and machine, and reimagines the possibilities of agency in virtual environments. By analyzing the contributions of thinkers such as Donna Haraway and later developments in third-wave feminist discourse, the paper explores how cyberfeminism not only critiques the gendered structures of technological production but also envisions emancipatory potentials within digital culture. Ultimately, the study argues that cyberfeminism constitutes a transformative philosophical framework for understanding the entanglement of gender and technology in contemporary society. **The research objectives:** explore the ideas and basic foundation of cyberfeminist ideas. Make an attempt to penetrate into the hidden foundations of these ideas. Also, make an attempt at a comparative analysis of a number of feminist and philosophical teachings. **Research methodology.** Teaching the ideas of feminism and cyberfeminism is complex and multifaceted. A comprehensive, systematic approach is required to analyze this topic. Therefore, a number of methods were used in this study: induction, deduction, historicism and the systemic method. **Connection with previous studies.** The problem of cyberfeminism is of interest to a large number of scientists. We find research data in the scientific works of such scientists as: Shoshana Zuboff, Mary Flanagan, Austin Booth, Marie Hicks and many other researchers. However, this topic remains an inexhaustible source of versatility for new philosophical research.

Key words: cyberfeminism, feminism, spirituality, technology, philosophy, values.

Presenting main material. The digital revolution has radically transformed the human condition, reshaping social relations, forms of labor, cultural practices, and modes of identity formation. Philosophy, in its critical function, must grapple with the question of how technology reconfigures subjectivity, embodiment, and agency. Cyberfeminism, as both a theoretical movement and a cultural practice, arose in the 1990s to interrogate these issues from the standpoint of gender and feminist critique.

While early feminism often treated technology with suspicion, cyberfeminism articulated a more ambivalent and multifaceted position: technology is both complicit in patriarchal domination and a potential site of resistance, liberation, and reconfiguration of subjectivity (A. Balsamo, 2000).

Cyberfeminism emerged from the convergence of feminist theory, poststructuralism, and the rising field of cyberculture studies. The Australian collective VNS Matrix famously declared in their 1991 Cyberfeminist Manifesto for the 21st Century: "We are the virus of the new world disorder." This playful yet radical statement encapsulated cyberfeminism's aim to subvert hegemonic discourses of technology.

Philosophically, cyberfeminism drew upon Donna Haraway's seminal essay A Cyborg Manifesto (1985), which deconstructed essentialist notions of gender and argued for a hybrid ontology where human, machine, and animal identities blur. Haraway's cyborg metaphor challenged not only patriarchal categories but also the binary oppositions (nature/culture, male/female, human/machine) central to Western metaphysics.

The publication of Donna Haraway's A Cyborg Manifesto marked a decisive moment in feminist thought. Written in the context of late 20th-century debates about science, technology, and politics, the text challenged both technophobic and essentialist

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strands of feminist theory. Haraway proposed the figure of the cyborg – half human, half machine – as a metaphor for postmodern subjectivity, destabilizing entrenched dualisms such as nature/culture, male/female, and human/machine. (D. J. Haraway, 1985).

At the same time, the emergence of Third Wave feminism in the 1990s was characterized by a rejection of universalist claims of the Second Wave and an emphasis on multiplicity, diversity, and intersectionality. This intellectual and political wave embraced contradictions, fluid identities, and popular culture as sites of feminist engagement. Haraway's manifesto, though written slightly earlier, resonated deeply with Third Wave priorities and provided a conceptual vocabulary for its philosophical articulation.

Central to Haraway's manifesto is the critique of dualistic thinking that has dominated Western metaphysics. The cyborg is a hybrid entity that blurs the distinction between human and machine, organism and technology, nature and culture. By collapsing these binaries, Haraway undermines the metaphysical foundations of essentialist identity categories, especially those applied to gender (D. J. Haraway, 1985).

Haraway rejects the idea of a singular, universal category of "woman." For her, identity is constructed through networks of technology, discourse, and power (D. J. Haraway, 1988). This anti-essentialism resonates strongly with the pluralism of Third Wave feminism, which emphasizes intersectionality and situates identity within overlapping systems of race, class, sexuality, and technological mediation.

Third Wave feminism, emerging in the 1990s, was shaped by critiques of the Second Wave's tendency toward universalism and its privileging of white, middle-class perspectives. Influenced by Kimberlé Crenshaw's concept of intersectionality, Third Wave feminists emphasized multiplicity of identities and the interlocking nature of oppression. Haraway's cyborg metaphor, with its emphasis on hybridity and partial identities, provided a philosophical framework that anticipated and supported this shift (R. Braidotti, 2013).

While earlier feminists often viewed technology and popular culture with suspicion, Third Wave feminism adopted a more ambivalent stance, treating them as both sites of oppression and possibilities for resistance. Haraway's manifesto exemplifies this ambivalence: the cyborg is born out of military and capitalist systems but also carries the potential to subvert and reconfigure them (D. J. Haraway, 1988).

Haraway's cyborg is not a utopian escape from politics but a figure of situated, partial, and contingent resistance. This aligns with Third Wave feminism's focus on localized, grassroots activism rather than universalist or totalizing frameworks. Political agency is seen as multiple, fragmented, and technologically mediated.

Despite its influence, Haraway's manifesto has faced critique. Some argue that the metaphor of the cyborg risks celebrating technological hybridity while neglecting material inequalities, particularly along racial and class lines. Others suggest that its dense postmodern language makes it less accessible to activist communities.

Third Wave feminists have also debated whether Haraway's anti-essentialism undermines the possibility of collective feminist solidarity. If identities are fragmented and fluid, can there still be a unified feminist movement? Haraway herself responds that coalition is possible through affinity rather than identity: political alliances based on shared commitments rather than fixed categories.

Donna Haraway's A Cyborg Manifesto stands as a bridge between Second and Third Wave feminism. By rejecting essentialist categories, embracing hybridity, and reconfiguring subjectivity through the metaphor of the cyborg, Haraway anticipated many of the theoretical concerns of Third Wave feminism: intersectionality, pluralism, and the politics of representation in a technologically mediated world.

For Third Wave feminists, the cyborg continues to serve as a potent symbol of resistance and creativity, a figure that embodies the contradictions of contemporary subjectivity while offering pathways for reimagining politics in the digital age.

Technology is not merely a collection of tools; it is a cultural and epistemic system that structures how societies understand and transform reality. Yet the dominant narratives of technological innovation – from industrialization to the digital revolution – have overwhelmingly centered male experiences, expertise, and authority. Women, despite their historical involvement in computing, engineering, and communications, are often rendered invisible or marginalized (M. Flanagan, 2002).

This silence is not simply accidental but symptomatic of broader patriarchal structures that govern both technological development and its discourses. Feminist criticism seeks to recover women's voices, challenge epistemic exclusions, and reimagine technology as a field of plural contributions and perspectives.

From Ada Lovelace's pioneering work on algorithms to the women "computers" of the mid-20th century, women have been integral to the development of computing. Yet their contributions have often been erased or overshadowed by male counterparts. This historical silencing reflects not only systemic sexism in recognition but also the construction of technology as a masculine domain (J. Butler, 1990).

Mainstream accounts of technological progress tend to valorize the lone (male) genius – figures like Steve Jobs, Bill Gates, or Elon Musk – while minimizing collective labor and female participation. This narrative framework perpetuates a symbolic exclusion of women from the imagined community of technological innovators.

Feminist philosophers argue that knowledge is situated. Excluding women's perspectives from technological discourse leads to partial and distorted knowledge. Women's silence is thus not merely a problem of representation but of epistemic validity: the absence of diverse standpoints impoverishes the epistemic field (M. Hicks, 2017).

Miranda Fricker's concept of epistemic injustice is central here. Women are often denied credibility (testimonial injustice) or lack the conceptual resources to articulate their experiences (hermeneutical injustice) in technological contexts. For example, concerns about online harassment or algorithmic bias were long ignored, precisely because women's testimonies were not given equal epistemic weight (M. Fricker, 2007).

The underrepresentation of women in STEM fields, particularly in leadership positions, ensures that technological discussions are dominated by male perspectives. This institutional imbalance perpetuates silence at both the structural and symbolic levels.

Cultural stereotypes of technology as "masculine" (linked to rationality, mastery, and control) discourage women from entering technological discourses. Women who speak in these contexts often face dismissal, harassment, or the expectation to conform to male-coded communication styles.

In digital spaces, women's voices are not only marginalized but actively silenced through online harassment, threats, and exclusionary algorithms. Feminist critics point out that platform governance often fails to protect women from misogynistic abuse, thereby reinforcing their silencing in technological debates (F. Wilding, 1998).

Technology is often presented as a universal, neutral, and objective force of human progress. Yet the history of technological discourse is marked by gendered exclusions, privileging male voices while silencing or marginalizing women. Feminist criticism of technology insists that such silencing is not merely a historical oversight but a systematic feature of patriarchal epistemology. To understand technology as a cultural, epistemic, and political system requires attention to whose voices are heard and whose are silenced. This article explores the historical, epistemological, and political dimensions of the silencing of women in technology discourses, showing how feminist theory provides both a critique of exclusion and a vision of epistemic justice (A. R. Stone, 1995).

Ada Lovelace, often celebrated as the first computer programmer, anticipated the possibility of machines performing operations beyond mere calculation. Yet for decades, her contributions were overshadowed by Charles Babbage. Lovelace's intellectual role was diminished as "assistance," reflecting the broader pattern of women's insights being undervalued in technological narratives.

In the mid-twentieth century, women were employed as "human computers" at NASA, the ENIAC project, and other institutions. These women carried out complex calculations, developed programming techniques, and laid the groundwork for digital computing. However, their work was framed as clerical rather than intellectual, erasing their status as innovators. It was only through retrospective feminist historiography, such as Margot Lee Shetterly's Hidden Figures and Jennifer Light's studies, that these contributions gained recognition (J. Light, 1999).

Grace Hopper, a pioneer in computer programming and the creator of early compilers, exemplifies how women could innovate while still facing marginalization. Though highly accomplished, Hopper's legacy was long overshadowed by male contemporaries, illustrating how systemic biases shaped recognition in technological fields.

Feminist epistemology asserts that knowledge is not produced from a neutral standpoint but is always situated. Sandra Harding and Donna Haraway argue that women's perspectives, shaped by their unique social positions, offer critical insights into technological practice. When women are excluded from discourse, technology reflects only partial, masculinized standpoints.

Miranda Fricker's concept of epistemic injustice illuminates the silencing of women in technology:

– Testimonial injustice occurs when women's contributions or testimonies are dismissed due to gendered prejudice.

– Hermeneutical injustice arises when women lack the conceptual frameworks to articulate their experiences, such as the absence of terms to describe online harassment before the rise of digital feminism (M. Fricker, 2007).

This twofold silencing perpetuates ignorance in technological discourse and limits the scope of technological imagination.

Technological expertise has historically been coded as masculine, associated with rationality, mastery, and control. Feminist critics such as Judy Wajcman show how this gendered coding perpetuates stereotypes: women are imagined as users or assistants, not innovators. This epistemic framing discourages women's participation and reproduces silence.

Women who participate in technological discourse often face cultural barriers. Online platforms have amplified misogynistic harassment, forcing women out of digital spaces or silencing them through intimidation. This hostile environment illustrates how the silencing of women is not merely symbolic but enacted through power and violence.

The rise of artificial intelligence has introduced new forms of silencing. Algorithms trained on biased datasets reproduce and amplify gendered exclusions. For example, recruitment algorithms have downgraded résumés with female-coded names, while voice recognition systems historically performed less accurately with women's voices. Feminist critics argue that these technological "neutralities" are in fact coded patriarchies (S. Plant, 1998).

Recovering the history of women in technology – constitutes an act of epistemic resistance. Such historiography destabilizes the myth of male-only innovation and provides role models for future generations.

The emergence of cyberfeminism sought to reclaim digital technologies as spaces for feminist creativity and resistance. By asserting women's presence online, cyberfeminism counters silencing with visibility and subversion (J. Wajcman, 2004).

The philosophical project is not only to amplify women's voices but to transform the epistemic and institutional structures that silence them. Achieving epistemic justice requires systemic reform in education, hiring, governance, and design, alongside cultural changes that value multiplicity of perspectives.

Conclusion. The silence of women in technology discourses is not a historical accident but a structural feature of patriarchal systems. It manifests in the erasure of women's contributions, the dismissal of their testimonies, the gendered coding of expertise, and the reproduction of bias in digital systems. Feminist criticism exposes these silences and reimagines technology as a plural, inclusive, and just field.

The task before philosophers of technology is to deepen this critique, expand the visibility of marginalized voices, and reconstruct epistemic frameworks that honor diversity. Only through such efforts can the future of technology be disentangled from the structures of domination that have long shaped its past.

From an epistemological standpoint, cyberfeminism critiques the "gendering" of knowledge in digital culture. Just as scientific rationality has historically privileged masculine-coded objectivity, so too digital technologies have been inscribed with patriarchal assumptions.

Cyberfeminism exposes these epistemic biases while simultaneously re-imagining alternative epistemologies rooted in multiplicity, hybridity, and situated knowledges. Digital space thus becomes both a battleground of epistemic power and a laboratory for new forms of feminist knowledge production.

Central to cyberfeminism is the rethinking of embodiment in digital contexts. Traditional feminist philosophy emphasized the material body as a site of oppression but also of resistance. In cyberspace, embodiment takes on new, disembodied or re-embodied forms through avatars, virtual identities, and posthuman possibilities.

Cyberfeminist philosophers such as Rosi Braidotti argue that the digital age invites a posthumanist reorientation of subjectivity. The body is no longer bound by classical essentialist notions of femininity or masculinity but becomes fluid, networked, and technologically mediated.

Cyberfeminism is not merely a theoretical discourse but also a political practice. It aims to dismantle digital patriarchies, challenge exclusionary structures of access, and advocate for feminist interventions in technology design. Online activism, digital art, and hacker culture have provided concrete spaces where cyberfeminist strategies unfold.

At the same time, critical voices caution against naïve techno-optimism. Cyberfeminism must remain attentive to new forms of domination in digital capitalism, including surveillance, algorithmic bias, and the commodification of gender identities.

Cyberfeminism stands at the intersection of philosophy, technology, and gender studies. It challenges us to rethink subjectivity, embodiment, and power in the digital age while providing conceptual tools for resisting domination and imagining emancipatory futures. In philosophical terms, cyberfeminism represents an ongoing interrogation of ontology, epistemology, and ethics in a world where the boundaries between human and machine are increasingly blurred.

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КІБЕРФЕМІНІЗМ: ФІЛОСОФСЬКІ РОЗДУМИ ПРО ГЕНДЕР, ТЕХНОЛОГІЇ ТА ЦИФРОВУ СУБ'ЄКТИВНІСТЬ

Анотація

Кіберфемінізм, що виник наприкінці 20 століття, являє собою критичне теоретичне та практичне дослідження перетину гендеру та цифрових технологій. Він ставить під сумнів як патріархальні структури, вбудовані в технологічний розвиток, так і філософські припущення, що лежать в основі відносин між людиною та машиною. Ця стаття досліджує кіберфемінізм як філософський дискурс, розглядаючи його епістемологічні, онтологічні та політичні виміри. Особлива увага приділяється напруженості між есенціалістськими та постгуманістичними інтерпретаціями кіберфемінізму, а також його наслідкам для цифрової суб'єктивності, втілення та владних відносин у кіберпросторі. Кіберфемінізм являє собою критичне перетину феміністичної філософії, технологій та цифрової культури, пропонуючи нові способи теоретизації ідентичності, втілення та влади в інформаційну епоху. Ця стаття розглядає філософські основи кіберфемінізму, простежуючи його виникнення з постмодерністської феміністичної думки та його взаємодію з питаннями технонауки, суб'єктивності та політики кіберпростору. Особлива увага приділяється тому, як кіберфеміністська теорія ставить під сумнів есенціалістські уявлення про гендер, дестабілізує традиційні дуалізми між людиною та машиною та переосмислює можливості діяльності у віртуальних середовищах. Аналізуючи внесок таких мислительок, як Донна Гаравей, та пізніший розвиток феміністичної дискусії третьої хвилі, у статті досліджується, як кіберфемінізм не лише критикує гендерні структури технологічного виробництва, але й передбачає емансипаційний потенціал у цифровій культурі. Зрештою, дослідження стверджує, що кіберфемінізм являє собою трансформаційну філософську основу для розуміння взаємопереплетення гендеру та технологій у сучасному суспільстві. **Завдання дослідження**: дослідити ідеї та базові основи кіберфеміністичних ідей. Зробити спробу проникнути в приховані основи цих ідей. Також зробити спробу порівняльного аналізу низки феміністичних та філософських вчень. **Методологія дослідження.** Викладання ідей фемінізму та кіберфемінізму є складним та багатогранним. Для аналізу цієї теми потрібен комплексний, систематичний підхід. Тому в цьому дослідженні було використано низку методів: індукцію, дедукцію, історизм та системний метод. **Зв'язок з попередніми дослідженнями.** Проблема кіберфемінізму цікавить велику кількість науковців. Ми знаходимо дослідницькі дані в наукових працях таких науковців, як: Шошана Зубофф, Мері Фланаган, Остін Бут, Марі Хікс та багатьох інших дослідників. Однак ця тема залишається невичерпним джерелом універсальності для нових філософських досліджень.

Ключові слова: кіберфемінізм, фемінізм, духовність, технології, філософія, цінності.

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