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From digital inclusion to IT appropriation: gendered aspects of appropriation imaginary and practices

Zusammenfassung

Von der digitalen Integration zur IT-Aneignung: vergeschlechtlichte Aspekte von Aneignungsvorstellungen und -praktiken

Die genderbezogene digitale Spaltung ist ein bekanntes Thema in Forschung und Politik. Politische Diskurse betonen den Inklusionsaspekt, der sich auf Chancengleichheit und wirtschaftliche Stärkung konzentriert. Kritische Analysen des Inklusionsnarrativs betonen dessen universalistische und normative Perspektive, die implizit ausschließt und festlegt, was geschlechterbezogene technologische Inklusion bedeutet. Dieser Beitrag konzentriert sich auf eine alternative, in Lateinamerika entwickelte Perspektive: die Aneignung von Technologien. Dieser Ansatz stellt die soziokulturellen und wirtschaftlichen Ungleichheiten im Globalen Süden in den Vordergrund. Anhand einer Fallstudie über eine transfeministische IT-Gemeinschaft in Argentinien werden die transformativen Aspekte ihrer Aneignungsvorstellungen und -praktiken analysiert. Es wird argumentiert, dass dieser Ansatz auch für andere Kontexte des Globalen Südens, in denen ähnliche Gemeinschaften existieren, relevant ist und uns ein besseres Verständnis der Möglichkeiten und Grenzen der Inklusion im Bereich der digitalen Technologien vermittelt.

Schlüsselwörter
Digitale Integration der Geschlechter, Aneignung von Technologien, Vorstellungen, Praktiken, IT-Gemeinschaften

Summary

The gender digital divide is a well-known research and policy topic. Policy discourses emphasise the inclusion aspect focusing on equal opportunities and economic empowerment. Critical analyses of the inclusion narrative stress its universalist and normative perspective which implicitly excludes and determines what gender technology inclusion means. This contribution focuses on an alternative perspective developed in Latin America: appropriation of technologies. This approach foregrounds the socio-cultural and economic inequalities present in the Global South. Based on a case study of a transfeminist IT community from Argentina, this paper analyses the transformative aspects of this collective's imaginary and practices. It argues that this approach is relevant to other Global South contexts where similar communities exist and provides us with a better understanding of possibilities and limits of inclusion in the digital technologies sector.

Keywords
gender digital inclusion, appropriation of technologies, imaginaries, practices, IT communities

1 Introduction: gender digital divide and gender digital inclusion

The concept of 'digital divide' emerged in the 1990s as an umbrella notion to distinguish those having access to and being able to make use of digital technologies[1] from those who are not accessing and/or using them. In terms of women (and other marginalised groups), research has identified specific grounds for this gap, namely psychological, social, and structural factors (OECD 2018; Vitores/Gil-Juárez 2016). As many of these aspects point towards an understanding of women (and other underrepresented groups) as passive, excluded from and disinterested in technology, inclusion strategies and policies have been focused on phenomena producing exclusion. Policy discourses view this as 'supply-side' problem, where women and minorities are seen as an untapped pool of talent and potential or wasted economic resources (World Economic Forum 2016; McQuillan 2010).

Although solutions to this issue are based on narratives of equal opportunities related to access, participation and retention as well as (economic) empowerment, scholars have criticised such approach for several reasons (McQuillan 2010). For example, Harding (1991) suggests this is equal to 'add women and stir' while Henwood and colleagues (2000) as well as Sørensen, Faulkner and Rommes (2011) stress the references to a determinist model of technology as well as a deficit model of women. However, the notion of inclusion found in policy discourses should also be scrutinised. The call for digital inclusion suggests the recruitment and retention of a specific population within the heteropatriarchal capitalist system. A critical perspective understands that the current socio-technical system is not a neutral space and that the related digitalisation process universalises dominant understandings of inclusion.

In that sense, Hoffmann notes that "inclusion represents an ethics of social change that does not upset the social order" (Hoffmann 2021: 12). The language of inclusion uses recognition as a tool to diffuse the radical potential of difference and to deepen dependencies on oppressive social orders (Hoffmann 2021: 12). Far from assuming that inclusion has an inherent value, inclusion is tied to exclusion due to implicit restrictions, assumptions, and expectations about what technology inclusion is, what the options for technology inclusion are, who should be part of inclusion initiatives, in what ways and how to perform with technologies (Turnhout/Van Bommel/Aarts 2010). Therefore, as Perdomo Reyes holds, adding more women (and other minorities) in technologies does not guarantee that these technologies will be transformed (Perdomo Reyes 2016: 175). This can only happen when cultural meanings, values, social relations and visions of the world are challenged. Thus, she proposes a critical appropriation of technologies, which entails more than access and participation of women and other underrepresented groups. This involves generating new discourses, meanings, technologies and another culture to overcome existing inequalities (Perdomo Reyes 2016: 173). In that sense, scholars such as Toupin (2014), Vergés, Hache and Cruells (2014), Martínez Pozo (2019) and Dunbar-Hester (2019) analyse processes of self-inclusion, which are collective and

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[1] Originally Information and Communication Technologies – ICT. In this work, ICT, IT and digital technologies will be used interchangeably to refer to information and communication technologies as well as digital technologies.

autonomous initiatives around feminist hackerspaces or Free, Libre and Open-Source Software (FLOSS) communities.

While these processes are taking place mainly in the Anglo-European context, Beltrán (2020), among other researchers in Latin America, analyses a Latina hackathon to stress that even such an ephemeral event, in contrast to hackerspaces which are more stable and material projects, can trigger the "liberatory potential of technologies" (Beltran 2020: 8). He argues that through the appropriation of technologies "issues they [the participants of the hackathon] have judged important to their collective well-being and future livelihoods" (Beltrán 2020: 8) can be resolved. Beltrán's view on appropriation emphasises the value of repurposing technology, creating new technologies, embedding new values, meanings, and imaginaries to break away from the current socio-technical system. This is my starting point. A line of thinking about appropriation of technologies that has emerged in Latin America. This perspective values the political engagement of appropriation practices and associated imaginaries, as well as concomitant processes of transformation in terms of socioeconomic and technology-gender relations (Morales 2009, 2018; Lago Martínez et al. 2020; Silva Reis/Natansohn 2019). Adding to elaborations on self-inclusion, this approach foregrounds the socio-cultural and economic inequalities present in the Global South context.

In what follows, I first outline the analytical framework employed for this study. I provide a synthesis of the Latin American appropriation of technology proposition and combine it with references to works on imaginaries from the feminist Science and Technology (STS) field and cultural studies. Then, I present my research methods and briefly introduce [Las] de Sistemas, the collective which I have been following since July 2020, followed by an analysis of their inclusive and transformative practices and imaginary in the IT sector. I conclude arguing that exploring feminist IT communities in Argentina through the lenses of technology appropriation is relevant to other Global South contexts where similar communities exist and provides us with a better understanding of possibilities and limits of inclusion in the digital technologies sector.

2   Analytical framework

In Latin America the notion of appropriation was developed in two different, but complementary perspectives. Based mainly on one of them but combining the strategic appropriation conceptualisation with feminist and postcolonial understandings of imaginary, I adopted a case study approach to study [Las] de Sistemas.

2.1 Appropriation of technologies

While the discussion about digital divide(s) in the Anglo-European context was guided by ideas of inclusion, in Latin America the notion of appropriation took over the discourse and research about closing the digital gap(s). Appropriation as a concept emerged from Latin-American studies on social communication in the 1980s. With the arrival of the internet and digital technologies in the region, media scholars recovered the notion and adopted it to study these new objects and their specific impacts (Sandoval 2019).

The digital gap and policies for digital inclusion were intensively discussed in the region between the 1990s and the first decade of the 21st century, providing a fruitful ground for expanding the development of conceptualisations of technology appropriation and the corresponding empirical work (Sandoval 2019: 4f.).

Although two divergent approaches to appropriation of technologies were developed, this work adopts the one known as strategic appropriation perspective. Following an instrumental position and acknowledging the contributions of other researchers in the region (Camacho Jiménez n. d.; Crovi Druetta 2013, 2017), Susana Morales' (2009, 2017, 2018) proposal emphasises the political value of confronting a neoliberalist and consumerist understanding of technology and individuals. The commitment is to the critical capacities that subjects can develop to confront inequalities and close pre-existing gaps (Sandoval 2019). Morales specifies this by stressing the connection between technology and the subject's project of autonomy at both the individual and the collective level. Her normative definition implies practices through which social, economic and ideological conditions associated to technology are identified. Through an implicit or explicit reflexive process of adoption and creative adaptation of technology to the subject's needs, convictions, and interests, technology can be used to transform national, social and/or personal reality (Morales 2017, 2018; Sandoval 2019). Furthermore, she stresses that appropriation is an unequal process. Although appropriation is an empowering process, differences between social and economic groups and aspects such as technical developments, access and availability conditions, marketing strategies, economic power of technological companies, dominant practices of use, new meanings given to subjects' practices and technological imaginaries can have deterring effects in the transformative process (Morales 2017: 41f.).

However, this normative characterisation is an ethico-political project which has yet to show a case where the level of transformation suggested is achieved (Sandoval 2019). Silvia Lago Martínez and her group have produced an extensive amount of theoretical and empirical development in which they characterise and apply their four ideal types and sub-categories (Lago Martínez/Méndez/Gendler 2017; Gendler et al. 2018; Lago Martínez/Gala/Samaniego 2020) based on the following definition of appropriation:

> "The practice of 'making other people's things one's own' and […] the focus is on the way in which individuals and/or collectives access, apprehend and give meaning to their practices with respect to various technologies 'not created by them' within the framework of diverse and unequal cultural, socioeconomic, and historical contexts." (Lago Martínez/Méndez/Gendler 2017: 78)

Among the categories presented in the typology developed in Lago Martínez, Méndez and Gendler (2017: 78ff.) and Gendler et al. (2018: 51ff.), two ideal types are of relevance for this work: a) adapted or creative appropriation and b) technology creation with activist or with collective action and social intervention goals. The first ideal type focuses on new and original forms of use not planned in the development of a technology. It is the result of a learning process to use an existing technology in creative ways, attaching to it unexpected beliefs, values and uses. By contrast technology creation is the process of creating one's own technologies. It requires a variety of knowledge and technical and scientific skills, sometimes as a product of the previous processes of appropriation, but also being a consequence of the diversity of context, strategies, and needs, producing the opportunity to create a new technology. Social movements or collectives acting in

the off-/online spaces combine adapted appropriation with the development of their own tools and platforms. They design and choose technologies to create a personalised space where they can develop their practices without depending on what has been set as the platforms' uses. These categories are regarded as elements that can be observed empirically but are not mutually exclusive. On the contrary, Lago Martínez' group emphasise that practices are in constant flux and can be considered as part of one or various types, can hybridise, or can modify themselves and transform into another type.

2.2 Imaginaries

Imaginaries are, as McNeil et al. (2017) explain, a notion with a long tradition, which has exponentially developed over previous decades, particularly in the field of Science and Technologies Studies (STS), but also in disciplines such as anthropology, sociology and cultural studies. In the late 20th century, the understanding of this phenomenon changed as Naranch (2002: 65) remarks. While imagination was previously conceptualised as opposed to reason, as being mere illusion, fancy, or misrecognition, it is now the ground for cognition, a central element to know and feel, and it is held collectively, which expresses the importance of affects and feelings of belonging to a community. Furthermore, several scholars searching for alternative heuristic devices to understand the relationships among science, technologies and societies have developed a plurality of divergent formulations of imaginaries as McNeil et al. (2017) observe. Among these different interpretations, feminist imaginaries play a particular role. These conceptualisations address the power of the visual aspects, or how images can shape one's sense of bodily identity, sexuality, sense of self or the development of subjectivity (Naranch 2002: 65; McNeil et al. 2017: 455ff).

However, as Jos (2021) stresses, Western feminist imaginaries of technology reproduce "a very monolithic or Eurocentric knowledge that, in the tradition of colonial rhetoric, sidelines agencies and cultures on the margins" (Jos 2021: 3). Although this imaginary presents itself as "collective, collaborative, inclusive, and closer to an achievable feminist future" (Jos 2021: 2) it is a one-dimensional representation. Addressing the issue of who this imaginary interpellates, Jos continues her argument explaining that it lacks connection with the lived realities of those in subaltern positions (Black, Indigenous and/or disabled people, LGBTQ+, Global South). Thus, although an imaginary as "collectively held visions of desirable futures, makes sociotechnical imaginaries into something that homogenises and unifies groups of people" (Willim 2017: 55), it excludes and disregards the knowledge, values, and identities of marginalised communities.

To counter this immature vision, Jos proposes to expand it by considering the material and real-life effects of social markers such as race, ethnicity, social class, sexuality, or gender-based identifiers and to conceive of them as the basis for their agency (Jos 2021: 9). Then, her framework for studying (and developing) feminist imaginaries brings to the fore the value of location, history, context, and politico-economic specificities and reinforces the argument of the flexibility of technology.[2] It acknowledges that

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2   Following the social constructivism approach in Science and Technology Studies (STS), this concept highlights how various stakeholders construct different meanings and interpretations around a technology (Bijker/Hughes/Pinch 1987).

not only by practices of developing artefacts but also through micro-resistances, such as employing technology for purposes it was not originally created for, imaginaries have a transformative power.

2.3   Methods

[Las] de Sistemas (LDS) is a collective with no legal status, whose practices can be, at first sight, considered in-between adapted appropriation and technology creation with activist goals, following Lago Martínez, Méndez and Gendler's (2017) proposal. LDS is a community from Argentina that emerged in November 2017. It comprises women, lesbians, transvestites, trans and non-binary people working in different areas of IT. This collective avoids membership fees, long sponsorship relations (particularly with big companies) and the use of paid software or applications to reduce costs and external dependencies in a precarious economy. The community presents itself as transfeminist, going beyond the gender binary women/men, and it supports the overthrow of heteropatriarchy. Thus, its efforts can be framed as transformative and therefore to be more than practices of digital inclusion. However, seeking to generate diverse, inclusive and safe technological spaces it relies on existing heteropatriarchal neoliberal capitalist technologies instead of exclusively developing its own ones.

In this article I focus on my observations and results from several interviews with members of this collective, which I have gathered through my fieldwork following the community. Based on a qualitative design and a case study approach (Yin 2018 [2003]), due to the COVID-19 pandemic I adopted as my main methods of data collection, online participant observation and in-depth interviews. My fieldwork has started in July 2020 and is still ongoing. I was invited to join LDS Slack channel, its main tool for internal communication and its mailing list. I participate in its online meetings, most of them on their Discord server, but also on a Jitsi server, and in 2021 I have observed its annual conference FemIT Conf. Additionally, I follow its social media accounts and website. The aim of my case study approach is to achieve a holistic understanding of LDS (Hesse-Biber 2017), getting to know this community as intimately as possible to learn about and describe its practices, meanings and values, its online interactions and relations keeping in mind that it is not only a virtual community. Digital technologies are not only a means for members to communicate, share and (re)create the collective, but a constitutive part of their everyday life. Most of the members are professionals in the IT sector, many are freelancers, and several provide remote work for foreign companies. Almost every aspect of their 'offline' lives is mediated and co-constituted by these technologies.

In the following section I scrutinise the practices and the imaginary of this community by taking into consideration the meanings associated by the members themselves and my interpretative analysis guided by the lenses of appropriation and feminist sociotechnical imaginary. Thus, this paper is the product of situated knowledge. It provides an account of gender digital inclusion for a particular group of people, in this case, [Las] de Sistemas. At the same time, it considers my own research position as an Argentine queer feminist doctoral candidate, having the privilege of working and accessing doctoral education in Germany, but concurrently, remote from my research subjects and unable to meet them in-person due to the pandemic. Prior to this project I was a stereo-

typical user of digital technologies with no affiliation to any such community. Therefore, my access to this community was granted based on my gender as much as my interest to learn about the collective and not on my expertise or commitment to their values and practices, making me an outsider in meaningful ways (Dunbar-Hester 2019).

3   [Las] de Sistemas

Although Latin American scholars such as Reis and Natansohn (2019) have focused on groups of trans and queer hackfeminists, who promote radical processes of technology autonomy, communitarianism and mesh networks, to study processes of appropriation, they also concede that micro-resistances are valuable practices of appropriation. In this sense, I have yet to come across such radical feminist communities in Argentina, but LDS' imaginary and associated transformative practices are in line with these researchers' thinking.

3.1   Imaginary

In November 2017, four friends tweeted an invitation to talk about the difficulties of women (and minorities) in the IT sector. About 20 people attended this first meeting, "something completely unexpected" according to one of the founders of the community. In addition, individuals with professions that are not classically considered to be in the IT field such as sociologists, journalists or graphic designers attended to the event. Along with this broader understanding of IT, another key feature of the community is its primary focus. LDS provides a safe space, support, knowledge, tries to make women and minorities visible and empowers them. Accordingly, its Code of Conduct (CoC) states the following:

"[Las] de Sistemas is a transfeminist community of women, lesbians, trans, transvestites and non-binary people who are part of the technology sector[3], and our main objectives are to make ourselves visible, empower ourselves, train ourselves, support us and transform our workspaces into inclusive places." (CoC)

In line with Jasanoff's argument about imaginaries as "publicly performed visions of desirable futures" (Jasanoff 2015: 55) this introductory statement of its CoC clearly highlights two different aspects. On the one hand, the objectives explicitly express what guides the community normatively – they justify what is being done in the present to achieve a desired future. On the other hand, this declaration emphasises what it aspires to, a future where the technology sector in Argentina is transformed. Furthermore, it is also possible to identify the importance of the visual aspect in this quote. Like Naranch (2002) and Jos (2021) stress, images – and words can also evoke images – are powerful tools to generate a connection between that what is being said, practised or desired, and the subject's bodily identity, sexuality, and sense of self. Acting on that relation, LDS is interpellating specific subjects, those at the margin or the ones being left out of the IT

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3   'Sistemas' in Spanish.

sector. Naming produces subjects: women, lesbians, trans, transvestites and non-binary people. They are the members of LDS, and they are not invisible. They are already part of society, of the social order, and they will be more visible by using and developing technology. By finding agency in their social markers, as Jos (2021) postulates, they perform their identities through digital technologies and in the process, they make the community's desired future present.

In turn, inclusivity takes a central place in this imaginary. It is not simply about an enumeration of gender and sexual identities; they are the community. As such, following Willim, this socio-technical imaginary "homogenises and unifies groups of people" (Willim 2017: 55). However, this excludes others. Challenging the normative value of inclusion, LDS makes some subjects visible and exclude others: cis men are not eligible for membership in the group. Because LDS "want(s) this to be a supportive, respectful, and harassment-free space for all. To empower underrepresented identities, we decided not to include cis men in the community, except for activities that are explicitly open to the public" (CoC). Although seemly a contradiction due to the reference to inclusivity, the difference lies on how inclusion performs a future where subjects are free of their identifiers (Jos 2021; Sørensen et al. 2011) and on how the notion of inclusivity plays as a queer signifier, one that makes existing and potential new diverse identities visible.

Transformation is also part of the quoted statement of the LDS CoC and clearly connected to the appropriation of technologies proposal. Following Lewis (2016), the CoC declaration points out to a specific image of what this collective should look like in the future, as an empowered community with knowledge and the ability to go beyond the mere use of technology. As Morales (2017, 2018) claims, appropriating technologies is a project of empowerment and autonomy. As such, through practices and critical processes of knowledge creation, technologies can be used to transform reality at both personal and/or social level. In this sense, Beltrán's (2020) idea of the 'liberatory power of technologies' reconnects the power of imaginaries with the situated conditions of those appropriating technologies. Drawing on the specific forms of inequality, oppression and domination of the affected subjects, technologies can contribute to change those conditions by repurposing them. Thus, the idea behind 'workspaces' has a particular value. This emphasis on work can mean several things: a position at a private company (technological or not), in the public sector, academia, or even in less obvious places, such as NGOs, social, artistic, or activist movements, or even the private household (i.e., care work). As previously mentioned, members of LDS cover a wide spectrum of professions, interests and skills and have particular technology backgrounds. Such an indeterminate statement regarding what the meaning of 'work' is allows them to cover for 'spaces' which are and are not yet represented by their members.

In sum, the imagined future of LDS is one populated with empowered subjects capable of using, adapting, and developing technologies in a transformed socio-technical system, where diversity and difference are valued. However, as McNeil et al. (2017) note, imaginaries also imply a commitment to that future as a desired reality and requires practices to materialise this abstract idea. Therefore, in the following, I introduce and analyse a few of these actions.

3.2 In practice

Formal contact channels have been established to generate and maintain the safe space this community promises. Members use free-of-charge software and applications (apps) with limited functionalities or options. However, the community does not have a physical place to hold meetings or organise events. Neither does it have legal status, nor does it charge a monthly or annual membership fee. Still, its Slack server registers more than 700 members (March 2022) and has more than 30 different public channels, where members can organise, share, debate or seek support, exchange on different topics or comment on different situations of misogyny, 'micromachism' or stereotypes.

During the early years of the community more members were active on the Slack server as well as attending in-person events as LDS representatives. Although the level of commitment of many members has decreased, this does not mean that sisterhood as one of its values, which is put into practice in the care, support and companionship that I observed in each of the meetings, has been reduced. Regarding this point one of the members clearly stated the following during an interview:

"When I joined [Las] de Sistemas I didn't really understand what sisterhood was all about, nor did I understand if it was really possible. And [Las] de Sistemas was the space where I really understood that it was possible, and I understood how it worked. So, the issue of maintaining that atmosphere of collaboration and mutual support is what we always try to take care of more than anything else." (Member B, July 2021)

This sisterhood is performed in the organisation of its annual conference FemIT Conf which the members organise without outsourcing its planning to third-party organisations. In 2021, I participated in the weekly meetings set up to organise the event and was able to observe how through their practices of appropriation of technologies LDS could successfully organise, once again, its conference. In parallel, by staging the FemIT Conf 2021 the community came a little closer to the imagined transformed future. In this sense, practices of appropriation refer to adapting digital technologies for unexpected uses based on their (interpretative) flexibility; creating, producing and acquiring new knowledge and skills; and based on their limited resources and time as well as the socioeconomic context, addressing gendered social relations and intersectional dynamics by using certain free-of-charge technologies.

Due to the pandemic and the associated restrictions regarding in-person events, LDS decided that its 2021 conference would have a virtual format as it had the year prior. While in 2020 the community had access to foreign currency to implement a webinar platform repurposed for its event, this was not the case in 2021. The lack of a legal status of LDS, the stringent conditions necessary to be met to pay with foreign currencies and the absence of an inexpensive national option convinced members to search for alternatives that could be used free of charge. To select such technologies the organising team devoted more than two months to identify, test and choose several applications and platforms to be implemented during the day of the event. The technologies were used for simultaneous coordination of the staging from behind the scenes as well as for coordinating among the organising team members who were not physically together. These technologies included platforms such as YouTube, Discord, Slack, Tele-

gram, WhatsApp, Zoom[4], OBS[5] and Zello[6]. In addition, on the day of the conference Argentina was affected by a massive internet outage and a last-minute change to the Google Meet platform was necessary.

Following Lago Martínez et al.'s (2017) typology, creative appropriation was performed by searching for and testing apps and platforms. This produced new knowledge and developed new skills among the organising team. This knowledge was compiled in a series of documents that were prepared and shared to specify the required and desired conditions to be met, the pros and cons of the tested tools, the expected use for each of the selected applications and the script of the conference, among others. Likewise, the skills were particularly necessary as the unexpected internet outage forced the organising team to switch to Google Meet to continue the live broadcast and to be the members themselves instead of the hired team[7], who maintained the live stream. Furthermore, the collection of platforms and apps used during the day of the event were employed for their own needs and therefore employed in creative ways. For example, a Discord server played the part of the virtual fair, a space for FemIT Conf sponsoring companies to have their virtual booth, but also that of a 'playground', a space for the conference attendees to communicate, exchange and connect across physical distance and time difference. In this sense, even if YouTube offers a chat function, the use of a Discord server offered several additional possibilities: it was a safe space for women, other minorities and allies, who accepted to comply with LDS CoC before joining the server, to chat, joke and share their ideas, opinions and feelings; it was a place where to make additional questions to the speakers after their live presentations, and it provided a tailored room for discussing the creation of a Telegram group to exchange new and creative teaching methodologies for minorities.

The different resources used are also the product of the members' available free time, which is one of the community's motivations for appropriating technologies. One of the interviewees put it in this way:

"The point is, always whatever we do, we do it on our own and in our free time. That free time is scarce. The reality is that the people who maintain – this 'core' — in some way active [the community] are very few in relation to the number of people who are in the community. And we don't have time. We don't have time to really generate, for example, other options that require more work. So, when we think of options we say, 'well what is realistic for us to keep going?'" (Member B, July 2021)

Although this statement may sound as a weakness, it also shows the commitment to the values and imaginary of LDS. Members of the community include people with family and care responsibilities, multiple jobs, studies in parallel to work, and/or disabilities. Therefore, their free time is notably limited. Nevertheless, the number of members of the collective as well as of those participating in the conference keeps growing. In the little free time that members find or make for the community, they generate, reproduce, adapt, modify and play with technologies.

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4   A basic account with limited options and one commercial account provided by one sponsor.
5   Free and open-source software for video recording and live streaming.
6   A walkie-talkie app that LDS had already used during previous conferences.
7   Although LDS members worked on a voluntary basis on the organisation, a team of two people was hired to do the streaming on the day of the event.

Likewise, appropriating technologies is a trade-off between available time, economic resources, knowledge, technologies, identity markers and potentially accessible new skills, knowledge and technologies. In this sense, postcoloniality, capitalism, geopolitics and heteropatriarchy are also intertwined in the assemblage that is LDS (Martínez Pozo 2019). Living and working in Argentina means that certain technologies and knowledge are available while one is being excluded from others. Situated knowledge and practices produce and reproduce certain technologies as well as differences, inequalities and relations of power and domination. As much as they condition LDS, the practices of the community aim to transform them. In 2020, when LDS decided to organise a virtual conference for the first time, none of the members of the organising team had any knowledge on how to run one. Yet, they moved forward, trying, testing, looking for options and constantly consulting among themselves and with others who could offer them advice and knowledge. Both the confidence that participating in the community gives them and the conviction that they were and are doing something important, motivates them to maintain and continue their efforts and to face challenges, even when the technologies themselves are 'patriarchal.' The exchange below, which arises from the question of what they plan to do for the 2022 conference, makes visible the technofeminist argument about the simultaneous shaping of gender relations and technologies (Wajcman 2004).

Coordinator of the organising team: "Yes, I agree. We'll have to think about it [what the community will do next year with the conference], but this is all really good. I also really enjoyed learning all this [how to broadcast a virtual conference] and sharing with this team that really surprises us every year. So, whatever we think, it is going to be great. Despite the zombie apocalypse."
(Everybody laughs)
Organising team member 2: "As (Founding Member A)[8] said, the patriarchy fell and took the internet with it."
(Everybody laughs)
 Coordinator: "Clearly. The internet is patriarchal. Yes."
(Group interview, August 2021)

It is this moment that clearly indicates the interpretative flexibility of technology. Although the technological infrastructure on which LDS relies for most of its efforts is 'patriarchal' and therefore part of the system the community seeks to overthrow, the members do not reject it. Based on the capacity to critically reflect, the community seeks to transform these technologies (and produce new ones) in everything it does. Yet, LDS also strives to make its transformative efforts particularly visible during its conference. Thus, there were no cis men among the organising team, the team employed for streaming, the hosts, the keynote speakers and the panellists. This event made visible that neither masculinity nor femininity are an inherent aspect of technologies. By challenging neutral understandings of inclusion that deny the political value of inclusivity the community excludes those who are already a majority in the tech sector to manifest in the present its socio-technical desired future. One where diversity of bodies, sexuality and other social markers is not an aspiration, but a reality.

According to Morales (2017), appropriating technologies is a project of autonomy through transformation of technologies and a subject's own conditions. LDS practices,

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8   Member who was not present during the group interview.

values, imaginary, acquired and developed knowledge, skills and critical capacity to reflect and act on technologies are framed by the legacy of colonialism, capitalism, and geopolitics. Nevertheless, these same practices and imaginary aim at transforming technologies and their own conditions. Acting from their situated position and acknowledging economic and socio-cultural constrains, members of LDS support, empower and make visible the diversity in the IT sector. A hybrid between creative appropriation and technology creation with activist goals categories developed by Lago Martínez, Méndez and Gendler (2017), this community proposes another form of inclusion, one that is aware of its socio-political implications.

4   Conclusion

This paper works as a proposal to understand inclusion in the digital technologies sector, at least in the Global South, from a different perspective.

The Latin American take on technology appropriation has developed a distinctive interpretation of what digital inclusion means. As a reaction to neoliberalist and consumerist meanings that accompanied the introduction of ICT into the region, scholars (Morales, Lago Martínez, Sandoval, Natansohn and others) have implicitly and explicitly criticised a universalist inclusion approach that lends itself to an all too easy instrumentalisation. Studying the resistance to integration into an oppressive digitalisation process based on extremely uneven conditions, this perspective proposes to study socio-material and symbolic processes, practices and imaginaries of the embedding of technologies into individuals' lives. Through reflexivity, critical thinking and practices of adoption and adaptation to the subject's needs, technologies can be used to transform personal or social reality (Morales 2017).

In this work I combined this perspective with a complex technofeminist take on the mutually constitutive relation between gender, sexuality and technoscience to study this relation "as an ongoing process of mutual shaping over time and across multiple sites" (Wajcman 2007: 296) implicated in broader social-cultural and economic dynamics. In addition, feminist thinking on socio-technical imaginaries provides the resources to study situated practices and visions of an aspirational feminist future grounded on the local capacities and experiences of marginalised subjects confronting historically constructed unequal technological relations and striving to re-define the socio-technical system.

Thus, based on a case-study approach I focused on gender technology inclusion by analysing through the lenses of appropriation of technologies one Argentinean transfeminist IT community, their values, practices, and imaginary. I scrutinised how this collective critically adopts and creatively adapts technologies to reframe, from its situated position as a community from Latin America, what inclusion, gender and technology are about. This collective performs through its practices and envisions through its imaginary a transformed social-technical future where a diversity of empowered technology producers develops artefacts for their own ends (Beltrán 2020: 8).

Annotation

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