Emma Baizabal

From Cyberfeminism and Technofeminism to an Ontological and Feminist Technology

Abstract: In this essay, I analyze some of the relationships that have been historically articulated between feminisms and technologies – specifically, the positions of cyberfeminism and technofeminism. I am interested in recognizing some of the instrumentalist and political assumptions about technology, where technology is understood in the sense of particular and discrete objects that have a specific political use, namely, to enslave or liberate. I articulate a critique of these assumptions from an ontological view of technology, which attends to the becoming of technical objects, recognizing in them their technological potencies and what this implies for a political, specifically feminist perspective.

Introduction

Every time we talk about technology we refer to categories such as instruments, tools, machines, etc., as if they were synonymous. Even in sociological and some philosophical discourses, technology is always thought as an aggregate of modern production of objects, inscribed in the big technoscience picture. The brief and Eurocentric history of philosophy of technology is outlined in an unbending antagonism between technophobes and technophiles. The former characterize technology as the main reason of alienation, loss of experience and mystification of life, as well as the mechanization of the body, territory, nature; in short, technology is equated with capitalism. The latter, on the other hand, deem technology as the dogmatic dream of freedom, emancipation, progress and an utopian future. This view of technology is also possible due to capitalism, but in a good-spirited nature.

Both approximations to the issue have some problems: 1) their starting point is a colonialist, masculinist bias characteristic of the state of production in the Global North, as if this were the only form of technological production. 2) the understanding of technology is reduced to dealing with specific objects produced from the industrial revolution onwards, which are also reduced to the category of utilities; as well as to the idea of means to an end. This can be encompassed in an instrumentalist notion were technology can only be enslaving or emancipatory and dependent of the good use or bad use of individuals. 3) they displace the problem of these instruments to the ideology that produces them as a particular form (capitalist, extractivist, dominant) that encloses them.

https://doi.org/10.1515/9783111051802-012

Cyber-techno-feminist Lineage

In order to confront these matters, several feminist theorists have done critical contributions about the epistemic and political conditions from which technical production unfolds. Whether it concerns the modification of life, bodily experience, in real or digital life, the relationship with nature and biology or the production of subjectivity of the gender named woman, technology, qua objects of interaction, has been intertwined with feminist concerns since well into the 70s. While it is possible to follow the interwoven thread of the feminist's waves of evolution and the transformations and bifurcations of the various critiques of technology, in order to understand how these movements and theories have affected each other, the interest of this paper is more modest. Here, I would like to map some of the ways in which these contributions have been made in order to recognize some implications bordering on the notion of technology itself.

It is well known that among socialist feminists, for example, the relations between women and technology runs through the acknowledgment of reproductive work, their role in the workplace and care work. Shulamith Firestone is one of the pioneer thinkers whose famous claim about the potential of modern technology, specifically embryology, to "freeing women from the tyranny of their reproductive biology" (Firestone 2003, 185) still resonates every time we deal with the problem of conceiving a feminist oriented technology. It is possible, however, that this condition of freedom or emancipation that wants to be imbued in technology is determined, as every well socialistic position, by the faith in the scientific knowledge of which technical objects are normally understood as an apex. According to Sarah Franklin, the reading of technology from Firestone runs through a dialectical perspective, where the interaction is understood not only between the abstract entities "society" and "technology" but even more between the internal tensions of each of these spheres (Franklin 2010, 33). This means that this vision of technology brings with itself the solution of every problem, as long as it is on the side of a just cause. What in today's rampant capitalism we would call the other end of the scale: cybernetic socialism, is undoubtedly one of the bets from which this type of proposal is nourished (Medina 2014; Paasonen 2010). Firestone's critique of the heteronormative, *bourgeois* family form tends to want to naturalize the use of reproductive technologies in order to deal with a biology contested by generic conformity (Lewis 2019, 16). This could be considered naïve in principle, precisely because it is increasingly evident that every technical solution that claims to be definitive brings with it a tensional movement. But it is also a reflection of the inauguration of a conflict that occurs in the political sphere between the difference between nature and culture or sex and gender. The conflict between nature and technique

continues to object to the paradigm of feminisms that go through technology to create more critical exercises.

Donna Haraway's work as we all know is the paradigm from which many of the critiques of the nature-culture divide, from the 1990s to date, originate. The cyborg, or the material semiotic machine embody this relationship between nature and culture and the complexity of the relationship to the point of questioning both fervent optimism and constricting fear, are undoubtedly one of the richest conceptual experiences that have been the legacy of the articulated dimension between technology and feminisms. It is true that the cyborg imaginary has often been confused with the organology of an externalization mechanic capacity, reaching the prosthetic extreme as a symbol of its technical constitution, especially among those posthuman researches that took the cyborg metaphor not so much as a metaphor but as a material experiment over the body (Wolfe 2010). Nonetheless, and even away from the big shift that came to turn the *Cyborg Manifesto* (2004) into a more radical and surrounding *Companion species manifesto* (2003), the cyborg figurine takes into consideration not only the disembodied industrial production that connects a certain socialist feminism, *ad hoc* with the old command to take over the means of production to achieve the expectation of emancipation, but mainly the experience of the bodies that are traversed in the mechanisms of production both technical and knowledge (Haraway 1988).

This is an inheritance that takes into account technology not only understood as particular objects of production, as tools and implements that would have to have certain dispositions in order to be used in an emancipatory way to redeem the enslaving uses. Rather, it is a technology that considers the symbolic, linguistic and knowledge framework of its own production. This is not, contrary to what one would like to think, a mere constructivism, but a kind of synthesis that seeks to question technology from its institutional models, a technology much closer to the mechanisms of production in which situated experiences take place.

The cyberfeminisms of the 90s were born out of this concern and cover a wide spectrum of digital arts and practices, from representation and participation of the feminized bodies in digital spaces to the question about the makeup of these same bodies/practices in such spaces. We all are only too familiar with the pioneer collective VNS Matrix and the Old Boys Network's 100 anti-theses, from whom the new network technologies enable inexperienced forms of resistance that nowadays we find customary. With a reminiscence of the imaginaries of the cyborg farther away from the maquila and closer to the metaverses these experiences have traced a broad path for the expectation of art and technology in the feminist conceptions of a digital world.

The importance of digital spaces in these practices is that they are understood not as alien to day-to-day practices but as an extension that, in many instances,

emancipates the inventive potential from recodification, reclaiming economic and artistic spaces (Plant 2020, 326). In these eccentric imaginaries, what is being sought is plasticity to catalyze experimental identities, even performative ones. An exacerbation of the modes of representation that still cannot come to terms with the political expectations of the collective autodetermination (Wajcman 2006). This is, at least, one of the criticisms that people want to make from the most contemporary fronts, forgetting that art, and even more so digital art, is also a space of dispute for subjects who are not identified in the social and political framework as techno-savvy men (Avanessian and Hester 2015).

Today, some of the cyberfeminist approaches from Latin-American contexts are more preoccupied by the political potency of the internet understood as the field of everyday battles against violence against women and girls. To this appropriation of the theories that came from the Global North, the most important things to elaborate on are mainly a critique of access to technology and the security of digital spaces (Torrano and Fischetti 2020, 62–63.)

Closer to Haraway than I would like to admit, and further away from the conceptions of technology that subscribe to the digital realm, are the contributions of Judy Wajcman who has developed an important analysis regarding the specific relations between gender and technology that picks those contributions and critiques of radical feminism that center around sexed bodies and the exercise of women's sexuality, as well as the reproductive condition attached to women's gender. This author's technofeminist proposal is based on a constructivist viewpoint of technology that recognizes the double implication and co-creation between technological materiality, understood as a network of artifacts, institutions, organizations, etc., and gender, where the relation between production/design and use/consumption is not only intimate but has to be de-constructed (Wacjman 2009). The most important distinction to be made regarding this emphasis in the prefix of techno, unlike the prefix cyber, reveals the amplification of the notion of technology. Although she declares herself an open constructivist – which for her means nothing other than that technology is not seen as an immovable monolith but also depends on valorization and cultural discourses – her amplification of technology seems to be situated only in relation to generic construction. This also places it much closer to those radical feminists for which the real axis of oppression is to be found in gender identification.

Another contemporary theoretical development, for example among xenofeminists (Laboria Cuboniks 2017) has followed a strand of analysis of technology that leads to the participation of the production of a "better quality of life" for everyone, where the gender term "women" wouldn't be a problem. In fact, this position collects and amplifies the positive appreciations of technology stemming from the socialist currents briefly outlined above, and positions itself as some political

engaged extrapolation of the most experimental cyberfemism that yearns to avoid the techno-utopian ingenuity anchored to the decorporeization located on the internet.

The 2014 collective "Laboratoria Cuboniks" has made this interpretation of technology possible, which is embraced by philosophers like Lusiana Parisi (2017, 140) who seeks in this scaffolding document a facilitator of speculation. This manifest, refreshing as it is, engages with left accelerationism who actually proclaimed itself a techno-utopianism that assumes acceleration to be an emancipatory power in itself (Avanessian and Hester 2015, 12).

Even though these proposals center around the acceleration of technical production to achieve destruction of everything, even gender, this recourse seems more akin to a political provocation than a strong theoretical proposal, since it's never quite clear what "acceleration" means, to the point of remaining a technophile hope for the future.

In this version of the rapport between feminism and technology the most important criteria are to go beyond the differentiation of nature and culture, even regarding biology and gender, further beyond the obliteration of nature by technology. The final expression that claims "If nature is unjust, change nature" (Laboria Cuboniks 2017, 161) is an expression seeking for the maximal confrontation.

If Wacjman's technofeminism focused on how gender acts in the sociotechnical process where the materiality of technology propitiates or inhibits the action of subjects entangled in gendered power relations, the expanded technofeminism of xenofeminism seeks to emphasize the agency of subjects not only regardless of their gender, but against any generic hierarchy produced that displaces the exercise of power both in the design and in the circulation, distribution, use and appropriation of technology.

Especially in Latin-American contexts, hackfeminisms have strong mobilizations on the side of access, appropriation and re-writing of technical resources such as algorithms, protocols and servers. Irene Soria is one of the many researchers in Latin America who have been concerned with giving critical visibility to all these strategies that concentrate their efforts on revitalizing the figure of the hacker from the exercise of self-determination of the "raw material" of new technologies: computer programming, to the way in which bodies, territories and subjects are imbricated (Soria 2016, 16). Special attention is deserved by the multiplication of local servers, the amplification of digital communities which main concerns are collective learning, self-defense and digital autonomy. The Red de Telefonía Celular Comunitaria (Cellphone Communitary Network) from Oaxaca, Mexico is the paradigmatic example of how indigenous and community efforts can be put together to bring to the communities themselves services that are monopolized by private en-

terprises and where the role of the state continues to be another mechanism for justifying expropriation.

Be it democratizing the access to the internet, foster the reproduction of devices that emancipate women from domestic labor or even the old dream, now a nightmare, of assisted conception, many of the proposals layed out are founded on the instrumentalist approach that conceives technology as the industrial production of discrete objects that serve as the emancipation of a particular political subject: women. Many of these criticisms start from a very clear critique of the complete political identity to which they intend to subsume the conditions of technical production so that, finally, the technical still seems the unthinkable outside the margins of the anticipated political decision.

Prior to this mapping of relations between feminisms and feminizations as appropriations of technology that seek to rewrite it – from the more specific production as the code, to the more abstract but structural condition as the institutions of knowledge –, some questions arise: is it enough to change the condition of "enslavement" of technology to that of "emancipation" to favor other technical dynamics? Is the feminist characterization enough for another type of technical production? These questions point to a transformation in the way of approaching the relations between technology and gender, women and feminism frameworks, where the question of the political power of technology takes a 180-degree turn towards the question of technological power itself: a question that pays special attention to the modes of development of the technical, that allows technology to become an ontological category rather than remaining a general concept that encompasses various instruments.

Technicity and Technology: A New Invention

In what follows I would like to bring back the reconceptualization of technology developed by Gilbert Simondon in order to think alternatives to our relation to technical objects. What is of interest to us regarding this conception is that it is entangled to the process of individuation and individualization, e. g., the modal condition through which the real becomes real (Simondon 2014, 20–25). This is not the old problem of the being and how being splits. I assume that all beings have a load of being that doesn't exhaust its possibilities, e. g., an excess from where new potencies emanate. Individuation is precisely the process where what is "becomes" in its modality. When Simondon asks about the particular ways in which the technical realizes itself, the answer is a process of technicity that, in general, is a process of concretization of technical objects (Simondon 2007, 90). The question of technicity is the answer to the question of the technical as such. Where Heidegger (2007)

thought that the essence of techné wasn't technical, e. g., where the essence of modern techné had to be sought in the way techné was a modal condition of being in its unfolding to the human, Simondon turns the screw. The essence of techné is properly technical: it resides in the way of proceeding of the unfolding of the technical-real, e. g., technical objects.

What looks like an engineerism that goes through the processes of production of tools, machines and assemblages is actually a philosophical reconceptualization of the problem of the technical. We then start to talk about technical objects not as particular objects (that include even institutions and organizations), but in the sense of a complex network of operatory and functional relations that produce individuals and assemblages. The technical object, a set of schemas of function and structure, is not the result of a design choice; it is a process that is constantly changing, a process of concretization where the human participates only as a crystalized gesture (Simondon 2007). To discover such a process as the proper realm of the unfolding of the technical is technology itself. Technology such understood goes from the particulars built in the industrial revolution until today towards a process of philosophical thinking that encounters the technical in itself (Simondon 2017, 237).

This theoretical approach does not feed from the accelerationist utopia that finds its root in technocratic aspiration, and neither does the image of the cyborg, with its contemporary iteration found in the transhumanist paraphernalia: problematic approaches, for they forget about the technical production in an operative sense and end up making up a robotic ideal with the biases of a humanism that disowns itself. The potency of the technical does not come from the emancipatory mode in which technical objects can be used. I'd say, with Stiegler (2020), that all technique is a *pharmakon* that can be both venom and antidote; yet its potency is not in either side, but in the concretizing act revealed by the technical process as its operation: invention.

In the same way, when talking about bodies, as in women's bodies or feminized bodies, it's not about biology, but about operatory structures that organize and reorganize, that form meanings and produce sense. When speaking about technical potency of the bodies I don't mean to diverge on the waters of the human's prosthetic condition, whose technical inflection centers around an extended biology. With this idea we look to displace the problem of the subject's determination with a stable, clear and distinct identity, for example, woman. Contrary to this resolve, grounded in an abstract political subject or a particular individual in the fashion of neoliberal marketing, technical inventiveness is the germ that triggers collective individualization.

For Simondon, the concept of invention refers to "the emergence of the extrinsic compatibility between medium and organism, and the intrinsic compatibility

between the subsets of the act" (Simondon 2013, 158, Translation EB). This means invention can be understood as a produced object that mediates relations but also, and more importantly, as an act that allows the creation and modification of them. The inventive act is a catalytic activity of movement that produces not only objects but new ways of inhabiting life. The relevancy of every inventive act is the effect it produces, not only in regard to its results or object but in the operation itself on which it relies, on which it is founded and from which it derives its structures. "The Invention is induced by a necessity of internal compatibility effectuated and expressed in the organized system that includes as subset of the living being through which it advents" (Simondon 2013, 210, Translation EB). Every inventive operation, in its technical sense, is a modification or creation of a structure. While it refers to heterogeneous mediations, it also has a functional place among different orders and as such allows the subject's action to take place. We insist that such invention does not only refer to the practical use which serves to solve a problem, but the act that expresses and leads to life (Simondon 2017, 303–318) – the construction of a relational realm. In this sense, more than a spontaneous activity, it's about a creative dynamism that emerges in the directed interaction of bodies to the resolution of a conflict or tension: what I've referred to as "operation".

This concept of invention is not the same as innovation, nor does it stand in relation to productive intentionality but with psico-social individuation, or with the transinidividual, to call it as Simondon does: the complex and systemic unit that exceeds the individual and at the same time interiorizes it: the collective formation (Simondon 2014, 360). If innovation finds itself on the side of production, as an intentional idealization that has its end in the object market, the conceptual force of invention, understood as a re-structuring operation that solves a conflict, lies in its technical and political thrust. The operation enhances new models of relational conformation both inside technical production itself as well as in the political organization with others, understood not as separate realms but in their real and practical intertwining. It isn't an amalgamation of cybernetic dreams between the biological and the technical or artificial, but an operatory analogy that inspires us to think other ways of acting together.

To Keep Thinking

Thus, a technological attitude centered around inventive activity implies the acknowledgment of operative potentialities that can promote other symbolic and bodily exchanges, e. g., a production in terms of individuation instead of creation. It's all about a new ontology in a sense that is not centered around the differences

among beings, but an ontology of becoming that materializes along an ontogenetic process where the technological potential remains as an operatory unfolding. Such generated action is not lead by an effervescence lacking control of any virtuality, but it tends to functional registers and possible restructurings. Technical invention is a political ontology and insofar an activity that expresses life, produces sense. What we want to keep focusing on with this approach is the possibility of the invention of a technological potency of politics. That we can recall technology in its own terms with a dialogue from the feminist perspectives in its dimensional diversity. This requires not just one type of techno or cyber feminism but an ontology that keeps in mind that there are, as well as the human individuals, technical individuals and others that enable different alliances.

References

Avanessian, A. and Hester, H. (Eds.) (2015). *Dea ex machina.* Berlin: Merve.

Firestone, S. (2003). *Dialectics of Sex.* New York: Farrar, Straus and Giroux.

Franklin, S. (2010). "Revisiting Reprotech: Shulamith Firestone and the Question of Technology". In Merck, M. and Sandford, S. (Eds.), *The Further Adventures of the Dialectic of Sex.* London: Palgrave Macmillan, 29–60.

Haraway, D. (1988). "Situated Knowledge. The Science Question in Feminism and the Privilege of Partial Perspective". *Feminist Studies* 14(3), 575–599.

Haraway, D. (2003). *The Companion Species Manifesto: Dogs, People, and Significant Othernes.* Chicago: Prickly Paradigm Press.

Haraway, D. (2004). "A Manifesto for Cyborgs: Science, Technology and Socialist Feminism in the 1980s". In Haraway, D., *The Haraway Reader.* New York: Routledge, 7–46.

Heidegger, M. (2007). "La pregunta por la técnica in Soler". In Soler, F. and Acevedo, J. (Eds.), *Martin Heidegger. Filosofía, ciencia y técnica.* Santiago de Chile: Editorial Universitaria.

Laboria Cuboniks (2017). "Xenofeminism: A Politics for Alienation". In Gunkel, H., Hameed, A. and O'Sullivan, S. (Eds.), *Futures and Fictions.* London: Repeater, 152–161.

Lewis, S. (2019). *Full Surrogacy Now. Feminism against Family.* London: Verso.

Medina, E. (2014). *Cybernetic Revolutionaries: Technology and Politics in Allende's Chile.* Cambridge, MA: MIT Press.

Paasonen, S. (2010). "From Cybernation to Feminization: Firestone and Cyberfeminism". In Merck, M. and Sandford, S. (Eds.), *The Further Adventures of the Dialectic of Sex.* London: Palgrave Macmillan, 61–83.

Parisi, L. (2017). "Automate Sex: Xenofeminism, Hyperstition and Alienation". In Gunkel, H., Hameed, A. and O'Sullivan, S. (Eds.), *Futures and Fictions.* London: Repeater, 152–161.

Plant, S. (2020). "On the Matrix: Cyberfeminis Simulations". In Thomas, T. and Wishermann, U. (Eds.), *Feminist Theory and Critical Media Culture Analysis. Starting Points and Perspectives.* Bielefeld: Trascript, 325–336.

Simondon, G. (2007). *El modo de existencia de los objetos técnicos.* Buenos Aires: Cactus.

Simondon, G. (2013). *Imaginación e invención.* Buenos Aires: Cactus.

Simondon, G. (2014). *La individuación a la luz de las nociones de forma e información.* Buenos Aires: Cactus.

Simondon, G. (2017). *Sobre la técnica.* Buenos Aires: Cactus.

Soria, I. (Ed.) (2016). *Ética Hacker, seguridad y vigilancia.* Mexico: Universidad del Claustro de Sor Juana.

Stiegler, B. (2020). "Elements for a General Organology". DOI: 10.3366/drt.2020.0220.

Torrano, A. and Fischetti, N. (2020). "Feminist Philosophy of Technics and Technology. Notes for an Activist Latin American Academy". DOI: 10.26694/pensando.v11i23.11058.

Vergés Borsch, N. (2013). "Teorías feministas de la tecnología: evolución y principales debates". Digital Repository University of Barcelona URL: http://diposit.ub.edu/dspace/handle/2445/45624 (last accessed 03 January 2023).

Wacjman, J. (2006). *Technofeminism.* Cambridge: Polity Press.

Wacjman, J. (2009). "Feminist Theories of Technology". DOI: 10.1093/cje/ben057.

Wolfe, C. (2010). *What Is Posthumanism?* Minneapolis: University of Minnesota Press.