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Techno-Subjectivities: The Politics of Cyborg-Cyber Feminist Resistance in Annalee Newitz' *Autonomous*

Saadia Jawad Makhdum

PhD Scholar, Department of English Language and Literature, The University of Faisalabad. Email: sjmakhdum@gmail.com

Dr. Qasim Shafiq

Chairperson, Assistant Professor, Department of English, Baba Guru Nanak University, Nankana. Email: dr.qasimirza@gmail.com

Abstract

This article offers a critical reading of Annalee Newitz's *Autonomous* through cyborg and cyber feminism, focusing on the articulation of techno-subjectivities and their role in feminist resistance. By examining key female characters who embody hybrid identities—human, cyborg, and molecular biotechnologist—*Autonomous* exposes the entanglements of gender, technology, and power within contemporary bio-capitalist structures. The paper explores how the novel critiques the commodification of scientific knowledge and pharmaceutical monopolies while presenting female characters who enact subversive forms of agency through biotechnology and artificial intelligence. Drawing on theoretical insights from Donna Haraway and Sadie Plant, the analysis foregrounds the novel's challenge to traditional boundaries between human and machine, subject and object, and self and other. This study argues that *Autonomous* models a feminist politics of resistance through relational, techno-embodied subjectivities that actively critique, intervene, resist and destabilize systems of power—particularly bio-capitalism, patriarchy, and scientific hegemony—while envisioning more equitable techno-social futures.

Key Words: cyborg feminism, cyberfeminism, techno-subjectivity, feminist resistance, biotechnology, artificial intelligence, bio-capitalism, posthumanism, techno-social futures.

Introduction

Annalee Newitz's *Autonomous* opens a critical space in contemporary speculative fiction by interrogating the structural violence of biocapitalism through cyborg and cyberfeminist frameworks, while simultaneously advancing counter-narratives of feminist agency rooted in relational, hybrid, and technologically mediated subjectivities. The figures of Jack, Lyle, Frankie, and Medea Cohen offer varied trajectories of resistance that challenge essentialism and reconfigure the boundaries of human and machine, nature and artifice, labour and identity. *Autonomous* not only disrupts normative constructions of gender and power but also contributes to the evolving genealogy of feminist speculative fiction. It carves out narrative and theoretical space for imagining posthuman futures in which subjectivity is a site of contestation, coalition, and creative



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transformation—a vital gesture toward more just and inclusive techno-social worlds.

Autonomous constructs empowered feminist subjectivities through its portrayal of women not as victims of a techno-capitalist world but as active agents of resistance and transformation. Within the framework of feminist technocritique, the novel's female and feminized characters—Jack, Frankie, Lyle, and Medea Cohen, the autonomous female-coded robot—embody diverse iterations of posthuman agency that collectively destabilize normative constructions of gender, knowledge, and power. Each female figure enacts different facets of cyborg and cyberfeminist thought—whether through scientific expertise, bodily hybridity, or autonomous artificial life—challenging patriarchal and capitalist regimes that seek to control life, knowledge, and identity.

The novel follows characters like Jack, a pharmaceutical pirate and anti-patent activist; Jack's autonomous biohacking is both a literal and symbolic form of resistance against corporate control. Her ability to manipulate molecular biology situates her as a figure of Haraway's cyborg—a hybrid who resists dichotomies and performs subversion from within the apparatus of science. Her embodied knowledge, ethical commitment to justice, and refusal to submit to institutional authority enact a feminist technoscientific ethos that Haraway calls "situated knowledge." Jack reclaims scientific authority not as neutral or objective but as relational and accountable to lived realities of oppression. Lyle, a brilliant postdoctoral molecular biologist, and Frankie, a cutting-edge protein synthesizer, each navigate, resist, or exploit the biotech-dominated world in ways that foreground complex techno-subjectivities—offering alternative models of subjectivity that disrupt traditional binaries of labour, sexuality, and identity. The autonomous female-coded robot Medea Cohen, as a brilliant scientist is perhaps the most overtly posthuman character, yet she is deeply embedded in feminist traditions of resistance. Her evolution toward self-awareness, her defiance of ownership, and her capacity for affect and ethical reasoning resonate with both Haraway's and Plant's rejections of anthropocentric and patriarchal definitions of consciousness. She embodies a feminist future where machines are not tools of domination but agents of relational and political insurgency.

Together, Jack, Lyle, Frankie, and Medea Cohen form a constellation of posthuman feminist subjects whose identities and resistances take different shapes—pirate, scientist, thinker, machine. Through Haraway's and Plant's theories, we can read these characters not only as narrative figures but as feminist provocations—figures who resist containment by gender norms, disciplinary boundaries, or technological regimes. *Autonomous* is thus a speculative cartography of feminist techno-embodiment, where feminine subjectivity is always in process, always entangled, and always political. *Autonomous* empowers its female and feminized figures by allowing them to articulate techno-subjectivities that resist capitalist and patriarchal infrastructures. They do not reject technology but reconfigure it as a tool of liberation—claiming space in a domain traditionally dominated by masculine and colonial logics. Their resistance is not isolated or reactionary but networked, embodied, and speculative—pointing toward feminist futures built through solidarity, care, and creative subversion.



Research Questions

1. How does *Autonomous* articulate a feminist politics of resistance through its portrayal of hybrid, techno-subjective female characters?
2. How are notions of autonomy and agency reconfigured in *Autonomous* through posthuman and relational subjectivities that emerge within technoscientific entanglements?
3. How does *Autonomous* contribute to feminist speculative fiction and posthumanist literary discourse by imagining technologically mediated subjectivities?

Collectively, these questions reveal how *Autonomous* operates not merely as a speculative fiction but as a critical site for feminist inquiry into the nature of subjectivity, resistance, and embodiment in the posthuman age.

Significance of the Study

This study intervenes at the intersection of feminist theory, posthumanism, and social science by positioning *Autonomous* as a critical narrative that reimagines gender, power, and technology. It extends feminist literary critique through cyborg and cyberfeminist paradigms (Haraway, 1985; Plant, 1997), emphasizing hybrid, fluid techno-subjectivities beyond essentialist and anthropocentric frameworks. By engaging biopolitical critiques of neoliberal capitalist control—particularly pharmaceutical monopolies and the commodification of biotechnological life—it situates *Autonomous* within new critical discourses. The novel's distributed agency challenges binaries like human/machine and subject/object, reflecting on ethical governance and relational embodiment. Addressing intersectional identity—gender, race, and class—it aligns with social justice critiques in feminist posthumanism. *Autonomous* thus serves as a culturally and politically salient text, dramatizing the ethical stakes of scientific innovation and corporate governance while articulating alternative modalities of collective and embodied resistance.

This research enriches posthumanist and feminist social science scholarship by positioning *Autonomous* as a critical site where speculative fiction intersects with contemporary theoretical concerns. It demonstrates the novel's capacity to challenge and expand prevailing paradigms of subjectivity and power, thus offering valuable insights for academic audiences invested in the social, cultural, and ethical dimensions of technological transformation. This article contributes to posthuman literary studies by demonstrating how *Autonomous* constructs feminist techno-subjectivities that challenge traditional humanist categories of agency, identity, and knowledge. By foregrounding the hybrid, networked, and embodied resistances of its female characters, Newitz's novel exemplifies how speculative fiction can theorize new modes of being beyond binary thinking, offering vital insights for both posthuman literary studies and evolving feminist critique. It advances the field by insisting on the ethical potential of fiction as a method of theorizing posthuman subjectivity—not as an abstract philosophical ideal, but as a lived, situated, and politically potent condition.

In the present era, characterized by the proliferation of AI, biotech surveillance, and algorithmic governance, the novel's themes of autonomy, embodiment, and



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resistance acquire renewed urgency. *Autonomous* anticipates current debates around bodily sovereignty, datafication, and the commodification of health, making its feminist interventions especially relevant to contemporary digital and biomedical cultures. The work complicates the posthuman figure by embedding it within intersectional feminist critique, showing how race, gender, labour, and class intersect in the production of artificial and biotechnological life. It opens pathways for future scholarship to engage interdisciplinary perspectives such as Afro-futurism, trans-feminism, and disability studies.

Moreover, this study situates *Autonomous* within the broader tradition of feminist critique that not only exposes but actively subverts the structural inequalities embedded in scientific and technological regimes. By interrogating the entangled intersections of gender, power, and technoscience, the novel extends and deepens feminist discourse, offering a nuanced exploration of how speculative narratives can contest dominant paradigms and envision more equitable futures. Through female characters who embody both human and machine elements, the novel critiques patriarchal and capitalist systems that seek to constrain and define individuals based on rigid classifications.

It aligns with Haraway's concept of the cyborg., which serves as a metaphor for transcending traditional boundaries and embracing fluid, multifaceted identities (Haraway, 1991). It also reflects her call for "staying with the trouble"—remaining ethically entangled with the messiness of techno-life—and Plant's vision of women as embedded agents within digital infrastructures. Thus, the article not only contributes to literary studies but speaks to the larger feminist project of reclaiming agency, knowledge, and embodiment within contemporary technopolitical world. Furthermore, by integrating Haraway and Plant into a literary analysis, the article underscores the value of feminist technoscience studies in enriching posthuman discourse. *Autonomous* is not only an illustration of posthuman theory but a contribution to it—a narrative experiment in feminist resistance within a computational and biotechnological framework.

Autonomous resonates profoundly with current global challenges, particularly the pervasive influence of biocapitalism, the ethical dilemmas posed by artificial intelligence, and the complexities of bodily autonomy. The novel's depiction of a society where pharmaceutical monopolies dictate access to life-saving medications mirrors real-world concerns about healthcare accessibility and corporate control over essential resources. Furthermore, the portrayal of AI entities grappling with consciousness and agency invites reflection on our evolving relationship with intelligent machines and the moral considerations therein. The study gestures toward broader socio-political implications regarding AI personhood, bioethics, and technological governance, demonstrating the relevance of speculative fiction to contemporary ethical and legal discourses.

In the context of feminist posthumanism, the narrative underscores the necessity of re-evaluating traditional notions of identity, agency, and embodiment. This approach aligns with the novel's exploration of female characters who defy conventional categorizations, embodying hybrid identities that challenge established power structures. By foregrounding these issues, *Autonomous* invites readers to consider the broader consequences of technological progress and the importance of integrating feminist ethics into discussions of innovation and development.



Literature Review

The recent scholarly interest in feminist science fiction and posthuman literature has highlighted the genre's unique capacity to interrogate technological embodiment and gendered subjectivity. Scholars such as N. Katherine Hayles (1999) have argued that the posthuman condition redefines the boundaries of the self, displacing Enlightenment notions of autonomous subjectivity with more dispersed, technologically mediated identities. Hayles' insights into the interconnection between information and embodiment offer a foundation for examining the techno-performative identities in *Autonomous*.

Donna Haraway's foundational text, *A Cyborg Manifesto* (1991), continues to be a critical touchstone in feminist science studies and posthuman theory. Haraway posits the cyborg as a figure of boundary breakdowns—between human and machine, nature and culture, male and female. Scholars such as Anne Balsamo (1996) and Rosi Braidotti (2013) have further developed Haraway's cyborg imagery to reflect the lived realities of feminist technoscientific resistance in contemporary society. As Rosi Braidotti articulates, embracing a posthuman perspective entails recognizing the interconnectedness of all entities and the dissolution of hierarchical binaries (Braidotti, 2013). Sadie Plant's *Zeros + Ones* (1997) contributes a cyberfeminist framework that sees femininity as intrinsic to the logic of computation and digital culture. Her work underscores women's historical and systemic involvement with technological development, recasting them not as marginal but as foundational to the coded architectures of technopower. Recent studies in cyberfeminism, including the work of Cornelia Sollfrank and VNS Matrix, have revived interest in Plant's contributions, emphasizing the creative, resistant capacities of female-coded technological labour.

In literary studies, feminist readings of speculative fiction have emphasized the genre's power to envision alternative futures and reimagine embodied subjectivity. Scholars such as Sherryl Vint (2021) and Rebecca Holden (2006) have read biotechnological narratives as sites of feminist resistance, where control over the body and reproductive autonomy are contested through speculative modes. Budgeon (2023) discusses feminist approaches to embodied subjectivity. Fairchild (2023) explores multiverse concepts, feminist materialist relational time, and multiple futures as ways to reconfigure possibilities for qualitative inquiry.

Annalee Newitz's *Autonomous* has begun to receive attention in this critical milieu. Several scholars have examined *Autonomous* through various critical lenses, including gender and robotics (Demir, 2023), trans becoming Barry, J. (2023), transhumanist ethics (Al-Maamouri & Husain, 2025), and capitalist hegemony (Adani, 2024). However, a focused analysis that integrates Haraway's and Plant's feminist theoretical frameworks remains underdeveloped. This article seeks to fill that gap by offering a sustained, theoretically grounded reading of how *Autonomous* models posthuman feminist resistance.

Methodology

This article adopts a critical literary methodology grounded in feminist technocultural analysis. It performs close readings of characterization, narrative



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structure, and thematic motifs in *Autonomous* to unpack the novel's engagement with posthumanism, biotechnology, and feminist resistance. Emphasizing the theoretical frameworks of Donna Haraway's cyborg feminism and Sadie Plant's cyberfeminism, the analysis centers on how technological embodiment intersects with gendered identity and subversive agency in the posthuman context.

Rather than treating the novel as a passive reflection of sociotechnical anxieties, the analysis approaches it as an active site of technocultural imagination—a speculative narrative that reconfigures the relationship between human and machine, labour and knowledge, gender and power. Interdisciplinary in scope, the methodology draws from feminist science studies, digital theory, and posthumanist literary criticism to trace how female and feminized subjects navigate, reprogram, and resist biocapitalist regimes.

The primary textual analysis is complemented by a theoretical triangulation: Haraway's *A Cyborg Manifesto*, Plant's *Zeros + Ones*, and secondary feminist posthumanist texts are used to interpret the ways Newitz's characters enact techno-performative resistance. The characters are not merely vessels for theory, but narrative agents whose complex positionalities reflect and reimagine feminist futures in technologically saturated worlds.

Theoretical Framework

Donna Haraway's Cyborg Feminism

In *A Cyborg Manifesto*, Haraway offers the cyborg as a metaphor for the fragmented, hybrid, and boundary-crossing identities that emerge from the intertwining of organism and machine. Her cyborg resists the essentialist logics of gender, capitalism, and militarism, and instead calls for affinity-based politics that are situated, embodied, and techno-mediated. Haraway's rejection of dichotomies (self/other, male/female, nature/technology) is crucial for interpreting characters like Jack and Medea Cohen, who embody feminist resistance through their transgressive identities. Haraway's concept of "situated knowledges" further informs the reading of the female scientists of novel, whose epistemic agency is embedded in relational, ethical, and embodied practices. These characters are not detached rational subjects but materially entangled agents resisting the commodification of life and labour.

Sadie Plant's Cyberfeminism

Plant's *Zeros + Ones* reconceptualizes the relationship between women, machines, and digital culture. She positions femininity as inherently entangled with code, secrecy, and networks, viewing women not as excluded from technological systems but as embedded within them—as hackers, disruptors, and signal carriers. Cyberfeminism valorises informational multiplicity, nonlinear agency, and technological intimacy, providing a conceptual lense through which to analyze characters like Frankie and Lyle. Plant's vision of cyberfeminism refigures the female subject not as a victim of technopower but as a distributed intelligence capable of subversion from within digital systems. Through this lense, *Autonomous* becomes a narrative of feminist reprogramming—of characters rewriting both molecular and informational codes to resist patriarchal and capitalist norms.



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Analysis and Discussion

Annalee Newitz's *Autonomous* engages deeply with the interconnection of autonomy, artificial intelligence, and the ontological consequences of technological evolution. Framed within the critical paradigms of Donna Haraway's cyborg feminism and Sadie Plant's cyberfeminism, this analysis foregrounds the novel's articulation of techno-subjectivities that challenge patriarchal structures. By centering technologically mediated female and feminized figures, *Autonomous* stages a feminist politics of resistance that reimagines identity and power in the posthuman era.

1. Jack's Techno-Subjective Resistance as Pirate Scientist and Feminist Disruptor

The protagonist Jack functions as a pivotal figure through whom *Autonomous* articulates the complexities of techno-subjectivity entwined with feminist resistance. As a former pharmaceutical scientist turned anti-corporate biopirate, and reverse engineer, Jack actively subverts entrenched structures of biocapitalism and patriarchal authority by illicitly producing and distributing patented drugs. Her deliberate defiance of the International Property Coalition's monopolistic control over scientific knowledge positions her as an agent of techno-political insurgency, embodying a feminist praxis that confronts both corporate and state power. As a woman operating outside institutionalized systems of control, Jack embodies what Haraway calls a "cyborg politics" that is situated, resistant, and irreducible to binaries. Though not a literal cyborg, Jack is metaphorically cyborgian: she inhabits a liminal space between systems—legal and illegal, scientific and subversive, humanist and posthumanist. Her body is marked by gender, labour, and technological skill, but she weaponizes her expertise to expose and dismantle the oppressive structures of pharmaceutical capitalism.

Through Haraway's lense, Jack resists the "informatics of domination" by refusing to be a cog in the corporate apparatus of knowledge production. Instead, she redistributes access to life-saving drugs, transgressing proprietary norms in favour of what Haraway would term "affinity"—a coalitionary ethic of care that transcends genetic or professional identity. Her feminism is tactical, embodied in her refusal to dissociate her intellectual labor from its ethical implications. Jack's work reclaims science from the hyper masculinized, profit-driven logic of technoscience, aligning her with Haraway's vision of a feminist reworking of the technological.

From a cyberfeminist perspective, Jack participates in a form of feminist hacking: she infiltrates the digital and molecular codes of the pharmaceutical industry to liberate data, molecules, and bodies. Plant's cyberfeminism champions precisely this kind of engagement—fluid, subversive, and networked. Jack's refusal to play by the rules of intellectual property law is a reclamation of knowledge as collective, embodied, and fundamentally political. She does not reject science or technology; she retools them for anti-capitalist, feminist ends.

By inhabiting the interstices of legal/illegal, human/machine, and producer/consumer binaries, Jack destabilizes normative gender and power relations. Her techno-performative actions reveal technology as a material-discursive space wherein feminist resistance is enacted through embodied,



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relational subjectivities. In this, Jack exemplifies *Autonomous*'s broader thematic commitment to reimagining posthuman feminist identities that resist hegemonic structures while envisioning new forms of political agency in techno-scientific milieu.

Advancing Social Justice through Technological Empowerment

Jack's character in *Autonomous* epitomizes a nuanced embodiment of techno-subjectivity where human agency and technology intersect to challenge dominant power structures, particularly those governing gender, biocapitalism, and scientific authority. Her role as a pharmaceutical pirate who strategically disseminates data exposing the addictive properties of the drug Zaxy demonstrates a deliberate act of resistance against monopolistic corporations. By vowing to "bring down the whole corrupt corporation" (Newitz, 2017, p. 73), Jack disrupts conventional paradigms of gender and biology, highlighting technology as a vital tool in the pursuit of social justice and feminist empowerment.

This fusion of human and technological agency reflects Haraway's conceptualization of the cyborg as a boundary-transgressing figure that blurs distinctions between natural and artificial, human and machine. Jack's insurgent tactics challenge the established intellectual property regimes upheld by the International Property Coalition (IPC) and the pharmaceutical industry, illustrating a commitment to dismantling oppressive socio-economic orders that restrict equitable access to healthcare and knowledge.

Navigating intersecting axes of oppression—gender, class, and healthcare access—Jack's techno-performative resistance transcends personal motivations and resonates with broader feminist struggles for equity and liberation. Her engagement with technology as an activist aligns closely with Sadie Plant's cyberfeminist perspective, which foregrounds digital technology as a catalyst for socio-political transformation. Positioned as a cyborg, Jack's bodily and technological hybridity enables her to pirate patented medicines and subvert corporate control, embodying a radical reclamation of both knowledge and embodied autonomy.

Motivated by justice and compassion, Jack's narrative charts a transition from passive compliance to proactive resistance, emphasizing technology's potential to empower marginalized subjects within systems of control. She insists on a vision of a future where "everyone has the potential to live over a century, free from disease and pain," yet recognizes that "the secrets to this good life are controlled by a few greedy corporations" whose patents "outlast a human lifespan" (Newitz, 2017, p. 69).

Collective Resistance and the Reconfiguration of Agency

Jack's subversive efforts to redistribute essential pharmaceuticals challenge the hegemonic control exerted by corporate and legal institutions, emphasizing a feminist ethics of care and accessibility. Jack's technologically augmented body—imbued with implants and enhancements—becomes a site of insurgency, transforming the cyborg figure into an instrument of socio-political disruption. Through her radical defiance, Jack enacts a cyberfeminist praxis that privileges collaborative agency over individual heroism. Her declaration to "smash open" access to medicine operates as both literal and symbolic resistance against the



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commodification of life, echoing cyberfeminism's investment in destabilizing hierarchies of power and knowledge. The confrontation between her hybrid body and the militarized agents of pharmaceutical enforcement dramatizes the novel's broader critique of control and exploitation under late capitalist technoscience.

Jack's techno-subjectivity is shaped through her fraught reckoning with complicity, guilt, and ethical accountability. Confronted by Threezed's probing questions about her role in the illicit distribution of Zacuity—a neurochemical enhancer with addictive and lethal consequences—Jack admits her failure in judgment and commits herself to redress. Her resolve to expose Zaxy, the corporate entity behind the drug, signals a shift from passive remorse to active resistance, positioning her within a feminist ethics of care and justice. Jack's proposal to disseminate a remedy to counteract Zacuity's effects underscores her transformation from trafficker to whistleblower, marking a pivotal reorientation of agency. This transformation is not simply a personal moral evolution, but a techno-political act: she leverages her hacker expertise and data archives to dismantle the epistemic and infrastructural power of corporate hegemony. In doing so, Jack embodies a cyborgian form of resistance—one that is technologically embedded, ethically reflexive, and politically insurgent.

Her character, defined by cognitive dexterity and emotional depth, challenges static notions of femininity and agency. Through her actions, *Autonomous* stages a feminist politics of resistance where subjectivity is neither fixed nor pure but emerges from the entangled domains of guilt, technological capacity, and moral reckoning. Jack's techno-performative identity thus becomes a site of subversive power, enacting a resistant feminist agency attuned to the complex negotiations between responsibility and rebellion in the posthuman age. Throughout her techno-performative journey, Jack's adeptness with technology and cyborg embodiment facilitate her navigation through emotional and physical hardships—such as solitude and remorse—while situating technology as an agent of empowerment that propels women towards autonomy and social transformation. Her commitment to collective liberation over self-preservation marks a decisive turn in feminist speculative fiction—one that reimagines agency as distributed, networked, and politically charged in the face of structural domination.

Jack's trajectory as a synthetic biologist illustrates the formation of a techno-subjective self—one shaped through the entanglements of scientific agency, feminist resistance, and posthuman embodiment. Her aspiration to develop targeted biotechnological therapies for genetic disorders signals more than vocational ambition; it constitutes a conscious deployment of scientific expertise as a tool for social transformation. In asserting control over her career and intellectual development, Jack resists traditional gendered constraints, embodying a techno-feminist subjectivity that challenges both patriarchal structures and capitalist bio-hegemony.

Her sustained inquiry into "apoptosis" (Newitz, 2017, p. 42), the mechanism of programmed cell death, during her formative years reflects not only scientific curiosity but also a symbolic confrontation with normative boundaries of life, death, and control. This act of engaging molecular biology as a mode of feminist intervention foregrounds the cyborgian ethos theorized by Donna Haraway, where the boundaries between the organic and the technological are purposefully



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blurred to reconfigure power dynamics. Jack's work becomes a site of feminist political resistance, where the molecular becomes political and scientific labour becomes subversive praxis.

Techno-Subjective Empowerment in Academic and Economic Spheres

Her enrolment in a prestigious PhD program within the Free Trade Zone—a hypercapitalist nexus of research and deregulated innovation—further illuminates the paradoxes of feminist agency within neoliberal technoscapes. Despite operating within the structures of global capitalism, Jack weaponizes her access to elite scientific institutions, such as the Bendis Lab, to create viral vectors that could democratize medical access and destabilize monopolistic pharmaceutical regimes. This dual positionality—both embedded in and resistant to dominant systems—underscores her techno-subjective existence.

Jack embodies a cyborgian hybridity—melding human compassion with machinic enhancement—as seen in her use of anonymizing technology to facilitate covert humanitarian communication. “She patted her knife, which automatically routed all her communications through an anonymizing network that stretched across the Earth and through at least two research facilities on the Moon” (Newitz, 2017, p. 109). Her identity resists essentialist classifications, instead presenting as an evolving nexus shaped by scientific engagement, moral ambiguity, and technological mediation. This hybridity extends into the economic sphere, where Jack's ownership of a transnational franchise, granted at birth, signals early economic agency and positions her within a global capitalist network that transcends static identity categories (Newitz, 2017, p. 135). Moreover, her adoption of a male name and her subversive activities—ranging from molecular hacking to drug liberation—further complicate gendered expectations, reflecting a cyberfeminist resistance against patriarchal and corporate structures. Jack's aspiration for “Good Science” (Newitz, 2017, p. 42), despite the morally fraught terrain she navigates, marks her as a posthuman figure whose scientific pursuit is not merely technical but ethically charged and socially transformative.

Through Jack, *Autonomous* presents a feminist reimagining of technoscientific subjectivity: one that refuses passivity, claims authority over the body and knowledge production, and destabilizes phallocentric scientific traditions. Her presence within elite biotechnological spaces not only counters historical exclusions of women and queer bodies from STEM fields but actively reshapes the discourse around ethics, care, and innovation in posthuman futures. In doing so, Jack's character becomes emblematic of techno-performative feminist resistance—asserting a political identity forged through the manipulation of code, cells, and cyborgian agency. This critique highlights how the intersection of cyborg feminism and cyberfeminism informs Jack's character construction, revealing broader implications for women's agency within contemporary technoscientific regimes. By illustrating the politicized potential of technological hybridity, Jack's narrative in *Autonomous* typifies feminist techno-subjectivities that challenge normative power structures and imagine emancipatory futures.



2. Lyle's Techno-Subjective Resistance through Technology, Art and Activism

The thematic emphasis on hybrid identity and subversive agency is further embodied in the character of Lyle, Jack's companion, who emerges as another compelling figure of techno-subjectivity within the novel. Whereas Jack foregrounds the socio-political dimensions of feminist techno-agency, Lyle illustrates the epistemic and performative aspects of cyborg identity as theorized in feminist discourse. Described as "damn smart" and able to "get away with a lot of things" (Newitz, 2017, p. 139), Lyle's intellectual acumen and scientific achievements establish her as a paradigm of techno-performative competence in a gendered scientific domain. Her pioneering doctoral research on molecular motors—a field that intricately intertwines biological processes with mechanical function—epitomizes the cyborg's hybrid ontology, blending organic life and technology in ways that challenge rigid distinctions between human and machine. Awarded for "the most promising first work from a young scholar" and later selected for a prestigious postdoctoral position at the Free Lab, Lyle's rising scientific stature disrupts normative expectations of gender and authority in STEM fields. Her visibility in high-profile scientific publications reflects not only individual accomplishment but also a broader feminist critique of epistemic gatekeeping that historically marginalizes women's contributions to science and technology.

Through Lyle's narrative, *Autonomous* enacts a feminist politics of resistance by foregrounding how female techno-subjectivities can reclaim and transform scientific knowledge production. Her work exemplifies Sadie Plant's cyberfeminist vision, wherein technological mastery becomes a site for challenging patriarchal and capitalist domination. Moreover, Lyle's position in the novel signals the possibility of posthuman feminist agency that operates within and against institutional power structures, reshaping the boundaries of embodiment, intellect, and technological innovation. Lyle not only personifies the cyborg's liminal hybridity but also enacts a form of feminist resistance that contests exclusionary norms, imagining alternative modalities of knowledge and empowerment in the biotechnological futures *Autonomous* explores.

Lyle's techno-subjectivity is marked by her deliberate alignment with the Free Lab and active participation in "disruptive strategies" that challenge prevailing cultural, economic, and scientific authorities. Her multidirectional focus and expansive social networks reflect a fluid and autonomous identity that rejects fixed boundaries—an embodiment of Donna Haraway's cyborg figure, which transcends conventional categorizations of gender, nature, and technology. By embracing biotechnological experimentation and persistent scientific innovation, Lyle enacts a conscious repudiation of traditional gender roles and normative expectations within STEM fields. Her engagement with technology is integral to her identity and empowerment, positioning her as a techno-performative agent who leverages the hybrid nature of the cyborg. Lyle's affiliation with a diverse cadre of artists and activists underlines this, particularly through their subversive projects—such as art shows featuring "uselessly beautiful GMOs and tissue mods" that comment on global recolonization (Newitz, 2017, pp. 139–140). These acts of creative resistance exemplify the intersection of art, technology, and



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activism, illuminating the transformative potential of techno-subjectivities to disrupt hegemonic structures.

The use of “sleep relievers” and Lyle’s preference for extended wakefulness further blur the lines between the natural and artificial, illustrating the cyborg’s traversal of organic and constructed domains. This corporeal hybridization aligns with Haraway’s vision of the cyborg as a liminal entity capable of reconfiguring identity and power. From a cyberfeminist perspective, Lyle’s expansive network and interdisciplinary collaborations resonate with Sadie Plant’s advocacy for the fusion of technology, art, and political activism as a means to challenge dominant paradigms. Her role in these interconnected spheres exemplifies the deployment of technology not merely as a tool but as a performative medium through which feminist resistance materializes. Lyle’s narrative embodies a posthuman feminist politics of resistance that merges scientific expertise, artistic expression, and activist intervention. Through her techno-subjective agency, *Autonomous* articulates a vision of empowered female identity that subverts traditional binaries and envisions emancipatory futures in the entangled realms of biology, technology, and culture.

Lyle’s engagement with biotechnology and her active participation in disruptive strategies exemplify a dynamic techno-subjectivity that aligns closely with cyberfeminist principles of subversion and resistance. Her involvement in avant-garde artistic expressions—such as genetically modified organisms (GMOs) showcased in provocative fashion shows—functions as a form of embodied resistance that challenges entrenched power structures and normative social orders. These acts of bio-art and molecular modification serve not only as aesthetic interventions but also as political gestures that destabilize phallogocentric discourses and patriarchal control over technology and scientific knowledge. Through these strategies, Lyle and her network enact a form of feminist uprising that rejects hierarchical authority, reflecting Sadie Plant’s cyberfeminist vision wherein technology becomes a site for women’s liberation, creativity, and self-determination. The novel situates biotechnology at the intersection of art, science, and activism, illustrating how embodied technological practices can disrupt capitalist and patriarchal regimes that commodify and control biological life.

Lyle’s techno-performative identity embodies the fluidity and hybridity central to Donna Haraway’s cyborg feminism, wherein boundaries between human and machine, nature and culture, are blurred and reconfigured to challenge normative binaries. By deploying biotechnology as both a creative and political tool, Lyle enacts a posthuman feminist resistance that reclaims agency over bodies, knowledge, and technological futures. In this way, *Autonomous* foregrounds her character as a critical site where feminist techno-subjectivities articulate new possibilities for empowerment and transformation within contemporary techno-scientific milieu.

Techno-Subjective Feminist Resistance through Prodigy, Legacy and Disruption

Lyle’s emergence as a prodigious figure in biotechnology is a potent subversion of the traditionally phallogocentric domain of STEM fields. Her exceptional scientific achievements and recognition disrupt entrenched gender norms, positioning her



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as a symbol of feminist resistance against societal constraints that historically marginalized women's intellectual and professional aspirations. In doing so, Lyle's success not only asserts her autonomy but also implicitly challenges the thwarted ambitions of previous generations, highlighting the ongoing struggle for gender equity within scientific domains.

Crucially, Lyle's narrative is deeply intertwined with the intergenerational transmission of feminist agency. The resonant echoes of her grandmother's impassioned advocacy (Newitz, 2017, p. 142) serve as a narrative thread that links past feminist activism with contemporary techno-scientific innovation. This familial legacy foregrounds the intersection of feminist thought and technology, illustrating how feminist praxis is perpetuated and transformed across generational lines in both public and private spheres. Such a connection amplifies the cyborg feminist and cyberfeminist frameworks, which emphasize the hybridity of bodies, technologies, and political agency.

Lyle's intellectual prowess, coupled with her engagement in disruptive strategies—ranging from molecular biological research to subversive biotechnological art practices—embodies the core tenets of Haraway's and Plant's feminist visions. She leverages technological mastery as a means to undermine conventional power structures and dominant narratives, enacting a techno-subjective resistance that is at once relational, embodied, and politically insurgent. Lyle exemplifies how contemporary feminist identities can be reimaged through the productive fusion of scientific innovation and activist praxis, illuminating pathways toward more equitable and inclusive techno-social futures.

3. Frankie's Techno-Subjectivity through Technological Proficiency and Cyborg Agency

This mode of techno-subjective resistance is further echoed and extended in the character of Frankie, whose embodiment of cyborg feminist agency reveals another facet of posthuman identity within *Autonomous*. Frankie embodies a sophisticated techno-subjectivity characterized by her seamless integration of organic and technological elements, a hallmark of cyborg feminist identity. Her adeptness is vividly illustrated in the moment she “network[ed] her glasses with a protein synthesizer she'd pulled down from a shelf” (Newitz, 2017, p. 155), an act that symbolizes the fluid boundary between human and machine. This embodied hybridity not only reflects comfort and fluency with complex technological systems but also enacts a subversion of traditional gender norms, positioning Frankie as an agent who navigates and reshapes the technological regimes. Frankie's knowledge is transformative, not because she occupies a dominant role in the narrative, but because she quietly rewrites the conditions of possibility for life, agency, and survival. She is part of a feminist network of disruption—distributed, technical, and embodied.

Her role as a developer further anchors her techno-performative identity. Frankie's creation of a tool to analyze phosphorylation pathways situates her within the core of technological innovation and scientific discourse—domains historically dominated by men. The subtle yet significant narrative focus on her technical expertise and active engagement in debates over programming languages, particularly the “Adder versus Ammolite” dialogue (Newitz, 2017, p.



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155), underscores a cyberfeminist intervention into male-coded spaces. By participating in this technical dialogue, Frankie challenges phallogentric conceptions of authority and expertise, embodying a feminist resistance that reclaims technological knowledge as a site of empowerment and agency.

Frankie's techno-performative gender identity disrupts entrenched stereotypes about women's capabilities in science and technology. Her presence in the narrative illustrates how technological proficiency becomes a vehicle for redefining gender roles and enabling feminist resistance. This aligns with the broader frameworks of cyborg feminism and cyberfeminism, which advocate for the dissolution of rigid binaries and the emancipation of women through active engagement with technology.

4. Medea Cohen's Feminist Resistance through Techno-Competence and Cyborg Agency

This thematic development continues through the character of Medea Cohen—affectionately known as “Med”—who embodies a captivating techno-subjectivity as an autonomous female cyborg scientist whose identity disrupts entrenched binaries between human and machine, and between nature and culture. Introduced as a robotic entity with a distinctly female persona, Med's role as a pharmaceutical researcher specializing in neurogenetics situates her at the intersection of cutting-edge science and embodied technology: “A headshot of the bot hovered above her name and title: ‘Medea Cohen, PhD, Assistant Researcher. Areas of specialization: pharmaceutical testing and development, neurogenetics’” (Newitz, 2017, p. 138). Equipped with neural implants that enhance cognitive function, Med exemplifies Donna Haraway's vision of the cyborg as a hybrid subjectivity capable of transcending traditional limitations imposed by biological and social constructs.

Med's engagement with innovative projects—most notably her work on “Retcon,” a pharmaceutical cure for addiction—highlights her as a transformative agent in a field historically monopolized by male scientists. Through her scientific prowess and technological embodiment, she actively subverts conventional gender norms and the patriarchal monopolization of techno-scientific authority. Medea's techno-performative competence enacts a feminist politics of resistance by challenging the commodification and regulation of bodies and knowledge in biocapitalist frameworks.

Moreover, Med's avant-garde approach to genetic engineering, which favours radical innovation over utilitarian applications, signals a departure from normative scientific practices and aligns with cyberfeminist ideals that celebrate technological hybridity as a site of emancipation and social transformation. In this light, Medea Cohen emerges not only as a figure of professional excellence but also as a symbolic manifestation of feminist agency—her cyborg identity destabilizing the boundaries of identity, expertise, and power.

Through Medea, *Autonomous* envisions new modes of feminist techno-subjectivity that are embodied, relational, and politically insurgent, illustrating the potential of cyborg feminism to reconfigure narratives of gender, science, and technology in posthuman futures.



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Autonomous Defiance and Feminist Techno-Subjectivity in Radical Embodiment

Medea Cohen's autonomy is distinctly articulated through her ability to transcend traditional gender roles and societal expectations that often confine women within narrow frameworks of dependence and subservience. As a principal investigator in the Free Lab, Medea navigates her professional environment with resolute confidence and agency, embodying a vision of femininity unbound by normative constraints. This self-determined stance disrupts ingrained gender binaries, presenting a fluid and expansive conceptualization of gender within a technologically mediated context.

Importantly, Medea's embodiment of feminine personality traits in her robotic form challenges prevailing assumptions about the supposed gender neutrality of technology. By integrating these attributes into her cyborg identity, she blurs and destabilizes the rigid dichotomies of masculinity and femininity, expanding the parameters of gender performance in a posthuman society. This techno-performative fluidity reflects key tenets of cyborg feminism, highlighting the constructed and mutable nature of identity in the intersection of biology and technology.

Medea's pioneering work in addiction therapy, particularly her development of "Retcon," further underscores her commitment to social empowerment and transformative change. Her scientific innovation addresses urgent social issues, offering tangible benefits to marginalized populations, including women who have historically been underserved by biomedical research. In occupying leadership roles and excelling within the male-dominated STEM fields, Medea emerges as a potent symbol of empowerment and resistance, illustrating how technological expertise can be mobilized to challenge systemic inequalities and advance gender justice.

Within the broader framework of techno-performativity, Medea's cyborg identity functions as a mode of resistance against patriarchal and capitalist hegemonies that govern contemporary biotechnological enterprises. Her defiance and subversion disrupt mechanisms of control and exploitation embedded within biocapitalist structures, positioning her as a beacon of insurgent potential. By embracing hybridity and technological embodiment, Medea envisions new possibilities for liberation beyond biological determinism, signalling a transformative reconfiguration of power at the nexus of science, technology, and feminist politics.

Techno-Feminist Subjectivity in Leadership Shaping the Posthuman Biotech Futures

Medea Cohen's leadership in groundbreaking technological projects epitomizes her rejection of gendered constraints traditionally imposed on women within scientific domains. Navigating her professional trajectory with unwavering determination, Medea defies societal stereotypes and expectations that have historically marginalized women in STEM fields. As the lead researcher on the Retcon project, her authority is unequivocal: "She was lead on the Retcon project, and they wouldn't do anything without her final approval" (Newitz, 2017, p. 138). This recognition of her expertise underscores her role as a visionary



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innovator, boldly charting new frontiers in biotechnology with exceptional audacity and precision.

Med's succession to the position of principal investigator at the Free Lab following Krish's demise marks a critical moment within the narrative, symbolizing a broader shift in the techno-social domain toward the normalization of female-coded technological beings in positions of leadership. This transition focuses the emergence of techno-females—entities that integrate feminine attributes with advanced technological personae—as legitimate and influential actors in domains historically dominated by men. Medea's ascendancy demonstrates evolving gender dynamics, highlighting a move toward inclusivity and diversity in the governance of interdisciplinary fields that intersect technology, science, and society. Through her leadership, Medea Cohen enacts a form of feminist resistance that challenges patriarchal structures within the scientific community and biocapitalist enterprises. Her prominence in the narrative illustrates the potential for techno-subjectivities to disrupt entrenched power hierarchies and reimagine leadership as a space open to hybrid identities. Consequently, Medea's trajectory signals not only personal empowerment but also the broader cultural and political possibilities for gender representation and equity within posthuman technological futures.

Conclusion

In *Autonomous*, Annalee Newitz crafts a speculative world where biotechnology, artificial intelligence, and pharmaceutical capitalism coalesce to form complex terrains of control, autonomy, and resistance. Through the interwoven lives of Jack, Lyle, Frankie, and Medea Cohen, the novel enacts a feminist politics of resistance that is deeply embedded in the material and symbolic structures of technoscientific life. By applying the frameworks of Donna Haraway's cyborg feminism and Sadie Plant's cyberfeminism, this article has shown how the novel's female and feminized characters subvert hegemonic systems through their hybrid identities, situated knowledges, and coded interventions. These characters are not merely resisting oppression—they are redefining what it means to be a subject in a posthuman world. Each of these female figures disrupts and reconfigures traditional gender norms within their respective scientific and technological domains, enacting forms of feminist resistance that challenge patriarchal and bio-capitalist structures. Jack's activist stance and pharmaceutical reverse engineering, Lyle's prodigious scientific intellect combined with disruptive creative expression, and Frankie's technological proficiency and hybridity collectively reflect diverse strategies through which female subjectivities navigate and subvert the gendered constraints of their worlds. Similarly, Medea Cohen's pioneering leadership and authoritative role in cutting-edge biotechnological research symbolize a significant rupture in the historical exclusion of women from positions of scientific influence, heralding the emergence of techno-females as agents of transformation and empowerment in the posthuman world.

These characters' engagements with technology are not merely instrumental but deeply performative, embodying cyborg and cyberfeminist ideals that blur boundaries between human and machine, nature and culture, body and technology. Through their techno-embodied identities, they reclaim marginalized



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epistemologies and enact subversive agency that destabilizes normative hierarchies of knowledge, power, and embodiment. Together, these narratives articulate a feminist politics of resistance that envisions new modes of subjectivity—relational, hybrid, and technologically mediated—that contest exclusionary paradigms and imagine more inclusive and equitable futures. Newitz's *Autonomous* thus offers a critical intervention in posthuman literary studies, demonstrating how techno-subjectivities can be mobilized to challenge engrained systems of oppression and open pathways for feminist empowerment within the evolving technoscientific domain.

Annalee Newitz's *Autonomous* serves as a compelling narrative that bridges speculative fiction and critical feminist theory. By presenting a world where identities are fluid and power structures are interrogated, the novel challenges readers to reconsider preconceived notions of autonomy, agency, and resistance. In doing so, it not only reflects contemporary societal concerns but also contributes to the ongoing discourse on feminist posthumanism, advocating for a more inclusive and ethically conscious approach to technological and social evolution. The novel's characters embody diverse modes of resistance—biopolitical, affective, and coded—that collectively challenge essentialist paradigms and reconfigure human-machine boundaries. *Autonomous* contributes to the literary genealogy of feminist science fiction by modelling subjectivities that are politically generative and epistemologically subversive. It offers a speculative terrain where posthuman futures are imagined not as dystopian inevitabilities, but as possibilities for more inclusive, equitable, and technologically entangled feminist worlds.

Thus, *Autonomous* offers more than critique: it models feminist techno-possibility. It invites us to imagine subjectivities that are not pure, fixed, or individual, but relational, embodied, and insurgently entangled with the very technologies once used to dominate them. In doing so, it contributes not only to the feminist speculative tradition but to the future of posthumanist thought itself.

Future Debates and Directions

This article has primarily focused on female techno-subjectivity as a site of resistance against techno-capitalist domination in *Autonomous*. Through a cyborg-cyber feminist lens, it has examined how hybrid, posthuman identities—especially those gendered female—disrupt binary structures and reclaim agency in technologized spaces.

While Haraway's (1991) cyborg feminist and Plant's cyber feminist lenses have provided the central theoretical framework, future research could benefit from a more pluralistic and interdisciplinary engagement. Perspectives from Afro-futurism (e.g., Eshun, 2003; Womack, 2013), trans-feminism (e.g., Stryker, 2006), and disability studies (e.g., Schalk, 2018) offer complementary critiques that foreground intersectionality and embodied resistance across axes of race, ability, and gender diversity. These frameworks would deepen understandings of techno-subjectivity and provide broader analytical range.

Although this article concentrates on female techno-subjectivity in relation to gender and capitalist exploitation, it is important to note that *Autonomous* also engages with themes of race, coloniality, and global inequality. These



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dimensions, while not central to the current analysis, are vital for a more intersectional and decolonial reading of posthuman resistance (Benjamin, 2019; Wynter, 2003). Future studies may build on this foundation by situating techno-subjectivity within broader systems of global power.

Finally, while this study adopts a primarily textual and theoretical approach, exploring reader reception or audience studies—particularly among marginalized or non-Western audiences—offers a promising direction. Such engagement could reveal how different readers interpret cyborg figures and engage with their socio-political implications. This would broaden the scope of feminist science fiction criticism beyond academic discourse toward interpretive and experiential dimensions. Moreover, another productive direction could involve examining how legal and political regimes in speculative fiction, such as those depicted in *Autonomous*, shape or mirror real-world discourse surrounding AI personhood, bioethics, and corporate governance. Investigating these intersections may help bridge literary critique and contemporary ethical debates in technology studies.

In sum, this article asserts that female techno-subjectivity, as imagined in *Autonomous*, offers a powerful site of posthuman resistance—one that invites further development through intersectional, decolonial, and reader-responsive frameworks.

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