Digital Activism, Community Media, and Sustainable Communication in Latin America

Edited by
Cheryl Martens · Cristina Venegas
Etsa Franklin Salvio Sharupi Tapuy

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Acknowledgments

Contents

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List of Figures

Radio Indígena and Indigenous Mexican Farmworkers in Oxnard, California

Practitioner Perspective. Digital Networks in Bolivia: Territory, Community Collaboration, and the Wayna Tambo Diversity Network

Open Knowledge, Decolonial, and Intercultural Approaches to Communication Technologies for Mobility: The Achuar Kara Solar Project

Practitioner Perspective. Autonomous Infrastructures: Community Cell phone Networks in Oaxaca, Mexico

Practitioner Perspective. Feminist Cyberactivism in Theory and in Practice

Re-presenting Indigenous in Ecuadorian Media: A NewsFrames Approach

Challenging Asymmetries of Power and Knowledge Through Learning Communities and Participatory Design in the Creation of Smart Grids in Wayúu Communities

Indigenous Journalism in Ecuador: An Alternative Worldview

LIST OF TABLES

Transforming Digital Media and Technology in Latin America

Cheryl Martens, Etsa Franklin Salvio Sharupi Tapuy, and Cristina Venegas

La capacidad de hacer nuestro implica no sólo la tarea de ensamblar, «sino la más arriesgada y fecunda de rediseñar los modelos para que quepa nuestra heterogénea realidad.»
Martín Barbero (2002, 17)
Our ability to make something our own involves not only the task of assembling, "but also the riskier and more fruitful act of redesigning models that match our heterogeneous reality."
Martín Barbero (2002, 17)

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INTRODUCTION

Over the past two decades, media and technology have been at the heart of political and cultural struggles in Latin America. Major battles over media power between government and corporate media corporations (Artz 2017; Follari 2014) have led to widespread public debate and media reforms across the region (Waisbord 2010; Martens et al. 2014). Community media organizations, across Latin America and beyond its borders, have been at the forefront, challenging power configurations and legislation concerning media and technology.

Latin America possesses a lengthy history of community media organization and activism. The foundations of community radio date back to Colombia and Bolivia earlier in the twentieth century (Rodríguez 2001; Santiago García Gago, this volume). Community media have also played key roles in providing alternative sources for the preservation of language and customs (Beltran 1983). In addition, Latin American scholars and activists led analyses of media power and hegemony in the 1970s and 1980s (Dorfman and Mattelart 1972; Beltrán and de Cardona 1980), while many other parts of the world focused on studies of media effects.

Research on media in Latin America draws attention to the potential of policy approaches and social movements in relation to media democracy and collective communication rights, which goes beyond geographical and structural understandings of community media, to include translocal mobilizations of communities of interest and communities of practices (Carpentier 2007). Much recent work on digital media and technology concerning communities and civil society, however, focuses on the role of civil society and activists in relation to media policy reform (Heintz 2014; Waisbord 2010, Segura and Waisbord 2019). There is also an extensive literature on the uses and appropriation of digital technology by specific communities (Crovi et al. 2011; Laudano 2018; Natansohn and Paz 2018). Scholarship, however, is increasingly beginning to examine data activism as a form of resistance in relation to data capitalism, surveillance, and the commodification of cultural goods within Latin American contexts (Segura and Waisbord 2019).

Despite the long trajectory of community media and activism in Latin America, the wider and overlapping ecologies of communities, media,

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communication, and technology remain under-documented, as do community-based strategies and approaches that challenge and reconfigure dominant uses and understandings of media and technology. The chapters in this collection seek to address this gap, from both academic and activist perspectives. This edited collection aims to go beyond analyses of uses, reception, and appropriations of technology by communities. It focuses on some of the ways Latin American communities are engaged in redesigning and transforming media and technology locally and transnationally in culturally situated ways, through activism and sustainable approaches to communication. On a micro level, this includes local decolonial, activist, and Indigenous approaches to journalism and technology, such as community-led designs and approaches to technology. On a macro level, multi-country regional approaches such as community radio networks and Open Access database mobilizations by academic communities provide examples of how technology is being reconfigured with communities and sustainability as part of their code.

This book first took shape at the Connected Communities Conference in Quito, Ecuador, in July 2017. The conference brought together Indigenous and community media activists and academics from across the region to share their experiences, theoretical and methodological approaches for community media, and the digital documentation of Indigenous languages and cultures. As the book project evolved, the conversations that began in Quito expanded to include a broader range of experiences and approaches from Mexico, Argentina, Ecuador, Bolivia, Brazil, Chile, Colombia, and Oaxacan Indigenous California, which speak to the concerns of practitioners and scholars alike.

The past two years have seen an intensification of what many commentators are referring to as the "Latin American Spring" with post-commodities boom countries at the center of social protests. Economic and political fractures across Latin America are making visible the profundity of the inequality that lies at the root of the conflict (Vivares 2019). While specific protest demands differ, social actors and communities across the region, both online and on the streets, are questioning cultural, political, and economic frameworks as well as structural inequality. Digital technology and social media are playing central roles both on the ground in mobilizations on the street and in online ideological struggles between governments, political parties, and social movement actors. While there is a growing global literature on digital activism, strategies, and methodologies in relation to the changing landscape and tools, the lack of training and access to information remain key concerns for activists (Freedman and Obar 2016).

Bringing into dialogue the work of scholars and activists, the case studies in this collection seek to address this gap and raise important questions concerning media, communication, and technology across online and offline spaces. Latin American communities, transnationally and translocally, are not simply appropriating digital media and technology, but also challenging Western technological rationality (Martens 2017) and profit models of global communication through collaborative communication networks. These counter-hegemonic frameworks are evident through such practices as community-led designs of solar canoes (Vila-Viña et al. this volume), which put sustainability before profit considerations and autonomous mobile telephone communication networks that allow for communicational priorities and strategies to be autonomously defined by communities (Loreto Bravo, this volume).

This collection also seeks to build on the rich trajectory concerning media, communication, technology studies, and activism in Latin America in conversation with international scholarship, which remains dominated by Eurocentric rationalist traditions at universities in the Global North. Most contributors to this book are established Latin American academics and activists who bring with them a diversity of epistemological and ontological approaches relevant to global debates concerning media and technology studies.

The chapters here bring into conversation decolonial, Indigenous, feminist, political economy, Science and Technology Studies (STS), and critical theory approaches. The next section will explore some of the more salient concerns of each of these diverse perspectives as they relate to media, communication, and technology in Latin America, followed by an overview of the book. The chapter will conclude by considering some of the implications of the strategies and reimagining of media and communication for understanding new modes of production, resistance, and activism within Media and Communication Studies.

Approaching Media and Communication Research in Latin America

This collection begins with the overarching premise that media and technology are not separate to but historically situated and intrinsically part of social processes that can be redefined and reconfigured. We draw on the work of Martín Barbero, who asks us to reconsider how we formulate our questions (2002, 29). This redefinition requires looking beyond Western

rationalist frameworks, which rely on logical certainty and dichotomies such as the individual and society to draw on a diversity of conceptual and methodological approaches that make up Latin American contexts. It also demands considering how digital and other communication technologies in Latin America are embodied in material and immaterial work and the role they play in the processes of exchange and social reproduction.

Key to this exchange and social reproduction are media systems, shaped by dictatorships and elitist democracies, which have prevented participation of other actors the media systems in Latin America and US hegemony is more widespread than in other countries (Lugo-Ocando 2008). Global relations of power led by US media and technology interests are part and parcel of these media structures. Robert McChesney argues that the digital market concentration is taking place at unprecedented speed, with US digital giants sitting at the top of the global digital political economy and poised to continue (2013, 130–131), leaving other actors at the periphery.

Drawing similar attention to the inequalities produced by current global communication and technology, Ramesh Srinivasan (2018), director of the University of California Digital Cultures lab, critiques global political economy structures. He argues that powerful commercial interests are responsible for "a highly asymmetric diffusion of digital tools and systems" (1) that treats billions of people as passive users of technology. Srinivasan's work, however, also focuses on the agency of actors and the potential for reimagining alternatives from the Global South that reflect a diversity of communities, cultures, and users in their design. Drawing on Angela Davis's "tyranny of the universal," Srinivasan argues for an alternative, situated approach to communication and technology. He writes,

> We cannot simply trust our gateways to the digital world as if they were democratically designed platforms, because they are not. Instead we can imagine alternatives that are non-commercial, public and conscious of cultural diversity. By uncritically evangelizing language such as "cloud, "open" or "Internet freedom" we block inquiry into what may be. Across the world, we can consider alternatives around how networked technology can better support our families, communities and cultures. (p. 2)

Governments and enterprises in the region and organizations such as the Latin American Development Bank and Telefónica have invested large sums in "digital transformations" to provide access to technology (Agudelo 2016). Although the digital gap in Latin America remains especially evident in rural and peri-urban settings, digital media, communication, and

technology are now widely integrated into Latin American economic, social, cultural, and political life and the emphasis on access in Latin America is beginning to wane (Bloom 2019).

Access, however, does not guarantee its equal distribution or use within communities. Recent studies (Gray et al. 2017), for example, argue that differences in media use between men and women are responsible for a gendered digital divide in Latin America.

Second, providing access to data and infrastructure does not address the interrelation of capitalism with colonialism. Couldry and Mejia argue that "The exploitation of human life for profit through data is the climax of five centuries' worth of attempts to know, exploit, and rule the world from particular centers of power. We are entering the age not so much of a new capitalism as of a new interlocking of capitalism's and colonialism's twinned histories, and the interlocking force is data" (2019, xii).

Digital activists in Latin America and social movements for free and open knowledge, Indigenous rights, cyberfeminism are taking the lead in questioning Western models of technical rationality, ownership, and data rights and their reliance on profit models and extractivist tactics. These interventions, however, go beyond the debates of media concentration and infrastructure, uses and appropriations. Technopolitics in Latin America can also be seen with regard to its impact on the architecture, design, ontologies, epistemologies, and methodologies of communication networks, and ways of working with technology.

DECOLONIAL APPROACHES AND INDIGENOUS COSMOVISIONS

Decolonial and Indigenous perspectives offer alternative paradigms to modernity and contemporary capitalism on political, economic, cultural, ecological, and social levels. While decolonial and Indigenous frameworks remain marginalized in many Latin American contexts, their impact can be seen in policies pertaining to knowledge management and communication, approaches to education, intercultural relations, and the questioning of concepts such as "development" and "progress," as well as the constitutional rights of nature.

In contexts such as Ecuador and Bolivia, the respective governments of Rafael Correa and Evo Morales appropriated the Indigenous concept of *sumak kawsay* or "good living", which was incorporated into the constitutions of both countries. Many commentators initially viewed this as a possibility for imagining new logics, rationalities, and sociocultural ways of living. It was also expected to transform colonial orientations in relation to

Indigenous groups historically denied rights and subordinated, and provide an alternative to the traditional constitutional materialization of the colonial developmental regime and its superimposition of global financial interests over the interests of local communities (Walsh 2012, 69).

However, as María Antonia Carcelén points out, recent configurations of *sumak kawsay* are based on generations of interlocking patriarchies, both Indigenous and colonial, and contaminated by Eurocentrism (2016). Serving the purposes of political powers, many now associate the term with the failure of twenty-first-century socialism in Latin America rather than the materialization of Indigenous cosmovisions of the good life and well-being.

In addition, decolonial perspectives demonstrate that Eurocentrism and the dualities of racial discourses have had profound economic implications. Patterns of colonial power have generated the processes of capitalist accumulation articulated in hierarchies whereby certain "races" and ethnic groups are destined to well-paid jobs, and others to coercive jobs, based on dichotomies such as "development" and "underdevelopment", and "barbaric" versus "civilized" (Castro-Gómez and Grosfoguel 2007, emphasis ours).

Against the backdrop of significant racial and class tensions, Indigenous cosmovisions have more in common with the ontologies and the ethics of the Commons of knowledge and information sharing than current capitalist models concerning communication and technology. Vasquez, for example, states that,

> the geopolitics of Commons opens up a new front in the battle against cognitive capitalism, which is done by connecting codes from Amazon communities with Ecuadorian neighbours, academics from the Americas and Europe, urban and rural occupation movements, as well as hackers, activists, communication specialists, until we became a network of over 1,500 people, discussing problems related to the exploitation of creativity of difficulties of knowledge access. (2015, 19)

This resistance to cognitive capitalism, however, involves more than rethinking creativity knowledge access. Decolonial ontologies and Indigenous cosmovisions foreground sustainability of communication and technology frameworks as environmental welfare is not considered separate to, but as a relational part of the code as it is developed. Despite debates concerning the term sustainability and its polysemic appropriation, we concur with Geoffrey Craig, that sustainability remains an important term "because of the way it can be used to prioritise environmental

welfare while also insisting on understanding the way that economic and social life are dependent upon the maintenance and nurturing of the environment" (2019, IX).

Etsa Franklin Salvio Sharupi Tapuy of the Amazon-based digital journalism network, *Lanceros Digitales*, asserts that for the first nations of *Abya Yala*, communication has become a tool of struggle and resistance. Virtual tools are not separate to, but co-exist with Indigenous philosophies, with the power of nature and the jungle, allowing communicators to share this knowledge via social networks and the web.

It is especially important, as he argues in chapter "Practitioner Perspective. Digital Communication Strategies for Strengthening and Empowering Amazonian Peoples and Nationalities: Community Radio and the *Quijos* Nation", to share *Abya Yala*'s First Nations sentiments and knowledge through social networks and the web. There is an urgent historical need to pass on Indigenous ideas, languages, ontologies, and other aspects of identity in order to be fully part of communities and societies, narrating and writing on virtual platforms, that are both used and managed by Indigenous community communicators.

In addition, Indigenous research and methodologies done by and for Indigenous people provide possibilities for greater relational accountability. Cree scholar, knowledge keeper and seeker, Shawn Wilson, argues that "research is ceremony, which aims to build stronger relations or bridge the distance between our cosmos and us. The research that we do as Indigenous people is a ceremony that allows us a raised level of consciousness and insight into our world" (Wilson 2008, 137). By stepping beyond dominant views of knowledge and doing research, Indigenous and decolonial research approaches make room for new agendas facilitating how research analysis and presentation of information is communicated.

CRITICAL THEORIES OF TECHNOLOGY AND STS

Science and Technology Studies (STS) and critical theory of technology highlight the inherent contingency and complexity of technical artifacts often hidden by the dominant technical explanations. The development of STS and its emphasis on specific case studies has been important in developing relational definitions and understandings of technology historically and in society, which emphasize technology's constitutive entwinement in a variety of social networks.

Critical theorists share many of the constructivist premises of STS but place greater emphasis on how technology is socially embedded within technical politics and social struggles over the code (Feenberg 1999; Gravante and Poma 2019). Critical theories of technology are especially concerned with capturing the multiple and varied social approaches to transforming technology, information, and knowledge.

Critical theories of technology emphasize underlying power relations of the technology-society nexus (Feenberg 1999; Kirkpatrick 2008, 2020). Technology philosopher Andrew Feenberg points out that, "The design and configuration of technology does more than merely accomplish our ends; it also organizes society and subordinates its members to a technocratic order" (1999, 17). For Feenberg, the shaping and implementation of technology is carried out through uneven power relations and the hegemony of technological rationality. Feenberg argues that technology is performed through a scripted activity or technical code, whereby people and objects co-produce designs and reproduce power structures and dominant ideologies concerning technology. Feenberg examines user interventions, from a wide range of actors, from activists to healthcare patients, that challenge the power structures embedded in the prevailing technological rationality as "democratic interventions" (1999, 93).

Anti-hegemonic struggles, however, cannot be universally categorized. Social theorists, such as Graeme Kirkpatrick, argue that "aesthetics, democracy and expertise are not easily assigned to 'sides' in an agonistic struggle against technical expertise over the shape or meaning of future technology" (2020, 200). His argument is that when we change technology, it becomes entwined in the production of diverse, unpredictable social outcomes. This makes it possible to draw on a larger vision rather than having 'faith' in certain rational outcomes, such as making technology more democratic will result necessarily in specific outcomes. Incorporating the cosmovision into technology design and making new technologies—rather than symbolically appropriating them—goes beyond 'democratisation' and socialist appropriation of indigenous ideas and practices, to create space for something different and anti-universalist, whereby equality is not conceptualized on in human terms but also in relation to species and nature.

While it is important to consider the significance of battles pertaining to technical codes, in relation to resources such as the Internet, it is also important to go beyond universalizing methodological approaches. Sierra

Caballero, Leetoy, and Gravante (2018) argue that this struggle for the code also requires re-thinking research processes in order to take into consideration a heterogeneous range of social actors, uses of knowledge, and information:

> Now we know, for instance, because of the revindication of the new net activism … that the exercise of citizenship and good government are necessarily and increasingly conceived as the construction not only of a process of inclusion and digital socialization in response to the intensive processes of change, but especially as a process of struggle and appropriation of diffuse resources like the Internet, of the struggle for the code, which requires greater permeability and cognitive openness of research processes in order to encompass or perceive the multiple uses and variety of information and knowledge by social actors. (14, our translation)

This multiple and varied use of information and knowledge is part of the rich cultural, linguistic, and socio-political diversity of communities in Latin America. It is also why looking more closely in methodological, ontological, and epistemological terms at transformations in relation to technology led by communities and activists provides us with key sites of analysis for alternatives to communication and technology. What make these alternatives stand out is that these are aligned first and foremost with community objectives and values, rather than needs created or imposed by market forces.

Cyberfeminism

Cyberfeminism's counter-hegemonic interventions within technological and scientific spaces expand the work of critical perspectives through feminism to counter male-dominated and masculinist network space. Cyberfeminist approaches make spaces for occupying positions in the public digital domain, empowering and occupying orientations toward information and communication. To do so involves intervening with key tools to address policies and rights.

Cyberfeminism, however, is less about access to information about policies and rights and more about the codes of information that make it possible to participate in decision-making, develop alternatives, and priorities in relation to rights. For cyberfeminists, cyberspace is also integrated with theory since it is a heterogeneous and encompassing movement,

ranging from netopia, within the liberal current to dystopia and resistance (Reverter-Bañon and Sales 2019).

Cyberfeminism also seeks to build democratic spaces which free bodies from gendered physical contexts, thus impacting on constructions of sex, gender, and sexuality. At the same time, it serves as a form of resistance that fosters greater reflexivity and self-determination, amid cultural, social, biological, or political logics. Latin American cyberfeminists point out that technologies such as the internet are marked by their military, male, white, American and European origins. They also point to the digital gaps, including gender, class, race, and generation in the production, circulation and uses of technology. They also draw attention to digital gender violence, digital crimes, invasion of privacy, surveillance, monitoring and control of bodies, which are feminist issues as women are the most affected (Natansohn and Paz 2018). However, going beyond victimization and technological determinism arguments, cyberfeminism opens paths through heterogeneous approaches to socio-technical networks, creating new options for action and social change. Binder argues that cyberfeminist activism in Latin America is based on politics concerning technology and provides a means to reconfigure and reshape society:

> Latin American cyberfeminists understand that their activism is a way of seeing life, a political position from which to think and act. It is a manifestation of prefigurative politics, in the sense that activists put into practice those ideals that will shape the society they want to build. (Binder in Benítez-Eyzaguirre 2019, 5)

Cyberfeminist practices and alternative communication therefore are not simple appropriations of media as a system of production or information and economic flows. Cyberfeminist perspectives and actions also provide opportunities for the recodification of identities, signs, and codes created, breaking with the passive acceptance of identities that are often imposed by external actors and structures.

An Overview of the Book

This volume aims to speak to the major transformations, challenges, and resistances concerning digital media and communication within the context of communities in and beyond Latin America's borders. The widespread availability of Internet technologies and smartphones alongside the

expansion of free and open access movements and digital activism has been especially important for Indigenous and other community media efforts.

While access to the Internet and communication systems remains a site for activism for many communities, this book aims to take discussions beyond media development perspectives that focus on the uses of communication and technology. The contributions here explore how Latin American community activists within Latin America, transnationally and translocally, are not simply appropriating media but also transforming it through a wide range of projects and epistemological frameworks.

It also explores questions, such as what type of Internet and communication systems may best meet community needs and who has the power to decide what these needs are. The chapters provide tangible examples of how we move about in mediated spaces and participate in decision-making and transformations of digital media, data, and sociotechnical processes.

The collection is organized into four parts each including academic and practitioner perspectives: The first part of the book focuses on digital territories and how the digital world is lived out in specific local contexts through hybrid experiences and multiple sites, beyond borders to include the experiences of transnational communities. Part II presents case studies and debates concerning free and open knowledge and the Commons. Moving beyond earlier discussions about uses of free and open source, the work presented here explores narratives and situated approaches to constructing knowledge and communication. Digital media and social networks have become key to the work of community activists, movements of local, and international resistance which is explored in Part III. The case studies in this section highlight a wide range of ways in which activists from Brazil, Chile, and Ecuador are countering oppression from a range of actors, including the state and corporate media, and bring to the fore discussions concerning online activism and its relation to grassroots movements and the offline work of social movements. Part IV presents further approaches in the development of strategies for documenting, representing, and strengthening Indigenous languages and cultures. Although this section focuses on Latin American contexts, the approaches and subsequent discussions around media and technology are transnational and relevant to scholars and activists elsewhere, interested in participating in conversations that address issues of structure and agency and the mapping of key issues concerning digital activism internationally.

PART I: DIGITAL TERRITORIES AND HYBRID LOCAL EXPERIENCES

The chapters in Part I explore some of the ways in which communities are rethinking relations between territoriality, community, and digital life. Carlos Jiménez in chapter "Radio Indígena and Indigenous Mexican Farmworkers in Oxnard, California" documents the creation and development of Radio Indígena and the Mixteco/Indígena Community Organizing Project (MICOP) by Indigenous Mexican Farmworkers in Oxnard, California. Documenting community FM broadcast and online experiences, Jiménez demonstrates how a transnational Indigenous community has created safe spaces for learning and engagement in mediated communication, transforming experiences of marginality by drawing on communication resources that create awareness and address important social issues and change. The community's roots in the state of Oaxaca, Mexico, provide an understanding of how technological needs and media practices develop as individuals migrate for work. His piece highlights the importance of considering Latin American community media beyond political borders to include transnational experiences brought about by migration.

In their discussion of the implications of creating sound mapping trajectories in an urban neighborhood in Quito, Elena Pinos and Cristina Venegas in chapter "Sounds of the Neighborhood: Innovation, Hybrid Urban Space, and Sound Trajectories" argue that technological appropriation at the community level provides possibilities for strengthening cultural identity to approach the urban environment and sites for social, community innovation. Challenging the influence of colonial spatial mappings of communities, digital sound mapping also provides opportunities for community-centered representations, new social memories, and dynamics. Pinos and Venegas argue that the recording of sound trajectories and sound mapping is not just about advocating the conscious listening to everyday sounds, but also concerns new ways of moving and interacting within space and territory.

Wayna Tambo Diversity Network founder Mario Rodríguez in chapter "Practitioner Perspective. Digital Networks in Bolivia: Territory, Community Collaboration, and the Wayna Tambo Diversity Network" presents a practitioner perspective of the case of digital networks in Bolivia in relation to territorial, face-to-face spaces. Rodríguez delves into the important question of how to integrate digital networks within the fabric

of our lives and our existence without doing away with nourishing social and community networks in our everyday lives. Rodríguez argues that digital networks need to be understood as sites of contested meanings and practices. His chapter highlights ways of re-inhabiting these spaces. He argues that, although this resistance may take place through protest, it is increasingly happening through the creation of alternative lifestyles that shape and revitalize work in territories and communities. This chapter in highlights how digital networks can simultaneously act as sites of protest online and foster sustainable lifestyles offline.

PART II: APPROACHES TO DECOLONIZING KNOWLEDGE AND COMMUNICATION

Digital media and technology are important sites for struggles concerning the future of knowledge, decolonialization, and sustainability. These struggles include battles over mobile and Internet access, equality online, digital rights, and sustainable communications systems. The chapters in Part II consider macro contexts such as regional community radio networks and their interaction with free and open-source communication and discussions concerning Open Source academic databases in Latin America. The cases here also explore two specific micro contexts focused on sustainable communication: a solar communication network in the Amazon and mobile telephony in Oaxaca, Mexico. Both examples provide evidence of new narratives and approaches to constructing knowledge and communication.

These narratives and approaches are philosophically grounded and at the same time practically oriented. Juan Manuel Crespo, David Vila-Viñas, and Cheryl Martens in chapter "Open Knowledge, Decolonial, and Intercultural Approaches to Communication Technologies for Mobility: The Achuar Kara Solar Project" present the case of the Achuar Kara Solar Canoe Project in the Ecuadorian Amazon. They examine how this project brings decolonial, open knowledge, and intercultural approaches into conversation with sustainable approaches to communications for mobility. The Achuar Kara Solar Project involves a wide range of actors. What makes this case unique is the way in which Indigenous knowledge about millennial technology concerning canoe construction and communities' values are not sidelined but form the foundation for work with external agents.

Questioning the construction of knowledge and communication in Scientific Communities in Latin America, Maximiliano Salatino in chapter "Open Access in Dispute in Latin America: Toward the Construction of Counter-Hegemonic Structures of Knowledge" examines the history and debates regarding the regional Open Access Scientific communities. Salatino argues that tensions between regionalization and the internationalization of scientific communication and the perpetuation of neo-colonial and Eurocentric practices affect Open Access in scientific communities in Latin America. Salatino's chapter urges us to reconsider open knowledge production and how this is connected to the democratization and access to scientific research, as well as its distribution, an issue affecting countries internationally.

Also concerned with sustainable regional networks, Santiago García Gago in chapter "Narratives for the Defense of the Digital Commons" examines Community Radio and Free Software Network in Latin America and its transition from analogue to digital media, the legislative advances and setbacks affecting community media, and the Network's demand for spectrum reserves. He proposes a rethinking of narratives around communication rights. This chapter points out the political nature of technologies and argues against net neutrality and in favor of the digital commons, which includes the collective management, maintenance, and governance that can be applied not only to infrastructure and hardware but also to code and content.

The activist contribution in this section (chapter "Practitioner Perspective. Autonomous Infrastructures: Community Cell phone Networks in Oaxaca, Mexico"), by Loreto Bravo presents the case of autonomous mobile networks in remote regions in Oaxaca, Mexico, in the Zapotec community of Talea de Castro in the Sierra Juarez of Oaxaca. This project, which involves community ownership and technology policy, demonstrates the possibilities for telecommunication autonomy of communities and sustainable networks of mobile communication that counter hegemonic systems of mobile telephony worldwide.

In pursuit of other collective futures, the spaces and approaches to media and technology presented in this section provide a window onto situated approaches to sustainability, open access, and decolonializing knowledge. They also point toward possibilities and the need for further consideration of how we might reconceptualize ethical futures in communication and technology.

PART III: DIGITAL ACTIVISM AND RESISTANCE

The digital activism explored in Part III explores how activists are working with and transforming digital media to address community needs. This section examines digital activism and its challenges in relation to territorial and equality struggles in Brazil, Chile, and Ecuador. Andrea Medrado, Taynara Cabral, and Renata Souza, in their case study (chapter "Favela Digital Activism: The Use of Social Media to Fight Oppression and Injustice in Brazil") of social media in fighting injustice in Brazil, argue that "marginalized communities search for new media territories where they can prevail and produce their own accounts in relation to territorial struggles" (Medrado et al., this volume).

This work also highlights how through the mediation of the neighborhood, using methods such as mapping and augmented reality of favela streets, it is possible for residents to share alerts in real time, bringing online and offline worlds together in highly relevant ways for residents, impacting on neighborhood safety and solidarity.

Diana Coryat's discussion of transmedia activist practices of the Yasunidos social movement in chapter "Jiujitsu Moves, Radio Bemba, and Other Transmedia Practices: Social Movement Strategies Counter Statist Media Power" demonstrates the example of digital activism and its social impact in the challenging of messages in mainstream and state media in Ecuador. Countering neo-extractivist discourses and politics concerning drilling for oil in the Amazon, Coryat argues that Yasunidos transmedia practices combined with on-the-ground strategies impact national and international public opinion and interrupt hegemonic meanings of development.

Focusing on the relations between online and offline Mapuche activism, Salvador Millaleo in chapter "Digital Activism and the *Mapuche* Nation in Chile" considers how the contours of limitations of Mapuche digital activism impact on Chilean public opinion. He draws on several case studies to explore the relationship between street mobilization and online digital content and argues that digital activism is limited by the overall mainstream media environment, the coordination of digital activism online in relation to the Mapuche movement, and protests on the ground.

Writing from a cyberfeminist academi-practitioner perspective, Natalia Angulo Moncayo in the final chapter of this section "Feminist Cyberactivism in Theory and Practice" explores bringing feminist theory and cyber

activist practice together. She points out how cyberfeminist practices provide new possibilities through feminist knowledge, digital communication, and the embracing of difference and dissidence. She also reflects on technology not only from a biopolitical perspective, in terms of control and segmentation of users, but also as a site for recoding technology, at once subversive and empowering.

Part IV: Strategies for Documenting, Representing, and Strengthening Indigenous Language and Culture

The Internet and digital media can be considered main sites for the recording and storage of historic and visual records (Prins 2001), fomenting alliances, and settling land claims and the right for self-determination (see Salazar 2009; Belton 2010) for Indigenous peoples. Local community activists, transnational media and journalist networks, intercultural communicators, and Indigenous journalists in Latin America are not simply making use of digital media recording devices and social media as part of their work, they are also questioning dominant power structures, and media and technology paradigms.

Some of these reorientations challenge hegemonic and often stigmatizing representations. Iria Puyosa, Belén Febres-Cordero, and Juan Diego Andrango in chapter "Re-presenting Indigenous in Ecuadorian Media: A NewsFrames Approach" write about the reframing of stories, whereby Indigenous communities and nationalities in Ecuador critically engage and break with hegemonic media structures in the positioning of the subject by creating new spaces and possibilities for sharing experiences, knowledge, and practices that recuperate historic memory and increase possibilities of self-representation. This case demonstrates the importance of developing skills in digital tools and methods that promote collaboration and collective production, self-representation, community mobilization as well as group identity integration.

Also concerned with countering asymmetries of power and knowledge, Javier Jiménez Becerra, Mónica Bustamante Salamanca, and Ángel Gutiérrez Pérez in their chapter "Challenging Asymmetries of Power and Knowledge Through Learning Communities and Participatory Design in the Creation of Smart Grids in Wayúu Communities" analyze learning communities and participatory design methodologies in the creation of

smart grids in Wayúu territories in Northeast Colombia, and the interactions that took place between Wayúu leaders, a private energy company, and a faculty of engineering. One of the objectives of the project was to challenge power-knowledge relations associated with colonialism. In the design and discussion process, Wayúu community needs were put first to orient the technology and design used for smart grids.

Another important way in which Latin American Indigenous communities and journalists have been reconfiguring media and technology is by taking control of cultural and informational production, through national and regional news production and alliances. Belén Albornoz and Gema Tabares in chapter "Indigenous Journalism in Ecuador: An Alternative Worldview" examine the role of the Network of Bilingual Intercultural Communicators of Ecuador (REDCI), an intercultural Indigenous journalist network in Ecuador. Through the practice of collective rather than individual journalism, work at REDCI laid the groundwork for countermining mainstream journalistic practices and creating alternative news channels and structures by foregrounding Indigenous cosmovisions and methodologies. The chapter discusses how REDCI's digital platform became a technological framework for the interaction of a wide range of Indigenous languages, cultures, and territories, whereby multidimensional realities and cosmovisions could come together, challenging many commonly held Western premises concerning media and technology.

Part IV concludes with the practitioner perspective of Etsa Franklin Salvio Sharupi Tapuy, who reflects on the strategies used by the Quijos nationality in the Ecuadorian Amazon. With linguistic and cultural roots pre-dating the arrival of the now dominant Amazonian Kichwa, the Quijos first received official state recognition in 2013. Sharupi Tapuy in chapter "Practitioner Perspective. Digital Communication Strategies for Strengthening and Empowering Amazonian Peoples and Nationalities: Community Radio and the *Quijos* Nation" discusses how digital communication strategies together with offline tactics such as strategic alliances are contributing to a Quijos linguistic and cultural revitalization.

Conclusion

The heterogeneous theoretical, epistemological, and methodological approaches of this collection provide an exciting range of perspectives concerning strategies and methods of collaboration that put communities at the center of media, communication, and technology. The frameworks

and the work outlined here provide possibilities for new intersections of theoretical and practical tools for rethinking media, communication, and technology in the context of Latin America and globally, as we confront many of the same media and technology concerns in relation to the wellbeing of our communities.

Further evidence of the strategies and approaches discussed by activists and academics throughout the book be seen in communicators' responses to the wide range of protests in 2019–20 in Chile, Bolivia, Colombia, Brazil, Ecuador and elsewhere in Latin America. Many of these protests have grown alongside the coronavirus pandemic, as economic and social inequality take center stage. Communities are now using a wide range of "jiujitsu strategies" (Coryat this volume) to harness their opponents' power to challenge political and economic frameworks via social media and on the streets. At a time where employment is scarce people are finding ways to meet family and community needs through alternative cooperative practices and systems of exchange promoted via social media. Others are turning to autonomous, low-cost information-sharing. All of these tactics demonstrate technopolitical responses that put communities ahead of profit margins.

Wayna Tambo Diversity Network in El Alto, Bolivia, used, for example, its social networking space to convene dialogue between affected people and communities in the aftermath of the political coup in November. It is now using its platforms to address community needs in relation to the coronavirus. In addition, the response from media activists in the historically significant political protests in Ecuador, which Sharupi Tapuy defines as the second rising of the Confederation of Indigenous Nationalities of Ecuador (CONAIE), has had an international impact and continues to grow despite lockdown measures. During the protests, and throughout the coronavirus pandemic, the independent journalists of *Lanceros Digitales* share coverage through Instagram and Facebook pages, often at odds with local and international mainstream media, which maintain a narrow range of media narratives.[1] The struggles and protests of Indigenous people in Bolivia, brothers and sisters in Haiti, Colombia, Argentina, and beyond in France and Taiwan have all become inter-connected via webs of transnational support, education and information sharing through social media online.

Indigenous websites and Facebook pages are open, free, and continuously engage in updating events not given depth or visibility elsewhere. Community information networks transmitted via Facebook Live or

through text messages both use and bypass traditional forms of news media reporting. Across these sites of protest, wireless communication systems, though regulated and governed from elsewhere, are combined with the logic and needs of communities whose concerns and rights are often misrepresented, or worse, left out of the picture altogether. The transmission of alternate views, especially around moments of intense political struggle in the midst of economic and health crises, demonstrates the material contours of local and global media infrastructures, signal regimes, and how they are in turn politicized.

Lessons learned from the efforts of Indigenous community media include developing ways to bring this work together with visionary practices—such as drinking sacred ayahuasca and tobacco—before joining the protests in cities such as Quito, Tena, Coca, Macas, or Puyo. Indigenous community media are part of several Indigenous movements and of other organizations across Latin America. They are also behind the production of content on websites, the data of the community, relating events that can be cited and archived, making it possible to study these sites of information to better understand Indigenous, worldviews, philosophies, and perspectives.

The sharpness and accuracy of the Amazonian lances of *Lanceros Digitales* aims to continue during and beyond moments of conflict and their reporting can be seen, taken up, and shared by masses in Latin America and beyond. The contribution by local media practitioners reporting events on the ground and the new perspectives arising therein provide substantive material to be considered in the writing of new policies. The debates and issues emerging from these conflicts are informed by the now important role of Indigenous community media in the hybrid contexts we have discussed here. In another location and in the context of extreme US anti-immigration policies, Radio Indigena in Oxnard, California, continued to advocate on behalf Mixteco and Mexican worker's rights and well-being, amassing content and contact with ever expanding community networks.

Given that digital and wireless technologies are embedded in our daily lives, the ubiquity of mobile and social media circulation, the expansion of mobile data networks (5G), and the growing political and economic impact of big data, future work must consider new questions emerging from this reality. How does the availability of faster technology and increased data raise the potential for discrimination, or widen the gap of the digital divide? In what way might we also imagine and create new

opportunities for social justice and cyberfeminist responses? How do wide-ranging community media networks continue to expand their potential to co-create spaces for vital collaboration and what will these collaborations look like post-pandemic? How do Indigenous and activist communicators bring together local and global media epistemologies across widely situated movements to impact sociotechnical relations and policies?

As the contributions throughout this collection attest, the assumed centrality of media narratives from dominant positions, governments, or institutions is under fire and being challenged from multiple perspectives, modes of doing and thinking. This has implications for media policymaking and activist interventions for understanding new modes of production, resistance, and activism in Latin America and the Global South. It opens spaces, theoretically and methodologically, for rethinking interfaces, media regimes, activism, and sustainability concerning the aims, rationality and uses of media, communication, and technology.

Note

1. Blurry cellphone videos revealed stark confrontations on the streets, and acts of deception by police. Coverage included CONAIE and CONFENIAE leaders as well as official coverage of the Indigenous agreement with the government.

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Digital Territories: Transnational and Local Hybrid Experiences

Radio Indígena and Indigenous Mexican Farmworkers in Oxnard, California

Carlos Jiménez

"Most of them of course, suffer in silence. They have no political weapon of retaliation."
Carey McWilliams (1939)

"Diasporic media have frequently been at the leading edge of technology adoption due to the particular challenges they face in reaching their audiences."
Karim H. Karim (2003)

INTRODUCTION

In September 2014, an all-volunteer radio committee in Oxnard, California, working to launch a community radio station, *Radio Indígena*, created a similarly named Facebook page, "Radio Indígena 94.1 FM." It

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27

did not take long for the radio committee to realize that including an FM frequency in its Facebook page name implied that the station was already broadcasting over FM. Committee members received messages from friends as well as interested followers saying they couldn't hear anything on the radio—it was all static. This was unfortunate but true because the low-power FM[1] radio station was more than two years away from being launched and was first using Facebook to help spread the word. Despite the page explicitly saying that the radio broadcast was still in development, the appearance of the frequency in the page's name caused both excitement and misunderstanding. The committee changed the page's name to "Radio Indígena en Oxnard," giving its geographic specificity and removing the frequency. For the radio committee, it wasn't FM or internet radio that first connected them to an information-hungry public; it was social media.

The Mixteco/Indígena Community Organizing Project (MICOP), the nonprofit that presented the idea for the radio station to the local community, believed that it would be a game changer. Since 2001, MICOP's mission has been to advocate on behalf of the Indigenous Mexican community in Ventura County to improve access to basic health and educational resources (*Our Mission,* n.d.). Latino radio, primarily in Spanish, started to boom in the U.S. between 1980 and 2002 (Castañeda 2003, 5). A radio station would provide MICOP access to a traditional broadcast medium that was extremely popular with its farmworker community, whose members are known for playing radio in the fields as they work.

An effort running through all of MICOP's projects is to create greater awareness of and respect for the Indigenous Mexican community living and working in Ventura County, which is directly northwest of Los Angeles. The community has a unique set of needs because its members tend not to speak Spanish or English. Instead, they speak Mixtec or Zapotec dialects. Given these linguistic challenges, one might assume that what Carey McWilliams wrote in 1939 about U.S. immigrant farmworkers suffering in silence would hold true today (140). Fortunately, economic, social, political, and technological conditions have changed. MICOP is both a part of and a product of these changes as an organization that addresses linguistic barriers and cultural differences in its community work. Specifically, MICOP has helped to create linguistic access within public education and health systems in Ventura County by establishing medical-interpretation training and services and offering

Spanish-language instruction, and it has worked to pass statewide legislation extending overtime laws to agricultural workers.

In its eighteen years of operation, MICOP has accumulated a range of communication tools that include word of mouth, two Facebook pages, a radio app, a website, an internet streaming radio, and an FM radio station. Per Karim H. Karim, this media adoption trend is not surprising. Karim argues that immigrants and diasporic communities are at the cutting edge of technology adoption given the difficulty they face in reaching their dispersed audiences (Karim 2003, 22). To understand how immigrant communities adopt radio and combine it with social media, this chapter analyzes Radio Indígena's Facebook posts, online/offline engagements, radio programming, and internal committee politics. I also consider the radio station's Facebook page in the context of its intended participants, a low-income immigrant community living in the U.S. Analysis of Radio Indígena's Facebook page shows a digital communication strategy through which the mission of MICOP, the local Indigenous Mexican community, online followers, and FM radio become increasingly visible and interwoven in one space. The range of local and global communication technologies that MICOP has adopted means that Indigenous Mexicans no longer need to endure being silenced by the lack of possibilities for communication. They have built what McWilliams described as "a political weapon of retaliation" (240). They have banded together to learn the politics, structure, and practice of mediated communication in a way that helps address urgent community issues.

This chapter begins by providing background on the emergent relationship between internet/social media and radio. Next, the chapter details the ethnographic approach used to carry out the study, followed by a brief summary of the changing conditions of immigrant farmworker communities in California. The remainder of the chapter focuses on Radio Indígena's social media use during three different moments of the radio's history: prior to the internet radio stream, after the internet radio stream launched, and after the radio began to broadcast over FM.

Background: Internet and Radio

During its early years, radio was a unique mass communication technology where a broadcaster sat in a room and their words were carried over the air to anyone tuned in to receive them. Broadcasters didn't know their audience, and audience members had nothing but a name and a voice by which

to identify the broadcaster (Bonini 2014). There was no opportunity for ongoing interaction with the broadcasting entity. The invention of telephones changed this. In his study on the relationship between radio and social media, Tiziano Bonini highlights how technological innovation over time has increasingly reduced the distance between broadcasters and audiences (Bonini 2014).

This distance decreased significantly in the 1990s and early 2000s, when radio stations began to use their websites to rearticulate their relationship to audiences. Particularly attractive for radio scholars was the way the internet could carry information by means other than audio, for it could also transmit textual and visual content. However, studies of radio on the internet during this period found that radio stations underutilized the internet and that it didn't notably increase interactions between broadcasters and audiences (Greer and Phipps 2003; Lind Medoff 1999; Potter 2002).

With social media, Bonini argues, the distance between broadcasters and audiences has become even blurrier. On social media, the two parties are no longer strangers. They have names and profile pictures, and listeners contribute content or become the content themselves (Bonini 2014). Today we are experiencing the latest reduction in distance between listener and broadcaster as radio stations adopt social media. The few studies that exist on this adoption process explicitly focus on mainstream, longstanding radio stations. Freeman, Klapczynski, and Wood conducted early research that examines radio and social media in a global context (2012). In their study of three dozen radio stations' Facebook pages, based in the U.S., Germany, and Singapore, they identify three types of posts: those "1) designed to generate engagement; 2) promoting station benchmarks and listening; and, 3) promoting radio personalities" (Freeman et al. 2012). In essence, radio stations have primarily turned to social media for self-promotion, which is similar to how radio stations used websites a decade before.

In 2017, Laor, Galily, and Tamir examined twenty-three Hebrew-speaking radio stations in Israel to understand how they had incorporated new media (websites, mobile phone apps, and social media) into their FM operations. Their study found that an overwhelming amount of stations had a Facebook page (70%), but some of the more innovative uses, such as broadcasting via Facebook (40%), content sharing (4.3%), or offering their broadcast via a mobile phone app (50%), were not overwhelmingly widespread (Laor et al. 2017). In 2018, Laor and Steinfeld studied the

popular posts of 19 Israeli radio stations and found that their social media use offered a "window into the station's inner workers, showcasing their product, programmes and hosts, and even serving as a catalyst for discourse and dialogue between the station and listeners" (2018, 280). Even when stations are well established and have an online presence, the authors argue, the use of social media, similar to the use of websites previously, continues to lack a cohesive strategy beyond being self-promotional (269).

This study shifts the focus to provide an in-depth, qualitative understanding of how the Facebook page helped shape the station's identity, increase participation in mediated communication, and address the station's internal politics. Radio Indígena's Facebook page is an example of how immigrants, and Indigenous Mexicans specifically, are continually at the cutting edge of technological adoption as they work to be heard and to address community needs.

METHODOLOGY

This chapter builds on previous studies of how Latina/o immigrants have established community radio projects (Casillas 2014; de La Torre 2015, 2018). Through an insider approach and interviews with radio station founders, broadcasters, and volunteers, I expand the scope of current research by examining the social media use of an Indigenous Mexican community radio station in the U.S. as an essential aspect of building audience engagement. In my research, I used ethnographic methods to document and analyze the active process of developing project governance, building a studio, creating a training program, and launching the station over the internet and on the FM spectrum. Over a twenty-six-month period (January 2014 to June 2015 and September 2016 to April 2017), I studied the ongoing activity of those involved through a combination of participant observation, ethnographic journaling, and semi-structured interviews with MICOP staff and committee members at varying stages of the radio station's development. This chapter also incorporates a 2018 interview I conducted with Arcenio Lopez, MICOP's executive director, to learn specifically about the organization's social media work and its evolution over time. Lopez graciously allowed back-end access to the radio station's Facebook page, through which I was able to analyze the data of its most popular posts.

My fieldwork for this study began in December 2014, when MICOP hired me to help build the community radio station as a part-time project

coordinator. For the first six months, I was given access to the radio committee and to MICOP's work. This included leading and participating in weekly committee meetings, supporting fundraising efforts, training broadcasters, overseeing Facebook posts, planning events, and listening to and addressing the challenges experienced by the radio committee. The committee decided to first launch the radio over the internet in preparation for the FM rollout (Jimenez 2019). During this process, I advocated and strategized alongside the committee as an insider while meticulously documenting every step as a researcher. The fieldwork I carried out in Oxnard, which formed part of my doctoral dissertation, had two focal points: one, the radio station's development, and two, how farmworkers used mobile phones in their everyday life.

Farmworker Community

Over the past several decades, Ventura County and much of rural California have experienced a surge of immigrants from Oaxaca, Guerrero, and Puebla who identify as Indigenous Mexicans (primarily Mixtec and Zapotec) and compose 20–30% of the agricultural workforce in California (Mines et al. 2010). For Indigenous Mexican farmworkers, who typically arrive in the U.S. undocumented, undereducated, and as monolingual Indigenous speakers, the experience of exploitation and exclusion is more intense given fear of deportation, limited interpretation services, and access to transportation (Mines et al. 2010; Rochin and Castillo 1995; Taylor et al. 1997; Taylor and Martin 2000). Indigenous Mexican immigrants do not typically arrive to an expansive support network; instead, they face marginalization within the broader Mexican community (Castells i Talens 2011). The reason for out-migration is the dire economic situation of rural peasants in Mexico, where 80.6% of the Indigenous populations are classified as extremely poor (De Rocío Conejo 2015, 87). In the U.S., many Indigenous workers end up living in substandard housing in segregated areas and occupy the lowest-paid positions in agriculture (Holmes 2013; Martin 2009).

Changes in agricultural production and settlement patterns have created new conditions for the inclusion and stability of Indigenous Mexican communities in California. Since the 1970s, the agricultural industry increasingly has produced labor-intensive specialty crops (e.g., strawberries, blueberries, etc.) that rely on an increasing number of year-round workers (Palerm 1991). Long-term immigrants that once moved across

California in search of seasonal work started to settle permanently in places like Ventura County and areas across the San Joaquin Valley. The expansion of available work led to significant demographic changes across rural California that are visible today (Palerm 1989). In 1990, the U.S. Census reported that for the first time in its history, Oxnard, the largest city in Ventura County, had a majority Hispanic or Latino population (54%), and in 2010, the growth showed no signs of abating (73%) (U.S. Census Bureau 1990, 2010). Latina/os and farmworkers who were once excluded and exploited now formed the foundation of rural communities across the state of California (Santos-Gomez 2013).

The size and stability of Latino/a settlement in rural California has created an urgent need to make visible the particular needs of Indigenous Mexican communities in these areas. With an estimated 20,000 Indigenous Mexicans living in Ventura County, and with their tendency to rely on radio communication, it is important to consider what reliable sources of information are available to them (National Public Radio 2018). In all of Ventura County, there was only one Saturday-morning program in Mixteco language and considering its many variations and dialects, the single weekly radio program's narrow impact limited its capacity to inform, connect, and inspire a growing Indigenous Mexican population.

The combination of a longer-established farmworker settlement in the county, exclusion from the airwaves, and MICOP's eighteen-year experience created both the need for a reliable source of information as well as the conditions necessary for Indigenous Mexican farmworkers to build their own communication systems. While FM radio was the goal, its costly infrastructure and legal challenges made the use of social media platforms the first communication project through which Radio Indígena reached the local community.

Facebook First

From the very beginning, Radio Indígena's digital communication strategy has depended on the experience and resources of MICOP. Radio Indígena's Facebook page was created with one of its many projects. One of the differences between Radio Indígena and other programs at MICOP, Lopez recalled, is how popular it became with the community and garnered a large volunteer base in a short period of time.

The radio committee created its Facebook page prior to launching the station over the internet and the FM spectrum as a way to create

Fig. 1   Radio Indígena's committee meeting group in a photo posted to Facebook in May 2015

Fig. 2   The radio committee recruitment flyer, posted to Facebook on July 16, 2015

awareness, recruit volunteers, and promote fundraisers. The page's self-promotional nature would later evolve, but at the beginning the committee posted pictures from committee meetings and included an invitation to anyone who was interested (see Figs. 1 and 2). Once equipment was purchased, they posted pictures of the radio studio in progress. The online posts were so effective that people from across the state of California would call in to the station asking if there was a station like Radio Indígena closer to where they lived or if it was already on FM.

The committee worked alongside MICOP staff to organize and structure the station, and in the early planning stages it dedicated itself to organizing fundraisers to help purchase the necessary studio equipment and antenna. In particular, committee members organized concert fundraisers two to three times a year. These events required a significant investment of time. The committee had to set a date, find a venue, invite bands, coordinate homemade food, and promote and sell tickets for the event. When one fundraiser finished, they were already planning the next one. The Facebook page was an easy place to promote the fundraisers and post images and videos from the events (see Fig. 3).

Fig. 3   Radio Indígena's posted flyers for fundraisers on November 1, 2014, and April 4, 2015

In an effort to increase the number of followers to its Facebook page, the station held ticket giveaways for those who shared the fundraiser announcement and garnered the greatest amount of "likes." The giveaways brought attention to the radio station and to its fundraisers (see Fig. 4). Another tactic was to follow other culturally relevant Facebook pages and to share their content on Radio Indígena's page. This allowed the radio station to populate their Facebook page with compelling content without having to create it themselves. Figure 4 on the left is a ticket giveaway posted on Facebook to generate followers on November 11, 2015. On the right is the Radio Indígena committee's invitation to the community to come learn to be a radio broadcaster, posted to Facebook on February 28, 2015.

The fundraisers and promotional content on Facebook helped to shape the identity of the radio station early on. In addition to highlighting the purpose of the fundraisers, the online flyers announced that the event would feature homemade Oaxacan food and regional music. What made

Fig. 4 Ticket giveaway and Radio Indígena committee's invitation to the community

the events special was that all the invited bands were local and each special-ized in playing regional Indigenous Mexican favorites, such as the Chilenas. The combination of food and music at the fundraisers helped the station strengthen its identity and reach its target audience.

Rather than having predetermined strategies, the promotional cam-paigns were driven by the needs of the Indigenous Mexican community. The content published online, however, had clear implications for how the community saw Radio Indígena: as a community-owned, community-led project that understood their experience and hunger for content that was culturally relevant and linguistically accessible. Radio Indígena incorpo-rated elements familiar to family celebrations (Oaxacan food and music) and moved them from a private setting into a public, online space. The station also established a strong geographic connection by working with local bands and holding concert fundraisers near farmworker neighbor-hoods. Together, the online presence, committee photos, and concert fly-ers, allowed the committee used social media and flyers to invite the community to a broadcast training program (see Fig. 4). By the time of the internet launch on June 6, 2015, the radio committee's membership had blossomed to more than thirty members, all eager to shape the future of Radio Indígena. But the growth in membership and the democratic structure created some tensions over decision-making between MICOP and the radio committee.

The radio station began with the intention of creating a democratic structure in all aspects of its operation. Everyone who had a radio show was given administrative access to the Facebook page. They could each post content that promoted their program or share content from around the internet to help generate "likes." This freedom in posting access was also meant to address one of the major issues that MICOP faced with its own social media work, which was that it didn't have the capacity to post content on a regular basis. While there was a dedicated employee at MICOP to oversee social media content, that person's responsibility was one among several key programs. The hope was that by having multiple individuals with administrative access, the station's Facebook page would produce a level of regular activity.

As Radio Indígena's parent organization, MICOP provided the station access to space, managed its finances, and paid for the radio project coor-dinator's salary. Lopez encouraged community members to be involved at various stages of the station's development. Additionally, an emerging

democratic structure allowed for community members to take on key leadership roles and help make executive decisions. But the way in which the Facebook page's administration reflected the democratic structure of the radio committee came to be viewed as a potential problem. After a meeting with MICOP's board of directors, Lopez was advised that giving multiple people access to the Facebook page could present an unexpected risk. For one, the page represented the organizational identity of Radio Indígena, and potentially MICOP too. The lack of clear oversight could lead to unique challenges, such as one individual posting something offensive or removing posts by other people. Lopez, along with the project coordinator, made the decision to restrict the radio broadcasters' and volunteers' access to the Facebook page. They were encouraged to create their own pages based on their programs, where they could freely publish any content they wanted. Later, a structure for the Facebook page was adopted where three MICOP staff members were assigned the role of administrators with the responsibility of accepting or rejecting posts submitted by broadcasters and committee members. Over time, select members have been given access to live-stream events and outreach efforts via Facebook.

As reflected in the initial impulse for broad, democratic access to its Facebook page, Radio Indígena's internal workings empowered participants and encouraged democratic ownership. The volunteers drafted their own bylaws, and membership tripled, but the committee became concerned about how the money they raised was being managed, and some members talked about becoming their own, separate nonprofit organization. Lopez also mentioned that members were making their own plans without consulting MICOP. The Facebook page was one element of the committee's growing power; the page was where MICOP first saw the potential consequences of having no clear structure for effective oversight. By revising access to the Facebook page, MICOP took its first step to reworking the democratic structure of the station, which became alarmed by the lack of a chain of command and by how much Radio Indígena's identity had merged with that of MICOP.

Radio Indígena's adoption of Facebook represented a concern beyond the self-promotion typical of radio stations' use of social media (Freeman et al. 2012). The point of contention for MICOP's leadership was over the difference they saw between Facebook posts made by several individual committee members compared to individual broadcasted radio programs. Radio programs are tied directly to an individual and their own

personal ideas and tastes. A radio station's Facebook page, on the other hand, does not clearly distinguish one post author from another; all the content posted by members coalesces into a singular identity. Social media is thus viewed as riskier especially since, as Bonini (2014) would argue, social media increasingly blurs the distance between broadcasters and listeners and the identity of the radio is simultaneously influenced by the identity of its followers and how they respond to the radio's posts. This blurring, aside from providing clear benefits, creates other risks especially since social media adoption by radio stations often lacks a cohesive strategy (Laor and Steinfeld 2018). To some degree, the full access given to committee members to post and the uncertainty of how audiences would respond represented an amorphous strategy that was later honed by placing MICOP leadership as Facebook administrators.

The Radio Indígena Facebook page became a site at which the internal power relations between MICOP and the radio committee played out. MICOP's decision to reconfigure access to the page was an effort to ward off unforeseen missteps when the FM radio launched in the future. During the committee meeting where permissions to Facebook were revised, Lopez also informed the radio broadcasters that their bylaws would not be adopted since MICOP already had its own agreed-upon bylaws, and he reminded the radio committee that its role was merely advisory. The outward-facing Facebook page and the risks it involved that became evident triggered MICOP to reassess its organizational responsibilities and role as one part of a broader struggle over the future of Radio Indígena's decision-making, creative control, and identity.

Radio Indígena Goes Live on FM

Radio Indígena went live over the airwaves on March 1, 2017; more than two years after MICOP presented the idea of the radio station to the community. The station's Facebook page has become one of the central components by which it continues to innovate its outreach strategies. One of the most unique strategies has been to build up an audience by visiting farmworkers in the fields. Typically, a group of volunteers from the radio committee arrive before sunrise with pan dulce, coffee, and cellphones with which to record video. The approach directly engages station listeners who are on the field working as well as introduces the work of the station to new listeners. All of this is captured on a cellphone and live-streamed or uploaded to Radio Indígena's Facebook page.

Fig. 5 Fourteen-minute video live-stream via Facebook on March 30, 2018

The radio station broadcasters announce these field outreach efforts over the airwaves, but the real impact with audiences is through audiovisual content on the station's Facebook page (see Fig. 5). One video on Facebook features the broadcasters speaking directly into the camera in a combination of Mixteco and Spanish as viewers see farmworkers walking up to a table lit by a car's headlights to grab a cup of coffee and pan dulce. This presentation style situates audiences in the fields with the workers. The radio committee adopted a popular commercial radio strategy involving partnerships with local businesses that cater to the Indigenous Mexican community: the farm visits promote a local bakery that donates the coffee and pan dulce. Similarly, the committee sells tickets to concert fundraisers at local Oaxacan restaurants and markets. These types of partnerships offer an ideal exchange where businesses receive indirect promotional airtime when broadcasters tell listeners where they can buy tickets, and Radio Indígena wins over potential listeners or followers. Through Facebook video posts, the station connects visually with farmworkers, local businesses, and mutual community needs.

These unique promotional strategies have resulted in Radio Indígena's Facebook audience surpassing MICOP's. As of the beginning of 2019, Radio Indígena's page had almost 9000 followers, easily double those of

MICOP, which had less than 4000 followers. MICOP in many ways anticipated that the informational and entertainment nature of the radio station would appeal to more people on a social media platform, both inside and outside Ventura County. Content that targets Ventura County residents includes reposts from the Oxnard Police Department about shelters, City of Oxnard meetings to discuss park improvements and MICOP programs and workshops. Content with a more global and general focus include posts about cultural festivals in Mexico, short videos about Afro-Mexicans, news stories from Oaxaca, and links to stories about Indigenous communities elsewhere in the world. The advantage of popularity is also MICOP's. As a direct-service community organization, MICOP can cross-promote posts, thus adding 9000 followers to its own programmatic reach. Because of its identity, Radio Indígena can post Indigenous cultural content and it can cover popular culture, nostalgia, Oaxacan gastronomy, and even humor. As an organization advocating on behalf of a marginalized community, MICOP has the ideal ability to broadcast a message on FM, in the fields and community, and on two social media pages.

Additionally, Radio Indígena has taken full advantage of the Facebook Live feature. The most traditional use of this feature has been for broadcasters to simply live-stream an entire show. This not only helps promote the show that is on air but also adds an additional layer of engagement where Facebook followers can send messages to the broadcaster or respond with a quick emoji. One example is a live-stream on June 24, 2017, that Irene Flores posted during her program *Hablando en Mixteco*, which reached 13,055 screens and actively engaged 1018 people (see Fig. 6).[2] Another popular form of promotion by broadcasters has been to talk about an upcoming show and thus create anticipation. The hosts of *Agarra Semilla* decided that after not posting videos for three weeks, they would live-stream themselves taking up a previous on-air conversation about healthy living. In this case, the two broadcasters set up in a MICOP office and, using their cellphone, started to live-stream via Radio Indígena's Facebook page. They recorded for twenty-six minutes, reached 14,633 screens, and engaged 759 people (see Fig. 7).

Beyond promoting the shows, the radio station and its Facebook page embody the mission of MICOP. To encourage this, MICOP incorporates the station into many of its grant proposals in order to expand full-time employees' responsibilities. One example is Juvenal Solano, MICOP's community organizer, who is responsible for identifying community needs and working to address them alongside the community. Given that

Fig. 6 Live-streamed video posted by *Hablando en Mixteco* to Radio Indígena's Facebook page

Fig. 7 Live-streamed video posted by *Agarra Semilla* to Radio Indígena's Facebook page

agricultural work is one of the main forms of employment for the community, workplace issues take priority. When the temperature in Oxnard reached more than 100 °F on October 23, 2017, Solano took to the fields near Moorpark to see whether or not workers were still picking or being provided protection from the sun. Solano started a live-stream on Radio Indígena's Facebook page with him on the side of the road showing farmworkers behind him picking without sun protection at well above 90 °F (see Fig. 8). This video triggered immense support and outrage. It reached 14,819 screens and engaged 3307 people.

Solano's video represents one of three types of popular posts that have helped Radio Indígena and MICOP bring local and nationwide attention to urgent community issues. A second type includes brief information about local news, such as on July 25, 2017, when the City of Oxnard became a sanctuary city.[3] The post reached a whopping 45,689 screens with 5302 people engaged actively. A third type of popular posts is coverage of natural disasters and local emergencies. When a 5.5-magnitude

Fig. 8 Community organizer Juvenal Solano on the side of a field of kale being harvested in over 90 °F temperature

Fig. 9 Mayra Ramirez live-streams an update about an earthquake that just happened

earthquake struck nearby, in the Channel Islands, a radio broadcaster used her cellphone to live-stream from an office and inform followers about what had happened (see Fig. 9). She looks straight into the camera to share the most up-to-date information about the earthquake, asking repeatedly that anyone watching share her video in order for it to reach as many people as possible. When the Thomas Fire broke out in the nearby area of Santa Paula on December 4, 2017, farmworkers in the fields of Ventura County worked unprotected from the heavy smoke while the City of Oxnard closed its offices because of the unhealthy air quality.[4] Two days later, on December 6, MICOP and Radio Indígena posted a video acknowledging the farmworkers' right to stop working outdoors or be provided with protective masks for smoke (see Fig. 10). The live-streamed video reached 35,668 screens, and 6665 people engaged actively. The next day, Radio Indígena and MICOP recorded themselves in the fields giving N-95 masks to farmworkers who still had not been given smoke protection by employers. The video received a comment from a *New York Times* reporter asking to be contacted, and a few days later the paper

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🏷 Tag Video   📍 Add Location   ✏ Edit

21,425 Views

😊😮👍 430   77 Comments 391 Shares 21K Views

👍 Like   💬 Comment   ↪ Share

Most Relevant ▾

... hay gente pendeja negativa que no apoyan ni su misma raza dejen este camarada si el tan quiera está tratando de ayudar de esa manera déjelo
Like · Reply · Message · 1y

...Mi padre trabajo más de quince años en el campo,ahora retirado. Pero si estuviese trabajando en esas condiciones si que me da coraje. Los patrones les vale. Muy muy triste
Like · Reply · Message · 1y

Write a comment...

Fig. 10 Juvenal Solano and a farmworker giving information about farmworker rights as smoke from the Thomas Fire covers the fields behind them

published an article on the fire and its impact on the agricultural industry and community in Ventura County (Jordan 2017).

The social media strategy of Radio Indígena and MICOP has matured over time and has increasingly reflected community, programmatic, and informational needs. The launch of the FM radio station initiated the opportunity for more collaborations with the community, businesses, city officials, farmworkers, and other community organizations. Radio Indígena's mission from its inception was to serve a linguistic minority and provide representation and access to information that might not otherwise reach them. The station's strategic deployment of its Facebook page and live-streamed and prerecorded video, especially during public emergencies, has amplified the reach of its messages and thus provided its community members with a political weapon.

Discussion

While existing research on radio suggests a slow, but certain adoption of new and social media, Radio Indígena's Facebook use represents a trend in creative social media strategies that go beyond self-promotion (Freeman et al. 2012; Laor et al. 2017; Laor and Steinfeld 2018). For this immigrant community radio station, social media acts like glue, bringing together community members, businesses, organizations such as MICOP, local issues, and FM radio. The Facebook page was a tool for Radio Indígena's participants to learn the politics, structure, and practice of digital communication, and the lessons learned were as much for the radio committee as for MICOP. Radio Indígena's Facebook page became a symptom of the growing power of the radio committee, its limited experience with operating a grassroots communication medium and its need for effective oversight. Not having previously experienced a community response like the one that helped build the station, MICOP could not anticipate the amount of work that participants would invest and how that would foster a strong sense of ownership. The radio station grew too fast and MICOP first saw the growing pains in the potential for the radio committee to misuse the station's Facebook page. These concerns over control were related to the future of the radio committee itself.

Radio scholars also note that there is little evidence of cohesive or long-term strategies for radio stations that use social media. This, however, does not adequately describe Radio Indígena's social media and broadcast work. Unlike commercial endeavors, Radio Indígena is not under pressure to attract more listeners tied to advertising dollars. Its strategy is instead structured organically around MICOP's mission to empower the Indigenous Mexican community. Radio Indígena has organized concerts featuring bands to which no one else was giving airtime in Ventura County. Additionally, MICOP applies for grants according to community needs and incorporates radio work as part of new and existing programs in areas such as domestic violence awareness, Latinx male empowerment, health awareness, community organizing, and more. MICOP's mission thus strongly influences its digital communication strategy.

Moreover, the immigrant community is at the heart of Radio Indígena's strategy. The community wants to be recognized and respected, which includes access to basic needs like health care but also to music and information in its native language. Since the 1970s, the Indigenous Mexican farmworker community has matured economically, socially, and politically,

but without access to or experience with mass communication its maturity could stagnate. The constant flow of ideas, a safe space in which to propose, challenge, and communicate new ideas, and the curation of information especially for the Mixteco farmworkers are basic requirements for the continuing progress of any community. As Castañeda argues regarding communication technology, "access represents a means of inclusion" (2017, 112). Access in this case is an opportunity for an immigrant community to learn how to navigate the technical, political, and legal complexities of broadcast and digital technology. Incorporating social media strategies, as Bonini (2014) suggests, allows the broadcaster the experience of knowing and directly engaging with their community. They receive immediate responses to content—speech, posts, and music. Learning to be challenged, supported, and engage in dialogue in a public sphere are fundamental competencies for the ongoing social maturity of an immigrant community.

As Indigenous Mexican immigrants learn to identify their community needs and bring attention to their problems, they can address them and not simply endure them. They have developed a "political weapon of retaliation" that so far has been used as a weapon for equality (McWilliams 1939, 240). MICOP has harnessed a range of communication tools that began with word-of-mouth strategies but now include internet radio streaming, an FM radio station, a radio app, a website, and two Facebook pages. The Indigenous Mexican community doesn't simply have a voice; its voice is diverse, multiplied, and amplified. This is a central component of MICOP's digital media strategy. Having multiple communication platforms is ideal for any community organization, but it is especially pertinent for those that serve low-income and immigrant communities. These communities experience precarious access to mass communication, especially to broadband and cellular technologies (Castañeda 2017; Jimenez 2017) and having a message broadcast with an array of communication tools ensures the widest reach possible.

Conclusion

Radio Indígena is part of a community media effort for its members to communicate publicly. However, in order to be heard, a community must learn to speak together. The launch of Radio Indígena's Facebook page was part of a process that, along with establishing the radio station, helped the radio committee to recognize that they needed to do more than

transmit information and music. They needed to learn how to identify pertinent information, how to present it to listeners, how to position themselves, and how to organize and operate several communication platforms as part of a concurrent strategy. Unfortunately, immigrant communities do not develop experience with broadcast or regulated communication technology like FM radio because they are not readily granted access. While adoption may be swift, the process is laced with pitfalls and institutional and linguistic barriers. In the case of Radio Indígena, FM radio and Facebook provided types of mediated access through which immigrant communities could safely practice communicating within a public sphere.

The digital communication strategies that Radio Indígena developed were driven organically by community needs and MICOP's mission. The station could have evolved along a commercial model that focused on "popular" content, but because the community station is a project of MICOP, the Indigenous community and its languages are a strategic, consistent focus. As they follow MICOP's mission, old and new programs creatively incorporate radio. One example is a collaboration between MICOP and the University of California, Los Angeles, to develop a Mixteco language radionovela to address cancer among women (Maxwell and Young 2016). The radionovela carefully built community involvement into the script and production process. Furthermore, the integration of radio into other MICOP projects has helped to strengthen their educational value, extend their reach, and create fresh content for the station.

Radio Indígena's Facebook page has become a node where collaborations among the local community, online followers, farmworkers, businesses, allies, and grantors are visible. FM radio is another important communication node, but as a sound-based medium with a geographically limited signal—the station has a five-mile radius—radio is not as far-reaching as social media. Social media has a global reach and carries text, visual, and audio material that promotes different types of audience engagement. Moreover, the Facebook pages of both Radio Indígena and MICOP provide a plethora of data about their posts and audience. The data becomes an additional source of information to help MICOP learn what community members need or want and how to strategically reach them online.

Even though radio has a localized signal, it is nonetheless a valuable communication medium for Indigenous communities. For Ventura County immigrant farmworkers, who experience marginalization within the broader Mexican community and face the declining use of their native

languages in Oaxaca and the U.S., radio has become a tool for preserving and revitalizing their languages (Perry 2009). The languages have moved from the private corridors of home, from music at backyard parties to a public and online sphere. This represents a significant shift in the social position of the Indigenous community in Ventura County and creates pride about their native languages instead of embarrassment (Perez et al. 2016).

Radio Indígena's FM station was the impetus for the development of digital strategies, and it was the station that created a physical site for people to come together and meet one another, exchange ideas, and foster a community. The station has created a safe incubator for people to learn to engage in mediated communication both over the air and online. The case of Radio Indígena and MICOP involves a balanced media strategy that includes both local broadcast technology (FM) centered on the local community and global communication technology (internet/social media) that can reach anywhere the internet exists. As MICOP adds to its communication tools, it increases the chances for its signal to be heard and for a wide audience to listen to what the community has to say. The increased use of communication technologies demonstrates a maturing community, which is no longer dependent on enduring its experiences of its marginality but can draw on its communication resources to create both awareness and change.

NOTES

1. Radio Indígena is a low-power FM station, with an operating power of 50 watts. I will refer to the station as "FM" throughout this chapter.
2. Facebook defines lifetime reach as "the number of people who had your Page's post enter their screen. Posts include status updates, photos, links, videos and more." Lifetime engagement is defined as "the number of unique people who engaged in certain ways with your Page post, for example by commenting on, liking, sharing, or clicking upon particular elements of the post."
3. Becoming a sanctuary city means that local law enforcement is prohibited from enforcing federal immigration laws and from asking about immigration status. The effort is meant to ensure that undocumented residents continue to report crimes and use public services without the fear of being deported.
4. The Thomas Fire is the largest wildfire in California's history. It burned more than 280,000 acres and lasted more than a month. Ventura County's agricultural industry reportedly lost $170 million in damages as a result of the fire.

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Sounds of the Neighborhood: Innovation, Hybrid Urban Space, and Sound Trajectories

Doris Elena Pinos Calderón and Cristina Venegas

INTRODUCTION

The contemporary media ecosystem is made up of different languages, multiple devices, practices, and subjectivities affecting how we communicate, live together, and understand the world (Martín-Barbero 2002a, 20). While information technologies have a structural and instrumental dimension strategically interconnecting spaces of perceived global value—companies, institutions, people, they also designate the cultural sphere as a strategic social space where mounting tensions break apart and recreate forms of "being together" (Martín-Barbero 2002a, 20). For Martin-Barbero, local territories anchor daily life and collective action where reciprocity and heterogeneity are woven together (2003, 40). Gurstein too

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53

sees the role of media technologies in local spaces as having the potential to activate countless social, cultural, and communicative transformations for the cultural and political expression and configuration of community processes (Gurstein 2014). One key aspect of these transformations is how the novel use of media technologies in hybrid spaces (de Souza e Silva 2006) can revitalize cultural identity and reconfigure urban social space. In the pages that follow, we discuss the co-creation of a sound map in the Chilibulo-Marcopamba-La Raya community in Southern Quito to demonstrate how the innovative use of basic digital technologies to create soundscapes and narratives activate social processes and anchor collective action as they create new political and social identities.

Theorists such as Bonilla and Cliche (2001) and Rueda (2005) point to the double edge function of media technologies, at once instrumental and possessing the potential for community innovation, social use, and creativity. Local cultures, groups, organizations, and communities face up to the dominant order through the reinvention of their lives and by defending the right to alterity. Alternative communication spaces challenge hegemonic projects in favor of social and community action. They generate more agile forms of contact and articulation by using social networks, blogs, discussion lists, and email to share campaign and event convocations, data exchanges, images, and sound archives (De Moraes 2013).

There are countless experiences in Latin America related to the social use of information technologies in the context of community informatics. These practices link technologies to the social and economic local development of communities (Rueda 2005) that with support from the state, private enterprise, non-governmental organizations (NGO), academic and research circles, insert technologies into education, preventive health, governance, democracy practices, productivity, human rights, and the protection of the environment (Bonilla and Cliche 2001).[1] They create hybrid social spaces where technologies combine with physical and virtual space with the goal of improving daily life.

Other social and political experiences of media technology have been deployed by social, artistic, counter-information movements, and alternative media networks (Valderrama 2012). For instance, Mexico's university student movement #YoSoy132 arose in the context of the 2012 presidential election and led to the creation of the Wikipartido and the organization of citizen participation and democratic political innovation (Wikipolítica MX 2017). Moreover, the boom of digital media publications, independent journalism, and collaborative economies in Latin

America, such as *Revista Anfibia*, *Plan C*, or *Economía Feminista* in Argentina; *La silla vacía*, *Humanos*, and *La otra cara* in Colombia; *Ojo público* and *Nómada* in Guatemala; and *La línea de Fuego*, *Guayaquil Kill City*, or *Amazonia viral* in Ecuador (Martínez 2017), support economic autonomy and political voices oriented towards disturbing power structures in order to undermine official narratives.[2]

In Ecuador, the experience of information technology use and research follows a regional trend that is connected to the state as it promotes the creation of an autochthonous knowledge economy and community and regional projects that reconfigure media use as social and cultural activism (Martens 2017). The project Chicos de la Calle (Street Kids) focuses on strengthening the participation of social actors in the management of local projects using digital technologies for education, childhood development (Rueda 2005) and improving teaching-learning practices in public schools (Peñaherrera 2012). There are also efforts by the central government and by the Decentralized Autonomous Governments (GAD) to implement digital zones to deploy services, infrastructure, and technologies, proposals that include guidelines, and management models for intelligent cities (MINTEL 2014).

This chapter examines the counter-hegemonic artistic, communicative, technological, and communal experience in the Chilibulo-Marcopamba-La Raya community in Southern Quito by the urban community art group Al Zur-ich and its Divagaciones Sonoras (Sonic Divagations) project.[3] The project was presented at the XII Meeting of Art and Community in Quito in 2014 and carried out for three months in 2015. The chapter begins with a discussion of Al Zur-ich, its objectives and approach to counter-hegemonic community work in the context of approaches to social change grounded in local and co-creative work. It then analyzes the resulting technological appropriation and the innovative use of sound mapping to enhance the socio-communicative functions of the neighborhood experience. The main argument is that effective forms of technological appropriation require co-creative approaches that can contribute to new socio-technical and communicational processes that make local initiatives visible, strengthen cultural-identity, and re-articulate urban space as a place of social, community innovation, and political organization. With the creation of a sound map as a counter-hegemonic artistic process, the colonial connotations of spatial mapping are upended, and the resulting digital soundscape uncovers new and forgotten social cohesions derived

from moving differently through the neighborhood and listening together as a social act.

Al Zur-ich is an online visual arts organization for emerging artists that develops community projects in public spaces in the neighborhoods in Southern Quito (Samuel Tituaña 2011). The group supports community initiatives and activities outside traditional art circuits, museums, galleries, and workshops. Strategically, Al Zur-ich aims to legitimate artistic expression based on street experiences by articulating them in conjunction with local social and political demands (Tituaña 2016). The group's methodology is shaped by their deep knowledge of the neighborhood context, the mapping of its activity flows, symbolic and cultural activities, the significance of local sites and by generating a reciprocal, horizontal, and open dialogue between artists and community residents (Tituaña 2011).

Each year, the group launches a call for projects aimed at the participation of cultural managers, artists, and multidisciplinary collectives. Many of these same projects also compete for funding (Tituaña 2016). The Al Zur-ich team selects around ten proposals according to criteria that include the project's relevance and its potential contribution to community work (idem). The projects are then discussed and redefined, consistent with the needs and interests of the community in which they are to be developed.

The selected projects have a cultural manager and coordinator who works with the project teams to implement them in the community, working closely with local actors who provide ideas and feedback (Tituaña 2016). At the same time, Al Zur-ich creates an oversight team that monitors the project. The process culminates with the presentation of project results at public events, installations, or other activities (idem).

In 2014, the XII Meeting of Art and Community Al Zur-ich supported six projects that brought together community, public space, and artistic objectives (Al Zur-ich 2014). One of the projects, Divagaciones Sonoras, was proposed by the cultural managers of the Dissonance Laboratory and took place in the Chilibulo-Marcopamba-La Raya community located in the southern part of the city (Vásconez 2016). The project set out to record a soundscape of the neighborhood by mapping significant sounds that could be used to create new narratives about the place thus generating new experiences. Project participants recorded live events, story fictions, oral testimonies, and conversations. The results were discussed as a social process with members of the group 60 y Piquito (60 Plus) mostly made up of grandmothers and other local actors (Vásconez 2016).[4]

Divagaciones Sonoras carried out two observational community walks to identify acoustic points of interest, recorded them, held a sound landscape workshop, created experimental instruments, and offered a listening session to review field recordings of the busiest areas (Al Zur-ich 2014). The team used basic and low-budget recording technologies (Vásconez 2016).

The grandmothers of the 60 y Piquito group collected stories, recalled cultural traditions, community practices, memories, listened to each other, and recorded their audio interviews and conversations with relevant cell phone applications (Al Zur-ich 2014). Their participation facilitated the collaborative creation of a soundscape documentary archive (Vásconez 2016). Using all of the recorded elements, the team produced electroacoustic pieces that combined ambient sound (the movements of passersby and other sounds) with oral narration (Vásconez 2016). Each week, the members of the Dissonance Laboratory selected and archived material for each audio track. Finally, the resulting sound map of the community and the evidence gathered by the project were presented to the community for their feedback (Al Zur-ich 2014) and it was then made available to participants and community organizations as individual CDs.

The principles and perspectives of using communication for social change (Gumucio 2004, 2009, 2011), the alternative and counterhegemonic proposal of network communication (De Moraes 2013), and social and community innovation (Finquelievich et al. 2014; Gurstein 2014) inform our analysis of technological use and appropriation. The creation of digital tools destined to making the hybrid urban territories audible by mapping the sounds of the neighborhood responds to the project's specific considerations and objective whereby public space encompasses streets and street corners, shops, community houses as well as the conflicts, debates, and negotiations emanating from these locations (Tituaña 2011). Public space in this instance is not limited to inanimate spaces, but to the lifeworld of a community shaped by its living interactions and the ongoing renegotiation of social, cultural, and political space. It also combines virtual spaces with those that are verified in situ (Comelles Allué 2012; Romero-Moreno and Palmett Garay 2015; Trachana 2013a, b, c). Indeed, Divagaciones Sonoras records the traces of these interactions and raises the metaphorical volume on communication between the community and beyond.

The XII Meeting of Art and Community Al Zur-ich

A key site for community interactions and rethinking of public space was the XII Meeting of Art and community, which created a space for discussion, presentation of work-in-progress, and as a fulcrum for the dissemination of information about Al Zur-ich's objectives. The event brought community and outside artists and activists to deliberate on the logic of community work as they did in the one-day conference included among the many cultural and communal events. Moreover, the communicative and technological experience of Al Zur-ich deployed three levels of action designed with social and political objectives in mind:

1. The diffusion of the project in traditional media, so that the discourse about local art was made visible in news reports, interviews, press releases, and other media (Paola López 2016; Tituaña 2016). By positioning the artistic work of Al Zur-ich and the emerging cultural managers in the southern neighborhoods of the city, the project was able to dispute dominant media agendas, spokespersons and media logics (De Moraes 2013; Rodríguez 2010).
2. Community communication strengthened local connections through broadcast communication, face-to-face encounters, participation, and local work (López 2016; Tituaña 2016). As Martin-Barbero stipulates, the local and territorial anchor is crucial for living in the world and thinking about communication (2003).
3. Social networks and blogs were used to experiment based on common sense use and autonomous learning and to promote learning new skills and the exchange, discovery and access to knowledge (López 2016; Tituaña 2016). The use of social networks was likened to the collaborative production of knowledge and practices of the commons (Bollier 2003).[5]

Theoretical Contribution

For social change, the objective of appropriation is to harness creative and communicative processes at all stages of conception and creation and not just in relation to media and technological instruments (Gumucio 2011). Thus, the use and appropriation of digital technologies must build on the long experience of prior communication approaches across a broad

expanse of work such as community radio as individuals and communities appropriate the tools to create their own content and meaning (Gumucio 2009, 2011). The art and community initiative discussed here builds on other urban cultural initiatives in effect in Southern Quito since the mid-1990s as emergent cultural organizations sought to reconfigure public space as a site to stake out new political positions. Tituaña (2011) reminds us how in order to expand the understanding of local culture there produced, art and community projects that formed part of the *Red Cultural del Sur* (Southern Cultural Network) affiliated themselves with individuals and local organizations with a long experience of conducting neighborhood work. Approaches to technologies in these circumstances needed to acknowledge the specificities of not just the place but of its own history of work towards social change.

For Martín-Barbero (2003), communication and information technologies represent the possibility for the common goal of sharing histories, ideas, and experiences, where social actors appropriate the word to create their own stories and participate in a reciprocal process of questioning others with their own stories and in turn being questioned by the stories of others. This aspect is decisive for the organizers of Divagaciones Sonoras who rely on co-creation with the residents of the community as a starting point to the work of sound recording. Furthermore, Rodríguez (2010) argues that information technologies differ from other types of technologies because they extend the potential to name the world in one's own terms. They also help to consolidate different versions of the social and political realities of the environment. The very act of appropriation relies on the ability to tell stories that will resonate with others, which is a process that implies that in order to be recognized, we need to tell our own stories (Martín-Barbero 2003).

In addition, the appropriation of digital technologies can create spaces of alternative and counter-hegemonic communication where groups, collectives, and communities converge. Thus, a plurality of voices, authorships, and narratives can dispute the meaning of political and cultural hegemony (De Moraes 2013; Rodríguez 2010). Digital tools can thus be re-articulated to record not just the hegemonic configuration of a place, but rather its original content, highlighted by the recording and archiving of sounds and voices historically associated to communities and often excluded from mainstream narratives.

Similarly, Gumucio (Pérez et al. 2009) argues that technologies are instruments whose intentionality depends on common uses and needs. He

presents a set of essential and non-negotiable conditions that must be ful-filled if the objective is social transformation, among them: community ownership, local content, adequate technologies, sociocultural relevance, convergence, and networks (Gumucio 2004). From this perspective, digi-tal use and technological appropriation includes developing processes of social and community innovation where the community itself co-creates the modes and possibilities of appropriation. The process also involves agreeing on a set of strategies aimed at empowering the community to improve its quality of life and respond to different types of social and com-munity needs (Gurstein 2014; Finquelievich 2014; Finquelievich et al. 2014).

The sound map is such an experience of social innovation, which uses information technologies applied to community and territorial needs. For Romero-Moreno and Palmett Garay (2015), the sound map is a powerful communicative tool because it joins the physical-geographical with the auditory-sensitive by means of a new cartography, the recording of activity flows and trajectories that anchor spaces, their identities and meanings to locations. In this way, colonial concepts such as cartography can be rein-terpreted from the community's perspective. Comelles Allué (2012) com-plements this idea when indicating that a sound map constructs a representation of urban experiences drawn from ethnographic recordings, sonorities, and acoustic scenarios, and produces a database of sounds. Indeed, it is an archive and a searchable interface.

The application of the sound map in the hybrid space of the city—spaces produced in a network and verified in situ—generates new ways of living in and feeling social spaces. It intensifies the sensorial perception of the environment, expands imaginaries and habits of coexistence through the creation of multimedia narratives imbued with the capacity to generate social meaning (Trachana 2013a, b, c).

Sound narratives, which are based on new models of creative produc-tion, are the outcome of the interaction between individuals in the physi-cal and sonic spaces (Gertrúdix et al. 2017). They evoke actions, continuous emotions, and a diversity of sensibilities and metaphors that overtake other descriptions from around the city, its places, and processes (Romero-Moreno and Palmett Garay 2015).

Methodological Approach

The methodological design of the research was based on a qualitative approach and on the principles of virtual ethnography for the analysis of information technologies as a research problem. Information technologies are thus viewed as social, cultural products, spaces of meaning creation and interaction where real life connects to face-to-face encounters (Hine 2000; Meneses and Cardozo 2014).

Data about the Divagaciones Sonoras project and its impact was collected via semi-structured interviews (Corbetta 2007) using a set script with open-ended questions. The actors involved in the case studies were selected for the relevance of their participation at the organizational, communicational, and community levels and for their professional and empirical knowledge.[6] They constitute a case study selected because of the richness, depth, and quality of the information these actors provide, rather than meeting quantitative requirements or modes of standardization (Hernández et al. 2014). The interviewees included two communication managers from the Al Zur-ich team who are responsible for managing the communicative and technological process of the project; a cultural manager, responsible for promoting the Divagaciones Sonoras project in the community; and the president of the Chilibulo-Marcopamba-La Raya community, responsible for leading the process in his community. The sounds themselves were also reviewed alongside the content of the interviews.

Experimentation and Learning to Communicate Using Information Technologies

Appropriating information technologies means appropriating communication. But before adopting digital technologies to produce innovation, Al Zur-ich's team assumed their communication process by promoting it and recognizing how it related to their objectives (Gumucio 2011). Thus, the innovation strategy, which incorporated the use of a blog and of social networks such as Facebook and Twitter, was part of the communicative and community project of Al Zur-ich's virtual space. It was supplemented with the dissemination of project information via traditional media, strengthening face-to-face contact, and a social relation strategy promoted in the community (Tituaña 2016). Tituaña, the communications manager for the Al Zur-ich team, comments that

We were given little space on radios or other media, but we knew that the poster should be sent by e-mail inviting people. We also had to go talk to the neighborhood president. Diffusion in networks supported diffusion in the territory, it was integral. (2016)

Despite the various efforts, Al Zur-ich's technological strategy for innovating community participation was active only during each annual edition of the Al Zur-ich event and sporadically throughout the year. One reason for this difficulty is the team's inability to sustain the platforms consistently with volunteer support. Resolving these issues involves figuring out how to incorporate these tools continuously as part of everyday life within these self-organized spaces.

Using digital technologies based on common sense, Al Zur-ich's experience of technological innovation began with a spontaneous approach to digital tools and built on practices learned through intuition and common sense that, according to Tituaña they "learned by doing" (2016). Common sense in this case means that the communicational managers of the Al Zur-ich team participated in a process of social and community innovation designed in accordance to their own ways of approaching and understanding information technologies. The new possibilities for use and appropriation were thereby shaped by the social needs of the neighborhood's artistic work so that they were co-creators of new experiences and learning (Gurstein 2014; Prince 2014; Tuomi 2002).

According to Tituaña, the managers worked intuitively, learning and solving technology obstacles when they arose.

We used the technologies according to what we needed to express in the video or photo of the neighbor in the neighborhood, asking, reading, seeing the experience of others and sharing what we knew. (2016)

The Al Zur-ich team promoted and developed individual and collective capacities in order to manage the communication process and the technological needs. This practice, according to Gumucio (2004), prevails over developing skills solely for technical operation. In the collective experience, the use of digital tools promoted creativity, intuition, and the search for group solutions to technical problems and to address concerns about how to plan communication (Gómez and Martínez 2001).

The managers of the Al Zur-ich team took advantage of the free and technical facilities of the blog to improve the design, functionality, and

meaning of its content (Gómez and Martínez 2001; Finquelievich 2014). The blog served as a tool to store the memories and reviews of each annual meeting creatively and in different digital formats (photo, video, or text) thus becoming an archive of community life (López 2016). Tituaña reiterates that, "when we began, we chose the blog because it was a free platform so we could save" (2016). Being in a digital medium was novel and its affordances led them to experiment beyond the use of email.

Likewise, the possibilities for innovation with the multiplicity of technological uses continued to evolve. Initially, the blog and social networks were useful in disseminating the project; then they were used to create autonomous sources of information; later, the tools facilitated the construction of content; and finally, they were used as digital and alternative spaces of communication and autonomous expression with their own agenda (Tituaña 2016).

The importance of communicational autonomy was established through a blog and social networks.

> We no longer had to wait for the "goodwill" of big media establishments who have little interest in community art projects. We could use our own words, aesthetic and dynamics to say we are here. (Tituaña 2016)

The XII Meeting of Art and Community Al Zur-ich was able to strengthen the dissemination of information, speeches, messages, content, agendas, and experiences since the virtual environment worked as a space for alternative and counter-hegemonic communication (De Moraes 2013). It presented an opportunity to position the autonomous transmissions of different narratives and formats.

There were limitations and resistance to the process, however. Not all of the members of the Al Zur-ich team were interested nor contributed in the same way to the management of the blog and of social network content. Some did not identify with digital culture and others were unfamiliar with its tools and feared "damaging or misusing technologies" because they lacked knowledge about their uses (Tituaña 2016). Gurstein (2014) attributes this behavior to a fear of the new and to the cultural and generational norms that create resistance to change within communities.

Moreover, the members of the project had different levels of experience when it came to using digital tools. Tituaña, for example, says that:

Some colleagues were not very interested in being on the computer, especially because we didn't grow up with digital tools and they didn't give it importance. Only the curious got involved. Other colleagues were in charge of design, going to the neighborhood, taking photos and editing. (2016)

LEARNING TO USE INFORMATION TECHNOLOGIES IN THE NEIGHBORHOOD

Community property. The communicational and technological strategy of Al Zur-ich consists of opening spaces of diffusion and communication that position and make visible neighborhood processes that are sustained by local networks of collaborative work and community property (Gumucio 2004). In the neighborhoods, the project promoted the articulation and political capacity of local actors in order to collectively assume their means and initiatives (Martín-Barbero 2003). It has been a central axis between the dynamics of community art and local management. For example, Tituaña asserts that:

We want the residents of the neighborhood to be empowered to share their ideas, as subjects who participate and appropriate, that people think about what is happening to them, that the neighborhood proposals and the artist's contribution are known. (2016)

Local content and sociocultural relevance. The multimedia content proposed by Al Zur-ich and presented in the blog was expressed in the everyday aesthetic of the neighborhood. Local hybrid narratives (virtual-physical) based on the experience of local areas emerged and were expressed in video, photos, or blog text. The coexisting voices in the south of the city were rescued and amplified. They recorded the experiences of the lady at the shop, the rocker, of the neighborhood and the cultural managers who make community art (López 2016; Tituaña 2016). Local content captured the presence of those who need to create their own stories in order to become politically recognized identities (Martín-Barbero 2002a).

López, the communications manager for the Al Zur-ich team stressed the importance of creating local content.

Community communication makes visible what is happening in a neighborhood and allows people to see themselves. Narrating the local is narrating

oneself. The people of the neighborhood and their artistic expression was a priority. The actors gained recognition and legitimacy. (2016)

Original content represents the world of narrations constructed from social and community modes where creativity is mobilized (Martín-Barbero 2002a, b); the processes are close to the cultural and linguistic diversity of the neighborhood, to the wealth of the territory and to its problems. Content is assembled using social norms, culture, and the local context (Gumucio 2011) strengthening the opinion local actors have of themselves and of their forms of organization and coexistence.

Appropriate technologies. The strategy of social and community innovation promoted by Al Zur-ich was also coupled with its organizational objectives, to territorial practices, and to existing communicative experiences (Gumucio 2004). The Al Zur-ich team adapted digital technologies to the needs of neighborhood community art in all its dimensions, including fieldwork, discourse, views on political art, narratives, recordings, and others.

Convergence and networks. Al Zur-ich has established strategic links and formed networks with other communicational and digital projects working in the artistic sector (Tituaña 2016). However, in some cases, these relations transcended the virtual field to the creation of community organizational processes and local networks and vice versa, achieving convergence between virtual and territorial networks (Gumucio 2004). Their coexistence was demonstrated between networks of physical proximity and the neighborhood, and the global electronic social networks (Schuler 1996).

As Tituaña explains, the communicational and community importance of Al Zur-ich was evident in their achievements.

> We have managed to have a digital network of organizations. It is not only a Facebook profile or a photo, but a link with the organizations of the sector. We know their work in the territory and they know ours. Through the blog we get in touch with friendly pages, with the Cultural Network of the South and with the pages of cultural managers. (2016)

Convergence here is conceived as a process of bringing together, in the context of art and community work, a range of organizations that build on a growing field of efforts and on communal work itself to create a space for dissemination that establishes hybrid cultural and friendship networks.

COLLABORATIVE WORK: THE SOUND MAP
OF THE CHILIBULO-MARCOPAMBA-LA RAYA COMMUNITY

To carry out the sound map of the Chilibulo-Marcopamba-La Raya community, cultural managers of the Divagaciones Sonoras project applied a participatory methodology that modified their work according to the characteristics and territorial needs raised on the go and by collective agreement. Jorge Vásconez, cultural manager of Divagaciones Sonoras, observed the process.

> We held community workshops. They were interested in telling about daily life, about the past and the present, which is why we went to the communal house to work with the 60 y Piquito group, especially with the women of that space, the grandmothers who had wisdom and knowledge. (2016)

Neighborhood actors participated in workshops to socialize the proposal, construct sound generators, and communal walks, contributing initiatives and suggestions, establishing guiding routes for the collection of sounds, opening their meeting spaces, and meeting daily to compile testimonial narrations (idem). The women in the 60 y Piquito group were the central actors because they were involved to a greater extent (Vásconez 2016).

The resulting sound map represented a collaborative production effort, materialized via the audio documentary archive that promoted a process of social and community innovation. It was an experience of co-creation linked, on the one hand, to the technological uses propitiated by its authors and to the production of shared subjectivities (Bollier 2003), and on the other, to the dimension of the social, local, and organizational life of the community, expressed in the language of sound (Prince 2014).

SOUND SPARKS EXPERIMENTATION

Divagaciones Sonoras used sound as a central element and problematized its existence in the community. It aimed to generate dynamic situations, perceptions, feelings, and interpretations linked to ways of recognizing the Chilibulo-Marcopamba-La Raya community and to the space-time of its activities (Vásconez 2016). For Romero-Moreno and Palmett Garay (2015) sound works as a communicative code that includes different levels of perception and interpretation that depend on rational and emotional

mechanisms to transmit sensations, concepts, or meanings. Sound as a creative component can configure an affective and immersive space that produces a different way of sensing culture, from single or collective voices to material and atmospheric sounds. According to Vásconez, "sound is in everything" (2016), affirming its potential to foster a new mode of acoustic sensing between communities.

Sound is also a trigger because it generates feelings, memories, closeness, and narrations. Sound cues help us to recreate the past and live in the present. For Vásconez, the sound map was an important tool for connecting with communities noting that "we learned to listen in order to recognize and come closer to the community" (Vásconez 2016).

Producing the sound map of the Chilibulo-Marcopamba-La Raya community was a creative process of experimentation using sound collages. Dialogues and sounds recorded in various environments were edited together, and fictional elements were incorporated with sound effects (idem). The territory was thus described through the combination of acoustic scenarios with ethnographic recordings of natural environments (Comelles Allué 2012).

According to Gertrúdix, Gertrúdix, and García (2017), one of the main characteristics of sound narratives is the diverse range of explorations of unbounded stories and their experimental nature. In this sense, multimedia technologies and audiovisual languages offered numerous opportunities to experiment with heterogeneous forms of story construction and generate production models that relied on acoustic "images" that are then transformed into enduring manipulated elements (Gertrúdix et al. 2017, 159). Vásconez explains that his work included a laboratory approach:

> We experimented with sonority and fiction. We took a conversation, gave it another context and time and included effects so that it is not a linear story, but a dynamic one. (2016)

Recording and editing tools made possible a field of experimentation for fictional storytelling with sound. The structure of time and space could be reconfigured (Gertrúdix et al. 2017) to create non-linear narratives as story material could be intersected on different planes by selecting specific historical elements that would activate the full potential of a story (idem).

Using Basic and Low-Budget Technologies

The project's cultural managers adapted basic digital register and low-budget tools (microphones, cellphones, editing tools) to the expressive conditions of the neighborhood participants in the Chilibulo-Marcopamba-La Raya community. This facilitated adopting a non-invasive approach. Audio recordings were used as the main strategy, which enabled close contact and openness, especially with the women of the 60 y Piquito group as they shared their experiences and conversations (Vásconez 2016). In this case, the use of recording technologies was adapted to the needs, orientation, and methodologies of cultural managers (Tuomi 2002).

The cultural managers learned that in addition to technological tools, respectful dialogue with local actors also requires a wide range of approaches. Vásconez explains that:

> sound allows people to open up and express themselves without so much fear. This does not happen with a video camera. He who uses it has more power. Eventually, the grandmothers of the group 60 y Piquito grew by telling their lives and about the neighborhood. Then, when they heard each other, they reacted with surprise. They had never heard their own recorded voices. But it wasn't so easy to gain their trust. (2016)

The process highlights the importance of having strategies that ease rapprochement with community actors and suggests that the communicative process is itself an opportunity to provoke more horizontal and equitable encounters, forms of negotiation and dialogue. From the start of the fieldwork, and in order to generate trust among the participants, discussions needed to bear in mind that the communication proposed had the purpose of social change (Gumucio 2011).

Mapping the Sounds of the Territory: The Visibility of Local Initiatives

The Divagaciones Sonoras project recuperated the acoustic identity of the Chilibulo-Marcopamba-La Raya community by exploring the diversity of sounds and organizing them as an alternative cartography of the neighborhood. The recording of activity flows and participant trajectories were linked to their movements and to the representation of local events. The physical geography of the place was supported and augmented with an

audio-sensitive layer and vice versa (Romero-Moreno and Palmett Garay 2015). Vásconez describes the surprise in discovering new sounds.

> One day we followed Mrs. Natividad's journey between going shopping and going home. We recorded the sounds of her daily activities and realized that in the middle of the city there was still a town with a strong presence of peasants. People who had their fields and did activities such as minga, meetings or other initiatives in favor of the community. (2016)

The recorded conversations, perceptions, and testimonies of local actors made it possible for the project to create a social x-ray to identify the problems, potentialities, and community initiatives (idem). Talking and listening assisted collective reflection about the local process, and the experience of creating the sound map generated discussions. Gustavo Tubón, president of the Chilibulo-Marcopamba-La Raya community, analyzed the achievements regarding the sound map, and they found:

> we were able to discuss the problems that concern us, for example, the insecurity that exists in the community. We had to learn to listen to others without being on the defensive, even if we may or may not agree. That had to change because in a community or neighborhood everyone contributes with words and actions. (2016)

Revitalizing Cultural Identity

The resulting soundscape of the Chilibulo-Marcopamba-La Raya community created a space of meaning, identification, and cultural differentiation. It is sustained by the interaction of geo-territorial location, sound codes, and the senses and meanings of what the neighborhood could be, based on the experience of its inhabitants (Reguillo 2000; Zumthor 2009).

The project team observed that the everyday spaces of the community had their own characteristic sounds, activities and temporal rhythms, actors, and ways of being. They also constructed, shared, and agreed upon a series of senses and communal meanings. Sounds provided sonic evidence of identity traits, promoted their recognition and appreciation (Vásconez 2016). Sense was created by living together, which strengthened mutual recognition and a sense of belonging (Trachana 2013a, b, c; Gurstein 2014).

Tubón remarks that "everyone knows the place they belong to because they identify with it," and the sound record was fundamental in archiving the acoustic signatures of each location.

> We registered the sounds of the court, the places where street vendors are located, the taxi stop or the corner where people gather to talk, to play traditional games (coconuts or cards) and to share. They also recorded the sounds of street fights and expressions used for the sale of food or basic needs. If you go down one more corner and it's Friday, you'll find chichera music playing at full volume. Then you know that the rokola is nearby. So, we are creating our identity. (2016)

The soundscapes evoked memories and emotions for community members. They activated place-based memories and imaginaries, recreating stories of the past that revitalized the roots of identity. Recordings were made to preserve the cultural legacy of the community and socialize the content from generation to generation (Vásconez 2016). According to Romero-Moreno and Palmett Garay (2015), a place evokes another place and the chain of evocations form a web of meanings, memories, and imaginaries. Situations and images created by listeners of the soundscapes constitute imaginaries that encode a series of signs and gives them social and cultural meaning (Romero-Moreno and Palmett Garay 2015).

Tubón describes the content of the narratives more precisely:

> Stories told how the community used to be and how it is now, with a certain nostalgia. When we hear the sounds of the wind, the fields, the park or the waterfall, we remember our childhood. We also tell the legends. … That in the waterfall there lived the elf and that a lady's daughter was persecuted for having gone alone. The sound of the village band and the pyrotechnics evoke memories of the festivities and traditions. We must continue to tell our children how grain food was made or tell them that people here used to be more united. The sound map helped us with that. (2016)

Furthermore, the oral narrations by the grandmothers of the 60 y Piquito group and of others in the neighborhood, stories that facilitated the collection of testimonies, demonstrate how local actors recognize and appropriate their individual and collective stories (Vásconez 2016). Martín-Barbero (2003) asserts that having ownership over the word means being able to express and question one's own and other people's

stories. The communal approach in the Divagaciones Sonoras project, and its unique configuration of information technology use, contributed to the layering of spaces and community activities with historical richness and diversity of the local identity processes. Immersed in the extended life-world made possible through soundscapes, residents could consolidate versions of their own social and cultural reality and describe the world in their own terms (Rodríguez 2010).

Resignification of the Urban Space

As urban space is re-conceptualized as hybrid space bridging physical and digital spaces, it is worth considering how movement through the Chilibulo-Marcopamba-La Raya community is transformed in the artistic process of creating the sound map. The causal nature of the recorded sounds—sound of the waterfall, of the street corner, of vendors at the market, of peasants in the center of the community—situates the community physically and affectively. The sounds evoke remembrance, traditions, stories, and more. Not only does the project produce new knowledge and skills, the project's extended presence on social media networks enfolds other outside contexts that converge into the community space. The reconfiguration of urban space and sound is thus one that is also structured through its online presence connecting and creating different social interactions. The connected spaces of social media are reiterated in the social spaces of the community and its sonic and sensorial register. The project thus fulfilled symbolic, pedagogical, counter-hegemonic, and archival functions:

1. It systematized the specific characteristics of the landscape of sounds pertaining to each representative site and revealed how they are transformed according to their location and context. The sounds helped to identify the symbolic places of the locality, "those that make us unique," says Tubón.

   It is the case of the Guanacucho Waterfall. There you can hear the sound of the wind, the birds and the water on the rocks. We associate the sounds of nature with popular sayings such as "when the river sounds, it brings stones." The sound map collected many sounds so that we realize that our environments have life and history. (2016)

The sound cartographic exercise helped participants locate representative sites that form part of the historical and cultural identity of the community either by their natural importance or by social meaning. These places had diverse aural sources: natural sounds (water), materials (transport), and social sounds (music, people's voices) (Ge and Hokao 2004).

2. It developed a more nuanced understanding of sound and the use of new listening skills. Local actors learned to identify sounds as an integral part of their daily lives, to characterize, value, and enjoy them (Vásconez 2016). The focus on sounds helped neighborhood actors conceive of their places as vital and sensitive, where culture and community are expressed and so that they could be located in one place while imagining themselves to be in other spaces. (Sabbatini (2012), referred to by Romero-Moreno and Palmett Garay (2015))

    Tubón indicates the need to consider how the sound map augments the space of day-to-day sounds and their relationship to specific spaces. The cognitive process of recognizing the place in another way, through its sonic qualities, creates new associations between aural and physical space and emphasizes the importance of the place for generating new social meanings. The data collected as audio recordings and shared with community members produces a social acoustic mirror whereby a causal link between sound and location serves to apprehend the place and to recognize its new potential.

    This was the first time we stopped to listen to what the neighborhood sounds like and the places we pass through every day. When we began to discover the sounds, we saw that the environment is alive because it expresses itself. Places speak, they have their own language and that's where we live. (2016)

Locating everyday sounds produced conscious listening among local actors who could acknowledge the place in relation to the expression of community and identity, its dynamics and inhabitants.

3. It generated hybrid descriptions and readings of the place and transformed imaginaries. Through the new relationship to sound, the local participants of the community experienced other ways of

approaching the places of the neighborhood, as well as new possibilities for inhabiting, perceiving, and relating to it aurally (Trachana 2013a). Thus, the local experience was broadened and the prevalence of other forms of relating and identifying between the actors and their spaces was propitiated (Vásconez 2016). As well, the hybrid sound narratives that were produced and disseminated in digital spaces and by digital technologies are sustained in geographical-territorial experiences (Trachana 2013a, b).

The recordings challenged the common idea that the Chilibulo-Marcopamba-La Raya community was insecure and dangerous because what emerged from local voices and their place in the community, provided a context to revalue processes of self-organization, the identification of one's own spaces (alive and sensitive) and cultural identity (idem). Movement through the neighborhood was thus coded socially and historically and not just in terms of a politics of insecurity associated with certain urban neighborhoods. Regarding this finding Vásconez argues that:

The stories that were collected, mostly unknown or forgotten, identified other references about the community. They questioned perceptions that the neighborhood and the people outside had about how dangerous the place was. These ideas were changed by people telling their stories about their community actions. (2016)

4. It serves as an archive of the soundscape of the place to preserve its content. The sound map of the community works as a repository or a soundbank where the collected sound material can be shared, consulted, and used to remember what has been learned and experienced (Comelles Allué 2012; Romero-Moreno and Palmett Garay 2015). Vásconez explains that:

The idea behind the production of the sound map as a CD had to do with the intention of creating a resource for consultation for those who wish to approach the Chilibulo-Marcopamba-La Raya community, but everything that was generated beyond that emerged from the shared experience. (2016)

By working from within community groups such as 60 y Piquito and other members of the community, the Al Zur-ich team connected the participants to novel and interactive modes of storytelling that emphasized

a communal perspective compiled through collaborative work and recollection. The sound map turned up forgotten places and histories, created new perspectives of community life, and acted as a vehicle for new affective sensibilities of the community. The affordances of the sound map bring together people, technologies, and sensing communities.

Conclusion

The digital soundscape project promoted by Al Zur-ich in the Chilibulo-Marcopamba-La Raya community co-created new possibilities for technological use and appropriation, the very foundation of which is the ability to tell stories that will resonate with others. It was part of the communication process proposed by the community to strengthen the development of other communication strategies applied in the field. The project's virtual and territorial scope is thus hybrid in character acknowledging the interconnection between technologies and the strengthening of cultural and political positions. Project diffusion through social media networks and the converging spaces of communication supported community awareness and actions as well as activities in situ.

Divagaciones Sonoras began by considering the social and community needs of a southern Quito neighborhood along with the artistic and communicative needs of the Al Zur-ich platform for community projects and emerging artists. This way of working enabled the co-production and autonomous dissemination of multimedia content, the quality, form, and meaning of which was improved. It created enriched narratives about the locality based on the spontaneous approach to information technologies (blog, social networks), autonomous learning, and the development of strategic skills and techniques to manage communication.

However, the evidence also showed that the communicational and technological process of Al Zur-ich, which relied on volunteer work over several years, faced moments of increased and of slower activity. We also noted that members of the Al Zur-ich team have varying interests and that collaboration in the management of the blog or of social networks relies on different levels of expertise. Lack of familiarity and limited identification with technological culture creates some difficulties such as the fear of misusing the tools, as well as insufficient knowledge and resistance to change.

The Divagaciones Sonoras project was characterized by the activity of mapping and recording the sounds of the neighborhood. It was an

experience of innovation and collaborative production in which, in addition to using basic and low-budget technological tools, other strategies were proposed in order to approach the community and expand the possibility of creating dialogue, trust, and reciprocity.

The sound map provided the opportunity to establish a community laboratory methodology. It experimented with story creation in new non-linear forms and exploratory production models. Proof of this were the sound collages combining natural and environmental elements with ethnographic narratives, intergenerational dialogue, and fictional elements with sound effects. Sound worked as an explosive element that dramatized situations, perceptions, and experiences in local space-time.

Moreover, the sound map recovered the territory's audible register of activity flows, movement trajectories, and the neighborhood's dynamics. It strengthened the sonic identity of everyday life, places, and community activities. The soundscape served to generate a social x-ray on the state of the local organization. The neighborhood actors collectively reflected on their problems and proposed solutions, criteria, and proposals thanks to the new experience of communication and the encounter it provoked. Importantly, the sound map collected stories, allowing the residents of the community to recall their memories and tell their stories, recognizing their existence and cultural legitimacy in the act of common sharing and storytelling.

Finally, it systematized the sound characteristics of representative places of the Chilibulo-Marcopamba-La Raya community by contributing to the development of the resident's listening skills. It generated new readings about the neighborhood, leaving behind imaginaries related to its insecurity and replacing it with stories based on affirmative actions. The sound map allowed local actors to experience other ways of approaching their spaces, living in, sensing, and perceiving them until the community spaces were re-signified and appropriated individually and collectively. The project ultimately laid the groundwork for future work focused on generating novel artistic, sociotechnical and community approaches to revitalizing cultural identity, but also for considering new ways of connecting virtual networks with broader political networks that seek to continue the work of social change.

Notes

1. Rueda (2005) discusses government-supported telecenters created in the Latin American region in the 1990s.
2. Government institutions also promote technologies in urban spaces seeking to encourage digital services in the cities (MINTEL 2014). The initiatives of local actors, however, have emerged spontaneously and involve appropriation of technologies based on their expressive, social, and political needs at local and community levels (Trachana 2013c).
3. Divagaciones Sonoras (Sound Divagations) is one of six projects presented at the XII Meeting of Art and Community Al Zur-ich in October 2014 that ran through 2015.
4. 60 y Piquito group is a pre-existing group of senior women, formed under earlier civic-oriented projects of the community. Working with the grandmothers allowed the project leaders to tap into their long historical knowledge of the place and its traditions as well as their personal histories.
5. Bollier defines the commons as a way of valuing assets that is no longer tied to a price value, but to intangible assets belonging to the public or a community where principles, social relations, common objectives, and a powerful creative force are shared.
6. The actors involved in the project agreed to participate in the interviews and to have their names used.

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Practitioner Perspective. Digital Networks in Bolivia: Territory, Community Collaboration, and the Wayna Tambo Diversity Network

Mario Rodríguez Ibáñez

INTRODUCTION

Large, multinational companies that own and control digital networks also benefit from collecting our data. Behind the concept of free networks lies a complex architecture generating increasingly concentrated profits for companies. Studies demonstrate that behind the rhetoric of democratization of expression in digital networks, asymmetries and inequalities are maintained and increased (Bianchi 2015).

What transpires in digital networks is an expression of what happens in all areas of life from economics to politics, to cultural rights, and who benefits from the exploitation of natural resources. This is part and parcel of social stratification, generating inequalities, discrimination, and

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81

oppression. Digital networks therefore need to be understood as sites of contested meanings and practices where new ways of re-inhabiting them can be created, often through acts of protest. Increasingly, however, resistance takes place with the development of alternative lifeways that shape and revitalize work in territories and communities.

The complementarity between face-to-face spaces (cultural venues, community fairs, festivals, encounters, learning and knowledge communities, networks of stores or *qhatus*,[1] territorial daily work) and massive broadcast and digital spaces (local radios, production of videos and TV programs, digital multimedia platforms, professional networks, exchange systems) provides a possible clue for how to design these spaces in ways that go beyond instrumental uses of digital networks. The question is how to integrate them into the fabric of our lives and our existence without doing away with nourishing social/community networks (many of which are decidedly not digital). This chapter examines the experience and our approach to digital communication and technological sovereignty at Wayna Tambo—Red de la Diversidad/Diversity Network in Bolivia. To better understand what we do and how we develop complementarity and reciprocity as an approach, the chapter provides a historical context for the evolution of strategies of complementarity that invigorate our communities and that have played a key role in the constitution of our work at Wayna Tambo—Diversity Network.[2]

HISTORICAL CONTEXT AND APPROACH OF WAYNA TAMBO—DIVERSITY NETWORK

Wayna Tambo—Diversity Network was started in 1995 by young people whose experience was marked by the transition from dictatorship to democracy and engendered by the crisis in ideological alternatives connected to the rise of a neoliberal hegemony, the collapse of the Soviet bloc, and the defeat of several revolutionary movements in Latin America between the mid-1980s and the early 1990s. In this context, the founders reflected on contemporary issues, globalization, and modern approaches of Western development in order to rethink cultural action and social transformation from the perspective of diversity. The network also aimed to include the contribution of Indigenous worldviews, youth participation, and create the cultural field as a place of political resolution.

The cultural field of our work thus acquired a dimension that goes beyond artistic and aesthetic work. It incorporates actions and strategies that are derived from our notions of civilizing horizons, ways of life and of relating and living together; in other words, the integral dimensions of our lives. The pillars of our work were quickly defined as territory, the specific place of life of the popular sectors, community, a form of coexistence enfolding alternative ways of life into the hegemonic and dominant ones, and the combination of culture, education, and communication.

At the center of our strategy are the processes of communalization, or the invigoration of our community experiences based on what already exists. In order to relearn to live in the community we need to erode a central element of the processes of modernization that separates the various dimensions of life into specialized compartments. Thus, it is key to adopt the worldview that every action, event, and activity we develop is also educational, communicative, and cultural. Our workshops promote learning, but also engage communicative and cultural processes. Music concerts, neighborhood parties, and photographic exhibitions are cultural events, but they also educate the community and create communicational opportunities. A radio program, a neighborhood bulletin or a video are communicative instruments that rely on profoundly cultural and educational experiences. Making sure that all our strategies engage education, communication, and culture is a first and fundamental step to breaking down the classic forms of institutional and organizational intervention, putting us back into a different work dynamic that potentiates what we do by enhancing the complexity and richness of all interventions.

These convictions led us to create Wayna Tambo in the city of El Alto on January 30, 1995. After several years following our own path, in 2006, we started Yembatirenda in the city of Tarija and the Diversity Network to bring together these efforts. The Network brings together strategies, local works, shared administrations, militancy, and sustained articulation. Currently, the Diversity Network has grown to include Wayna Tambo in El Alto and La Paz, Yembatirenda in Tarija, Sipas Tambo in Sucre, Uywana Wasi in Cochabamba and Buri Tambo in Santa Cruz.

The territorial strategy of working through cultural ch'askas,[3] or co-responsible groups, is being consolidated in various spaces such as Pasankeri and Cotahuma macrodistrict in La Paz, Villa Dolores and District 8 in El Alto, Bartolina Sisa and the city center in Sucre, the neighborhood Luis Espinal and neighborhoods in Tarija and the Municipality of Achocalla in the department of La Paz. Diverse groups from different

cities are now integrated into the Diversity Network preserving their autonomy like the process currently underway with Uywana Wasi from Cochabamba and others.

Bolivia is part of the Tejido de Cultura Viva Comunitaria and member of the Latin American Council of Cultura Viva Comunitaria. This latter network has a local, national, and continental scope and since 2013 has organized four Latin American conferences. Held in El Alto and La Paz, the first conference included the participation of more than a thousand people and each of the conferences had participants from more than 17 countries. We also form part of a rich process of urban organizations in Bolivia and from across the continent that include the Urban Resistance Front, which brings together organizations from Brazil, Colombia, Venezuela, Argentina, Chile, and Bolivia. In 2018, we organized a meeting of the Tejido de Cultura Viva Comunitaria from Bolivia with almost 40 collectives from 6 cities across the country.

After more than two decades, we now work together as Wayna Tambo—Diversity Network in five major areas. The details of this work would take us beyond the scope of this chapter, but what is important to note is that the work is based on a cultural strategy that brings together and emphasizes artistic, educational, and communicational areas (see Fig. 1).
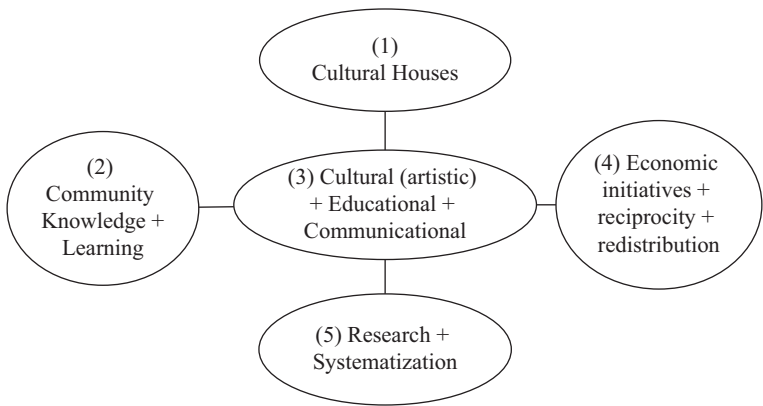
Fig. 1   Wayna Tambo—diversity network

What Do We Aim to Do with Our Work?

Rooted in the perspective of Living Well (Vivir Bien), an alternative civilizational horizon and a plurinational equitable organization of our diversity, our work seeks to restructure and invigorate communitarian life in Bolivia. This includes active participation of popular urban neighborhoods through the urban organizational fabric and living community culture. This has an impact on the co-responsible management of the public and the common good, as well as on strengthening urban and rural continuities from decolonial, anti-patriarchal and anti-comercialist perspectives by implementing cultural, artistic, educational, and communicative strategies and actions. The work takes shape in cultural centers, communities of knowledge and learning, intercultural community media, economic initiatives of reciprocity and redistribution, research and systematization.

What we create, cultivate, and nurture is complemented by three strategic objectives:

1. Invigorate Indigenous singularity in diversity: The development of a cultural, educational, and communicative intervention for producing/creating/nurturing the circulation and reception/enjoyment of cultural goods. This is accomplished with actions and scenarios of mediation, cultural negotiation, and empowerment to invigorate the singularity of local Indigenous roots in contemporary urban spaces and strengthen cultural diversity in equity.
2. Participation and community management of what is public, co-responsibility: Revitalize the management of the public and common good from the community's perspective and through its own initiatives, effective coordination of networks and the strengthening of urban, cultural, and youth movements. Fortifying our co-responsible and participatory presence between state authorities, so-called civil society and communities with proposals, managerial capability, mobilization, and social control.
3. Living Well in the urban context: Systematic reflection, urban communal, and network experiences that produce practices, proposals, and debate to invigorate civilizing alternatives within existing frameworks that complement continuity and reciprocity between urban and rural lifeways, invigorating community coexistence between human beings, between humans and nature and between ancestral

and sacred life cycles. Re-inhabiting concrete territories by influencing daily relations, the organizational fabric, and public policies.

How Are Digital Networks Integrated into These Processes?

As mentioned earlier, working with digital networks only makes sense when their use is integrated as a strategy that complements all dimensions of our actions. This complementary approach and some of the lessons we have learned include the following:

(a) Digital networks enhance conventional mass media

From the beginning, Wayna Tambo identified the need to intervene in the mass media through cultural events, radio programs, and publications. Also in 1995, our magazine "Rayazos" was founded and later became a digital multimedia newspaper called "Los Muros" (The Walls) and we started our first weekly half hour radio program. The radio project grew and a few years later we were transmitting up to 4 hours a day on friendly radio stations. By 2002, our own alternative community-managed radio project was consolidated, which has notably amplified the work of Wayna Tambo and our first radio station within the current network.

In 2003, radio Wayna Tambo in El Alto played an important role in the Gas War of September and October in Bolivia, as well as in the Black February conflict. Wayna Tambo became the voice of the people of Alteño providing visible support in the resistance struggle with significant participation from the radio audience. Since this time, the articulation with diverse social movements has been at the heart of the Wayna Tambo's work.

Today we have a network of radio stations that includes three local analogue stations and one internet radio station. The digital radio station has allowed us to be heard beyond el Alto, La Paz, Tarija, and Sucre, the four cities where they tune us in through analogue stations. During the social conflicts around the Bolivian constitutional process of August and September 2008, Yembatirenda—Red de la Diversidad de Tarija played a role like that of Wayna Tambo in El Alto in 2003. From the perspective of

community and activist work, we can broadcast 17 hours of daily programming with over 50 programs produced in-house.

(b) Digital media strengthens face-to-face cultural activities

The basis of our work has been in our Cultural Centers, in meetings and events where people engage in diverse cultural activities including music, dance, scenic arts, audiovisual production, plastic arts, literature, and others. To this end, each work space carries out weekly programs, meetings related to various artistic expressions, itinerant cultural fairs in different neighborhoods of the cities, festivals, and massive events the characteristics of which are communitarian, intergenerational, intercultural, and of diverse cultural and artistic expressions.

Our mass media may be conventional, but it usually transmits our cultural activities into our homes and in the neighborhoods where we work: concerts, festivals, fairs, meetings, debates, and so on. The benefit of our face-to-face work is that it always embraces actions in and with the presence of others, which provides the basis for other actions to take place and make sense to the community. To the direct experiences we added digital networks that enable simultaneous transmission and disseminate the work via streaming transmissions in YouTube or Facebook. This has generated broader real-time communication, as well as an immediate archive record of these actions. If we also consider the fact that we also write radio notes and short videos of each activity to be shared on the multimedia platform "Los Muros" ("The Walls"), the communicational, cultural, and educational impact is undoubtedly greater.

Local and face-to-face activities are supported and accompanied by digital media content reaching more people and amplifying our reach. The identity of local actors is strengthened and gains prominence as they are recognized as part of broader regional, national, and international processes that in turn strengthen local communities and their intervention.

(c) Digital strategies enable broader and more diverse of educational processes

Our team is recognized for its diverse training across different fields including political, cultural, technical communication, and the arts. The Community of Knowledge and Learning is an open and wide space for us. However, beyond the face-to-face workshops, that are both long and

sustained meetings and one-day interventions on the streets, or in the middle of a fair, the value of using digital networks has been to expand the circulation of our training materials, and their use by participants.

We have accumulated extensive experience in this area and are currently building an interactive multimedia training platform for national and regional courses to teach topics such as Living Well, urban processes and living community culture. We feel that we have created a strong enough foundation to take this new step.

The book series *Cuadernos de Conversaciones* (Conversational Notebooks) publishes reflections on the systematization of processes and the production of collective knowledge and is distributed through digital networks. Normally a thousand copies are printed, but the digital reach is much greater, and materials are made available in digital files for a free download. We also make these texts available on the radio, and in audio and video files that we develop based on collective work. In this way, we can also reach places that would be impossible to reach through print media.

(d) Digital communication revitalizes reciprocal economies and redistribution networks

The *Illa*[4] is a reciprocal economies and redistribution system that we created, which uses a unit of measure called *Poquitits* for reciprocal transactions and redistribution. The system circulates products, services, and equipment. We use the name Illa because it is an Andean cultural concept that refers to that which already contains what it needs to become, but must be nurtured and tended to communally, like a *chakra* or field, in order to consolidate that which already exists. In other words, illas are like chakras that begin to sprout, when the signs indicate that crops will emerge without yet being crops, but guarantee what will be and already is, without yet having come into being. This is our reciprocal economy, an experience in bloom, that exists without yet having completed its upbringing and careful cultivation.

This network encourages processes for the circulation of wealth (in the broadest sense of the term), through the exchange of products, hardware, equipment, and services without the use of common currency. To facilitate these processes, we are experimenting with a digital platform that allows us to generate exchanges beyond our immediate group and extend the reach of our work. It also allows us to have an efficient register of

supply and demand, as well as a record of all the exchanges, so that their quality can be evaluated.

A central aim of this network is to promote the exchange of what we do best. In other words, we seek to ensure that goods and services are of high quality and demonstrate dedication. The experiment of a system of reciprocity generates more wealth if it is well or better managed than the monetized mechanisms of the market. Having a digital record of this reciprocal experience allows us to evaluate it and promote greater exchanges. In addition, a digital record allows for a quantification of the exchanges.

Progress is being made in this area by expanding exchanges with eco-social enterprises to convert circulating wealth into reciprocity as a rate of exchange with common currency, and with the support from these enterprises to enable access by autonomous and community groups to needed resources for investment. The companies gain cultural, educational, and communicational services from community organizations. We hope this process will better connect policies between communities, eco-social enterprises, and state entities. Though there have been proposals, there are no current processes within State institutions. Doing this work with the use of digital networks has been especially beneficial.

There are collaborative forms of economic work with urban organizations and living community culture, which allowed us to consolidate the nascent network of community market vendors called *qhatus* (see Fig. 2) that use the digital system mentioned above.

This experience has also allowed us to generate opportunities for investment in community cultural groups through an annual *pasaku*. The pasaku is a traditional form of economy in which several trustworthy people come together, each one contributing an equal monthly amount to a common purse. That money or its alternative (pasaku can also be spices) is collected by one of the members of the group each month, making it possible to create funds for investment without a bank's mediation. This system is part of ancestral pasaku economic wisdom that has now been incorporated into urban life. Since 2017, we have implemented a pasaku between community cultural organizations and currently we already have two groups each with ten organizations. This means that we have twenty organizations generating the use of a reciprocal economy annually through these means. The pasaku groups integrate organizations from different cities of the country and we even have demands from organizations from other countries. These groups essentially work based on the trust and

Fig. 2 Qhatu—community market vendors

co-responsibility that each has in our digital platform as an operative mechanism to make the exchanges possible from a distance. Therefore, without losing the sense of community economies, digital networks have also strengthened in us these capacities for expanding our territory of action.

(e) Strengthening networks and the social fabric

As was mentioned earlier, we are part of the fabric of the community living culture at the local, national, and continental levels and of urban communities with organizations from several countries in the region. The organization has functioned mainly by developing working groups on various digital networks. Some are more commercially oriented and others more alternative, but we facilitate meetings, generate agreements, coordination, assign tasks, follow-ups, and so on by networking and weaving together these mechanisms.

This allows us to conduct multiscale work simultaneously. Our strategy strengthens the local and immediate territory where community experiences are best invigorated and from there easily connect on meso and

macro scales. This produces greater impact, capacity for learning and exchange, solidarity in struggles and projects. Without abandoning the local territory, we connect easily with the organizational fabric that strengthens our actions and makes evident that we are not alone.

Rapid mobilization in the event of rights violations is undoubtedly one of the greatest achievements of these processes. At the same time, the fast and agile collaborative action in different communities in support of local processes, not only with declarations but with concrete work is a notable contribution of this operation. However, none of this would be possible without visiting and meeting in person, because that is where deep complicity and trust are woven together to know that those who participate in the network or organizational fabric are "worthy" of our decisive support when they need it.

(f) Territories and communities also rely on digital networks to strengthen their conviviality and belonging.

Communities need to see each other, listen to each other, feel each other, and embrace each other. Presence binds us together, generates daily coexistence, trust, and affectivity. A community that has no practical use tends to dissolve. The community is a permanent exercise of encounter that is useful for reproducing and regenerating life. At the same time, taking care of the intersubjective bonds, of loving each other, and of "missing each other," even if we do not always get along. Community is life itself with its ups and downs, advances and setbacks, but it is the place of the ordinary, of the common good that is necessary for our own life. Our lives need community. The community is territorial, even if the territory is not a clearly delimited space, but open, flexible, and even multiscale. The community needs to strengthen belonging to the territory, to the collective, and to history. For this reason, although the fortifying of local territory and community requires immediate experiences, it is also strengthened in a complementary way with digital networks.

In the territories where we work, we encourage the creation of lines (or life cycles), the reconstruction of neighborhood memory and the elaboration of new cartographies to resignify the territory, which allow us to re-inhabit with our histories and feel it as our own. This thereby increases our disposition to take care of it and the people who inhabit it. Even people who are more than human beings and include nature, our buildings, and our places of coexistence.

The reconstructions of memory and cartographies are usually shared in local digital networks which serve as a bridge within families for an intergenerational encounter to take place. More than amplifying the reach of messages, what is key is the use of digital tools that help us to weave a better and stronger social fabric that is our own. And it works. There is progress in this regard with various experiences, though we continue to learn and refine them.

Conclusion: Community-Managed Learning and Moving Toward Technological Sovereignty

All our accomplishments have come about without hiring experts in digital networking. These were done by learning collectively, doubting, asking questions, and dialoguing in an intergenerational way. Our team was and continues to be reluctant in the face of the digitization of everyday life. Nevertheless, we consider it important to participate in the digital world, so we learned to understand how the world system and its digital networks work in order to avoid being naively engrossed. But we also engaged with these tools in order to develop our own use of them. This was done to conceptualize the steps that could help us break with our dependence on large companies that profit from our digital needs. Weaving alliances to advance our technological sovereignty is complicated, but small steps can be taken. We have carried out some experiments that are still not completely satisfactory but we continue to move in this direction.

We also learned how to manage our digital multimedia newspaper, which still needs improvement, but we will do it ourselves. We did not hire experts for that task, which may slow us down, but it generates greater appropriation by the community, better local capacity building, and more autonomy, which we value deeply.

There can be no territoriality without strong communities. Strong communities, however, require the right conditions for their autonomy, which does not mean isolation but the recognition of our wealth and potentialities, our capabilities, the totality of our life potential and integrity. At the same time, it requires that we acknowledge our incompleteness because we need others to exist, which is why networks and the weaving together are important. Quotidian networks, connections, and conviviality woven together through embodied action are thus wonderfully complemented with digital networks.

Possibly the greatest lesson we have learned is that in order avoid the trap of the monopolies that dominate digital networks, we need to be part of community networks and their territorial fabric, which is ultimately a privileged location where the disputes over the expansion of capital, colonialism, patriarchy, and the control over nature take place. These disputes work to the extent that we are able to move from resistance and denunciation, to re-inhabiting other lifeways integral to our existence. To re-inhabit from the territorial and the communitarian perspective is also carried out through digital networks, but not only by relying on them. We must take into consideration the totality of the dimension of our lives. To meet, to relate, to embrace. If we are not able to do that, our work within digital networks remains incomplete, it becomes useless and is subordinated to those who control the networks and use our participation in them for their benefit. Most importantly, this approach means experiencing and living out other ways of life of Living Well and living well together.

Notes

1. Qhatu is an Aymara term for market.
2. Further information about Wayna Tambo is available on its Facebook page: www.facebook.com/pg/fundacionwaynatambo.reddeladiversidad/about/?ref=page_internal and for the live radio stream go to: http://radiowaynatambobolivia.blogspot.com/
3. ch'aska is a quechua term referring to the stars and their relation to the constellations. It is also a term used to refer to uncombed or unkempt hair. We use it to refer to the articulation of a cultural point of departure, to a neighborhood's meshed territory of cultural, educational, and communicative spaces, cultural organizations, public spaces, and more.
4. For further details about this concept see: www.laillareciprocidad.wordpress.com/2015/07/28/la-illa-economias-de-reciprocidad-y-redistribucion/

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Approaches to Decolonizing Knowledge and Communication

Open Knowledge, Decolonial, and Intercultural Approaches to Communication Technologies for Mobility: The Achuar Kara Solar Project

David Vila-Viñas, Juan Manuel Crespo,
and Cheryl Martens

Development efforts that ignore local circumstances, local technologies, and local systems of knowledge have wasted enormous amounts of time and resources. Compared with many modern technologies, traditional techniques have been tried and tested; are effective, inexpensive, locally

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> *available, and culturally appropriate; and in many cases are based on*
> *preserving and building on the patterns and processes of nature.*
> *(Grenier 1998, 10)*

INTRODUCTION

As a philosophy of life and an instrument for the visibilization of Indigenous peoples (Caudillo-Felix 2012), Sumak Kawsay[1] is a term derived from the Kichwa[2] cosmovision and notion of Living Well (*Buen Vivir*) and has had a major impact in Latin America and internationally (Acosta 2013; Dávalos 2008; Kothari et al. 2014). This term encompasses a wide range of proposals from 'living well', or the 'full life', beyond the practices of consumer culture and orientations toward austerity, with an emphasis on the affective and spiritual dimensions of life. At the same time, the term signals collective-being, whereby humans are not separate to or above, but part of Nature; where use value is considered more important than exchange/economic value. In addition, the Sumak Kawsay framework permits the deconstruction of patriarchal, colonial, and other structures of cultural and social class domination (Acosta 2013; Acosta and Cajas-Guijarro 2015).

For Indigenous communities, discussion around living well also concerns resolving immediate everyday needs, as this chapter will discuss, focusing on the communication and technology tools of the Achuar in the Ecuadorian Amazon. This chapter will discuss the Kara Community Energy Infrastructure Project. Based on solar energy, this project is of significance for rethinking technology in the Amazon, as it brings with it the possibility of a more sovereign transport and communication network that can also allow for the creation of new range of production projects based on similar technological innovations and the construction of an Achuar vision of Good Living and ancestral knowledge: Shiram Pujustin and Ii Unuimiarmuri.[3]

The chapter begins by looking at discussions concerning the concepts of Sumak Kawsay, decoloniality, interculturality as well as the ecology of knowledge. The Kara Solar project is specifically focused on the development of a solar canoe network in the Ecuadorian Amazon. The project is discussed in the second section as a significant example of bringing knowledge based on Eurocentric rationalism into dialogue with local Indigenous knowledges and a decolonial approach to knowledge negotiation. The

third section considers the major lessons of the project and concludes with a discussion of Kara Solar in relation to wider discussions concerning communication and technology.

DECOLONIALITY, SUMAK KAWSAY, AND DIALOGUES OF KNOWLEDGE

The inclusion of decolonial approaches, which focus on living well or good living[4] in the recent constitutions of Ecuador (*Buen Vivir*[5]) and Bolivia (*Vivir Bien*) have led to unprecedented discussions on the construction of living practices and alternatives to capitalism, Eurocentrism and Western rationalism.[6] These paradigms have had a major impact across the region, from the policies of knowledge management and communication, to education and intercultural relations. They also question the concepts of 'development' and 'progress' and their relationship with nature. What is particularly innovative about the Ecuadorian and Bolivian constitutions is how they highlight logics, rationalities, and sociocultural ways of living that have been historically denied and subordinated, opening possibilities for interculturality and alternative logics, rationalities, and ways of living that contribute substantially to a transformation through a decolonial orientation (Walsh 2012).[7]

Discussions of Sumak Kawsay/Buen Vivir[8] have also provided an important critique concerning development, destabilizing its unidirectional and linear conceptions, and associated notions of progress and productivity, so that they can be strongly projected in active decolonial debates[9] (Gudynas and Acosta 2011, 82–3). This discussion on a philosophical level increasingly includes the participation of Indigenous intellectuals in dialogue with Latin American mestizo and/or European intellectuals. This is particularly important for a republic and a region[10] that have fought against intense racism[11] and where the very conformation of the state can be understood as an expression of the coloniality of power and knowledge (Quijano 2010).

The anti-hegemonic notion of Sumak Kawsay,[12] however, needs to be analyzed not only in the context of structural racism and how it is a type of a resistance to colonialism, but also within the current regime of capitalism in which the economic and governmental exploitation of people's cognitive power is growing (Vercellone 2007). This present framework of domination based on neoliberal governance and corporate power plays a

role in the dispossession of informational and cognitive production processes. This hegemonic framework, however, has also led to the development of a related concept of resistance, concerning other ways of knowing and doing, which revolve around *Ii Unuimiarmuri*[13] or 'Good Knowledge'.

In contrast to Sumak Kawsay/Good Living, relatively little has been published in relation to its congruent framework of Sumak Yachay/Good Knowing (Vila-Viñas and Barandiaran 2015). This concept, based on many of the same premises of good living, also attempts to break with colonialism and challenge structures and processes related to global capitalism, but is focused on resistance to hegemonic structures of knowledge production and consumption. A key example of this resistance is the FLOK[14] Society project (Free Libre and Open Knowledge project), 2013–2016, developed in Ecuador around the same time as many of the key developments of the Kara Solar project. The project makes explicit its resistance to the approaches of rationalist knowledge within global capitalism:

> We are on the battlefield that has defined the Citizen's Revolution of buen vivir in terms of knowledge and its cyber tools: a globalized colonialist inheritance and interference defined by a cognitive individualism based on consumption and the transaction of knowledge in the form of intellectual property. (Barandiaran and Vazquez 2013, 5)[15]

The notion of Sumak Yachay[16]/Good Knowledge, for our context of study we will use the Achuar concept of Ii Unuimiarmuri, is therefore an indispensable dimension for Good Living; a new form of knowledge management at all levels is a potentially infinite and common resource that can articulate a productive matrix capable of overcoming the extractive nature of natural resources and the role of a peripheral country within the international division of labor. This approach seeks to destabilize the epistemological and cognitive dimensions of coloniality. In other words: "(…) all forms of life imply a form of knowledge, of coupling with the means of regulating the exchange of matter and energy. To inhabit is to know, and Good Living requires good knowledge" (Barandiaran and Vazquez 2013, 5). This is the underlying meaning of the notion of Ii Unuimiarmuri.

Therefore, while science and knowledge have a central place, they should not be confined to univocal and closed notions as coloniality has prescribed (Walsh 2012, 70–1). Scientific and technological knowledge

can also be articulated with ancestral knowledge, so that ancestral knowledge is recognized not as peripheral, but as relevant and central knowledge in and of itself. Good living is thus not an abstract creation but is a concept based on knowledge established by generations. Within this substratum is configured the vision and social practice regarding life and the cosmos, which unites physical and spiritual spaces. Sumak Kawsay, Shiram Pujustin, and Ii Unuimiarmuri are built an ontological and ethical fabric of four fundamental principles: relationality, correspondence, complementarity, and reciprocity. The recognition and commitment to ancestral knowledge, both for Indigenous and Afro-Ecuadorian peoples and for other 'peripheral' or 'subaltern' sectors, can be understood as a tangible approach to building a plurinational State, as well as a significant tool of epistemic decolonization in favor of an integral life in which knowing and living are interwoven.

This allows us to build epistemological assumptions that are open rather than closed, that are not based solely on knowledge and reason but consider the totality of aptitudes and senses as well as feelings. This opens and challenges modern epistemology that depends on an understanding of the world as being reached and studied via rational knowledge. Instead, it makes room for other epistemological logics that are used by a great majority. This epistemology considers that knowledge is arrived at from the world rather than solely through rational logic, pointing to a decolonial epistemology, pedagogy, and reason. In this way, it shows that living well is not only social and economic but also epistemic (Walsh 2012, 70).

From the historical practice of the native peoples of Abya Yala, good knowledge alludes to an open, common, shared, and reproducible knowledge: a Pachamama of knowledge (Barandiaran and Vazquez 2013, 7). It is evident that this knowledge of the peoples is not completely abstract and individualizable knowledge, but that it exists in an inherent relationship to their territories, their histories, their practices, and their needs. For this reason, the use and access to this ancestral knowledge must take place within the limits of respect for the context and self-determination of peoples to maintain, reproduce, and share their knowledge, as well as their decision to engage in dialogues of knowledge with other cultures and knowledge. Not approaching in this way could mean an epistemicide[17] of ancestral knowledge. This is how this Pachamama of knowledge could contribute to building the present and imagining the future, by managing knowledge in a coherent manner in order to reproduce and keep alive the wisdoms of peoples and, through them, the life of the rest of natures.

On the basis of this understanding of good living, good knowledge offers the framework for the possibility to manage the different types of knowledge that coexist both within peoples and nationalities and in their articulation with other types of knowledge, including modern, mestizo or hybrid, although always with a critical and decolonial approach. This is the framework that delimits an ecology of knowledge (Santos 2010), where it is possible to construct practices and technologies that can be appropriated by a plurinational and decolonizing society. An ecology of knowledge understood as:

> (…) a learning from the South through an epistemology of the South. This confronts the monoculture of modern science with the ecology of knowledge. It is an ecology because it is based on the recognition of the plurality of heterogeneous knowledge (one of which is modern science) and on the continuous and dynamic interconnections between them without compromising their autonomy. The ecology of knowledge is based on the idea that knowledge is interconnected knowledge. (…) The ecology of knowledge expands the testimonial character of knowledge to also embrace the relationships between scientific and non-scientific knowledge, therefore expanding the range of inter-subjectivity as inter-knowledge is the correlation of intersubjectivity and vice versa. (Santos 2010, 49, 53–54)

Building on Santos's notion of ecology of knowledge and drawing on our experience, this chapter discusses a project for the construction of boats for transport, communication, and community production, driven by renewable energies of the Achuar Nation of Ecuador, and the Kara Solar Foundation. Proposed here is a hybrid model of knowledge, where ancestral Indigenous knowledge is evenly weighted with 'modern'/ Western knowledge, which is developed through a dialogue of knowledges, permitting the building of a river transport system on Amazonian rivers, free of the need of oil or nonrenewable resources, which bypass classic visions of development and is consistent with the anti-extractive struggle of the Achuar in the Amazon.

Sumak Kawsay, or Shiram Pujustin in Achuar, in all its polysemy provides strong alternatives to development beyond conventional Eurocentric knowledge. Thus, decolonization is part and parcel of this concept. Decolonization opens the doors to different sets of understandings, rationalities, and feelings of the world. However, *Shiram Pujustin* also respects its internal plurality of conceptions, without hierarchies. Classic liberal

approaches to multiculturality are insufficient for this purpose. The approach taken is instead one of interculturality. As Gudynas argues, Sumak Kawsay (or Shiram Pujustin) is therefore more than simply the coexistence or juxtaposition of different living cultures, it proposes an interactive dialogue and praxis focused on promoting alternatives to development (2011, 445).

The notions of interculturality and plurinationality have great political and transformative potential from a decolonial and rights approach, as Walsh indicates these frameworks are about transgressing, interrupting, and dismantling the colonial matrix that governs the different social structures and institutions, while creating others that distance themselves from capitalism and its epistemology of 'reason'. At the same time, decoloniality requires interculturalizing projects to be effective. This consists of the articulation of different beings, knowledge, techniques, technologies, and logics of living. In other words, interculturality can be understood as a decolonial and critical tool, a mechanism of both coexistence and coexistence:

> (…) decoloniality will not have a major impact without the projects and efforts to interculturalize, and to articulate beings, knowledge, ways and logics of living within varied, multiple and multiplying projects, underpinning the possibility not only of co-existing but of co-living (of living 'with') in a new order and logic that start from the complementarity of social partialities. (Walsh 2012, 69)

In this sense, Escobar also argues that interculturality implies, on the one hand, the recognition of multiple definitions and interests around the forms of sustenance, the social relations and the economic and ecological practices (2011, 311). On the other hand, it implies the capacity to design policies from relational cosmovisions, rather than the dominant dualist cosmovision. Finally, to establish intercultural dialogues around the conditions that could become a pluriverse of socio-natural configurations. With respect to different experiences of decolonial knowledge management, interculturality operates as a device/mechanism that allows and demands dialogues of knowledge. However, "dialogue between cultures demands not only mutual respect, but also base of mutual knowledge, which is not possible without sympathy and love" (Panikkar 1996, 148).

Since these are disputed concepts, the effectiveness of these notions also depends on how they operate within a given political context and on

the imposition of the meaning given to them by the different interpretations. Cortez has delimited the field in which the dialogue of knowledge is possible, within the limits of the three preponderant interpretations (2013, 14–5). From certain republican visions, the knowledge of Indigenous peoples can be recognized and integrated into the national culture but always at its lower levels, as an element of the past and can therefore be 'surpassed'. At the other extreme, interculturality brings different visions of the world in relation to each other, without altering the social processes that have historically interconnected them (domination, but also urbanization, hybridization), so that interculturality as such would be impossible, as well as the notions of Shiram Pujustin or Sumak Kawsay,[18] which would have split irreconcilably. Finally, constructivist readings deny the entity of these categories of ancestral/originary knowledge as such and ignore the historical accumulation achieved especially by original populations, so that the ancestral is reduced to a mere invention in function of obscure interests. Therefore, the work of plurinationality, interculturality, and dialogue begin precisely in the space marked by these external limits and with the understanding that inequality in the relations of knowledge-power must also be a self-critical factor of intercultural dialogue.

Within this general approach of critical interculturality, plurinationality[19] would primarily challenge the organization of the State.[20] For political purposes, it is in fact a plurinational opening, by which the national dimension of the State unfolds and preserves on the one hand the sense of liberal nation ('we are all Ecuadorians') but incorporates on the other hand an ethnic-cultural perspective of nation, articulated through relations of self-determination but not of independence and conflict with the liberal nation (Santos 2010, 3). This is intended to counteract the undermining and colonization of Indigenous and Afro-American populations that has generated monolithic political, cultural, and racial dimensions of the nation-state (Cortez 2010, 231).

Both processes of interculturality and plurinationality are complex and have significant obstacles of colonial roots. In any case, it is important to highlight the consensus that this transition is not oriented toward a multicultural regime such as that of (neo) liberal traditions, nor does it deepen the *mestizaje* regime, which is based on hegemonic colonial persistence within many independent Republics (Cortez 2010, 239; Walsh 2012, 61–2). Faced with this colonial background in which it was even possible to situate certain symbols of the cultural baggage of the Indigenous

peoples as the leaders of the ruling classes of the Creole State and deepen meanwhile the process of colonization on those peoples, the horizon of good living and plurinational diversity implies the constitutional recognition that there are several, equally legitimate forms of organizing political action, conceiving of property, how to manage territory and economic life (Santos 2012, 29), as well as knowledge.

Such processes of interculturality and plurinationality need to also converse with preponderance of cognitive work and Internet Communication Technologies (ICT),[21] as dealt with in detail by projects such as FLOK Society, as discussed earlier. In this context, any alternative mobility and communication project must respond to two challenges: On the one hand, it must be formulated from a perspective of democratic use and orientation of technology, in contrast to the hegemony of instrumental-technological rationality, which considers the possibilities of technical and political institutionalization of Indigenous and popular communities, including their eventual alliances with public institutions (Martens 2017, 16). On the other hand, it must consider the relevance of communication for the expression and sustainability of Indigenous communities. Beyond a means of transmitting information and putting people in contact, communicating and coming into contact are related to the autonomous construction of territory, culture, and community.

From this perspective, the introduction of a new catalogue of technological instruments may alter the relationships of communication and socialization within a community, but it is not possible to predict how this will happen, and what scenario might be created. FLOK Society, however did manage to orientate the scenario, by focusing on two key components (who and how) in order to generate a new, more equitable set of processes (what). It focused on: (1) Who—the actors (considering a tripartite alliance between social movements, Indigenous communities, and public institutions); (2) How—through open source technologies and horizontal governance, with the aim of promoting a different technological episteme; (3) What—a set of processes of economic and social change in which technology contributes to good living.

In the following discussion we will explore, the project for the open design of solar-powered transport in the Achuar community (Ecuador) as a story of innovation and important advances in the field of intercultural communication, technology, and mobility.

Technological Hybridization: The Case of Solar Canoes[22]

> Ecosystems sustain themselves in a dynamic balance based on cycles and fluctuations, which are non-linear processes. Ecological awareness, then, will only arise only when we combine our rational knowledge with an intuition for the non-linear nature of our environment. Such intuitive wisdom is characteristic of traditional, non-literate cultures … in which life was organized around a highly refined awareness of environment. (Capra, quoted in Berkes 1993, 1)

Kara is an Achuar[23] word that means a vision or dream that is about to become reality. The Kara Solar project[24] started from this imaginary to design, jointly between community and experts, a river transport system within the territories of the Achuar Indigenous communities. Driven by solar energy, with the aim of providing an alternative to fossil fuel use on the rivers of the Amazon basin. We discuss the Kara Solar project and its development of solar canoes, as an example for technological hybridization, combining ancestral knowledge with contemporary engineering and technological knowledge.

In terms of the aims and objectives of the project, the project aimed to provide transport and communication for the inhabitants of the Achuar communities, producing an efficient and clean service of transport and a way to exchange goods and services. Materially the project facilitated access to basic services, such as health and education centers and communication between communities. At the same time, this project had a key objective to contribute to advances toward local energy sovereignty beyond fossil sources and projects such as community tourism and/or the processing of medicinal plants for use both within and outside Achuar communities. In this sense, the main objective is to promote an alternative imaginary to the classic notion of development and to firmly ground the activities of the communities on the notion of the Shiram Pujustin, the Achuar concept of good living, for the harmonious coexistence of human beings with nature.

Significantly, in addition to the specific, tangible objectives of this project and its potential adaptations or diversity of applications, this project also demonstrates a tangible application of the methodology for the collective creation of ideas and designs, as well as construction, execution, and general maintenance of solar canoes, led by an Achuar perspective to

technology. In other words, the project is based on ecology of knowledge as the foundation for its success.

The work is organized through the logistics of Achuar assemblies (see Fig. 1), which direct all decision-making processes. Beyond decision-making, the cognitive work involved in the project requires the involvement of the entire community, so it has also been agreed that all goods, material and immaterial, must be community domain, free and open access, even for replications in other territories in the future. Hence the Achuar communities arrived at the full name of the project, which is 'Community Energy Infrastructure Project', it has the aim of go beyond just solar canoes, the main aim is to provide clean energy for different purposes that will give them more autonomy for their territory without depending of extractive industries, giving them dignity and more coherence about their philosophy of conservation struggle against extractivism.

Fig. 1 Kara Solar community technical assembly. (Source: Kara Solar project photo, 2017)

Kara Solar combines ancestral knowledge with contemporary knowledge oriented toward the production of common goods. The project has been imagined, researched, and designed by the Association of the Achuar Nationality of Ecuador (NAE)[25] through the Local Management Committee with the support of various national and international actors.[26]

Although the contributions range widely in terms of economic, logistics, technical as well as political aspects, as an example of intercultural, inter-regional, and international dialogue of knowledge, it is important to note that all decisions relating to the project pass through the Achuar assembly system.

This methodology is relevant in terms of dialogues concerning knowledge creation and development, since it is a project based on the community participation of its main beneficiaries, which is indispensable in order for a technology to be developed and adapted efficiently to a particular context and the Achuar reality. Even so, this does not mean that the methodology is simple or easy. It has resulted in problems and confrontations along the way. On the one hand with financial sustainability aspects, as it is a technological development of prototypes, which involve continuous testing and error in long time periods without necessarily obtaining concrete or safe results, something that is demanded a lot from financial institutions. On the other hand, there are great expectations from the community to see the technology working perfectly and the errors or problems in the technological development, create frustration that at times has weakened the support for the project (see Fig. 2).

The Kara Solar project demonstrates both technical and financial viability, given the current local demand[27] for this type of transport and in relation to the navigability of the rivers, the technical designs of the boats and the location of the recharging stations, as well as the projections of income and expenses. It is worth highlighting the role that Indigenous knowledge has played as the basis for a form of knowledge-based social economy in the region. The Kara Solar project initial feasibility study included an analysis of the efficiency of ship designs adapted to the conditions of the Amazon rivers, based on various models, including some proposed by companies and naval technicians, along with other traditional community vessels. From there, the analysis was initiated by a team of Massachusetts Institute of Technology (MIT) technicians, with digitalization and simulations made by naval engineer from California, Michael Roberts. Although the initial simulations were based on MIT's standard mono-hull designs, the traditional designs were digitalized too, making it possible to compare

Fig. 2   Tapiatpia, the first solar canoe in the Ecuadorian Amazon. (Source: Kara Solar project photo, 2017)

and define the most suitable designs, given the conditions of the rivers and the need for adaptability of solar propulsion technologies. A modification was thus proposed, using alternative traditional materials to wood, such as fiberglass. The safety of the hull was therefore improved in case of collisions with objects dragged by rivers, while reducing logging in the area, with a preventive impact on the increasing deforestation of the Amazon. Of course, it was the community itself that finally validated and confirmed, in a decision not without irony, that the designs, which had evolved over centuries within the Amazon, were the best adapted to the conditions of navigation. Something similar happened with the engines that are provided by a German company, that had different durability problems, at the time are being tested because they are not designed for Amazon rivers, so new adaptations are being made testing on the field with local drivers, which is the most efficient way to come to best results (see Figs. 3 and 4).

In the second and current phase, Kara Solar has come to include an integrated system of charging stations along the Pastaza, Capahuari, and Bobonaza rivers. In addition to the direct usefulness of improving

Fig. 3 Kara Solar training in the Achuar community. (Source: Kara Solar project photo, 2017)

transportation in the area, an integrated communication system and elec-tric power microgrids will also be generated, which will be able to supply the stations with solar energy for other uses, including community tour-ism, schools, health centers, and information and communication technol-ogy centers. The community is presently studying the viability of productive projects that require an energy investment to be used outside the area, such as processing platforms for essences of medicinal plants, supplies for agriculture and farms. Although it introduces greater complexity into the project, it drives traditional knowledge toward the Achuar objectives of reducing dependence on fossil fuels and promoting alternative systems of transport, communication, and energy generation within communities, since, as indicated in the feasibility study itself, "the daily dependence of communities on these fuels and the generality of the extractive regime constitutes a structural problem" (Kara Solar 2014, 38).

Generally, this project demonstrates a living laboratory of knowledge and creativity flow, bringing together academia, engineers, and local-based communities. The experience of generating a common space of common

Fig. 4 Solar canoe. (Source: Kara Solar project photo, 2017)

challenges of negotiation between these three types of actors has generated a very big challenge but with very important results for learning, and above all, for improve both in this project and other new projects to be developed where hybrid technologies could contribute to sustainable life models for humanity.

LESSONS LEARNED: THE SIGNIFICANCE OF THE PROJECT FOR COMMUNICATION AND TECHNOLOGY STUDIES

The case of Kara Solar allows us to confirm some already clear postulates about approaching science and technology from a decolonial approach, illustrating the importance of building on, rather than side-lining Indigenous knowledges. This is consistent with Zwahlen's argument that the main strength of Indigenous practices for sustainable development is that they have evolved in close contact with specific cultural and environmental conditions. Some traditional techniques have proven to be sustainable in the sense that they have performed well over a long period of time (1996). These practices are consistent with the contingent vision of

technology and how it may be articulated in relation to democratic rationalities to improve social structures. In particular, it makes it possible to move beyond the modern contraposition of contemporary (disruptive and technological) versus ancestral (traditional) knowledge, demonstrating the points of reference between the frontiers of the knowledge produced by academic institutions and those of communities and activists, capable of orienting certain public institutions toward their perspective (Martens 2017, 15).

The solar canoe technology project of the Achuar community demonstrates an example of open knowledge and highlights the possibilities and the difficulties of the dialogical and relational knowledge from a decolonial perspective. It is important to draw attention to some key issues concerning the proposal. The project first came about as the community itself identified the problem of energy dependence and the threat posed to their lives and territories by extractive activity of all types. For example, the need for fossil fuels to meet minimum standards of quality of life, including the maintenance of regular means of contact between its members, constitutes a key justification for the continuity of extractivist policies, both with respect to the affected communities (in this case, for transport and internal communications) as well as Ecuadorian society as a whole.

The horizon of a fluvial transport system capable of solar self-sufficiency is the first step toward greater energy autonomy, given that the necessary micro-grid system could, in the long term, become the community's energy fabric to feed regular needs and other self-managed activities, such as communication, community tourism, and/or other sustainable productive activities. Thus, innovation or the implementation of an improvement in community life is not claimed from outside industry but, as a means to achieve relevant objectives delimited and shared by the community.

Secondly, given that the project arises from community needs, concepts, and designs, its operation and management are consistent with the methodology of the community itself in the decision of matters that concern them. In other words, it is not a project promoted by a diagnosis from above or determined by 'expert' solutions. As has been shown, dialogue with proposals and external agents, even with materials that do not exist in the traditions of the community, such as fiberglass or solar technology, are very relevant for the implementation of the project, but none of these alliances detracts from decision-making or the day-to-day management of the project by community decision-making bodies, as there is a strong consensus that the political and technological appropriation of the

project (in short, its democratic character, in the sense of the community itself) is also a key condition for its sustainability.

Thirdly, a dialogue concerning knowledge is possible and effective, but not with all knowledge. The features of "technological appropriateness" (Pearce 2012), adaptation of technology, autonomy in decisions, among others, that make effective a critical interculturality in the field of knowledge and technologies are only possible in relation to open knowledge and technologies, which are susceptible, in turn, to reconfiguration according to the original approaches and innovations that the community raises. Therefore, sovereignty over the project demands the free and open character of the designs and technologies used. At this point the ancestral knowledge or 'common sense' coincides with the hacker ethic, which hedges its bets on the opening up of technology that allows the community to direct it, and differs from other projects that offer technological solutions to the communities, without ensuring that they have control over it.

Finally, by promoting and making the mobility of the Achuar community sustainable and autonomous, the project boosts community communications infrastructures, not only in terms of the mediated transmission of information, but also in terms of the physical proximity and the social and economic interactions that this allows. This communication serves as an alternative to the proposal of cognitive capitalism, whereby a communication carried out by millions is managed by a center and governed by an opaque algorithm to which it intends to communicate.

Please refer to Fig. 5 for a photograph of the Canoe on the river.

Conclusions

Ii Unuimiarmuri, based on Ancestral, forest knowledge evokes the epistemic struggle of the Indigenous peoples against different manifestations of contemporary colonialities of power and knowledge, at the same time as it constitutes an alternative dimension to the parameters of colonial and modern contemporaneity, as well as neoliberalism and rationalistic notions of welfare, providing instead, a concrete proposal of an autonomous and shared knowledge that is the intellectual and practical context in which good living is developed, constructing an enriched ecology of knowledge, which allows for the incorporation of aesthetic and sensorial and ancestral experiences.

Fig. 5   Solar canoe on river. (Source: Kara Solar project photo, 2017)

The example of the creation of a fluvial transport system based on ancestral knowledge and on the micro renewable energy networks of the Achuar of Ecuador, the Kara Solar project, has shown the potential of an intercultural dialogue based on free knowledge. This case promotes opportunities for mobility and communication of the Achuar and introduces diversified possibilities for the development of autonomous and sustainable productive projects. The Kara Solar project demonstrates tangible possibilities for building projects that overcome the coloniality of power and knowledge through the implementation of local knowledge, in open and constructive dialogue with external knowledge. Likewise, by overcoming colonial views that 'modern', 'Western' knowledge is the only valid knowledge form and accepting the capacity of local knowledge to dialogue with other knowledges, toward the building of good knowledge and the good life, makes possible a decolonial solution in the construction of another society, bringing us close to a decolonized society of good knowledge.

Notes

1. Sumak Kawsay is a Kichwa term and worldview defined as living life in fullness or a state of plenitude; good life and good living. The concept was proposed at the beginning of the twenty-first century and introduced by the CONAIE (Confederation of Indigenous Nationalities of Ecuador/Confederación de Nacionalidades Indígenas del Ecuador) (2007) as an alternative to dominant development paradigms. The term was used thereafter in constituent debates and included in the Development Roundtable, which led to its incorporation into the 2008 Constitution as a post-development paradigm for Ecuador. The term has undergone much debate and has also been misconstrued. For further discussion Indigenous political thought, see Macas (2014), Pacari (2013), Kowii (2014), Chuji (2014), Cholango (2014), Crespo and Villa-Viñas (2015), Huanacuni Mamani (2010), or Medina (2008).

2. In Spanish, the term 'quichua' or 'kichwa' refers to the Indigenous culture and languages of the region of the Andes and the Amazon. Originary Kichwa peoples generally use the spelling 'kichwa', which we adhere to here. It is important to point out that there is a wide range of similar Indigenous terms, and that the Kichwa version of the term is not the only conceptualization of Sumak Kawsay in Ecuador or among the Andean or Amazon peoples.

3. During an interview with Domingo Peas-Achuar leader on 2019, he stated that the concept of Good Living is most often translated in relation to the kichwa concept of Sumak Kawsay. The Achuar people have their own concept: Shiram Pujustin which dialogues with the term Ii Unuimiarmuri which means the ancestral knowledge or the wisdom of the forest.

4. The fact that it is a concept that comes from Indigenous peoples and nationalities does not mean that it is exclusive to Indigenous peoples. It is understood as a concept that is inclusive rather than exclusive and above all intercultural and diverse. As a result, today there is a wide range of proposals concerning good living from diverse cultures and parts of the world. Despite their differences, they provide alternative proposals to modern conceptualizations of 'development'. For further discussion, see Acosta (2013), Unceta (2014), Tortosa (2012), Gudynas (2011).

5. The notion has a strong presence in the preamble and throughout the operative content of the Ecuadorian Constitution, in a complete chapter, entitled 'Rights of good living', which develops fundamental rights within Title II dedicated to this effect.

6. For example, the notion of good living operates in Ecuador's 2008 Constitution as an alternative to the traditional constitutional materialization of colonial development regimes, which prioritize global financial

interests over the interests of local communities, although the impact of the term has weakened with Ecuador's recent shift to conservative and neoliberal policies.

7. It is important to note that constitutionalizing the concept does not imply its stability, since it is a living political notion constructed by the practices of citizens, but it needs to be understood as pluralistic and in dispute, above all concerning understandings and approaches to 'development'. The approaches are carried out by many of public institutions, and advocated by social movements, including Indigenous, ecologist, feminist movements, among others. In any case, through a genealogical and constitutional perspective, there is no doubt regarding its inclusive, intercultural and plurinational character, as well as the necessary confluence of knowledges that sustain viable decolonial alternatives.

8. For further discussions in relation to Good Living as a practical alternative see Vega (2014), Pérez-Morón and Cardoso-Ruiz (2014), Tortosa (2011), Santos (2010), Gudynas and Acosta (2011) and Cortez (2010). "From the perspective of governability", see Vila-Viñas (2014).

9. The close relationship between the emergence of these concepts, particularly that of plurinationality and Indigenous struggles in Ecuador, can be seen in Jameson (2011).

10. "Applying the concept to other regions does not make sense; Other cultures will have to explore and build their own Buen Vivir. The term Buen Vivir is best understood as an umbrella for a set of different positions" (Gudynas 2011, 444).

11. From a constitutional perspective, the first milestone in this process dates from the Ecuadorian Constitution of 1998, whereby the related notions of plurinationality, multi-ethnicity or interculturality appear, the latter referring to education. These are the seeds that, in the 2007 Constituent Assembly process, came to be called plurinationality and interculturality.

12. There is much debate on the equity of terms and translations concerning good living and Sumak Kawsay or Shiram Pujustin and other Indigenous cultural variations. For Gudynas and Acosta, Buen Vivir is a plural concept (one could speak of 'buenos vivires' or rather say 'buenos convivires'), where for example the Sumak Kawsay is not identical, for example, to ñande reko, since all of them have specificities in relation to each culture. Good living cannot be reduced to the Sumak Kawsay or the suma qamaña of the Andes, but similar ideas are found in different Indigenous cultures, and also in some criollas, or as a result of recent contemporary hybridizations. From our perspective, this variety does not speak badly of good living, but, on the contrary, it is a reflection of the dynamism of a concept under construction, where traditional knowledge interacts with new looks, which allow redefining identities toward the future (Gudynas and Acosta 2011, 80).

13. For Domingo Peas (2019), historical leader of the Achuar people, Ii Unuimiarmuri is a concept based on the wisdom of their grandparents that has been transmitted from generation to generation. It has to do with the knowledge of the Amazon forest and good living in general. This means deep ancestral knowledge necessary for the Achuar culture to remain in constant reproduction as well as life in their pursuit of Shiram Pujustin (The Good Life).

14. Free/Libre Open Knowledge Society (https://floksociety.org). A summary of the project's focus on Barandiaran and Vila-Viñas (2015) and a compendium of the policy papers it proposes in Vila-Viñas and Barandiaran (2015) are available in English.

15. This quote comes from the framework document for the subsequent research project Buen Conocer—FLOK Society, a research-action project for the proposal of public policies for a transition to the social economy of knowledge in Ecuador. www.floksociety.org

16. This concept, also in the ancestral Kichwa language, has been translated into Spanish and English as 'Good Knowledge', although from the Indigenous worldview it implies more than this: it is based on the notion of ancestral wisdom and knowledge of the grandparents for a Sumak Kawsay, understanding this as a life in plenitude far beyond material life, where factors such as spirituality, notions of coexistence, family, community, the relationship of harmony with mother nature and the universe, the Pachamama, also enter. See http://floksociety.org and Vila-Viñas and Barandiaran (2015).

17. The term 'epistemicide' has been developed by Boaventura de Sousa Santos (2010, 7–8, 82), who defines it as "(…) vast destruction of the peoples' own knowledge caused by European colonialism (…) Cultural imperialism and epistemicide are part of the historical trajectory of Western modernity"; Likewise, to deepen the relationship between 'epistemicide' and 'decoloniality', see Correa-Muñoz and Saldarriaga-Grisales (2014).

18. A relevant synthesis of this perspective can be found in Oviedo (2014). For example, for Simbaña (2011), Sumak Kawsay is not a concept that can be understood by itself, but it is necessarily linked to plurinationality and these are directly linked to the community, which is the constitutive base of both.

19. To deepen the notion of post-constituent 'plurinationality' in both Ecuador and Bolivia, see Schavelzon (2015).

20. This new constitutional approach begins with the adoption of ILO Convention 169 in 1989 and is first reflected in the incorporation of pluralism and cultural diversity into Latin American constitutions during the 1990s (Yrigoyen 2011) and continues with the constitutional texts to which we have referred: "Colombia 1991; Mexico and Paraguay 1992;

Peru 1993, Bolivia and Argentina 1994; Ecuador 1996 and 1998; Venezuela 1999. (…) In these Constitutions, pluralism and cultural diversity become constitutional principles and make it possible to establish the rights of Indigenous and Afro-descendant groups" (Llasag Fernández 2014, 305).

21. This relevance can be seen in concrete examples, centered on the survey of information and communication media of their own, for the communities of the north of Cauca (Colombia) in Salazar Torres and Johan (2016, 51–53) or centered on the appropriation of the Internet as a space to disseminate and defend community processes, generating political-social and communicative links beyond physical proximity, in the Kokonuco population (Dpto. del Cauca, Colombia) in Acosta Nates and Andrea (2014, 156) or focused on the consolidation of an Indigenous political institutionality to achieve normative modifications and concrete improvements, as in Arjona (Dept. of Bolivar, Colombia), in Carmona Nobles (2014, 55). Stolle-McAllister's research (2013, 46–48) is also interesting in that it shows the importance of community identity and production, sometimes with intensive use of ICTs such as a project in Otavalo, in the political strategies of the Kichwa Indigenous communities in Ecuador, to reinforce and adapt these identities to social changes, mobility, increasing dispersion in the national territory, and so on.

22. This section has been elaborated from the feasibility study of the project (Kara Solar 2014) and from personal interviews with Oliver Utne, Director of the Kara Solar Foundation and part of the project's design team, who is also one of the coordinators and mediators between the Achuar Nationality of Ecuador (NAE) and technical teams during the process of design and construction of the project and the project's sustainability plan.

23. The Achuar are American Indigenous people belonging to the Chicham family such as the Shuar, Shiwiar, Awajunt, Wampis, and Andoas between Ecuador and Peru. They are located in the provinces of Pastaza and Morona Santiago (Ecuador) in twenty-eight communities extended to the border area with Peru. The Achuar territory is located in the basins of the Pastaza, Capahuari, Bobonaza, Corrientes and Copataza rivers (in the province of Pastaza) and Guasaga, Surik, Situch, Wichin, Mashumar, and Makientza (Morona Santiago). Politically they are integrated in the Achuar Nationality of Ecuador (NAE), which groups the Achuar of Pastaza and Morona Santiago. The town has approximately 10,000 inhabitants, distributed in 50 communities.

24. At the end of 2017, the project was able to complete the first phase with a journey of approximately 1800 km through the Ecuadorian and Peruvian Amazon. During this trip, the prototype boat was moved from its construction site north of the Ecuadorian Amazon to the Achuar territory,

where the project is being executed. For more information on the crossing and the current status of the project, see Giménez (2017) or www.karasolar.com. A new phase of the project is currently under development, consisting of the construction of a second prototype canoe. At the same time, solar power plants are being built to generate solar energy that could serve other productive purposes for the community. For example, the community is carrying out a collective evaluation of the use of this energy for a processing plant for essential oils from medicinal plants in the Amazon forests of the Achuar territory and for community ICT centers.

25. The Spanish Acronym NAE stands for Nacionalidad Achuar Ecuador (the Achuar Nationality of Ecuador).

26. Some of the institutions and individuals that have participated and contributed to the Project include: Escuela Politécnica del Litoral (ESPOL), Fundación ALDEA, Massachusetts Institute of Technology (MIT), Universidad San Francisco de Quito (USFQ), Instituto Interamericano de Cooperación para la Agricultura (IICA), Fundación Pachamama, Torqeedo, Tecnavin, Farmosa. Michael Roberts, Prefectura de Morona Santiago y Prefectura de Pastaza.

27. According to the local demand study carried out in the area, it is estimated that an average of 70 inhabitants move by river each week. In addition, it is necessary to consider the estimate of about 1000 tourists per year that travel to the Ecolodges Kapawi and Sharamentsa (Kara Solar 2014).

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Open Access in Dispute in Latin America: Toward the Construction of Counter-Hegemonic Structures of Knowledge

Maximiliano Salatino

Introduction

The expansion of scientific competition and the extension of indexation and quantitative indicators, impact factors, and the H-index have generated a division between scientific actors and the communication of their research. This development is especially noticeable because academic evaluation practices for tenure and promotion at universities often rely on impact factors, journal quartile classification, and productivity based on the most prestigious databases. This phenomenon is related to the increased corporatization of editorial management. Editorial companies not only publish books and journals but now also manage databases and their consequent scientometric indicators. In other words, scientific communities no longer control the circulation of research results because scientific publishing has become highly commercialized.

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It is also in the centers of the world academic system that the idea of core science emerged and was connected to those same centers of excellence. Scientific knowledge worldwide is thus classified according to center-periphery relations. According to this scheme, there are key geo-cultural regions where scientific capital is accumulated while other academic and intellectual spaces around the globe become peripheral to that valuation.

While publishing in mainstream journals has become synonymous with "international" science, everything published outside this indexed world of science has become marginalized as "local" science. The dichotomy "mainstream/periphery" has thus gone global because mainstream is synonymous with autonomy and universality, while the periphery is identified with dependence, marginality, and provincialism (Beigel 2016). The critique of this dominant system began in the 1980s within the "centers" themselves (Arvanitis and Gailard 1992; Garreau 1985; Schott 1988), but also in the "periphery, " where different critical approaches countering academic dependence, scientific imperialism, eurocentrism, and coloniality of knowledge emerged (Alatas 2003; Lander 2000). Latin American scientific communities have thus actively developed strategies of resistance to mitigate the asymmetrical relations in the world academic system, the most important of which is the adoption of Open Access (OA). OA represents a completely different conception of knowledge production and circulation. It views science as a common public good without commodifying scientific knowledge. The main centers of the academic publishing system emphasize profits both in the book and in the periodical business. Open Access in contrast became an inherent part of the Latin American structure of scientific knowledge in the 1980s constituting a counter-hegemonic approach to the commercial model. Free access to science research thus made Latin America a beacon within the publishing industry. Scientific knowledge came to be considered a common good and its free circulation understood as a strategy for democratization. The Open Access movement proposes free and open access to research materials through a peer review process (Suber 2012). This applies to journals and articles but is often extended to book chapters, monographs, and primary research data. There are several open-access publishing modalities such as the golden, green, and bronze routes.[1] Thus, the percentage of OA resources (articles, books, chapters, datasets, etc.) in Latin America is higher than in the rest of world (Alperin 2015; Alperin et al. 2014; Miguel 2011b) with estimates ranging from 51% to 95% of all online journals available through OA. The numbers vary depending on the source of the data used (18).

The expansion of Open Access in Latin America has been possible due to the activism of researchers and intellectuals who fought to make visible the scientific advances produced in Latin American countries. This work has been supported by organizations such as Organization of American States (OAS), Centro Latinoamericano y del Caribe de Información en Ciencias de la Salud (BIREME), Consejo Latinoamericano de Ciencias Sociales (CLACSO), Universidad Nacional Autónoma de México (UNAM), academic specialists (including Hebe Vessuri, Lea Velho, Ana María Cetto, Dominique Babini), and the development of the first regional databases (Latindex, SciELO, and RedALyC).

Currently, there are two main orientations to Open Access in the region. The first aims to make regionally visible and available Latin American scientific production and communication. This regional objective promotes the development of local knowledge and national recognition. This trend is part of a long-standing tradition of knowledge production that challenges international asymmetries in science and the consequences of universalizing Eurocentric and North-Atlantic patterns. The movement began at the International Book Fair in Guadalajara (Mexico) in 1994, with the First Latin American Workshop for Scientific Journals. The Guadalajara workshop was also the beginning of the first large Latin American database, Latindex. A result of the efforts of Ana María Cetto and Octavio Alonso Gamboa from the University of Mexico and their collaborators, a regional perspective on the journals and articles produced in this part of the world was consolidated. And, they had a clear objective: to increase visibility and access to regional science in a context where the Institute of Scientific Information was being colonized by the hegemonic perspectives of world science. The second goal seeks to intervene in scientific debates worldwide by prioritizing the integration of Latin American scientific research into mainstream science. This view posits that in order to achieve international recognition and increase their impact factors, Latin American journals need to promote international indexation and publish scientific research in English. This view also makes a direct correlation between publications being indexed on the Web of Science or Scopus journals and scientific excellence. As a result, this approach affects the assessment culture at a national level promoting quantitative mainstream criteria in the evaluation of scientific institutions, researchers, and their academic production. Moreover, this OA practice does not question Author Processing Charges (APC) so it maintains an ambiguous position on the commodification of scientific knowledge.

The two approaches to the communication of scientific research share core Free and Open Access objectives: immediate access, free registration, and no subscription or payment requirements. However, they have opposing epistemological orientations. This chapter focuses on the historical expansion and tensions within the Open Access movement, the infrastructure of which has grown over the past 30 years at the national and regional levels. I argue that OA has played a key role in the development of a scientific distribution structure in Latin America and examine this process in order to understand the contemporary tensions that have turned OA into a disputed field. The chapter also proposes a revision of the concept of Open Access publishing. The main argument is that Open Access movements in Latin America and internationally need to articulate dimensions of knowledge production that go beyond issues of broader circulation. This reconceptualization is key to rediscovering alternative paths to the democratization of scientific knowledge that do not exclude, but are based on the inclusion of regional science assessment criteria, the incorporation of new definitions of excellence that go beyond Western mainstream metrics, and the integration of integral scientific tools that contribute to promoting local and regional scientific development. The chapter concludes with a discussion of the lessons learned from OA activism in Latin America and its implications and relevance for rethinking Open Access in scientific publishing internationally.

The Historical Context of the Hierarchization of Science Research in Latin America

To understand the development of Open Access within scientific communities in Latin America, it is important to have a sense of the international development of scientific knowledge circulation. Admission to a database implies validation and a mark of distinction within the world of scientific publication. Such a distinction is simply a credential and it can be a source of dispute in the arena of scientific communication. Inclusion in the indexes, however, also entails participating in a process of hierarchization where various hierarchical criteria legitimate scientific excellence and determine quality.

Guédon (2008, 2017) argues that the process of hierarchization in the sciences itself responds to the way scientific institutions and their objectives developed. While certain institutional arrangements experience moments of expansion and contraction, the rate at which scientific capital

accumulates is rather slow and can take decades. The most prestigious research centers and universities in the world have been historically favored in this accrual to the detriment of academic centers in the periphery. Consequently, the development of the "international scientific system" of competition has led to two trajectories within national scientific fields: a national and an international one (Guédon 2008, 25). That is, on the one hand, a nationally oriented approach, which produces and circulates scientific knowledge within the boundaries of local and regional publishers and journals, and on the other, researchers and scientific institutions that encourage international and mainstream publications.

The universalization of metrics and quantitative indicators of science reinforce the symbolic system by which scientific capital is accumulated. Metrics and quantitative tools were first developed from the creation of the Science Citation Index by Thomson-Reuters (now Clarivate Analytics). Since 1970, major publishers and scientific enterprises consolidated the production of a specific type of scientific communication: written in English, this academic production came from traditional research centers and universities, and focused on natural and medical sciences with high impact factors (as well as successors such as the H-Index, Eingenfactor, or SCImago Journal Rank).

This assumed norm can be understood as long standing. Guédon (2017) systematically examines the history of how the oligopolies in scientific publishing were consolidated by Western powers and demonstrates that after World War II, the acceleration of scientific research and its publication prompted commercial publishers to benefit from the expansion. In 1955, for example, Eugen Garfield first proposed the Science Citation Index (SCI) in that year's issue of Science magazine in order to consolidate a group of "core journals," and the index was eventually launched in 1964.

However, the crisis in journal subscription prices in the mid-1970s created the opportunity for large corporations to move into electronic publishing. In 1996, Academic Press brought about a major reform of the system when it introduced "The Big Deal" that consisted in the institutional sale of a group of journals that would attract larger subscriptions. The result was a process of accumulation and concentration of the publishing industry that prevented smaller publishers from accessing the market.

Larivière, Haustein, and Mongeon (2015) show that when we look at the total number of publications in 2013, five large corporations,

Reed-Elsevier, Wiley-Blackwell, Springer, Taylor & Francis, and Sage, controlled more than 70% of the research production in some disciplines and more than 50% overall. The oligopolistic structure of scientific communication has thus dissociated the genuine production of scientific knowledge from its circulation, especially since scientific communication is valued by its impact and citation rates in relation to how large corporations determine "excellence."

Guédon (2008) also points out that the stratification of competition in science is well-known within the scientific community but its transformation into an oligopolistic power structure is often left unquestioned. The growing commodification of knowledge has thus led to high revenues for corporate publishing. If we take into account the profit levels of the five oligopolistic academic publishing corporations between 2012 and 2013, they add up to more than $2 billion for each company: "Forty-two percent more than companies like Pfizer, 29% more than the ICBC, and well above 10% of Hyundai Motors, which are the most profitable pharmaceutical, banking and automotive company according to Forbes' Global 2010" (Larivière et al. 2015, 10).

Furthermore, over the past decade, the pay-to-publish modality through Author Processing Charges (APC) has become a new hybrid form of open access, a type of commercialized open access. For example, to publish in any of the versions of public library of science (PLOS), authors must pay between US $2350 and $3000 (US $1595 in the case of PLOS One).[2]

Subscriptions to journals and databases are also costly.[3] For scientific communities on the periphery within Latin America and at publicly funded institutions, it is difficult to access the long list of databases and subscriptions available in the global academic system. This implies a lack of access to knowledge and to basic library and scientometric resources in order to carry out research in the twenty-first century. The database subscription crisis and its consequent economic cost are so significant that many institutions adopted policies to end their subscriptions. Such is the case of several top German universities, which in 2017 decided not to continue with their subscriptions to the resources provided by Elsevier.

However, in Latin America, this scenario produces a remarkable paradox where publicly funded scientific research and production cannot always be disseminated within its own scientific community. Given that most research carried out in the region is fully or partially financed by public governmental institutions, the commodification of this knowledge

results in a surreal commercialized scenario. Moreover, subscriptions, databases, and scientometric resources are also paid for with public funds. In the case of scholarly communication, authors affiliated with public institutions carry out the editorial management and evaluation of articles. But, often subscription to a database is necessary to gain access to it making it problematic to disseminate research produced within the region.

The international structure of scientific research dissemination thus profoundly affects the way scientific knowledge is produced. In the context of scientific competition, researchers increasingly consider where to publish their research results. The decision transforms the research process as scholars weigh various factors including time to publication, the scope and aim of the well-indexed journals, privileged disciplines and agendas, linguistic restrictions, available funding for publishing, among others.

This logic of scholarly publication represents the actual state of scientific communication that influences peripheral regions like Latin America. Especially because Latin America represents an alternative approach to science communication worldwide.

The Open Access Movement and the Latin American Experience

The 1980s witnessed the beginning of a revolution in the world of scientific publishing when the established forms of publishing, editorial management, and print circulation format changed in response to the adoption of information and communication technologies. The increasingly digitized editorial process has been widely analyzed in the available literature (Camarero Izquierdo et al. 2018; Espinosa and Gamboa 2017; Guédon 2017; Ludovico 2012; Mitra 2010; Saleh 2015). In Latin America, electronic publishing represented an opportunity to promote the production and improve the dissemination of scientific information as the cost of print journals and their circulation via subscription had been limited by logistical difficulties and the cost of delivery in broad geographical extensions.

Along with the digitization of the publishing system, OA emerged in the region as an option to freely communicate scientific information and the strategy was to overturn the biases of a system that was becoming increasingly expensive with institutional subscriptions representing a large part of university budgets. Latin American representation within the mainstream scientific publishing was (and is) negligible so that Latin American

science was not known and there was not yet a structure to support its dissemination in the region.

In response to this situation, Latin America adopted early OA as an instrument and horizon for the production and circulation of its science. To this end, it progressively adopted the three main formats or "routes" for open access, which will be discussed briefly here: gold, green, and bronze routes (Piwowar et al. 2018; Suber 2012).

There are different types of OA that range from making content freely available to read and download on a journal's website to self-archiving and rights to reuse the content. In the gold route, the publisher allows access to materials free of charge. In most cases, journals maintain the publication rights of the final version of the article and authors are forced to load previous versions (pre-prints) or final versions with a period of embargo during which the material will be kept private. In the green option, however, the author is responsible for making articles available through an institutional repository. The green route in open access publishing operates through entities that finance the research and require the institutions and their researchers to allow free access to their results to the entire scientific community. Thus, the repository and the self-archiving capacities are two fundamental pillars if the green option is to be viable. It is also possible to identify a third hybrid option, where the journals are available through open access, but authors must pay to publish or access a garnishment period.[4]

In a recent study, 67 million articles were analyzed in order to explore the expansion of open access. It is estimated that about 28% of these articles are made available through some form of open access and, strangely, the most commonly used choices were neither the green nor the gold as described earlier, but a third, so-called bronze route (Piwowar et al. 2018).

The bronze alternative consists of free articles, which can be read online and downloaded without an explicit open license. Embargoed open access journals are also included in this category as are articles, dossiers, journal numbers, or volumes in open access within journals or publishers with subscriptions, and journals and articles in open access, but not included in large transregional databases such as Directory of Open Access Journals (DOAJ). According to the study, the bronze option is the most commonly adopted worldwide (Piwowar et al. 2017).

A series of digital ventures have emerged to make scientific journals, articles, and books available in a parallel system to open access policies,[5] and the proliferation in recent years of these projects has been noticed by

large corporations. In particular, Sci-Hub which was created in 2011 by Alexandra Elbakyan has become the website with the largest number of downloads in the world. A recent Nature article estimates that the site stores more than 50 million articles that can be downloaded in full text and free of charge only with the URL, PMID, or DOI.[6] Although experts, such as Jean Claude Guédon and Ernesto Prieto consider that this venture has little to do with the open access movement, the fact is that it is a worldwide initiative where anyone, from any browser, can access any scientific article without restrictions, and free of charge.

The adoption of open access policies in Latin America and the Caribbean is extensive and Latin America is a worldwide leader in this area. Recent studies identify open access as one of the most important reasons for the expansion of Latin American publishing. Miguel (2011a, b) highlights that of the 15,000 resources indexed in Scopus, 73.9% of them are open access Latin American publications. Chinchilla-Rodríguez et al. (2012) combined DOAJ records, Scopus citation database (which covers more journals than the Journal Citation Report) and the SCImago database in their study and found that open access publications in Scopus reach 15% of the total, and in terms of regional distribution, Latin America Open Access represents more than 73%.

There are, however, several limitations to the open access movement in the region related to the commodification of scientific communication (Alperin and Rozemblum 2017; Babini 2014a; Meneghini 2012), the lack of awareness of the scope and meaning of open access (Bongiovani and Gómez 2015), and the discrediting of free and open access publication. Consequently, Delgado-Troncoso and Fischman (2014) analyze three major challenges for researchers in the region:

> First, the high cost of scientific publications, especially those considered to be high impact; second, the invisibility of the science produced in the region worldwide and third, the challenges of recognizing the value of local scientific production both inside and outside the region. (2014, 383)

The authors thus conclude that open access policies in Latin America allow for more efficient solutions to these challenges, but OA on its own is not enough. If frameworks for OA remain limited to focusing on visibility and access, they will not become integrated with the objectives and opportunities within alternative movements such as open science, free software and the construction of scientific metrics oriented according toward disciplines, languages, and geography.

Most of the advances of open access in the region are due to the creation of the three large regional portals: Latindex, SciELO, and RedALyC. Latindex was founded in 1995, SciELO in 1997, and RedALyC in 2005. They also created broad cataloging, evaluation, and repository space for Latin American scientific research at article and journal level. There are many studies that chronicle the emergence of regional portals and the existence of many other inter-institutional initiatives (Alperin et al. 2014; Alperin and Fischman 2011; Alperin et al. 2008; Cetto et al. 2015; Cetto and Alonso-Gamboa 1998; Cetto and Hillerund 1995; Packer 2014). The strategies adopted by these large regional repositories will be discussed here in order to make explicit the lines of collaboration, complementarity, and differentiation.

The disputes around the Latin American structure of scientific journals (LASSJ)[7] (Salatino 2018) are an important part of the historical structuration of science communication. Since the 1960s, structural limitations to the communicative practices of scientists in the region have been evident. The Final Report of Rio Piedras (UNESCO 1964), which diagnosed specific disciplines of the OAS and reported the main problems for scientific communication in Latin America: lack of funding, weak professionalization of the edition, the segmentation of production spaces for the circulation of the research results, scientific journals as a personal development project of the editor (or his working group), and the limited interconnection of editorial experiences. During the 1980s, the LASSJ emerged as a result of the inter-relation and networking of different institutions, researchers, and open access advocates. The LASSJ is not a homogeneous structure without conflicts. Therefore, we propose a historical approach to examine this peripheral science structure in order to identify different strategies of movement activism, legitimation, and science communication.

The Latin American Approach to Open Access

In Latin America during the 1980s, the building of scientific structures constituted a pivotal juncture in the communication of science for the region. Based on previous experiences linked to the efforts of United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organization of American States (OAS), and Universidad Nacional Autónoma de México (UNAM), a series of publication initiatives were launched in the 1990s to increase the visibility of the science research

produced in this part of the world. Initiatives from Mexico and Brazil, in particular, sought to generate a Latin American space to enhance knowledge of regional science and allow for the promotion of scientific journals, local publication, and free access to science both from and between academia and the general public. These initiatives generated a counter-hegemonic process and regionalization of Latin American science where the Spanish and Portuguese language was prioritized, paper publication and even non-indexed journals were welcome.

The initiatives focused around the creation of three main regional publication portals adding dynamism to a set of projects that have important local and national legacies that remain important to this day. The first of these is the Latindex Project and the role played by the Centro de Investigaciones Científicas y Humanísticas (CICH)[8] at UNAM. A second one is the work of the Pan American Health Organization and BIREME, which supported the development of SciELO. And third, the activism of CLACSO (the Library and the Campaign for Open Access) which became a space for the inter-institutional gathering that developed micro- and macro-scaled projects to make visible the circulation of journals and articles.

The Latin American structure of scientific journals (LASSJ) was established in the context of this push for greater visibility and was consolidated through five main processes that took place throughout the region:

1. The implementation of documentation, cataloguing, and index databases at UNAM. The creation of ALERTA, CLASE, PERIODICA, and mainly, the Latin American Bibliography, which gave way to a regional dissemination scheme oriented to make the scientific production of Latin American researchers visible and easily available. This effort motivated the implementation of publishing standards that allowed for the creation of spaces of independent circulation.

2. The establishment of a critical position against the mainstream. The presence of Latin American experts initiated the construction of a properly regional standing linked to the rescue of a local scientific tradition and with strong criticism of the instruments of dissemination in the mainstream of the world academic system. The pioneering works of Hebe Vessuri (1988a, b, 1987,) and Lea Velho (1986; Velho and Krige 1984) are the most representative of this approach.

3. The establishment of an evaluation/assessment system of regional journals. From the Rio Piedras Workshop to the efforts of Brazilian experts (mainly linked to BIREME) in the early 1990s, Latin America established its own publication evaluation system. This publication evaluation system recognizes the difficulties of peripheral publishing but is also aimed at promoting local publication and enhancing its impact on national science fields (Arends 1968; Braga and Oberhofer 1982; Krzyzanowski et al. 1991).

4. The construction of a scientific communication infrastructure based on the circulation of scientific journals in open access. From the 1980s and 1990s, it became necessary to think about structures of access, circulation, and visibility of scientific knowledge as a common good. Consequently, a set of regional databases and data directories were developed, networks were constituted, and discussions were held between experts and referents of the subject at the world level. The Latindex workshop in Guadalajara and the institutionalization of Latindex project in 1994–1995 were the foundational moment. Latindex bridged the circulation of scientific knowledge in Latin America, promoting dialogue between experts and scientific agents from all over the region and rescuing local experiences in the editing and publication of journals. Moreover, Latindex represents the first adoption of selection criteria for journals applicable through national nodes of cooperation.

5. The expansion of the number of journals published in the region. To this growth in absolute terms we must add the greater reach in geographical terms and the development of different local/regional/international dissemination strategies. By 2015, 28 countries had 10,104 active journals. A double-sided phenomenon is observable with regard to the strategies for expansion within the regionalization process. First, the configuration of a regional circulation strategy, promoted by journals published in Spanish and Portuguese led by social sciences and humanities with an important local presence. Second, the development of a heterogeneous structure based on the diverse scientific and institutional capacities of the agents of scientific communication.

The power of the open access development in Latin America from the beginning of the regionalization process was made possible by the creation of a series of institutions that were mostly non-state actors. The organization

of the national headquarters of Latindex and SciELO, the emergence of RedALyC and the incipient publication in institutional repositories generated a scientific communication infrastructure whereby scientific knowledge is considered a public good. One of the main organizations that initiated a campaign in favor of open access was CLACSO.[9] CLACSO promotes free and active dissemination of knowledge produced by social scientists in the academy, as well as those scholars working with social movements, popular organizations, civil society entities, and the general public. It also seeks to give international visibility to the region's social science research, which lacks prominence in international indexing services (Babini 2011).

In order to achieve the objectives of dissemination, visibility, and access to research results, beginning in 1998 CLACSO's library, together with the publication department, launched a network of virtual libraries and in 2002 a digital repository for social science research from Latin America and the Caribbean, developed with free software recommended by UNESCO. Since 1998, this program has been conceived as a space and virtual community for the exchange of information, experimentation, and cooperation in the development of academic communication in open access. CLACSO remains one of the most important activist institutions of open access in Latin America and the world. Dominique Babini is the coordinator of the campaign for open access; her activism represents the consolidation of a democratic and cultural revolution concerning science communication.

Advances and Setbacks in Contemporary Latin American Science Communication

The number of Latin American journals expanded substantially by the end of the twentieth century due to the consolidation of the three large databases/indexes and the growing process of digitization of scientific communication. During this time, there were breakthroughs and setbacks, as well as instances of competition between them. Non-commercial open access has been challenged by a set of external phenomena linked to the processes of commodification of scientific knowledge. Despite the critiques of oligopolistic concentration of the publishing industry associated with scientific journals (Bergstrom 2010; Björk and Solomon 2014; Lawson et al. 2015; Mingers and Leydesdorff 2015; Wellen 2013), the increasing

marketization and re-adaptation of publishing practices, and the growing demand for quantitative indexes guaranteeing scientific excellence, the publishing industry continues to be very profitable.

This phenomenon has concrete effects in Latin America. First, the reliance on scientometric indicators to measure the quality and quantity of the scientific production. That is, evaluation mechanisms for tenure and promotion in scientific careers are tied to the quantitative assessment of scientific production. At the same time, the scientific policies of many countries in the region generated normative instruments to rank and classify scientific journals. Many national scientific policies assess and classify scientific journals according to mainstream criteria. In this scheme, only those journals that have adapted better to the rules of international scientific competence are highlighted and recognized.

Consequently, two main models of scientific communication compete with each other. One scientific communication trend considers that Latin American science needs to consider mainstream indicators. The development and institutionalization of these indicators as guidelines to evaluate science has promoted a series of singularities. If the evaluation of the individual or institutional practice is attached to the quantity of their production, it generates articulations that modify the original objectives of knowledge production because of the publish or perish dilemma. The evaluation focuses on productivity measured according to quantitative indicators, especially because beyond the warning of its limitations (Arunachalam 2004; Beigel 2016; Guédon 2017; Vessuri et al. 2014), they were consolidated as a measure of scientific "excellence."

Second, the representativeness and visibility of the scientific production—journals and articles—of emerging and peripheral countries inside these "rankings" of excellence is minimal. Historically, Latin American science has been underrepresented in indexing databases such as Web of Science (Clarivate Analytics) or Scopus (Relx-Reed Elsevier). Of the estimated 10,104 journals Latin American journals in 2016, only 232 are included in Web of Science and 810 in Scopus (Salatino 2018).

Third, as outlined in the introduction, a group of scientific companies based in the centers of the world academic system produce and promote Eurocentric sets of metrics, which have uncertain applications in different and dissimilar scientific contexts. An example of the introduction of a mainstream approach to science is the launch of the SciELO Citation Index. In 2014, Clarivate Analytics (ex-Thomson and Reuters/Web of Science) purchased most of the journal collections, which led to the

negotiation and subsequent development of a Latin American resource within the Web of Science. The main objective of the agreement was to advance the international visibility of SciELO and increase the relevance of Brazilian research.

The creation of the SciELO Citation Index was part of a global Web of Science strategy which builds databases based on the journals from peripheral regions. These included the Chinese Science Citation Database, the Russian Science Citation Index (a partnership between the Russian Electronic Library and Clarivate) and the KCI Korean Journal Database. The project to build a Latin American Citation Index introducing SciELO into a central science system was thus completed, yet this opportunity also marks a strong move toward commercialization and exclusion.

Another example is the case of the development of evaluation criteria in the scientific field in Brazil. At the beginning of the twenty-first century, the strong development of the Brazilian scientific community has taken place in relation to the expansion of scientometric indicators that respond to the implementation of criteria for the evaluation of science by the Coordination for the Improvement of Higher-Level Personnel (CAPES). Created in 1976 to evaluate the performance of undergraduate and postgraduate programs, it consolidated quantitative evaluation criteria. Mugnaini and Sales (2011) analyzed the CAPES evaluation form, emphasizing that intellectual production is one of the five components of the form. The weight of scientific publications varies between 30% and 65%, with the Impact Factor (a product of Clarivate Analytics—Journal Citation Report) having a primary weight in the evaluations, followed by the indexing of journals in Web of Science or Scopus.

Mafalda, Amorim, Degani-Carneiro, and Ávila (2015) argue that the relationship established in Brazil between bibliometric indicators and scientific policy, taking quantitative studies of science as a national utility, produces an excessive dependence on the products and resources of large scientific companies such as Thomson Reuters or Elsevier. As a result, in 2002, the Brazilian government created the scientific production register QUALIS-CAPES, which classifies national and international journals according to their impact factor, segregating periodicals into categories. CAPES is used to evaluate postgraduate programs at the institutional and individual levels. In contrast, a critical approach to OA considers the importance of strengthening the Latin American networks of knowledge by creating a regional infrastructure. The examples of the orientation of the strategies of CLACSO, Latindex, and RedALyC to construct a regional

sphere of visibility for Latin American science clearly favor Open Access over the commercialization of knowledge.[10]

CLACSO and RedALyC began a process of cooperation through different institutional relations and collaborations and in 2018 they created AMELI-CA (Open Knowledge for Latin America and the Global South Consortium). By the end of the same year, UNESCO adhered to AMELI-CA along with 13 national universities and national scientific councils. AMELI-CA is a new configuration of strategies that respond to international, regional, national, and institutional context seeking collaborative, sustainable, protected, and non-commercial Open Access solutions for Latin America and the Global South (Becerril-García et al. 2018).

There is consensus that since the transformation of the publishing world in the 1980s, universities and academic publications in Latin America are modifying their mission toward contributing to knowledge dissemination, the quality of life, and the reduction of social inequality. For this reason, spaces of visibility are necessary, which have become spaces of Eurocentric exclusion, to form a project of communication and critical thinking that can respond with alternatives to increase diffusion, construct networks, exercise analysis, training, and technology for the purpose of scientific publication (Becerril-García et al. 2018).

In the current context of profound scientific competition, Open Access needs to be understood as more than a set of moral principles. It should include practical approaches to democratizing science and consider the reality of scientific national fields on the periphery.

The above discussion makes clear that it is necessary to develop a more complex concept of Open Access that addresses visibility, access, and beyond. It is important to consider open trends of science assessment based on regional needs and context, regional indicators of science and a critical view on indexation processes. The current SciELO and Clarivate Analytics endeavors are examples of how in the twenty-first-century mainstream, science attempted to colonize science in the peripheries. An Open Access policy without a substantial change in the ways science is evaluated and legitimated in Latin America risks remaining just an operational way of thinking about the common good.

Final Words: Open Access in Dispute

The historical development of Latin-American scientific communication has been founded on strong processes of growth and the consolidation of Open Access projects, activism, and policies in the region from the 1980s onward. During the 1990s, large open access database projects boosted scientific communication while democratizing the circulation of scientific knowledge in the region.

International social organizations and national universities carried out the majority of the efforts to address Eurocentric biases of established academic publishing indexing practices. The important role of UNAM, UAEM, USP, BIREME, and CLACSO among others, constituted a disconnected network that allows for the emergence of different Open Access initiatives. However, it was CLACSO and its campaign for Open Access that energized contact between SciELO, RedALyC, and Latindex. This was a crucial bridge for creating concrete possibilities for the development of inter-institutional spaces of scientific communication.

In Latin America, scientific research is mainly publicly funded and there are no structural policies addressing issues related to the circulation of scientific knowledge. These efforts were principally established by public intellectuals and Latin American science advocates such as Ana Maria Cetto (UNAM-Latindex), Hebe Vessuri (CONICET), Lea Velho (CNPq), Dominique Babini (CLACSO), Ariana Becerril-García (UAEM-Redalyc), Octavio Alonso Gamboa (UNAM-Latindex), Eduardo Aguado (UAEM-Redalyc), and Abel Packer (SciELO). Early on, they warned of detrimental impact of asymmetries and inequalities present in the world of scientific publishing. Working from within their universities, each one of them sought to consolidate alternative and counter-hegemonic approaches to the mainstream from Latin America through the creation of databases, regional organizations, and many other instances. The institutional and network arrangements, however, do not create public state-oriented scientific policies.

In the twenty-first century, two interpretative frameworks define the trajectories of global and regional Open Access: On the one hand, a regional approach to scientific communication interested in creating the conditions of greater repercussion and access for the Latin American scientific community demonstrates a notable resistance to market models. On the other hand, the promotion of Latin American visibility in mainstream spaces seeks to concentrate academic international excellence.

What both frameworks have in common is Open Access, but their perspectives are completely different.

Currently, Open Access in Latin America is a disputed field. The field consolidates a specific way of accumulating scientific capital that leads to divergent political and academic practices. The tension between regionalization and the internationalization of scientific communication leads to the stagnation of a progressive Open Access development. This tension is the result of contemporary struggles against neocolonial and Eurocentric practices. The dynamics of science communication no longer only refer to the means of communicating research; they also affect the way research is conducted.

It is no longer enough to simply access the full text of Latin American scientific articles. Networks of visibility need to be expanded to develop regionally oriented evaluations of scientific production. The regulation and commercial use of scientific knowledge and Open Access modalities that incur costs to authors need to be reduced. This trend affects not only science in the periphery, but also the centers of world academic system as they experience different and probably more heteronomous effects. Regional and national scientific policies must take into consideration the sphere of knowledge circulation because of the effects that journals, articles, impact factor and indexation have on scientific evaluation processes. The Latin American strategies outlined here demonstrate relevance beyond the region both in the challenges ahead and in the positive outcomes of collaborative projects with clear objectives.

The work of academics such as Diane Crane in the 1970s and 1980s promoted the professionalization of editorial processes in order to generate better ways to communicate scientific research. From peripheral regions such as Latin America, this once important recommendation is no longer enough to theorize and deal with the struggles in the scientific communication realm. Open Access must embrace the scientific assessment of scientific research, Open Source, Open Data and consider the multiple ways of doing open knowledge production in order to continue the path toward the democratization of scientific research and its distribution.

Notes

1. There are many forms to describe and classify Open Access. Piwowar et al. (2017) categorized eight types: Open, free, Gold, Green, Hybrid, Delayed, Academic social networks, and Black Open Access.
2. For more information please visit the web page: www.journals.plos.org/plosbiology/s/publication-fees
3. At present, the institutional subscription in electronic format of Springer is US \$1892.3 and Elsevier US \$3437. The price per article of a SAGE journal such as International Sociology costs US \$137, of a Springer journal such as scientometrics US \$39 and of an article in Nature is US \$32. According to the Forbes 2000 list, Relx (the consortium former known as Reed Elsevier) reported a 6% improvement in operating profits to £2.35 billion by 2018 until the end of December.
4. About the current problems of hybrid System and Author Processing Charges: (Babini 2014b; Björk and Solomon 2012; Morrison et al. 2015; Solomon and Björk 2016).
5. It is still a complex debate to determine if these projects such as Sci-Hub or Gen Library are a type of Open Access. Several specialists no longer support Elbakyan project denouncing it as a mere case of piracy (Priego 2016; Priego et al. 2017).
6. The case of Elsevier against Sci-Hub is already a paradigmatic example. Sci-Hub and Librería Génesis (LibGen) are two digital projects founded by Alexandra Elbakyan and a group of academics from around the world who sought a way to access documents and sources necessary for their respective research free of charge. The result was the creation of two large sites where the required resource can be accessed from the URL, DOI, or ISSN of an article or journal. On June 21, 2017, Elsevier filed a lawsuit against Sci-Hub, LibGen, and its related sites for making available more than 10 million articles and books edited and managed by the Dutch corporation. The suit claimed copyright infringement for more than US \$25 million. Elsevier's lawsuit in New York was part of a legal strategy against Elbakyan that we can track until 2014. The main lawsuits were filed in the New York district alleging unauthorized access to copyrighted material owned by the corporation. The Sci-Hub and LibGen sites continued to function normally from different domains and different IP addresses. The Elbakyan case is very particular since it is not part of the mandates of Open Access internationally and many of its main references do not agree with the project. The main problem is that Sci-Hub is immensely popular beyond its "illegality."
7. Espacio Latinoamericano de Revistas Científicas.
8. (Centro de investigaciones científicas y humanísticas by its acronym in Spanish).

9. CLACSO is an international non-governmental organization, created in 1967 and currently brings together 371 research centers and 654 post-graduate programs in social sciences in 23 Latin American countries and the Caribbean. The objectives of the Council are the promotion and development of social science research and teaching, as well as the strengthening of exchange and cooperation among institutions and researchers within and outside the region.

10. The Public Knowledge Project (PKP), UNESCO, FLACSO, and CLACSO promoted the first project in which the three major regional databases (Latindex, RedALyC, and SciELO) worked together for the first time. The project was called "Calidad de la comunicación científica en acceso abierto en América Latina" (N° 106660-001). The Project focuses on the production of indicators to assess Open Access in the region.

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Narratives for the Defense of the Digital Commons

Santiago García Gago

INTRODUCTION

Since their creation in the first half of the twentieth century, Latin American Community Radio Stations have been key actors in social development and democratization processes that have taken place in the region, especially when it comes to Communication Rights. Using the slogan "democratize the media to democratize society", movements for alternative and community communication have articulated their voices and managed to pass legislation in various Latin American countries, accommodating new media for a more plural radio spectrum.

Today Community Media face a new communication reality. Information and Communication Technologies (ICT) have offered a window of opportunity to democratize communication. They have, however, also led to serious inequalities in access—both in terms of infrastructure and in terms of skills—and, above all, a disproportionate concentration and monopolization of companies in the sector at a global level. Are the

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149

same narratives that promoted Communication Rights in the analogue era useful for defending the "digital word"?

The Community Radios and Free Software Network is a community that originated in 2013 from the meeting of a series of actors and initiatives that were working on these issues by themselves: The GNU/ ETERTICS project, a GNU/Linux distribution for Community Radios; Aprendiendo con libertad and Radios Libres websites, which produced technical content; specific software developments such as G-Radio to automate radio programming, among others. They are now linked through a web page,[1] a mailing list, and a Telegram channel, offering accompaniment to all the radio stations and radio production centers that want to "free themselves".

This chapter consists of four parts. The first section presents a brief overview of the history of the emergence of Community Radio Stations in Latin America and their demand for Communication Rights as a prerequisite for the construction of solid democracies, under the slogan "without Community Media there is no democracy". This claim was taken up by the United Nations Educational, Scientific and Cultural Organization (UNESCO), which hosted the debates on Communication Rights at the international level at the end of the 1970s.

The second section discusses the challenges of the traditional electronic media system. The concentration of ownership of analogue media in Latin America is worrying, even scandalous in cases such as Guatemala. However, after years of activism by the community sector, countries such as Argentina, Bolivia, Ecuador, and Uruguay have managed to achieve spectrum reserves for Community Media. Although highly debated, these legislative measures have been considered a success for the sector.

The third part of this chapter analyzes the irruption of the Internet in the media system, a revolution compared to that of the printing press. While disputes over control of the media are not new, in the digital world they become more complex. New players in the ICT sector are among the world's richest companies. This brings new problems, including the undermining of privacy, phenomena such as Fake news, or the violation of principles such as network neutrality.

The concluding section presents a proposal to update the narratives in defense of the right to communication developed by the Community Radios and Free Software Network. Drawing on Langdon Winner (Winner 2008), this proposal involves leaving behind the concept of technology neutrality in favor of the defense of the digital commons, understood as

those collectively managed, in the broad sense, as developed, maintained, governed, and so on, and from which we benefit as a community.

Background

In 1947, from the Bolivian mines of Siglo XX in Potosí, the union of workers began broadcasting *La Voz del Minero (The Miner's Voice)*. This radio station aimed to organize workers to defend themselves against abuses by their employers. That same year, in Colombia, the priest Joaquín Salcedo also used a short-wave radio station, Radio Sutatenza, to teach workers in that impoverished region of the country to read and write. With these two experiences Community Radio was born. It was in Latin America, for the first time in the history of world radio, that electromagnetic waves were used for anything other than selling, informing or entertaining (Gumicio Dagrón 2001; López Vigil 2004).

Since that time, Latin American Community Radio Stations have played key roles in the processes of social development and democratization across the region: Defending miners' unions, offering education to rural populations, and fighting as guerrilla radios against invasions in Central America. At the same time, these radios also supported struggles in the defense of territories, water, or ancestral wisdom; commons that have historically been threatened by privatization and monopolies.[2]

Thanks to community radio stations, the most disadvantaged populations have been able to defend land claims and other rights, such as the right to healthcare. Commercial radio stations are not generally concerned with giving a voice to these social sectors. For this reason, Communication Rights are conceived by Community Media as essential rights because they make it possible to claim other rights. Media "materialize the exercise of freedom of expression"[3] and Community Media in particular have been "spokespersons for the marginalized and at the heart of communication and democratic processes in societies" (UNESCO 2003, 6).

In order to guarantee the exercise of this right on a massive scale, it is necessary to have access to the tools that allow it. At the end of the 1980s, the Latin American Community Radio movement launched an intense campaign to consider the radio spectrum as a common, a heritage of humanity at the service of the citizens.

The debate on the management of the frequencies and information is not new. Since the late 1960s, the Non-Aligned Movement (NAM) promoted the establishment of a New World Information and Communication

Order (NWICO) to balance information flows and the management of satellite communications, both aspects controlled by countries of the Global North. These debates took place in several UNESCO Assemblies, but full consensus was never reached. UNESCO also brought together a commission that drafted the document *Many voices, one world* which openly defended the thesis that communication as a right and not a commodity:

> The freedom of a citizen or social groups to have access to communication, both as recipient and as contributors, cannot be compared to the freedom of an investor to derive profit from the media. One protects a fundamental Human Right; the other permits the commercialization of a social need. (MacBride et al. 1980, 1–15)

The United States of America and the United Kingdom, which led the group that defended the thesis of liberating the "free flow of information", abandoned the UNESCO position. In order to close the debate, the organization opted to condemn the report to oblivion and thus restrict efforts to establish a global policy to democratize communication (de Moragas et al. 2005).

Although none of the 82 recommendations of the MacBride report were ever formally implemented, this text legitimized the claims of Community Media, which were defined in the document as key to "community development efforts, stimulate participation, and provide opportunities for diversified cultural expression" (de Moragas et al. 2005).

All these arguments shaped the campaigns of Community Media Movement, articulated under the motto: "Democratize the media to democratize the society". The movement argued that the only way to guarantee a plural and diverse society is through plural and diverse media. Under this slogan, at the end of the 1980s and the beginning of the 1990s, actions were initiated throughout Latin America with two main objectives[4]: To fight the privatization of radio and TV frequencies; and to end monopolies, since in many countries one or two companies owned every radio and television station (López Vigil 2004).

Concentration and Monopoly
in the Analogue Society

Data backs the discourses of the Community Media Movement on media ownership and monopolies. In Latin America, this issue has been studied in-depth, as media ownership is highly concentrated. Several countries in the region promoted legislative processes to "correct" this scenario and guarantee a more plural distribution of access to the radioelectric spectrum.

Martin Becerra and Guillermo Mastrini, two prominent specialists in the field, have been measuring media concentration in the region since the late 1990s. According to the coefficients used by Becerra and Mastrini, concentration is defined as high when the first four operators control 50% of the market or when the first eight own 75% of the share. However, in Latin America, these percentages are far higher. In many cases, the top four operators exceed 75%, and in some countries, such as Mexico, two operators own more than 75% of the media (Becerra and Mastrini 2008).

The International Federation of Journalists (IFJ) warned several times of the dangers that such media concentration can have for democracies:

> The gravity of the scenario described, and its progressive collision with the principles of freedom of expression, citizen equality, plurality of voices and cultural diversity, makes the media issue and the Communication Rights an indisputable priority for the peoples and democracies in Latin America. (International Federation of Journalists 2016, 48)

In some countries like Guatemala, the "gigantic" media power of one of the sector's businessmen, Ángel González, pushed the Inter-American Press Association to speak out:

> Without a doubt, the control he exercises over open television and important radio stations in the country, which form part of its monopoly fiefdom, practically grants him the power to elect presidents of the Republic and make the population receive less critical information from the governments in office. (Paolillo 2015)

The fact that the concentration of radio and television stations directly affects the health of a democracy has also been corroborated by international organizations such as the Inter-American Commission on Human Rights of the Organization of American States in its report on the challenges of democracy in Guatemala: "This lack of plurality of information

is a serious obstacle to the functioning of democracy" (Inter- American Commission on Human Rights of the Organization of the American States 2003).

The effort of Community Media to combat this concentration was taken up by legislators in several countries, passing laws that regulated and democratized, at least on paper, access to radio and television frequencies. For instance, Uruguay's 2007 Community Broadcasting Service Bill guarantee 33% of its radio spectrum "for the provision of community and other non-profit broadcasting services". In Argentina, a similar 33% reservation was established for non-profit media under the Audiovisual Communication Services Law enacted in 2009.[5] Bolivia, with the 2011/164 General Bill on Telecommunications, Information and Communication Technologies, was the first country to divide the radio spectrum equitably into three sectors: Public (33%), Commercial (33%), and Community (34%, divided in turn into a 17% for the Community Social Sector and the other 17% for Indigenous Native Peasant Peoples, and Inter-cultural and Afro-Bolivian Communities). This path was followed by Ecuador, which established the same sectors and percentages in the Organic Law of Communication passed in 2013. In Venezuela and Colombia, although there are no specific spectrum reserves, legislation facilitates the access of Community Media to radio and TV frequencies (Radios Libres 2018); however, this progressive trend in legislation is in retreat. In Argentina, with the arrival of President Mauricio Macri in 2015, the Audiovisual Communication Law was modified. Since the end of 2018, Ecuador has been debating the reform of the Communication Law, which reduces the progress achieved for community radio stations (El Churo Comunicación 2018). In Brazil, outgoing President Temer signed a decree on 31 December 2018 to close 130 community radio stations (Jusbrasil 2018, 15).

Even though not every Latin American country has progressive communication policies and in some, such as Argentina or Ecuador, these measures are in the process of being dismantled, the Community Media Movement's influence on these changes cannot be denied. While the effort of this movement focused on the democratization of the analog spectrum, those who support the thesis of communication as a commodity, such as big networks or telecommunications' companies, were already laying the foundations for a new form of media distribution: Digital Information and Communication Technologies (ICT).

Media and Digital Society

The influence of the Internet on media and society can only be compared to other technologies such as printing or the telegraph. In addition, the Internet came along with the promise of democratizing mass communication and information tools, not relying on a finite and limited resource such as the radio spectrum. These conditions meant a structure of opportunity to reduce media concentration rates and design a new technological system of plural and diverse digital media. Facts concerning concentration, however, suggest otherwise.

Disputes over control of the media and the tools that allow it to work have existed since their creation. Castells argues that "throughout history, the control of information and communication has always been a fundamental mechanism for building power" (Castells 2017, 74–77). These dynamics of control, which we noted earlier with analog media, have deepened in the digital society reaching "brutal levels of monopoly and concentration, surely unparalleled in history" (Rendueles and Subirats 2016, 77).

An in-depth study carried out by Observacom (2018) shows how the layers that make the Internet possible are controlled by less than fifteen companies worldwide. For example, five large corporations account for 90% of content network traffic (known as CDN intermediaries). Six companies control more than half of the world's existing domains and web hosting. And if we talk about services and platforms, about five companies share the control of social networks and e-mails. In addition, these companies are international conglomerates that are difficult to control or limit by national legislations.

Another problematic factor of this concentration is its multilayered characteristic. In other words, a company that provides Internet access is, at the same time, the owner of a content production company or sells web hosting services. An example of this multilayered concentration is AT&T's acquisition of Time Warner, which in turn owns Cable News Network (CNN) or the entertainment channel Home Box Office (HBO).

These new players on the information and digital communication scene are building a new world order in which the traditional industrial economy has given way to a "networked world information economy" (Benkler 2012). In this scenario, it is not strange that of the 100 top companies in the world 33.9% take part of the IT industry. Most of the world's wealth is no longer in the hands of the extraction companies that exploited gold

Table 1 Description of companies

Company	Description	Millions of dollars (USD)
Alphabet	The parent company of the search engine with the highest market share (Google), the Chrome browser, the most used e-mail (Gmail), Google Maps, and the YouTube video platform. Alphabet owns the most prominent online advertising platform (AdWords) and 75% of the world's smartphones run on Android, Alphabet's mobile operating system. Its new line of business is Artificial Intelligence, positioning itself as one of the most powerful players in the sector	921.559
Facebook	The owner of this famous social network, Instagram, and WhatsApp	866.930
Microsoft	Owner of Skype, Outlook/Hotmail, LinkedIn, and Windows, the most widely used operating system on personal computers. The company recently acquired GitHub, a platform for publishing software source codes	850.031
Amazon	Online store with the highest sales volume in the West. It also controls Amazon Web Services, which provides web hosting and cloud services to important web pages. In 2013 the company bought *The Washington Post*	814.375
Apple	Their famous iPhone phones and iPads, along with the famous Mac computers, put this Company in the first place of this privileged list	498.275

Source: www.expansion.com/empresas/2018/08/04/5b65d2ce268e3e405d8b4577.html (July 2018). Prepared by author

and oil, as in the twentieth century. The top five most valuable companies in the world today represent the new post-industrial digital technological capitalism, whose commodities are data, information, and knowledge[6] (Table 1).

This panorama of concentration confronts us with new risks. Three main risks include:

- **Privacy issues:** These companies make their profits doing business with personal data. The main mining taking place this century is data mining. Research on Cambridge Analytica's role in Trump's triumph in the US election, for example, demonstrated tangible risks that are at stake with Facebook losing 37 billion in one day (BBC 2018).

- **Fake news:** There has never been so much information in existence, but instead of serving to inform us better, it is now also being used to misinform and post-truth challenges media that must make a greater effort to keep their credibility alive.
- **Neutrality:** Mobile phone providers with agreements with certain companies can offer their App for free at the expense of its competitors. If the same thing were to happen with the media and, if, for example, a provider offered five free media subscriptions of the same media group, would anyone pay extra to access to a Community Media channel, for example?

In other words, if in the past Community Media had to be developed in nationally concentrated media systems, today this concentration of the media market, including traditional media, digital media, and ICT, has global reach. And yet community radio stations are using these global platforms to continue to defend their historical claims. We argue that there are deep contradictions associated with the uncritical adoption of globally concentrated technologies and the historical claims of Community Radio for a plural media system.

In Defense of the Digital Commons

There are various approaches to the study of Science and Technology. With the emergence of ICTs, a new set of studies has emerged, inviting us to take more critical positions and ask ourselves about the kind of world are we creating when we develop or use one technology or another. The proposal of the Community Radios and Free Software Network is based on two main theoretical pillars: The political nature of technologies, and the notion of digital commons. Both concepts apply not only to infrastructure and hardware, but also to code and content. Langdon Winner, for example, rejects the idea that technologies are neutral by claiming that they are "inherently political":

> It is evident that technologies can be used in ways that increase the power, authority and privilege of some over others; […] The technological platform has been prepared beforehand to favor certain social interests. […] The objects we call 'technologies' constitute ways of constructing (or perpetuating) order in our world. (Winner 2008, 28)

Other voices advocate treating digital technologies as commons. From "the language spoken by the machines" (software, protocols) to the infrastructure that makes Internet operative. This proposal suggests establishing common governance models to ensure open, free, and neutral digital technologies, thus avoiding further privatization (Benkler 2008, 127–136; Bollier 2016; Lafuente 2007, 77–78). According to the economist Yochai Benkler, three layers can be differentiated within the digital commons: Infrastructure, codes, and contents, over which this control and privatization is evident. These critical attitudes concerning the use and appropriation of technology are also inspiring new organizations within the Community Radio movement.

New Narratives, for New Times

The Community Radio and Free Software Network was set up in 2013, bringing together more than 100 radio stations and producers from all over Latin America who debate and promote the use of free technologies.[7] Its proposal for free communication was developed with the aim of defending the digital commons through community radio stations. The network's goal is to produce new narratives to encourage community radio stations to adopt a new approach in their effort to democratize communication, focusing on "three layers" of Digital Information and Communication Technologies:

- **Physical layer.** There is a need to promote a digital infrastructure based on commons, with a physical layer of open networks and understanding spectrum as a common. The network defends a free, secure, and neutral Internet (neutral in the sense of Internet Neutrality principle), with platforms that respect privacy.
- **Logical layer.** To maintain open protocols and standards and promote free software platforms. Currently, the Community Radios and Free Software Network is developing its own free distribution called GNU/Linux Eter TICs, aimed at community radio stations in Latin America, with all the software they need to broadcast.
- **Content layer.** With legislation that prioritizes the right to access culture and knowledge rather than the right to profit in the markets. Many community radio stations already broadcast their content in an open and accessible way using Creative Commons licenses.

Elinor Ostrom (2000) demonstrated that successful systems of commons governance are those that are collectively managed. For this reason, the Community Radios and Free Software Network proposes to add a fourth social layer composed of the different communities that come together to defend the digital environment: communities that defend digital rights and privacy on the network; those that work for a common governance of the Internet based on network neutrality and freedom; free licensing movements and free software communities and who care about Communication Rights. Digital commons allow:

> An environment in which individuals and groups can produce information and culture from their own interest […] provides an enormously important counterpoint to the industrial information economy of the twentieth century. The construction of a common infrastructure […] allows us to develop a society whereby everyone can speak to everyone, and in which anyone can become an active participant in political, social and cultural discourse. (Benkler 2008, 136)

Digital Information and Communication Technologies conceived from the paradigm of the Digital Commons have the potential to materialize the historic dream of community radio stations: To guarantee the Communication Rights of the whole of society, especially of those most vulnerable. In order to do this, it seems necessary to broaden the demands of the movement for the democratization of the media. It is no longer enough to access the radio and television frequencies of the radio spectrum. Currently, it seems necessary to update and add new narratives for the defense of the digital commons to the Community Radio repertoire.

This political agenda of defense of the digital commons is as broad as the actors and realities behind it. This is in fact what it's all about, that each community has the right to decide the technologies they need, how to develop them, and how to use them. But among some of the common demands we find: The promotion of federated networks, truly distributed that do not give more power to certain nodes than others; guarantees of Internet access, not only in terms of infrastructure but of skills necessary to make a conscious use of it; free culture, in all layers of the Internet: hardware, software, and protocols, content and horizontal practices; and, understanding that technical knowledge is not an exclusive prerogative of engineers, that knowledge can be shared and is something we have in common. The Community Radio and Free Software Network has taken

up these challenges and the day by day work of producing knowledge but also the role of accompanying radio stations with know-how when they want to migrate to an online training center and Telegram group, develop and maintain free software such as GNU/Linux Eter TICS (operating system) and G-Radio (radio automation), and defend Communication Rights in this digital arena.

Notes

1. For more information on the webpage, please visit the site: www.liberaturadio.org
2. The commons are those goods that "belong to everyone, but nobody at the same time", as described by Antonio Lafuente (2007). Nobel laureate Eleonor Ostrom explained in detail in her book The Government of the Commons (2000) how these collective heritage assets or common resources such as community forests, fishing banks or irrigation systems have historically been managed. Currently, there is a "rediscovery of the commons" that questions the management of public resources in urban environments, such as streets or hospitals, from the perspective of the commons (Bollier 2016). Latin America uses the term "ours" more to name these communal management goods governed under "an ethics and a practice of solidarity and reciprocity, of balance and cooperation" (Flórez 2008).
3. Both the Court and the Inter-American Commission on Human Rights of the Organization of American States (OAS) have advocated in various reports for a diverse and pluralistic media system, as well as emphasizing the importance of the media. Inter-American Court of Human Rights of the Organization of American States. Available at: http://www.corteidh.or.cr/docs/opiniones/seriea_05_eng.pdf
4. As José Ignacio López Vigil explains in his Urgent Manual for Passionate Radialists (2004), in 1994 the so-called Group of 8 was formed, one of the collectives that most promoted the movement for the democratization of the media. It was made up of AMARC-ALC, Centro Internacional de Estudios Superiores de Comunicación para América Latina (CIESPAL), Servicio Conjunto de Comunicación (UNDA-AL, OCIC-AL and UCLAP), Federación Internacional de Periodistas (FIP), Asociación Latinoamericana de Educación Radiofónica (ALER), Federación Latinoamericana de Facultades de Comunicación Social (FELAFACS), Radio Nederland Training Center (RNTC), and Asociación Latinoamericana de Medios Grupales (PROA). The International Audiovisual Coalition for Development and Democracy (VIDEAZIMUT) and the World Association of Christian Communicators (WACC) joined shortly thereafter.

5. This law has been under revision since the election of Argentine President Mauricio Macri in 2015.
6. 33.9% of the 100 most capital-intensive companies on the planet are in the technology sector. See: http://www.expansion.com/empresas/2018/08/04/5b65d2ce268e3e405d8b4577.html See the complete list in: https://e00-expansion.uecdn.es/opinion/documentosWeb/2018/08/04/100%20empresas.pdf
7. To learn more about the history of the Community Radio Network and Free Software at www.liberaturadio.org/quienes-somos/

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Practitioner Perspective. Autonomous Infrastructures: Community Cell phone Networks in Oaxaca, Mexico

Loreto Alejandra Bravo Muñoz

Author's Opening Remarks

Before reading this article, I suggest you do the following short exercise.

Instructions (Spanish are available on this link http://nbl.gs/qs9): Close your eyes and in your mind's eye travel to a distant rural area, in the middle of the mountains or the desert. The local community has invited you to share your experience of mobile phone use and the Internet. The people in these communities are interested in communication technologies and in finding ways to access them.

[pause]

Take a deep breath and remember the moment when you used your first cell phone. Remember the first time you used the Internet. Now think about the role these technologies play today in your daily life.

[pause]

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Go back to the community. What would you say to the people in the rural area? What would you ask them? How would you feel if you were in that situation?

Now, open your eyes and consider the series of questions and challenges raised in this article that emerge in the daily lives of those of us who are involved in community network projects with autonomous infrastructures in Latin America and the Caribbean. In the meantime, I will tell you the story of the Autonomous Mobile Telephony project of the Indigenous peoples of Oaxaca, Mexico.

INTRODUCTION

The development of digital information and communication technologies in our lives is an important phenomenon to study. It is worrisome, however, when we consider the issue that close to half of the world's population remains without access to the Internet (International Telecommunications Union, 2018). However, among those most interested in connecting half the world to the Internet are the multinational companies that manufacture and develop technologies and platforms such as Facebook and Google. Their interests are first and foremost commercial, based on a model of extracting and selling user data. For these companies, technology is a consumer good that produces a need, regardless of environmental or human costs.

It is important to note that the half of the world's population without access to the Internet also does not have guaranteed access to basic human rights such as healthcare, education, housing, or work. Much of this population lives in a forced diaspora, including zones of war or conflict. This situation, however, is unimportant to most tech companies, which prioritize the expansion of smart phones and connecting them to the Internet to attract more people to their products and platforms (Murphy 2015). The public justification for this is that once people are connected, they can find information that provides the opportunity to break the cycle of poverty. Poverty, however, is a structural problem that does not end with simple access to information and knowledge. Does the way these companies envision technology as a problem of access resonate with you?

The most disturbing issues concerning the digital divide, however, go beyond the question of connectivity. Once new users possess smartphones, it then becomes important to consider the issue of content (Wikipedia 2019a). What content do people have access to? Which communication

services, and for what purposes? What is the impact of this content and technology on people's daily lives and their territories? How could these technologies promote human rights that guarantee their subsistence? Or how do they bring greater levels of surveillance and control by external institutions leading to the manipulation of local opinion and behavior modification of these populations?

I begin with a critical perspective of technology because I am convinced that people will have fewer opportunities to exercise their fundamental human rights to privacy, communication, and access to information in the next 10 years as Artificial Intelligence and the Internet of Things, under corporate control, become dominant forces in our lives. This means that we must question the model proposed for bridging the digital divide, as well as the metrics used to study it. To say that a person is connected is not enough. We need to consider the potential undemocratic consequences that connectivity also brings. It is therefore crucial to cultivate a critical approach to technology to ensure that we understand the multilayered impact on everyday lives (De León Alvarado and Musiño 2006).

Why is it that when we talk about bringing the Internet and cellphones to disconnected communities, mostly the positive aspects of the use of technology are highlighted and we rarely discuss the potential negative impact associated with their use? I am referring to phenomena such as online violence against women, pedophile networks that use the Internet to attract and abuse minors, identity theft, non-consensual pornography, psychological and emotional addiction to social networks, surveillance, data mining, and so on. In adopting these new systems, it is essential to problematize what they bring to our communities, including both the positive and negative dimensions of information and communication technologies.

These are some of the questions that we encounter daily when we bring a critical perspective to the work of introducing digital technologies to disconnected populations. This chapter does not seek to answer these questions but rather propose a perspective for thinking about technology in relation to a sustainable future for the planet and the living beings that inhabit it. All of us who work to promote community networks and autonomous infrastructures start from the premise that information and communication technologies play an important role in life, insofar as they can be tools and spaces that generate new knowledge and contribute something to the transformation of society.

A main problem for communities living without access to the Internet and other media is the introduction of technologies unsuited to their ways of life or their needs and objectives. There are many examples of how the adoption of specific technologies have been promoted by companies simply because these companies consider it convenient for their bottom line, but it is not evaluated with respect to whether it achieves a community's development objectives. This situation leads us to ask several questions: How can we design technological appropriation projects that do not reproduce the inequalities of gender, age, race, and class? How can we best identify the specific development needs and improve the living conditions of communities using digital technologies? How do we arrive at the right choices considering the context and value to the community given the potential consequences of technological incorporation? How can we generate a process of technological adoption whereby community members participate in the definition of the topics, content, and formats to ensure that they coincide with their needs and interests and forms of communication?

This chapter shares the experience of the Autonomous and Community Mobile Telephony Networks developed by the Indigenous peoples of Oaxaca, Mexico, the organization Rhizomatica, and the Mexican civil society organization, Indigenous Community Telecommunications (TIC AC). This case provides us with the opportunity to consider these complex questions in specific circumstances.

See Fig. 1 and note the advisory sign at the entry of Ixtlán de Juárez, which states that there is no private property in the community, therefore the communal goods commissioner of Ixtlán de Juárez forbids people to sell or buy communal lands.

Context

Oaxaca is a state in southeastern Mexico where 17 different Indigenous peoples coexist, each with their own language, customs, and traditions. Oaxaca is characterized by a rugged geography the result of three mountain ranges that cross the state, which in colonial times made it difficult for Spanish invaders to fully colonize and dominate many of these peoples. Because of this, the peoples of Oaxaca today conserve forms of life that Indigenous elders call "communality" to denote a way of life characterized by the presence of five elements: communal ownership of land, the system of community positions of authority and service, collective work called

Fig. 1 Advisory sign at the entry of Ixtlán de Juárez

Tequio,[1] the community assembly as the highest decision-making body and the fiesta. At the administrative level, Oaxaca is divided into 470 municipalities of which 85% are self-governed, that is governed by indigenous norms and not by political parties. Authorities are appointed by the community itself in their assemblies.

See Fig. 2 An overview picture of one of Oaxaca's communities.

BACKGROUND

In the 1960s and 1970s, foreign companies interested in exploiting the state of Oaxaca's natural resources began to arrive. Some communities organized to defend their territories and created communal natural resource management companies as a model of economic sustainability for their communities. These communal enterprises also evidenced the need to create their own media, such as community radio and television stations.

Currently, Oaxaca is the state with the highest concentration of community radio stations in Mexico. Although there is no exact census, it is

Fig. 2   One of Oaxaca's communities

estimated that there are more than 100 community radio stations in the state. These radio stations arose out of community needs to have media to transmit pertinent information corresponding to their contexts and cultures.

In the first decade of the 2000s, and with the arrival of mobile telephony to its largest cities, community authorities in Oaxaca began requesting service from large telecommunications companies, including Telcel,[2] owned by Mexico's Carlos Slim, one of the richest men in the world. Because these are remote communities, with few inhabitants that rely on a subsistence economy, these telecommunications companies refused to consider their requests to build the necessary infrastructure since they saw it as unprofitable. Mexican regulations do not oblige telecommunications companies to provide connectivity to towns with populations below 5000 people.

Faced with this refusal, the communities began to organize to find a way to overcome this isolation and exercise their right to communication. That is how a conversation began between the authorities of the Zapotec community of Talea de Castro in the Sierra Juarez of Oaxaca, the people

in charge of the community radio, and members of the organizations Palabra Radio and Rhizomatica, who at that time provided direct engineering assistance to support to community Frequency Modulation (FM) radio stations in all aspects of maintenance and operation.

In the following months, Rhizomatica, an organization which supports the development of autonomous telecommunications networks, began researching how to incorporate existing technologies to create autonomous mobile phone networks. This was the beginning of the construction of a bridge between the Indigenous communities of Oaxaca and members of the free software and open-source movement from different parts of the world to work on autonomous telecommunications. Rhizomatica is a non-profit organization with members from around the world that lobbies the International Telecommunication Union and national governments to develop regulatory frameworks that create a more favorable environment for community networks. Rhizomatica also focuses on providing continuity for the technological development of tools that enable communities to operate their own cellular communications networks (Rhizomatica 2015).

In March 2013, the first cellular base station installation was carried out as an experiment in the town of Talea de Castro. In the first meeting with the community, Rhizomatica suggested installing the equipment for a three-month trial period at the end of which the operation would be evaluated. Before informing the community that the base station had been installed in the town, the system was tested to see if it worked and the result was surprising because the system received a reply from more than 700 mobile phones that were on at that time. What were 700 mobile phones doing on in a village of 2500 people where there was no cellular signal provided by any company? We discovered that the vast majority of mobile phones had been sent as gifts from relatives working outside the community, mainly in other cities in Mexico and the United States. We also discovered that people, in the absence of a signal, were using their cell phones as clocks, alarms, FM radio receivers, video and photo cameras, music players, diaries, flashlights, and more.

An interesting anecdote is that on the day of the community meeting, an elderly woman asked for the floor to inquire about the cost of the telephone service. The answer from one of the technical team at Rhizomatica was: "That's up to you." A disconcerting silence flooded the meeting and a discussion about what it means to be responsible for managing your own telecommunications infrastructure followed. Then another woman requested the floor and asked, "How many calls can there be at the same

time?" A Rhizomatica representative explained that as a limited resource, the base station allowed for only 14 simultaneous calls. Immediately, a man in the audience expressed his concern that women could stay on a call gossiping, which would saturate all the channels so that no one else could make a call. Laughter spread across the hall. One of the technicians suggested that he could create script for code that would cut a call after five minutes thus making everyone more aware of their time on the phone. People agreed to the proposal. The technician, however, forgot to write the code limiting the time. Though the time limit was encoded into the system, people nonetheless made conscious and responsible use of a limited community resource. This is an example of how communities govern their common resources, in this case their own cellular network.

Another important debate that occurred inside the TIC AC[3] network was around the collection, storage, and use of personal data such as call records and text messages. These debates took some time to resolve amongst its members, but now there is a clear internal policy around how these matters should be handled. For instance, call records are stored locally at each network and at a shared data center facility for six months, in the event that village authorities need to consult them, for which there is also a policy. After six months, the data is deleted and is never shared with any outside party.

Currently, Oaxaca has 16 autonomous mobile phone networks that serve more than 3500 people in 70 communities. Each person using the network pays a little more than two dollars a month for unlimited calls and text messages within their community and to other communities that are part of the network. Each network is connected to an Internet provider and users make calls through Voice Over Internet Protocol (VoIP)[4] technology to phones with services provided by private companies, including services for international calls. Making long-distance calls costs money, so users can add credit to their account through a prepayment system by paying cash to the network's local administrator.

Communities that have opted to own and operate their own networks are organized as an assembly that has democratic control of TIC AC which is responsible for providing technical and legal support to the communities. Thanks to pressure from various community authorities and the work of the legal team, in 2016, the telecommunications regulatory body in Mexico, the Federal Institute of Telecommunications (IFT) granted an Indigenous Social Concession to TIC AC to operate the

networks legally in five states of the Mexican republic, including Oaxaca (TIC AC n.d.).

Rhizomatica receives constant requests to implement further autonomous models nationally and internationally. The non-governmental organization (NGO)'s growth policy is based on the premise of free and shared knowledge so that other organizations may adapt the model to different contexts. One of the most important challenges to the growth of community cellular networks around the world is the lack of regulatory frameworks that promote the implementation of community telecommunications networks.

Other important issues pertaining to telecommunications networks were discussed in September 2018 at the First Latin American Summit of Community Networks, held in Argentina, where the need for a common language, a definition, and a strategic plan for the region was raised, including the articulation of these technologies with other communication technologies such as community radio and television. One of the most common questions among users of the Autonomous Mobile Telephony Networks concerns access to mobile data, an issue that raises a complex debate for communities. Technically, it is possible to offer mobile data to users but first it is necessary to discuss the impact that access to data will have on the way people in the community and the territory relate to each other.

So far, mobile telephony has allowed person-to-person communication which adapts to community needs, overcoming distances, strengthening the local economy and in some cases even saving lives. This was the case of a man who went to work in the fields and was bitten by a snake. Thanks to cellphone connections in order to communicate with his family immediately, the health center staff was able to help him on time. However, when we talk about access to data, we are also talking about using platforms and services that today are questionable for how they shape behavior and consumer habits, as well as serve as instruments of surveillance and control. Look at what happens around us, what happens to the people who have access to data. Some important questions that we raised above and also discuss with communities include: What do we use our data for? What platforms and services are we using?

To conclude, as the adoption of community mobile networks demonstrates, a fuller understanding of the creation of more than just infrastructures of telecommunications helps us to consider the implications of

greater connectivity for those populations across the world who remain without access to information and communication networks. It is thus important to open the dialogue among peers, problematize and politicize the use of digital information and communication technologies. The Internet, which was created as a technology that relies on a protocol to exchange information packages, should be used to promote and strengthen community networks, through strategies such as low energy consumption or renewable energies like solar technologies. The current situation where the Internet has produced undemocratic publics and participation should give us pause to consider these issues as they could help not hinder the development of platforms of community empowerment rather than as instruments of homogenization and control. We can dream of and conceptualize technologies that both strengthen the autonomy of communities and promote the sustainability of the planet.

NOTES

1. *Tequio* refers to collective work (Wikipedia 2019b). For more information on the etymology of the word and its meaning, please see: https://es.wikipedia.org/wiki/Tequio
2. Telcel is Mexico's biggest telecommunications company. For more information see: https://www.telcel.com/
3. TIC AC is a civil association that hosts a permanent Indigenous assembly with the aim of looking after communities' rights and proper use of their own telecommunication networks. For more information see the following website: https://www.tic-ac.org/tequio/
4. VoIP technology uses broadband Internet access to convert voices into digital sounds that travel through the network service and allow voice calls to be made from and/or to computers or telephone lines. For more information see: https://www.fcc.gov/general/voice-over-internet-protocol-voip

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Digital Activism and Resistance

Favela Digital Activism: The Use of Social Media to Fight Oppression and Injustice in Brazil

Andrea Medrado, Taynara Cabral, and Renata Souza

Introduction: Digital Activism and the Struggle Against State Violence

On 4 December 2008, Matheus Rodrigues, an eight-year-old boy, left his house in Complexo da Maré to buy bread. As he walked down the steps that led to the front gate, his life was brutally interrupted by a rifle shot. A photo of the boy, lying on the ground while still holding the one Real coin that he would have used to buy bread, circulated in many newspapers at the time, such as Extra and O Dia. After Matheus' death, activists produced an illustration based on the image and used it as a symbol for the resistance against police brutality in Rio de Janeiro's favelas[1] and

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177

peripheral areas. Unfortunately, since then, a large number of innocent children and teenagers have become victims of the so-called war on drugs in Brazilian cities. Human rights organizations have highlighted the serious consequences of this criminalization of the lives of favela youths and children. Based on data published by the Institute of Public Security (ISP) in January 2018, Amnesty International Brazil estimates that in the city of Rio de Janeiro 25% of all murders were committed by the police. This number corresponds to the largest proportion of police killings since 2000 (Amnesty International Brazil 2018). A couple of years earlier, in 2016, Human Rights Watch had also launched a report called "O Bom Policial Tem Medo" (The Good Cop Is Afraid). The report estimated a similar number in which police killings corresponded to 20% of all murders. Among these, 75% of the victims are black (Human Rights Watch 2016, 1).

Indeed, these numbers reveal a disturbing and complex scenario. Jurema Werneck, director of Amnesty International Brazil, points out that "the police should be an agent of life-protection. … The more we have control and transparency in police action, the more we will be able to ensure security for the population and for the police themselves." This also reflects on the high numbers of police officers killed on the streets. According to the Institute of Public Safety, 31 military and 4 civil police officers were killed in 2017 (Amnesty International Brazil 2018). Faced with the violence and power of criminal factions, the police representatives often argue that the deaths result from a legitimate use of force. However, Brazil is also known for having a high rate of extrajudicial killings, whereby the police shoot unarmed civilians, or execute detained prisoners. In Rio de Janeiro and other cities, people who live in the favelas and peripheral areas have historically been subjected to unfair and oppressive treatment.

This scenario worsened during the preparations for and hosting of the 2014 FIFA World Cup and the 2016 Olympics. Critics such as the members of the Popular Committee for the World Cup and the Olympics suggest that the projects for hosting mega-events in Brazil had three main characteristics: (1) the implementation of policies of segregation, with the construction of physical barriers; (2) the gentrification of poor areas, with rising prices in several "pacified" favelas; and (3) the militarization of everyday life that has brought with it a significant expansion of the "police state" (Comitê Popular da Copa e das Olimpídas 2015, 102). In this context, the voices of oppressed and marginalized groups increase in force and spread across cyberspace. They reach the favela residents themselves but also the residents of other city areas. Often, such voices reach the

mainstream corporate media, or they feed back into other spaces, generating interlinked dynamics of technology appropriation between different marginalized groups. Based on these premises, in this chapter, we aim to

- analyze favela digital activism as a tool against injustice, oppression, and state violence;
- understand how the networks of favela digital activism operate, identifying some of its key characteristics and tactics;
- demonstrate the ways in which favelas digital activism represent urban communication infrastructures that help people in their everyday survival skills in a context of urban conflict.

In order to achieve these goals, we draw from anthropological approaches to digital media (Miller and Horst 2012; Machado 2017), which will be further explored in the next section of this chapter. We suggest that favela digital activism needs to be understood within its wider urban media environment. Indeed, favela digital activism is deeply intertwined with the phenomenon of having an augmented favela. Each corner of Complexo da Maré can be transported to cyberspace via social media as residents constantly share information on how to protect themselves. This helps characterize favela digital activism as a distinctive urban media phenomenon that provides residents with important tools for daily survival.

Methodological Approach: Digital Anthropology

Our methodological approach draws on insights from the field of digital anthropology. In this section, we will outline the specific methods employed in the study and provide a brief discussion about the ways in which digital anthropological approaches are useful for our research. According to Daniel Miller and Heather Horst, digital anthropology is an emerging subfield within anthropology. The premise is that the digital should and can be a "highly effective means for reflecting upon what it means to be human, the ultimate task of anthropology as a discipline". Importantly, the authors strongly argue against the idea the digital has rendered us less human or less authentic (Miller and Horst 2012, 3–4). Additionally, as the authors put it, "no one lives an entirely digital life and that no digital media or technology exists outside of networks that include analogue and other media technologies" (Miller and Horst 2012, 16). As

a result, if an anthropologist focuses on aspects of life, such as museums, social networking, or politics, she or he must recognize that the person working at the museum builds social networks and may get immersed in politics. Therefore, the "specifics of any of these three may depend on understanding the other two" (Miller and Horst 2012, 16).

Christine Hine was one of the first authors to highlight the close integration of digital technologies within the lives of her research participants. As she suggests, whenever mediated communications play a significant role in people's everyday lives, the ethnographer will need to immerse herself in such mediated dynamics. This should happen organically and in parallel with whichever face-to-face interaction might occur (Hine 2005).

Hine's earlier work was written in the 2000s, and, naturally, things have changed drastically in terms of media consumption since then. In the context of Rio's favelas, as they are in a large city, it is difficult (not to say impossible) to find a resident who does not make use of multiple forms of mediated communications. In fact, residents constantly and simultaneously navigate through various multiple media territories (a concept we will present in the next section), such as Facebook, WhatsApp groups, Instagram, community radio, as well as commercial broadcasting media such as TV and radio. Thus, in order to grasp this complexity, our methodological approach includes:

(a) (N)etnographic observations on one Facebook fan page—Maré Vive—from Complexo da Maré, a network of favelas comprising 16 areas, located in the North Zone of Rio. Here, we are inspired by Robert Kozinets's (1998) ideas on netnography. He applies anthropological concepts such as "dense description" and participant observation to studies of media consumption and media use. We conducted daily observations between the months of January and December 2017. This included capturing screen grabs of all content which was posted on the page. At the end of each month, we analyzed four posts that expressed the largest number of reactions. These reactions included "likes" (the thumbs up emoji), "loves" (the heart symbol), "angry" reactions (angry face emoji), "sad" reactions (sad face emoji), and "laughing" reactions (the LOL face emoji). We then placed these posts into categories that we had established by manually coding the data. These categories included: (a) nostalgia and memory: posts that make explicit reference to historical elements, such as the favela's first residents to

have settled in the areas or posts that contained affective memories of favela residents, such as playing in the rain as a child.

(b) political and social issues: posts that included critiques of the government's lack of investment in education and health or that addressed the importance of voting in elections, among other issues.

(c) promotion of local events and opportunities: posts that inform residents about courses, parties, and community celebrations, among other events.

(d) special dates: posts that celebrate special holidays such as Black Awareness Day or the International Women's Day.

(e) live news about police operations: posts that alert residents to police operations taking place in different areas of the community, informing them about how to avoid dangerous areas with shootings.

(f) awareness on violation of rights: posts that discuss issues such as police brutality or racial profiling of black favela residents (this differs from category "d" in a sense that the posts discuss these issues more broadly rather than just offering updates on which areas are being targeted by police operations at a given time).

(g) missing residents: posts that ask for information on favela residents that have gone missing. These categories are obviously not mutually exclusive. For instance, a post about Black Awareness Day might also tackle political and social issues. However, they helped us organize the content in terms of the most prevalent themes for the posts. Finally, we focused on the content published by Maré Vive only (rather than including our analysis of other activist pages) to allow for the in-depth discussion associated with ethnographic studies.

(h) contextual field notes analysis—as part of the netnographic observations, we produced notes, contextualizing the discussions by writing about the main political, cultural, and social events that related to the posts we collected. We then organized our notes into thematic categories, such as police brutality, political commentary, and cultural events. Similar to our approach with the netnographic observations, our research team organized these categories by manually coding them rather than using software.[2] Here, we also focused on key events that illustrate the important role that digital activism play in the everyday lives of favela residents. In this chapter,

we discuss one event in which police conducted an operation in Complexo da Maré on 27 November 2018.

(i) in-depth interviews—in addition to the netnographic observation and contextual field notes, we conducted five in-depth interviews with favela activists—one who works at Museu da Maré, the first museum to be located inside a favela in Brazil; two who are part of the Maré Vive Collective; one who works in the Papo Reto Collective; and one who is responsible for the Impacto das Cores, an artistic project from Favela da Providência. For the purposes of this chapter, we will focus on our interviews conducted with activists from Favela da Maré. The priority here was to analyze their motivations for running these collectives, learning about their senses of fear and risk, but also about their personal and professional achievements. This shed light on the everyday functioning of the activist initiatives of our study.

Additionally, it is worth mentioning that this study was conducted in two phases and that each one of the three authors played different roles in different phases, as we will explain here. The first phase involved conducting research on the activist pages online. For this phase, Taynara Cabral played a crucial role as a research assistant for the project, collecting data from the Facebook pages, helping manually code, organize, and analyze the material. The second phase consisted of conducting offline ethnographic observations in Favela da Maré and in-depth interviews with favela activists. Renata Souza's contribution was vital in this phase as she was born in Maré and has had vast experience working as community journalist prior to her earning a Ph.D. and becoming a researcher. Renata helped conduct the interviews, guided us in various tours of the favela, and helped with the analysis of the interview transcripts and ethnographic field notes. Andrea Medrado is the first author of this chapter and acted as a project leader, having designed the research questions, and the theoretical and methodological approaches in the study. In terms of writing and authorship, we decided to use the plural form of the first person—we—as this is a subjective and positioned (from our perspective) account of what we have observed online and offline, as well as a collective research effort.

From Media Activism, to Media Territories, to Urban Media

In this section, we examine the literature on media activism, identifying some of its main gaps, such as the need to devote more attention to issues of state and corporate surveillance, concentration of ownership, and the role of algorithms in creating an anti-democratic online environment. By going beyond the use of short-term studies of the so-called Twitter revolutions and mass uprisings, we argue that favela digital activism represents a distinctive type of activism and a unique urban media phenomenon.

A considerable body of research has focused on various forms of media activism and mobilizations during large-scale global protests, such as the Occupy Movements, the *Indignados* in Spain, and the Tunisian and Egyptian Revolutions. Among these, Castells' *Networks of Outrage and Hope* is now a well-cited book on how the relationships between social movements are being reshaped into networked social movements in the internet age. Published in 2012, the book uses a vast empirical dataset and analyzes several case studies of uprisings taking place in different parts of the world in countries such as Egypt, Tunisia, Spain, Iceland, and the United States. Thus, the author provides us with a model for understanding the phenomenon of networked social movements, devoting special attention to their communicative, cultural, and technological elements (Castells 2013).

Adopting a similar optimist tone, other researchers highlight the emancipatory potential of the new information and communication technologies. Within this perspective, the term "liberation technologies" has been commonly used. Larry Diamond (2010), for instance, analyzed the different uses of technology by Chinese citizens to expose cases of government abuses of power. The author defines liberation technology as "any form of information and communication technology (ICT) that can expand political, social, and economic freedom" (Diamond 2010, 70). In this way, the Internet's decentralized character can reach large numbers of people and serve the needs of grassroots organizations.

In Brazil, Letícia Abella follows a similar train of thought, focusing on the role that new technologies play in social mobilization. She notes that the new technologies can be easily appropriated by marginalized groups without the need of being approved by the powerful sectors and elites (Abella 2016, 93–94). Additionally, Brazilian scholars have maintained the tradition of analyzing the relationships between media, politics, and social movements during mass protests. The so-called 2013 June Journeys

(Jornadas de Junho) were emblematic in this sense. During these protests, which gathered nearly one million people in large cities, Brazilians of various age groups and different economic backgrounds took to the streets to demonstrate their dissatisfaction with the country's executive, legislative, and judiciary branches of power. Large crowds of people demanded changes in governance as well as more investigation and punishment for the widespread cases of corruption (Custódio 2018, 301).

While liberation technologies and media activism perspectives provide us with useful conceptual frameworks, they also leave some gaps. These optimistic views neglect issues, such as state and corporate surveillance (Uldam 2018), the role of algorithms in fostering anti-democratic behavior and racism (Noble 2018), as well as the concentration of ownership in the internet world (Fuchs 2014). One additional issue, which is particularly relevant to this chapter, is that during periods when there are no mass protests, there is little documentation of how media activists develop their capacities for building and heading social movements.

In this context, the phenomenon of favela media activism seems of relevance here. Indeed, in Rio de Janeiro, favela activist groups carry on their activities daily, rather than solely during moments of highly visible protests and have a long history of involvement with community media and other grassroots initiatives. Echoing Leonardo Custódio, we argue that favela media activism is a distinctive phenomenon if contrasted with other forms of media activism. The author defines it as

> [t]he individual and collective actions of favela residents in, through and about media. These contesting actions derive from and/or lead to the enactment of citizenship among favela residents. By engaging in media activism inside, outside and across favelas, favela residents raise critical awareness among peers, generate public debates, and mobilize actions against or in reaction to material and symbolic consequences of social inequality in their everyday lives. (Custódio 2016, 82–83)

The use of a specific term to refer to this type of activism by and for favela residents is based on the acknowledgement that the favelas represent: (a) Spaces of action, (b) a political identity, and (c) the targets of civic action. Thus, using this term is a way to mark the boundaries that separate the different kinds of citizenship that we can find in the socially unequal Brazilian society (Custódio 2016, 83). During our 2017 ethnographic research and interviews, for instance, favela activists would often stress

that while the country's military dictatorship ended in 1989, it had never really ended in the favelas. Indeed, historically, the favelas were frequently subjected to policies of military intervention, such as the military occupation that took place in Complexo da Maré in 2014 to contain the favela spaces ahead of the World Cup. This reveals how favela residents are still considered lower class citizens that need to be constantly monitored and controlled. Additionally, favela activists clearly set distinctions between themselves and some of the middle-class activists that took the streets during the 2013 *Jornadas de Junho* protests. We took note that while the police would shoot rubber bullets into crowds of middle-class protesters, in the favela spaces, they used real bullets.

While we subscribe to Custódio's perception of favela media activism as a distinctive phenomenon, it can be complemented by adding that favela media activism represents a unique urban media phenomenon. In fact, some of favela media activism that we analyze in this chapter can be considered successful precisely because they took place in an urban context in which people have wider access to media technologies. A research project conducted in 2013 by the non-governmental organization (NGO) Observatório de Favelas and by the State of Rio de Janeiro's Secretariat of Culture revealed that 90% of young people between the ages of 18 and 25 who live in the City of God, Penha, and Manguinhos favelas have access to the internet (Barbosa and Gonçalves Dias 2013).[3] This recognition of favela media activism as urban media exposes us to a range of concepts that we can productively incorporate into our work. One important concept is that of "media territories" proposed by Tosoni and Tarantino (2013). The authors note Graham (2004) in regard to "the so-called 'information society', which is an increasingly urban society … [and] the digital age commonly dominated by cities and metropolitan regions to an extent that is unprecedented in human history" (cited in Tosoni and Tarantino 2013, 575). Thus, in a context of mediatized cities, social actors who are immersed in a context of urban conflict as found in Rio de Janeiro, start to make use of various symbolic tactics to represent themselves in ways that are more accurate. As Tosoni and Tarantino argue:

> By *symbolic tactics* we refer to discursive operations performed by social actors with certain tactical intents: that is, to gain vantage positions within a conflict by providing its representations and connotations. By symbolic we mean *retaining to interpretative and sense-making processes*. These practices entail media along with instances of secondary audiencing, content

production and circulation, and negotiation of meanings; they seldom involve single media, but, rather, mobilize varying assemblages of media platforms, devices and contents. Each element of the assemblage is mobilized, often temporarily, because it grants certain resources (cognitive, emotive, symbolic, etc.) as well as carrying a specific meaning or connotation (trustworthy, well-informed, user friendly, etc.). Using a spatial metaphor, we define these temporary assemblages as social actors' media territories. (2013, 577)

The concept of media territories seems useful here because of its non-media-centric nature. Often, the academic literature on grassroots media revolves around media specific initiatives, such as radio, TV, or newspapers. However, our research with favela media activism unveiled much more fluid dynamics of media usage and production in which the streets and the media are intertwined, as we will demonstrate in the following sections. We observed that marginalized groups consume media in situations of urban conflict as well as in spaces of intense media production, which promote a sense of media saturation (Tosoni and Tarantino 2013, 574). In this context of media saturated cities, marginalized communities search for new media territories where they can prevail and produce their own accounts in relation to territorial struggles.

Within the scholarly tradition of urban media, other studies focus on mediated forms of urban living, interpreting the city as both symbol and text and exploring the ways in which the concepts or media and city are intertwined. Here, relevant issues include the mediation of neighborhood and community; communicative answers to urban crises; the ways in which the organization and functions of urban infrastructure relate to what we understand as media, in a broader sense; and, lastly the acknowledgment that technology and media uses cannot be fully understood outside of their urban contexts.[4] Myria Georgiou et al.'s study of multicultural communities in Harringay, London, illustrates this tradition. The authors suggest "communication and technologies constitute infrastructures that shape conditions and forms of interaction, thus informing the possibilities or restrictions in the constitution of communities" (Georgiou et al. 2016, 5). In this way, "communication infrastructures, as constituted in the range of systems and technologies that regulate and manage everyday urban communication, represent a rich, diverse and contested element of urban infrastructures" (Georgiou et al. 2016, 6). Based on these ideas, we argue that the favela digital activism phenomenon can be interpreted as an

important form of communication infrastructure, which will be addressed in the next section.

Maré Vive Is Remembering, Sharing, Connecting, Surviving, and Staying Alive

During our 2017 ethnographic field work, the following was noted: It was a cloudy overcast November day in Rio de Janeiro. I was at Renata's house, my friend and research partner. We both sat around the table, munching on the crunchy rolls we had bought at the Vianense market, which is located near Passarela 9. While sipping the coffee that Renata's father had prepared, I felt a mixture of anxiety and joy. I would finally meet the people behind the Maré Vive Facebook page. As Renata praised the cover of my notebook, we heard a helicopter, which seemed to be extremely close to her roof. "Police helicopter", she said: "the noise is quite distinctive". Soon we heard voices at the gate: Renata! Renata! Renata! There they were. They came into the house smiling and each of the three gave me an affectionate hug, which reduced but did not eliminate my anxiety. We all sat around the table, ate more bread, and filled our coffee mugs. Renata and I started to present our research ideas to them. They listened attentively. Finally, one of them, Rodrigo,[5] said something remarkable: "we started in 2014, when we had a military occupation in Maré, but we were not sure about what we were doing. In fact, we are still trying to understand what we do."

We wrote up these field notes after my first face-to-face meeting with the activists responsible for managing the Facebook page Maré Vive. Before this meeting, we had been conducting netnographic observations and collecting material from the page since January 2017. The meeting marked the beginning of a second research phase, which combined netnographic observations with offline observations and interviews with activists and users of the page. Renata Souza, co-author of this paper, postdoctoral researcher, and resident of Favela da Maré, played a key role in this process. Having worked for 13 years as a community newspaper journalist in Maré, she has a long history of media activism. Going back to our fieldnotes, we are struck by Rodrigo's thoughts on how we, as researchers, perhaps might be able to help them, as activists, to understand "what they are doing" with the page. Clearly, they are aware that this is something that the favela residents find important. At the same time, they seem to be trying to evaluate and measure its reach and resonance. Would

Maré Vive become a collective space? A community media outlet? Or would it be merely a Facebook fan page? We wish to tackle these and other questions in this section.

Maré Vive[6] was founded as a platform that aimed to cover the military occupation that took place in Maré on 05 April 2014. At the time of writing, the page had amassed over 135,000 likes.[7] We took note of what Rodrigo told us about the activists understanding they do need to "go beyond Facebook". At the same time, it is evident that Facebook is the most efficient platform for them in terms of reach and impact. In their social media accounts (Facebook, Twitter, Instagram), Maré Vive describes itself as a "community media channel" produced collaboratively. According to Pedro,[8] "the channel is made possible by all residents here in Maré" (Maré Vive 2018). In the page's history tab, we found the following description:

> We carry out journalism just like any regular newspaper, magazine, or TV station. However, our aim is to show what happens from a Favela da Maré point of view. The mainstream media often ignore favela perspectives. We are always marginalized and shown in a negative light, but this is different here! We don't have an anti-police or an anti-army stance when we are covering issues. What we have a pro-favela-resident position and we are proud to state this very clearly. We are together, Favela! #marévive. (Maré Vive 2018)

Some relevant points emerge from this description. The first relates to Maré Vive's self- description as "a community media channel".[9] For the purpose of this chapter, we wish to refer to Jankowski's definition of community as being "conventionally identified with a relatively limited geographical region—a neighborhood, village, town, in some cases a city. However, community might also be a community of interest, where members have cultural, social or political interests in common" (Jankowski and Prehn 2002, 5). For the purposes of this discussion, Favela da Maré is conveniently circumscribed within geographical boundaries but the work that Maré Vive does targets communities of interest in a sense that it also addresses issues relevant for residents of other favelas, such as police brutality, and human rights campaigns.

Moreover, as for community media, many denominations are used in different parts of the world. Besides community radio, practitioners, listeners, and academics speak of "participatory media", "alternative media",

"rural media", "free media", "popular media", and "educational media", among other terms. There are countless community, or alternative, or participatory media outlets in the world, each with its own context, characteristics, and experiences. Therefore, it comes as no surprise that there is a certain struggle to find common ground to encompass this wide range of practices. For our research, what matters is the way in which the term community media derives from a focus on the communal. In general, we consider community media those platforms, projects, and initiatives that are not only interested in thoroughly knowing the community (in a wider sense) that they address, but also in allowing this community to speak for itself.

Our netnographic observations shed light on the ways in which the Maré Vive page displays a collaborative character in its content. One example is when the activists create posts about daily events in the favela and ask for real-time updates from different areas of the favela. Every time this happens, the page reaches high engagement metrics, including people sharing the post, leaving a reaction or comments. The publication posted on 28 November 2017 illustrates this. The post obtained 672 reactions—494 likes, 111 sad face reactions, 58 angry face reactions, 4 "love it" reactions, 3 shocked face reactions, and 2 laughing out loud reactions. As we will be unable to provide images for all the publications discussed here due to a space limitation, we provide a transcription and a translation of the text from Portuguese into English:

> Yesterday we had over 10 hours of police operations in the Nova Holanda, Parque União, Rubens Vaz and Sem Terra areas.[10] The operations always start in the mornings when people are going out for work or kids need to get to school. The police arrive, they break into homes, threaten and many times harm and kill people. This is our breakfast, lead bullets! #MaréVive #MaréSobrevive. (Maré Vive 2017a)

However, even if it shows significant levels of collaboration and constant updating from residents, the page would not be as successful if it did not have a very engaged group of core people managing and maintaining it. The activists behind it are constantly online, on call, answering questions, checking for updates, and posting the incoming news. The group is composed of three people—all activists who had a history of creative production in community media outlets as photographers and video makers.

On the day we met, the three of them came into Renata's house a few minutes after all of us had just heard police helicopters. As they came in, and shortly after greeting us, the three of them slipped their fingers across the screens of their mobile phones. During the meeting, we took note of them looking down, as they typed something, and then Pedro told Rodrigo: "We already have several messages asking if this is an operation", to which Rodrigo replied: "you're responding to them right now, right?" Turning his attention to me and Renata, and laughing, Pedro said: "people keep asking if we ever get to sleep".

Our conversation with activists confirmed several of the netnographic observations. Rodrigo stated that Maré Vive tends to mobilize a large number of people, not only because it exposes wrongdoing that affects residents, but also through appealing to the community's collective memory. As one example, we took note of when Pedro mentioned a post published on 27 November 2017, a rainy day in Rio de Janeiro, which evoked memories of people playing in the rain and him telling us: "believe it or not, that mobilized more people than when we post about police operations" (2017b). The post contained an image of a boy picking up a ball on the ground in the rain. It prompted 765 reactions—666 likes, 87 "love it" reactions, 9 "laughing out loud" reactions, 2 "shocked face" reactions, and 1 "crying face" reaction. It also generated 90 comments and 20 shares.

> Whats up Favela!? (Fala Favela?!)
>   The rain is pouring down and it brought me many childhood memories. Tell me, when it rained like this, we would get soaked on the street, playing football, games, and did we ever get sick? We certainly acquired immunity. Tell me about your experience in the rain! When you were a kid, of course! #marévive. (Maré Vive 2015)

Furthermore, Maré Vive's profile picture is the image of one of Maré's first residents, Dona Orosina.[11] Originally published on 10 April 2015, the text that goes with her picture on the post pays tribute to her and generated a significant number of reactions (553—with 539 "likes", 13 "love it" reactions, and 1 pink flower[12]):

> Give us your blessing, Dona Orosina!! One of the first residents of Complexo da Maré. An inspiration for us in these difficult times. Resistance without losing our references. (Maré Vive 2015)

The post also generated an engaged comment thread, which reinforces Pedro's observations on the importance of fostering the community's memory in Maré and in other favelas: (Page user comments)

> I grew up in a house next to her house. When I was feeling ill, she would always bless me and give me a treatment with rue herbs. As I kid, I found it so weird to see those little leaves withering. (Page User 2015)[13]
> "Hail Dona Orosina!" (Page User 2015)
> "She was my mother's maid of honor." (Page user 2015)

Having discussed some of Maré Vive's main characteristics, we will now unveil some of the main tactics that Maré Vive uses within the context of favela activism (Custódio 2018):

(a) **Collaboration:** Our netnographic research on the Facebook pages evidenced the frequent process of mutual sharing between different favela digital activism pages, such as Coletivo Papo Reto and Nós por Nós. One publication of 19 January 2017 by Coletivo Papo Reto exemplifies this. The text refers to various human rights violations that had been occurring in various areas of Maré:

> Since early morning, the situation has been tense in Parque União and Nova Holanda. We are receiving many reports of human rights violations, people being humiliated, and thefts, all this being carried out by agents who should oversee public safety. Follow Maré Vive and help us give more visibility to complaints against this chaos. #NósporNó #FavelaSempre. (Coletivo Papo Reto 2017)

Here, it is key to acknowledge the importance of the dynamics of sharing personal stories and images on social media. In this way, it is possible to observe the establishment of a collective identity but, more than this, the above quote demonstrates how these social actors orchestrate connective action (Bennett and Segerberg 2012), which allows for greater reach and impact.

(b) **Online and offline connections:** The Maré Vive collective goes beyond posting content on social media. They frequently promote offline cultural and educational events. In this sense, Maré Vive connects with many other collectives within Favela da Maré as well as other favelas, illustrated by this post from 30 May 2017:

People who are interested in technology issues, check this out: How about us getting together to learn how to plan and to install a network to gain access to the internet? We are having a workshop about this between July 3rd and 7th, in Maré. It will take 5 days and we will offer transport and food so that people can work together and learn about free networks. You don't have to know much, you just need to be willing to learn and to work. To learn more, access the project's website and register here: https://redemare.wordpress.com/formulario/ Spread the news because we only have 15 spots, 5 of them are reserved for residents of Maré. Come along! #NósporNó #FavelaSempre. (Maré Vive 2017c)

All these represent plural and diverse initiatives that seem to be in tune with the concept of media territories (Tosoni and Tarantino 2013). In this way, it is possible to put an emphasis on how the borders between online and offline are fluid. In this context, the favela media activists are particularly skilled in terms of moving between multiple and complex media territories, which include social media, obviously, but also community workshops, events, and meetings.

(c) **Favela digital activism as urban infrastructure:** As in our face-to-face encounters with activists, Maré Vive publishes regular real-time updates when the police carry out operations in the favela. Consequently, residents often describe their habit of checking the page every time they leave or return home. This is their way to ensure that they stay safe, avoiding the areas where there are shootings. Indeed, these constant updates generate an intense engagement by residents who respond promptly to the page's call outs for more information. Usually, the page asks its users: Shall we communicate? It is therefore possible to observe the ways that Maré Vive acts as a form of urban communication infrastructure, offering help and support for residents when they want to avoid conflict areas. In other words, the page becomes a resource for everyday life survival.

Maré Vive as an Urban (Survival) Infrastructure

This section discusses the ways in which favela digital activism (and, particularly, Maré Vive) can be understood as forms of urban communication infrastructure. In order to achieve this, we are guided by Christine Hine

(2005) on the importance of identifying the most impactful key themes and events. Secondly, on a monthly basis, we analyzed the four posts that generated the highest number of reactions. When doing this, we observed that the posts that covered police operations tended to attract the largest number of reactions, shares, and comments.[14] Based on our observations and research, we discuss what a typical police operation day is like in Favela da Maré, from the perspective of the Maré Vive page. We then chose one date—27 November 2017—a Monday.

We will discuss here the first post published on this date. Due to space limitations, we present a small number of screen captures, which identify the frequency in which the page produced content on a typical day of police operation in the favela. We noticed that the page produced ten posts in a period of ten hours. The gap between posts was 41 minutes (fastest) and 1 hour and 38 minutes (slowest), which illustrates the fast timing adopted by Maré Vive during these days. The post receiving the largest number of reactions was published at 10:33 p.m. It consisted of an image of a motorcycle on fire followed by a text, which questioned the irresponsibility and brutality of police actions: By setting a vehicle on fire, rather than just towing it, the police put lives at risk. The publication with the smallest number of reactions was the last post published on that date. It just contained a short text that said: "the operation is over".[15]

Table 1 shows the frequency of publications on the Maré Vive page about the police operation on 27 November (captured on the following day—28 November 2017, 11:30 p.m.)

Post published at 05:17 a.m.—first post on 27 November 2017 (see the translation below)

> Attention! Be very careful! We received information about a police vehicle between Parque União, Rubens Vaz and Nova Holanda. Is this true? Let's communicate. #marevive #Livesinthefavelasmatter #notonesinglerightless. (Maré Vive 2017d)

> What stands out at first is the great degree of familiarity with the Maré Complex, the use of abbreviations that refer to the different areas of Maré, such as NH (Nova Holanda), RV (Rubens Vaz) and PU (Parque União). This language reveals the extent to which digital activism and popular (working class) communication are intertwined. In his Ph.D. thesis, Leonardo Custódio mentions the Popular School of Critical Communication (Escola Popular de Comunicação Crítica—ESPOCC) as an example. One of the school's objectives was to experiment with the language of popular

Table 1 Maré Vive page frequency of publications about police operation

Time gap	Time of post	Reactions	Comments	Shares	Links
0	05:17	726	150	150	https://www.facebook.com/Marevive/posts/1588453304523449
1 h11	06:28	545	110	26	https://www.facebook.com/Marevive/posts/1588523654516414
1 h02	07:32	744	79	99	https://www.facebook.com/Marevive/photos/a.657112800990842.1073741829.656366417732147/1588574494511330/?type=3
1 h08	08:40	422	34	21	https://www.facebook.com/Marevive/posts/1588638594504920
56 m	09:36	370	55	17	https://www.facebook.com/Marevive/posts/1588690561166390
57 m	10:33	1,4mil	126	346	https://www.facebook.com/Marevive/photos/a.657038790998243.1073741828.656366417732147/1588748084493971/?type=3
41 m	11:14	233	39	0	https://www.facebook.com/Marevive/posts/1588797241155722
1 h38	12:52	323	57	2	https://www.facebook.com/Marevive/posts/1588907821144664
1 h12	14:40	431	89	26	https://www.facebook.com/Marevive/posts/1589032884465491
1 h19	16:59	201	21	0	https://www.facebook.com/Marevive/posts/1589179574450822
Total		**5385**	**760**	**588**	

communication as a tool for critical thinking and social transformation. Drawing on such language, residents of favelas and peripheral areas challenge the dominant representations, telling their stories, identifying and facing some of their challenges in terms of communicating with wider publics (Custódio 2016, 151–152). Here, there are two substantial challenges: The first one is social in character as it relates to the issue of police brutality, whilst the second one is spatial in character, deriving from the vast spatial dimensions of the Maré Complex, with all its 17 areas. In order to tackle such challenges, Maré Vive demonstrates competence when employing two key phrases in its posts—"is that right"?—to attest the truth of the information published and let's communicate.

Additionally, the page frequently uses the hashtags #favelasempre (favela always) and #vidasnafavelaimportam (favela lives matter), which illustrate the collaboration that it frequently establishes with other favela digital activism collectives as well as their online and offline connections, as discussed above. The latter also represents a Brazilian version of the #blacklivesmatter hashtag, employed by the black lives matter movement. In addition to the posts, we also analyzed some of the comments published throughout that day on the Maré Vive. These illustrate two main issues: The ways in which a process of militarization manifests in the everyday lives of residents, and the ways in which they use the page as an urban infrastructure resource and as a survival tool in an oppressive context.

Comments by Maré Vive's users on 27 November 2017 (collected at 11:45 p.m. on the day after the operation—28 November 2017—translation into English below)

"PU is silent. At 5.30 a.m., they were inspecting people on Roberto Silveira street, close to the square."

"They were here on Brasília Street. They just went up the building where I live. They turned the door latch but they didn't ring the bell."

"It's very silent on João Araújo Street and this is weird."

"Very silent on the street where I live. I only hear the dogs barking."

"Good morning, I hope??? This always happens when kids have exams at school. My daughter studied so much for it, and now she will need to miss her test. What can I do? Just sit down and wait and let them know that I will be late for work."

"Very unfortunate" (Maré Vive's reply to the comment above)

"Here is RV, lots of shootings, I was going to take a shower and go to school, OMG"

"Take a shower but wait, right?" (Maré Vive's reply to the comment above)

"This is so sad, I went to pick up my daughter at her grandmother's house, and they almost shot me, this is really sad."

"Be extra careful. When things are like this, don't go out, and wait."

In terms of what we mean by the term "militarization", it refers to the employment of military tactics, concepts, procedures, and personnel, assigning a military character to everyday issues (Valente 2014, 211). The idea is to treat favelas as enemy territories, and to criminalize their entire population, particularly favela's black youth. In this way, the deaths of favela residents that occur when the police operations take place are considered acceptable "collateral damage" during the so-called war on drugs. It is impossible to remain indifferent to the comments published, in real time, on Maré Vive's page, during police operation days. Residents check the page regularly and, based on the posts and comments, decide whether they can risk leaving their houses or not. As a result, children simply cannot go to school, or they have their classes cancelled, which affects their learning. Mothers who are head of their households cannot go to work, which might reduce their income and affect their ability to earn a living. Importantly, all these take place in a context of significant economic and social vulnerability.

Let us now return to our previous discussion on urban media. Authors such as Georgiou, Motta, and Livingstone (2016) have demonstrated the ways in which communication infrastructures, such as Wi-Fi hotspots, are incorporated into urban planning and city growth. Alessandro Aurigi and Fiorella De Cindio (2008), for instance, refer to the spaces of contemporary cities as augmented spaces that acquire new meanings with digital technologies. Our research with the page Maré Vive demonstrated this in very overt ways: Roberto Silveira, Brasília, João Araújo, one by one, each street, each corner, each physical space in Maré is "augmented" and transported to cyberspace via social media as each resident alerts other residents so that they can protect themselves. Here, we can return to McLuhan's (1967) old concept that the medium is the message. Similarly, in Maré, if the streets represent forms of media, due to their communicative properties, the media (social media in this specific case) also represent forms of virtual streets that residents can either navigate through or avoid for purposes of survival and protection.

Concluding Thoughts

Our research provides clues about the ways in which the phenomenon of favela digital activism has had significant reach, impact, and achievements. As the favela activists suggested, Maré Vive represents a meeting point where residents can share the pain and anguish of living a militarized daily life, their memories of loved ones, but also, they can share the joys of remembering what it was like to play in the rain as a child. Other significant achievements include sharing personalized stories, engaging in connective action (Bennett and Segerberg 2012) with other activist groups and moving through various online and offline media territories (Tosoni and Tarantino 2013).

It also highlights important issues of representation. The non-government organization Catalytic Communities conducted a study, which provides us with relevant data in terms of the representations of favelas in the international media. According to this report, favela residents were directly quoted in 112 articles (out of 315, or 36%) in 2015–2016, and in only 7 articles (out of 45, or 16%) in 2008–2009, marking a 16-fold increase in visibility for favela voices (Catalytic Communities 2016, 10). Clearly, this was because Brazil was in the media spotlight for hosting two mega-events, the 2014 World Cup and the 2016 Olympics. At the same time, there were considerable gains in terms of visibility for favela perspectives and our research indicates that favela digital activism played a key role in this process.

The main issue revolves around visibility. If favela digital activism seeks visibility, what happens after achieving such visibility? In addition, what are the possibilities of favela digital activism, particularly in the context of the high commercialization of social media whereby platforms, such as Facebook, profit by selling users' digital behavior and digital traces to advertisers? As urban communication infrastructures, initiatives such as Maré Vive represent meeting points, where we can think of alternatives in terms of media representations of favela residents, greater incorporation of favela voices, and the development of more responsible public safety policies. Indeed, the state must provide assurance rather than violate rights.

Notes

1. Presenting a beehive-like appearance, the favelas are usually densely populated and located on hilly unstable areas, impoverished areas, or on the outskirts of a city. From a distance, they look like an undistinguishable mass of brick-colored small boxes, built on top of each other. However, the favelas are heterogeneous environments with significant social, economic, and demographic differences from favela to favela, neighborhood to neighborhood, zone to zone, city to city.

2. The license for most commercial qualitative coding software, such as NVIVO, is expensive and it has been challenging to have them installed at the university labs. For future projects, we are searching for free and open source software.

3. Here is worth noting that research reports with statistics of favela residents' consumption and living standards are rare. Usually, they are produced by NGOs devoted to working with favela residents such as Observatório da Favela. Therefore, given the lack of research, some of statistics may not be up-to-date.

4. The forthcoming book *The Media Urban Companion*, edited by Zlatan Krajina and Deborah Stevenson will offer a welcome contribution in this sense. The book will be published in 2019 by Routledge.

5. Fictitious name to preserve the activist's anonymity and protect his privacy and security.

6. For more information on Maré Vive, please visit the website: www.facebook.com/Marevive and @Marevive.

7. Maré Vive also has a twitter account (https://twitter.com/MareVive), with 3529 followers, and an Instagram profile @Marevive, with 9913 followers, as of the time of writing.

8. Another fictitious name to preserve the activist's anonymity and protect his privacy and security.

9. Here, it is worth clarifying that providing detailed definitions of both "community media" and "community" is beyond the scope of this chapter.

10. Sem Terra are areas within Complexo da Maré.

11. This was true until 14 March 2018 when Marielle Franco, a city councilor, human rights advocate, and former resident of Maré, was brutally murdered in Rio de Janeiro. Right after the murder, Maré Vive replaced Dona Orosina's photo with a silhouette of Marielle's face in honor of her. The crime remains unsolved.

12. The pink flower reaction was made available temporarily on Facebook in 2015.

13. When including comments from users of the page, we chose to not disclose their names for ethical purposes.

14. Examples of posts that address this theme can be found on the following dates: 19 January 2017, 23 February 2017, 17 March 2017, 30 March 2017, and 02 April 2017.
15. As we do not have the space to include all screen captures, we included links on this table so that this content can be easily accessed.

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Jiujitsu Moves, Radio Bemba, and Other Transmedia Practices: Social Movement Strategies Counter Statist Media Power

Diana Coryat

Introduction

How can a social movement do battle on a mediated playing field with a government that holds vast amounts of media power? This is an issue that contemporary social movements are increasingly confronting. In the first decade of the twenty-first century, there was a great deal of excitement about the expanded opportunities for social movements such as Occupy, and the uprisings associated with the Arab Spring, to communicate via social media platforms at local, national, and international levels. However, while governments appeared to lag several steps behind these movements in terms of their agility in making use of new digital technologies, they quickly caught up. Now, governments and social movements alike engage transmedia strategies to make visible their perspectives, and to engage in mediated battles with each other. A focus on transmedia strategies—the

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use of a diverse array of media platforms—is crucial.[1] While *social media* platforms can permit direct, unfiltered access to citizens, the use of mass media and broadcast media are still vitally important. This is particularly true in Latin America, where Internet access greatly varies. This means that the playing field is still quite unequal, as governments command much more mediated space and attention in print and broadcast media.

This chapter argues that a mediated lens that considers transmedia strategies is a necessary element in examining state-social movement relations in the twenty-first century. It proposes a conceptual framework to comprehend its dynamic tensions. While this argument can be generalized, it focuses on a case study of a mediated battle between the Ecuadorian government and Yasunidos, a social movement that confronted the government's neo-extractivist discourses and practices with innovative digital, broadcast, and performative strategies.

The emergence of Yasunidos in August 2013 marked a new era in Ecuador in terms of how the government and social movements engaged in mediated disputes. This was due to a confluence of several factors: one of the most determinant was that the Ecuadorian government greatly expanded media power, which dramatically increased with Rafael Correa's presidency beginning in 2007. The Correa government boosted its media power in several ways: it increased the amount of media outlets it owned; it produced media programs and publicity across media platforms; and it silenced journalists and media outlets through threats, intimidation, delegitimation, and legal actions. It also took over or closed private media; and established ministries that surveilled and sanctioned journalists and media organizations. The government also used its media power to try to delegitimize and criminalize social movements. All these strategies dovetailed with other policies and actions that led to not only a decrease in communication rights and media democracy, but a decrease in democratic practices overall. Indeed, this was the context in which the mediated battle between the government and Yasunidos took place.

This chapter seeks to contribute to scholarship on social movements and their mediated practices, which are often undertheorized, or not considered in state-social movement analyses. It is based on a two-year ethnography that included extensive media and visual analysis and in-depth interviews with social movement actors. My data collection, research, and field work commenced on August 15, 2013, and continued for a full year. During the second year, through December 2015, I carried out 30 in-depth interviews with members of Yasunidos, political analysts, and journalists.

Background Context: The Emergence of a New Social Movement

On August 15, 2013, then Ecuadorian President Correa announced that he would terminate one of the most popular programs of his presidency, the Yasuní ITT initiative.[2] This groundbreaking initiative, which had been developed by local ecologists and adopted by his newly elected government in 2007, pledged to keep the "oil in the soil" deep in the Amazon, in the most biodiverse place on earth. Upon learning of its demise, Ecuadorians expressed their disillusionment and outrage.[3] The Yasuní ITT initiative was the first of its kind globally, just as Ecuador's constitutional pledge to respect the rights of Nature was also groundbreaking. The initiative protected Indigenous lives, including uncontacted *pueblos* (nomadic groups that have resisted contact and colonization) and marked a step toward global redistributive justice, given that countries of the global North were to provide monetary compensation to the Ecuadorian government to keep the oil underground.[4]

The government's reversal of its decision was not a surprise to those paying close attention, such as environmental activists, who were acutely aware of the many inconsistencies between rhetoric and practice regarding the Yasuní and other cases since the early days of Correa's presidency. The resolve to drill for oil in a beloved national treasure was consistent with Ecuador's, and other Latin American governments' "commodities consensus," the neo-extractivist practices that have been a constituent aspect of the economic and political-ideological order of the progressive governments (Svampa 2013, 117).[5] As Daza, Hoetmer, and Vargas (2012) have argued, twenty-first-century social movements confronted a reconfigured political landscape, which included a new adversary, the so-called progressive governments that had pledged to change the rentist model, but rather deepened their extractive practices. Moreover, some of them, including Ecuador, had passed legislation, including a new penal code, that repressed, controlled, and criminalized resistance.

After a few days of peaceful demonstrations across Ecuador, a new social movement powerfully and unexpectedly came onto the political scene, aptly called Yasunidos.[6] While its demands and practices resonated with people of all ages, regions, and ethno-racial groups, Yasunidos was quickly viewed as an urban youth movement[7] because of the number of young people that became involved. It would passionately lead a nationwide effort to save the Yasuní from oil extraction over the next several

months. Yasunidos chapters sprung up independently in many towns and cities across Ecuador. Given its rhizomatic nature, it was difficult to estimate exactly how many people were involved in Yasunidos. The Yasunidos chapter in Quito was the most visible, given its location in the nation's capital where national protests took place, among other factors.

The 2008 Ecuadorian Constitution contained a mechanism that enabled Yasunidos to engage in direct democracy and organize toward a national referendum.[8] This was an ambitious undertaking given that it had just formed a few days earlier. In order to bring the issue of the Yasuní to a national vote, Yasunidos would need to collect a minimum of 583,324 signatures (5% of the electorate at that time). The question they posed was "Do you agree that the Ecuadorian government should indefinitely leave the crude oil in the ground in the ITT, known as block 43?"

At the core of this mediated battle was a struggle over the meaning of development. In Ecuador, the concept *Buen Vivir* or *Sumak Kawsay* in the Indigenous Kichwa language (literally, good living), was integrated into the 2008 Ecuadorian Constitution. It pointed to sustainable, non-capitalist models of development in which living beings and the natural environment should take precedence over material wealth (Acosta 2012). However, the government deployed the concepts of development and *Buen Vivir* in the service of extractivist projects, with promises that extraction would bring material wealth to the Amazon.

The six-month process of signature-gathering became a powerful act of direct democracy. The entire country was focused on Yasunidos and their allies as they occupied plazas and streets across Ecuador to collect signatures. The process kept Yasunidos and the Yasuní in the public eye and in the media for a period of time far greater than the relatively brief period of many street protests.

The government did everything in its power to hamper the process, and eventually derailed it completely by eliminating over 60% of the signatures that were delivered to the Consejo Nacional Electoral (CNE). The unequivocally partisan Election Board, in a process that lacked transparency, validated just 359,761 out of the 757,623 signatures gathered).[9] While this paved the way for oil drilling, the direct democratic process was a defining moment in Ecuadorian politics. Its attempt to justify the decision to exploit the Yasuní, coupled with efforts to delegitimize and criminalize Yasunidos, precipitated a series of political losses for the government in the following months and years.[10]

While that initial struggle did not result in stopping the government from its plans, Yasunidos became a key actor in the *post* "left turn," anti-extractive protest movements that sought to keep progressive governments accountable to their pledges. Hence, it is crucial that we analyze the mediated battle that took place, and the ways in which Yasunidos was successful. While Yasunidos has remained active since its inception, this chapter focuses on the mediated strategies that Yasunidos employed during its first year, specifically during the signature-collection process. An analysis of statist media strategies and movement counter-strategies.

Theoretical Frameworks: Statist Media Power and Mediated Cultural Politics

A communicational lens can illuminate contemporary state-social movement conflicts in ways that are often overlooked in studies where a media analysis is absent. This chapter utilizes the conceptual frameworks of statist media power and mediated cultural politics in order to foreground the mediated and transmedia processes that shaped the conflict about the future of the Yasuní.

The notion of statist media power expands on Couldry's (2003) notion of media power as symbolic and material resources that, taken together, have *definitional* power to shape the whole of social space. It refers to the power to construct a version of reality using symbolic and material resources at the state's disposal. It is a multilevel, multi-modal, dynamic process that involves the mediation of symbols, images, rituals, and discursive constructions of state and non-state actors. Statist media power is part of a "package" of various kinds of statist capital (political, economic, legislative, judicial, and communicational), which increases its potency. Therefore, it is unlike the media power of news media, social movement media, or other forms of mediated communication.

Of course, media power is not as "predictable, solid, or immoveable" as advocates of the propaganda model would argue (Freedman 2014, 117). But, how can we account for challenges and resistance that weakens and destabilizes statist media power? I propose that the concept of mediated cultural politics can help us to perceive of instances in which social movements powerfully deploy alternative conceptualizations that are contrary to hegemonic notions being advanced by statist media power. Mediated cultural politics refers to movement practices that interrupt

dominant meanings, values, and discourses, which are then amplified when they circulate across multiple media platforms. The notion fuses two distinct concepts that of cultural politics as theorized by Alvarez et al. (1998), which brings attention to "how social movements operate at the interface of culture and politics" (1998, xi). Secondly, I draw on Jesus Martín-Barbero's understanding of mediation as socio-cultural manifestations that traverse and give meaning to the process of communication. A focus on mediation displaces a restrictive focus on the media and rather focuses on social actors and processes that shape meanings and social imaginaries. Scholars such as John Downing (2000) have been emphasizing diverse forms of mediation for decades.

STATIST POWER AND MEDIATED DELEGITIMIZATION OF YASUNIDOS

When the government announced its plans to drill for oil in the Yasuní, it met with massive public outcry, and sought to justify its actions. Given its statist media power, it had many ways to carry out a mediated strategy in order to influence public opinion. One of the most important platforms it had was the Sabatina, a weekly, four-hour program hosted by Correa, and broadcast each week on national television, radio, and Internet platforms.[11] It was the mediated space *par excellence* that the government used to communicate directly with the public.

Prior to 2007, private media had more power to shape the national agenda and public opinion. But with the reconfiguration of media power, and the introduction of the Sabatina, the Correa government could speak directly to Ecuadorians, thereby shaping the media agenda. This kind of program was unprecedented in Ecuador. Each week, the Sabatina travelled to a different towns or city in Ecuador and even internationally when Correa was travelling. It covered wide-ranging themes of national interest. The main speaker was the president, which embued it with newsworthiness. It was *de rigeur* for journalists and government ministries alike to watch the show to learn of the latest announcements. Its ritualized nature; its celebration of national popular culture, the diverse regions it featured each week, its entertainment value, and the accompanying itinerant ministries, brought Ecuadorian citizens into direct contact with government officials and the president himself, in regions where most governments had never gone before. Correa would discuss each day of the

past week, detailing his activities, giving an appearance of government transparency. Initially, the Sabatina was quite popular due to its unprecedented nature, but many Ecuadorian citizens eventually tired of its campaigns of delegitimization against journalists and social movements, as well as its obviously high cost of production (the government never provided actual figures about its cost).

Another aspect of the Sabatina was Correa's lengthy and virulent attacks on his perceived enemies. These opponents were anyone who criticized him, especially other political parties, journalists, and the private news media. Of course, social movements that had not been coopted by the government were included in this group. After the change of plans regarding the Yasuní, Correa began to spend a great deal of airtime justifying extractive mega-projects, seeking to convince citizens of their merit, and mocking the ecologist movement and their aims. Yasunidos became one of the government's many targets. Although he rarely mentioned them by name, the young activists were consistently framed as naïve, irresponsible, hypocritical, and manipulated by national and foreign political actors. The closer that Yasunidos got to their goal of collecting over 500,000 signatures, the more virulent the attacks became. Once they surpassed their signature-collection goals, Yasunidos was accused of defrauding the Ecuadorian people.

Correa also frequently sought to demonstrate that he had support from the Amazon. For example, during Sabatina No. 337, a video was shown in which several Amazonian mayors declared their support for the exploitation of the Yasuní (these mayors would all lose electoral races several months later). The video also insisted that exploitation would not greatly impact the Yasuní, and it attacked the urban middle class for not understanding the importance of resource extraction for the Amazon. In another instance, on Sabatina #341, on September 28, 2013, Correa attacked ecologists while discussing the benefits of a hydroelectric project. This is a representative example of how he frequently sought to delegitimize them:

> If we condemn everyone to live like Tarzan, we wouldn't have roads, universities with grants in the exterior, hospitals. In other words, the real *Buen Vivir* [good living] increases options. But they (ecologists, Yasunidos) would condemn us to slavery. Ask these neo-ecologists how many of them took cold showers this morning. When they want to condemn us to poverty they take our freedom. On the contrary, when one can live with basic

services, those that want to, like these people, can live in the jungle. You shouldn't pay any attention to these people. (Correa 2013)

For Yasunidos, the ongoing situation of being thrust into the limelight, not only due to its six-month-long campaign to collect signatures but also because it was insulted or made fun of by the president on a weekly basis, proved to be a double-edged sword. While the media attention presented excellent opportunities for national visibility, it also presented formidable challenges. This new movement of young people, most of whom had little to no political *or* media experience, had to quickly learn how to respond to the frequency and number of attacks. Like other contemporary movements, Yasunidos juggled a plethora of transmedia strategies, which are analyzed in the following section.

MEDIATED CULTURAL POLITICS AND TRANSMEDIA STRATEGIES

The study of mediated cultural politics entails a multi-layered, transdisciplinary investigation into the creation and circulation of diverse media and art, and the use of public space by movement actors. It is attentive to ways in which a movement mobilizes counter-hegemonic images, discourses, and perspectives, and the way online and offline interactions shape collective imaginaries. Yasunidos disrupted the dominant narratives deployed by the government about development, extractivism, and the movement itself in three interrelated ways: (1) it led a six-month campaign on streets and plazas across the nation, to gather over a half million signatures of Ecuadorian citizens in order to have the legal right to call for a national referendum on the future of the Yasuni; (2) it circulated documentation of artistic and performative practices that depicted a healthy future free of extractivism, thereby communicating post-development imaginaries across multiple media platforms[12]; and (3) Yasunidos engaged in bold, multifaceted, transmedia strategies that brought it into direct confrontation with the President and the government's powerful media apparatus. This chapter focuses on the transmedia strategies (see Coryat 2015, 2018 for an analysis of the first two strategies).

Developing a Communication Strategy

Given the enormous task of confronting statist media power, various members of the collective dedicated time and energy to crafting the movement's communication strategy. They knew that they had to act swiftly and wisely to counter the mediated insults and attacks. Compared to the government, Yasunidos had few resources. One member of Yasunidos did have experience as editor of an ecologist website, but most of the members had little to no experience relating to the media.

> We did not have a clear path for where we wanted to go. We did not have previous experience in relation to spokespeople. Many of the people that acted as spokespeople during the whole time period, started with the collective in the first press conferences. Their first brush with the press was with a tape recorder, a camera. I am talking about young women of 17 or 18 years old. Ten young people of 17 or 18, that for the first time, faced a television camera as spokespeople for a collective that didn't even know where it was headed. I had worked for some newspapers but I found myself in a much larger communicational scenario, in which the link with private media turned out to be fundamental in terms of proposing all that we would go on to propose. (Yasunidos member, personal communication, May 7, 2015)

To help craft its strategies, Yasunidos reached out to experienced, allied media analysts for advice and training. Public opinion polls also provided Yasunidos with polling data about how the public perceived of the movement, and whether or not they approved of its actions.

Yasunidos' communication remained singularly focused on the issues, without personalizing the conflict by attacking President Correa or other members of the government. One Yasunidos member describes the conscious decision to focus on issues, not attack the President:

> Many political actors would have loved for Yasunidos to attack the President but we wanted to criticize a development model that impoverishes, that contaminates and that eliminates not only the forests but also the populations that depend on them to exist. (Yasunidos member, personal communication, May 7, 2015)

This tactic was, in fact, quite different than the way in which the government communicated, which did personalize issues and attack individuals and organizations related to the movement.

Social Media Presence

Yasunidos quickly launched a website and a Facebook page to explain who it was, what it stood for, to answer commonly asked questions, and disseminate information about upcoming events and actions. The website also contained pertinent reports about extractivism and sustainable alternatives. Having the ability to self-represent allowed Yasunidos to articulate a common ground of struggle among diverse sectors of society. A member of Yasunidos describes some of its transmedia practices:

> One of our main strengths was obviously Facebook. Many people were there, and I think that it was our principal communication channel that legitimated our position, because we did not have resources to pay for television. Well, also [important] was the print media. We gained the respect of the [private] media and they gave us a lot of space. They would attend our press conferences – they even applauded. And they interviewed us all the time. (Yasunidos member, personal communication, March 12, 2015)

Instead of a televised signature campaign, Yasunidos spread the word through posters that said *Yasuní, yo firmo por ti* (Yasuní, I sign for you). Many people took photos of themselves with signs, which were then circulated on social media platforms.

Given that Internet access is not universal in Ecuador, nor do all those who access the Internet use it to listen to online radio or read political analyses, Yasunidos' reach via the Internet was limited (Instituto Nacional de Estadísticas y Censos INEC 2013).[13] So, in addition to constructing its own media representations, and making use of other alternative media (mostly other people's social media sites and blogs; online radio, digital magazines; posting video on YouTube), these strategies were not the most significant ways in which it was able to build visibility. Yasunidos also needed to work with private media outlets.

Yasunidos and the Private Media

The favorable coverage that Yasunidos received from private media was due, in part, to these outlets' interest in highlighting opposition to government policies. Since 2007, the Correa government and the private media had a highly conflictive relationship. In fact, Correa often framed private media outlets and journalists as political opponents (Cerbino et al. 2016). This combative context benefited Yasunidos, given that print and

broadcast media remain the most significant sources of visibility in Ecuador. Yasunidos' strategy included giving radio and newspaper interviews, often doing several interviews a day for a variety of different outlets. Members of Yasunidos discussed media coverage:

> Yes, for the [private] media, it was also a way for them to express their bad feelings, I believe, and to support a struggle that is so legitimate, so morally strong a theme as Yasunidos, so they said, let's open this space….a space in which a movement is so forcefully questioning Correa. (Yasunidos member, personal communication, April 30, 2015)

Yasunidos' transmedia strategies also included emotionally charged press-conferences. They were favorably covered by private media.

The "Jiujitsu Strategy"

The collective inadvertently discovered a way to gain more visibility and favorable public opinion. Yasunidos eventually realized that its greatest source of support stemmed from people's negative reactions to the President's virulent attacks leveled against it on the Sabatina, because of the amount of calls it would receive on Monday. Callers would inquire where they could sign or offered to help gather signatures. Yasunidos began to use this to its advantage, planning actions later in the week so that Correa would react on Saturday. A member referred to it a "jiujitsu strategy" in which Yasunidos leveraged the strength of its "enemy."

> The collective does not have economic resources; it can't pay for campaigns in social media, it can't deploy *cadenas nacionales* (obligatory national broadcasts produced by the government) to delegitimize other political actors in the national political scenario, and we wouldn't want to anyway. But we did use other strategies. There is a practice in Jiujitsu, the martial art, in which you use the power of your enemy. The first time that the President attacked Yasunidos (on the Sabatina), it was totally unexpected, but it was impactful. He referred to Yasunidos as liars that are collecting signatures …. and the next day we collected so many more signatures than we generally did, because people were mad. So, the President would attack us, and we would use all of that visceral energy in our favor, and get him to speak about themes that we wanted to position. (Yasunidos member, personal communication, May 7, 2015)

With Correa reacting to the actions of Yasunidos, the collective was able to put the government on the offensive.

There were other factors that made it difficult for the government to convince Ecuadorian citizens that its policy reversal was justified. From 2007 to 2013 it positioned the Yasuni ITT initiative as one of its major achievements. Because of the Initiative, the government was heralded as an innovative leader seeking alternatives to resource extraction. These antecedents made it next to impossible for it to backtrack and led Yasunidos to say that Correa himself was its greatest publicist.

Moreover, public opinion polls showed that citizens were in favor of preserving the Yasuní,[14] and moreover, they were attracted to the youthful Yasunidos, a new subjectivity without a political past that fought for the Yasuní, and for a healthier future for Ecuador. Indeed, opinion polls revealed that 72% of Ecuadorians wanted to be consulted about the Yasuní (Perfiles de Opinión 2014). This polling data revealed the limitations of statist media power. All the millions of media dollars spent to discredit Yasunidos ultimately failed to reap the hoped-for results, which was to turn public opinion against Yasunidos and its anti-extractive messages.

Radio Bemba and Street Presence

Yasunidos' communication strategies were not limited to mediation. In fact, it could not have been as successful as it was without daily, on-the-ground organizing. And then there was the, leveraging the family, which is still a dominant feature of Ecuador's social structure. A Yasunidos member explains:

> The work was much more that of worker ants, and I think it is more about the information that people received, and how people communicated that information to their closest circle. It is what I always said to people. They would ask where they could sign, and what could they do, and I would always say that the most important thing they could do would be to convince their whole family and friends, tell them what is happening, and convince them to talk to their friends and family….or as they say, *radio bemba* (word of mouth), and convincing people like that is the work of ants, and that is what made the signature campaign successful. We didn't have television campaigns asking for people's signatures. (Yasunidos member, personal communication, April 30, 2015)

The future of the Yasuní was part of the dinner conversations in households throughout Ecuador, which by movement standards was a real triumph. Taken together, these emblematic, transmedia practices brought Yasunidos visibility, legitimacy, and also signaled new movement repertoires in Ecuador. Yasunidos became an important political actor in Ecuador and remains so to the time of writing. Alberto Acosta, an ecologist, scholar, and one of the original architects of Yasuní ITT, analyzed the contributions of Yasunidos:

> The emergence of Yasunidos was very important for many reasons: in the first place because it gathers the experience and accumulated history of resistance and the construction of alternative proposals. Secondly, because it confronts power and uncovers the lies. And in the third place, and I find this really important, it is able to resonate widely with the Ecuadorian society. It isn't just the people in rural areas, it isn't just those who were affected by Chevron-Texaco, but also people who have not directly been affected by extractivism, and I find this significant. Moreover, it opens the door toward the creation of a strong movement using the arguments of the government and tools of the Constitution, in trying to build another form of democracy, another way to do politics, and this is the great legacy of Yasunidos. (Acosta 2015)

Indeed, Yasunidos provided a powerful, fresh, and courageous stand against planned extractive practices in the Yasuní. Its movement practices helped reinvigorate practices of democracy and citizen participation, at a moment in which participatory democracy was at a very low point in Ecuador.

Concluding Remarks

This chapter seeks to contribute to the growing attention being paid to media power and mediated cultural politics in order to foreground the mediated and transmedia processes that shaped the conflict about the future of the Yasuní.

The notion of statist media power expands on Couldry's (2003) notion of media power as field. Although the government used its full arsenal of statist power and statist media power to promote resource extraction while delegitimizing its opponents, it was not able to stifle activism, dissent, or the post-development imaginaries that continue to circulate to this day. Certainly, we could not fully understand what transpired during that time

period without taking into account processes of mediation, on the part of the government, and on the part of Yasunidos.

This chapter also explored the limitations of statist media power. As Freedman has argued, media power is "open to challenge, particularly when their frames don't match experiences or aspirations" of its consumers (2014, 19). The idea that oil-drilling brings wealth to the Amazon region did not match Ecuador's decades-long experience as a petrol state, in which the financial resources generated from extractive practices clearly did not benefit the Amazon region. Even more dissonant, the government's vision of development did not match its own previously stated vision. In the case of Yasunidos, cynicism only increased once the government introduced the changes, and with them, a media campaign that sought to convince about the positive aspects of drilling for oil.

The mediated cultural politics framework presented herein helped make visible the underside of media power. Yasunidos constructed counter-hegemonic representations from below that resonated widely with diverse publics. Working in tandem, the two conceptual lenses, statist media power and mediated cultural politics can elucidate how Yasunidos, with no substantive media power of its own, was able to interrupt hegemonic meanings of development that were powerfully deployed through statist media. I contend that Yasunidos' mediated cultural politics has been able to re-signify not just development, but also democracy and citizen participation.

This study of Yasunidos is relevant to activists and scholars who are seeking to analyze social movement use of transmedia strategies to contest hegemonic logics. Of course, it is essential to underscore that mediated practices alone would not have been sufficient to widely affect public opinion. The social impact was anchored in Yasunidos' nationwide, six-month signature-collection process which entailed prolonged occupation of public space and on-the-ground organizing. Indeed, one must take a long view of the movement against extractivism to understand its wins and losses.

The Yasunidos case makes visible the rising tensions between the progressive Latin American governments and the social movements that are resisting large-scale extractivist projects across the Americas. The battle over the Yasuní was a significant turning point in anti-extractive resistance not only in Ecuador, but in the Americas. Yasunidos, and many

other collectives and movement, are still seeking to bring an end to oil extraction, mega-mining, and other forms of extractivism.

Notes

1. Costanza-Chock (2014) coined the phrase transmedia mobilization to refer to the range and layering of media practices and communication platforms used by activists.
2. ITT refers to oil blocks Ishpingo, Tambococha, and Tiputini, named after rivers in the Yasuní.
3. Opinion polls conducted right after the decision showed that approximately 80% of Ecuadorians thought that the oil should remain in the ground.
4. See Le Quang (2016) and Martin (2011) for excellent analyses about the Yasuni ITT initiative.
5. In 2013, those who fell under this denomination were Argentina, Brazil, Bolivia, Ecuador, Uruguay, and Venezuela. This is a problem that goes beyond left-leaning governments; with most Latin American governments concessioning vast territories for resource extraction.
6. Yasunidos can be read as together for the Yasuní (Yas and *unidos*). In addition to the name of a movement, the related verb, yasunizar (yasunize), has been a way to call people defend territories and the rights of Nature.
7. It was also seen in some parts of Ecuador (in particular Quito, the capital city) as a largely middle-class, mestizo movement.
8. Article 104 of the 2008 Constitution stated that Ecuadorian citizens could call for a popular referendum on any significant issue. After this conflict, the government amended the article so that proposals could only come from government institutions.
9. An academic study concluded that Yasunidos delivered between 667,334 and 680,339 valid signatures, and that the chances that the number was less than the minimum required by law was almost equal to zero (Vázquez 2015). See this study for a detailed accounting of the multiple ways in which the government tried to damage the process.
10. See Coryat (2015) for a more detailed analysis of this story.
11. When Lenin Moreno because president after Correa's two terms, he immediately discontinued the *Sabatina*, probably given its high cost as well as its decrease in popularity.
12. I follow Escobar (2014), who defines "post-development" as social practices and discourses that displace normative conceptions of development, in order to identify alternatives to development.

13. In 2013, when Yasunidos first became active, 40.4% of the Ecuadorian population used the Internet in the last 12 months, with 47.6% in urban populations and 25.3% in rural areas (INEC 2013, 14).

14. Of those polled, 66.3% said they favored preserving the Initiative even if sufficient funds were not raised. For more information, please visit the website: www.eluniverso.com/2013/08/16/infografia/1295011/encuesta-sobre-iniciativa-yasuni-itt

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Digital Activism and the *Mapuche* Nation in Chile

Salvador Andres Millaleo Hernández

INTRODUCTION

Since the 1990s, following the initial dissemination of the Zapatista Movement's political statements via web pages of its supporters in 1994, celebrations took place in different parts of the world as Indigenous peoples began to use digital communications to present their demands, reinforce their cultural identities, and share their stories and traditions. According to Nathan (2000, 39), Indigenous peoples were early proponents of the World Wide Web, in contrast to their secondary and underrepresented position within traditional forms of media. As for the global stage, this early engagement with online media was also the case with the Mapuche peoples in Chile and beyond. The Mapuche began to generate a tangible mediasphere in the late 1990s, with some members of the community questioning past denials of recognition and the invisibility of their identities in hegemonic communications (García 2014, 178).

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221

However, early Internet use by Indigenous peoples and their engagement with digital communication devices gave rise to problems that put in doubt the new potential of digital media to transform the marginalized position of Indigenous peoples via public forms of communication. Inequality of access, the costs of digital production, the digital commodification of Indigenous cultures, and decontextualization of culture were all identified as direct threats (Dyson and Underwood 2006). Above all, how effectively new media could challenge the hegemonies of traditional mass media and communications became another pressing question.

This chapter examines Mapuche media activism as an example of the importance of digital activism for Indigenous peoples. The chapter begins with a discussion of Mapuche mainstream and digital communications and analyzes Mapuche cyber-journalism in relation to three cyber-journalist organizations: Mapu Expres, Azkintuve, and Werken. The chapter thus goes onto to consider three significant cases of Mapuche digital activism: The Mehuin Pipeline, Luchsinger Cases 1 and 2, and the Coins of Freedom Campaign. The main argument is that if the efforts of Indigenous activist journalists are to join those of community, environmental, and human rights activists, the forms of protest must contend with the transformed media landscape in order to fully participate in this counter-hegemonic project.

Mainstream Media and Alternative Forms of Communications Among the Mapuche

The evolution of digital communications has given rise to several new opportunities for Indigenous activism. In conjunction with the emergence of social media in Web 2.0, these opportunities have increased expectations, particularly in terms of the ability of marginalized groups and movements to fight for greater justice in the wider society. The cause for such optimism is that users of digital media, particularly social media, produce autonomous spaces that can exist beyond the control of governments and corporations. This enables users to share information about social movements, gather support from diverse actors, coordinate collective action, inform the public, and increase the visibility of demands and viewpoints of peripheral groups (Castells 2012, 2).

With respect to the Mapuche, over the past 30 years, traditional or mainstream print, television, and digital media have developed systematic

and highly coherent strategies to align these media actors with political and economic elites. Consequently, this approach reproduces racist stereotypes about the Mapuche community and its individuals. Such attitudes are defended and indeed concealed with the overall purpose of maintaining the status quo about conceptions of wellbeing and security among the general public (Amolef 2004).

These characteristics have been the mainstay of the Chilean press since the nineteenth century. However, in the past three decades the media, particularly mainstream audio-visual outlets, have reinforced this strategic discourse, especially in the context of a new cycle of Mapuche protests following Chile's return to democracy in 1990. Specifically, the Mapuche have been represented in three ways: as a passive people lacking in diligence; as actors and protagonists linked to violent actions; and as secondary actors, who are less important to the news agenda of non-Mapuche groups (Sáez 2014, 132–133). The political consequence of this denigrated image was that of isolation of the Mapuche movement as a possible ally or partner in the view of society. This has produced the continuation and validation of a public opinion that is hostile, or indifferent, to Mapuche demands.

The representations and strategies of mainstream media thus represent the main challenge to Mapuche community activism and the dissemination of its messages. Andrew Chadwick's concept of hybrid media systems is useful in this instance in order to locate interactions between old and new digital media and to consider how their logics coexist and influence one another in terms of their respective technologies, genres, rules, behaviors, and organizational forms (Chadwick 2013, 4). The mere existence of digital and social media is insufficient therefore, when it comes to providing alternative views. If the digital sphere is influenced by long-standing stereotypes, stigmas, and hegemonic strategies that work against Indigenous peoples, then the practices of the new alternative media fail to intervene in this process if they do not take into consideration the logics of old media. The development of digital media technology is of fundamental importance to the Mapuche people, even though the ability of Mapuche groups to influence the media system via the use of these same digital means remains somewhat limited. In this regard, the mainstream media continues to hold on to its capacity to reproduce hegemonic attitudes despite the insistence and innovation of alternative media organizations and Mapuche digital activism.

Mapuche digital forms of media create a distinct, de-colonized space. Yet, although the perspectives produced therein are occasionally included in other media and influence public opinion, their reach fails to fully extend into the public sphere at large in a systematic manner. The corporate media's control over the broader media system and national public opinion, conversely limits the influence of Mapuche's new alternative media, as well be discussed in the following sections. Corporate media pursues an impervious editorial line, aligned with Chilean political and economic elites, openly opposing Mapuche demands.

Digital Media and Mapuche Cyber-Journalism

The organization of digital media by Mapuche groups is a notable characteristic of the ways in which community members use information technologies. Digital media has, for example, been used primarily to oppose and promote debate in response to mainstream media news stories and their political demands regarding the Mapuche. As such, activism has taken the form of cyber-journalism activities that provide the public with counter-information. In addition, these media also promote the constitution of Indigenous subjectivities, generating a cultural circulation of elements of Indigenous identities related to the land, common history, language, and spirituality as well as other aspects of Mapuche cultural life. This enables a reading of Indigenous cultures by and for Indigenous peoples as well as for non-Indigenous readers within the media sphere. It also involves the discussion of and intervention in traditional cultures, generating new meanings and cultural interpretations. The following discussion outlines the significant interventions of Mapuexpress.org, Azkintuwe, and Werken, three Mapuche digital media outlets in responding to the denigrating barrage of dominant mainstream media.

Mapuexpress (1996–Present)

Online since 1999, Mapuexpress[1] is a digital media outlet that continues to be run and supported by a mostly Mapuche collective of professionals—Alfredo Seguel, Eva Barriga, Catalina Manque, Paola Henríquez, Angélica Valderrama Cayuman, Felipe Gutiérrez, Sergio Millaman, Martina Paillacar, and José Luis Vargas. Its central purpose is to create a distinctive media organization that reflects the worldview and interests of the social actors themselves. It operates as an autonomous group that

exists in a broadly intolerant and information-restrictive mediascape in Chile (VV.AA. 2014, 8). The organization's name Mapuexpress combines the expression 'Mapu Press' (or Mapuche Press) and 'Express' to denote that coverage is a concise source of information, aimed at a non-elitist public.

However, the origins of Mapuexpress date back to 1996, when a group of professionals from the state-run Corporación Nacional de Desarrollo Indígena (National Corporation for Indigenous Development) met in the Colectivo Konapewman (Konapewman Collective) to work on issues related to the recovery of Mapuche identity and cultural reconstruction. Subsequently, they began to form alliances with communities and organizations from different territories and provide them with support in cases of territorial and environmental conflict.

In 1999, the collective launched a website with the intention of disseminating information about the organization's different activities, including a section dedicated to current affairs.[2] That section was eventually moved to another website in April 2000,[3] to make use of a free server.

The communication strategy of Mapuexpress is self-communication, whereby digital media provide a space for the Mapuche movement. The organization addresses a public of Mapuche communities and organizations. It projects its own line of thought, discourse, and proposals to the Mapuche people. As such, the group assumes the challenge of 'werkenizing'[4] communications, meaning to rescue the role of traditions, in a virtual sphere. Werkenes[5] historically crossed borders, shared information, and communicated between different peoples. The approach adopted by Mapuexpress emphasizes the importance of acting as a modern outpost of werkenes, where information is carried and transferred to the communities.[6] In turn, this requires building sources of information distinct from the mainstream media, where the Mapuche are subjected to discrimination and denigration. Throughout its existence, Mapuexpress has consistently sought to give voice to the viewpoints of Mapuche communities that are not represented in mainstream media.

The team at Mapuexpress defends Indigenous collective rights and pursues goals related to both communication and political action (Gutiérrez 2014, 117). Mapuexpress is a medium for a social movement that provides a distribution channel which is also a source of valuable information. It ensures that the topics and issues taken up by the movement gain greater visibility, while simultaneously reinforcing their processes in the communication of information. Mapuexpress believes that the exercise of the

right to communication, information, and freedom of expression is a means to support the setting of autonomous goals, and that the State must provide reparations to Indigenous peoples who continue to face discrimination, censorship, racism, and neo-colonialism.[7] Consequently, the news site also seeks to inform a broader general public.

Notably, Mapuexpress and its collaborators have played an active role in the creation of the Red por la Defensa de los Territorios (Network for the Defense of the Territories).[8] This network is a coordinating organization comprised of Mapuche communities, communicators, environmental organizations, students, and members of the general public who work on issues related to the defense of water resources, lands, and the wider Mapuche territory collectively known as Wallmapu. The network generates numerous activities in relation to information and protests, and in response to projects or situations that affect natural resources and the environment.[9]

The following example from 2017 illustrates the collective stance taken by Mapuexpress. In response to a third-party lawsuit filed against the media organization for publishing a statement issued by Mapuche communities opposing a hydroelectric investment project, Mapuexpress states that:

> The Mapuexpress information site was created more than 17 years ago and is managed by a collective, whose members belong to Mapuche and intercultural organizations that [work] primarily on issues related to Wallmapu (southern Chile and Argentina) and especially on the conflicts caused by the extractive and energy industries. At the same time, our website is an active platform for communities and organizations that oppose this development model. Clearly, a lawsuit of this type does not stop our work which is aimed at the defense of collective rights and territories, but rather, reaffirms the importance of what we do as a platform and space for coordination. (Mapuexpress 2017)[10]

The ties Mapuexpress established with different organizations and communities ensure that the news reported by the group comes from primary sources. Simultaneously, the site acts as a fixed platform on which statements released by Indigenous organizations can be published without significant editing by the Mapuexpress team (Gutierrez 2014, 115).

Consequently, Mapuexpress can be understood as partisan media, committed to several processes that relate to the defense and recuperation of

Indigenous territories, in opposition to extractive industries projects, and supports demands for recognition of collective rights and initiatives to revive and strengthen Mapuche culture and language.

Azkintuwe (2003–2010)

Another Mapuche digital media organization is Azkintuwe. Founded in 2003, this media outlet was run by Mapuche journalists Pedro Cayuqueo, Wladimir Painemal, and Jacqueline Caniguan among others. Azkintuwe published a digital and a print edition until 2010. Its objective was to disseminate information about the distinct cultural, economic, social, and political dimensions that constitute Mapuche life (Maldonado 2014, 400). It aimed to provide a communication platform that used technology to support Mapuche people, while providing the communities with a sense of ownership of the media organization itself (401).

Azkintuwe promoted the right of Indigenous peoples to communication and information and was presented as an alternative, credible, and serious source. It aimed to not only be an information intermediary but also provide original content such as reports and interviews across different fields in relation to the rights and struggles of the Mapuche people. With this approach in mind, Azkintuwe members gradually developed high levels of professionalism, turning the organization's more militant, activist, but amateur early profile into a genuinely professional media outlet.

The origins of Azkintuwe are in the Colectivo Lientur de Contrainformación (Counter-information Lientur Collective). The group was founded in Temuco in 2000 with the launch of a website committed to reporting the abuses experienced by Mapuche communities and organizations (Doyle 2015, 93). It becomes Azkintuwe in October of 2003, with the launch of the dual print and digital formats which sought to cover Mapuche society throughout Mapuche territory, and thus beyond the national boundaries of both southern Chile and Argentina. The team consisted of networks of journalists and communicators in both countries. Azkintuwe also documented Indigenous disputes across the Americas becoming the first global Mapuche media outlet (Boccara 2006) publishing 44 print and online issues between 2003 and 2012. It published a range of supplements to Azkintuwe's main publication—Koyon, Nütxan, Zapilkan, AZ Domingo, Yekintun—dedicated to art and Indigenous film and video.[11]

The editorial and journalistic content of Azkintuwe can been characterized as embodying a decolonial position. First, it critiques and antagonizes by providing information that emphasizes an oppositional stance to forms of coloniality that persist over the Mapuche people. Second, it employs a projective decolonial critique, whereby Mapuche cultures assert themselves as a legitimate and tangible reality in the future through a discourse that accentuates dynamism, current development and future perspectives (Maldonado 2014, 608 ss). In 2010, the creators of Azkintuwe started another project, the Mapuche Times Newspaper[12] that only ran until 2012 and has not had the same cultural and political impact.

Werken (2012–Present)

The Werken website was launched in 2012. Werken defines itself as "an informative, non-profit media outlet for Mapuche people, the main objective of which is to deliver news and information about relevant activities taking place in communities not covered by traditional media."[13]

This non-profit media organization is the result of a joint effort between several Mapuche communicators: Elvis Quilapi, who was the administrator of the blog Wallmapu[14]; Natividad Llanquileo, the spokeswoman for Mapuche political prisoners on hunger strike in 2010[15]; Gonzalo Manquepillan at Müpülem Mañke blog[16]; and Richard Curinao,[17] administrator of the blog Werkenkurruf[18] (Gutierrez 2014, 165).

Werken is characterized by the extensive production of original content. This approach was halted temporarily between 2014 and 2016 but has since been activated with a new intensified effort since 2016.

Importantly, Werken's content has a territorial focus in the treatment of news. For Werken, the notion of territory differs from that of other media sources, since the nature of the Mapuche perspective in general is grounded in territory and land. According to this point of view, territory is approached as a site of dispossession by private companies, individuals, and the Chilean State. However, in Werken territory, it is simultaneously conceived of as a political space for the reconstruction of the Mapuche nation and as a symbolic place of cultural significance within the Mapuche worldview, which transcends the instrumental perspectives of development (Del Valle and Maldonado 2016, 347). Although it has this aspect in common with Azkintuwe and Mapuexpress, Werken focuses on the territory as a place of recent conflicts, where private companies and the State are represented as

permanently hostile to the Mapuche people, while the other two media outlets accentuate greater vindication of the Indigenous cultural identity.

WEBSITES AND SOCIAL MEDIA: BETWEEN SPONTANEITY AND STRATEGY

The political communication of Mapuche communities and activists represented in the previous examples of Mapuexpress.org, Azkintuwe, and Werken have since evolved from Web 1.0 sites and now make use of social media. Mapuche communities continue to use information technologies that engage political and cultural communications with an intercultural orientation, since their target audience in the broader media sphere includes non-Mapuche publics.

According to Godoy, by 1999 the fractious relationship between the Chilean State, forestry companies, and Mapuche groups had reached a high point with the conflict becoming a central issue on the national news agenda (Godoy 2003, 60). In this context, new Mapuche websites at the turn of the millennium sought to create a space of reflection from an Indigenous perspective. These websites demonstrated and elaborated a level of Mapuche discourse, based more on forms of argumentation than on polemics. For example, these websites provide research papers with highly abstract content.

Notable websites included Comunicaciones Xeg-Xeg, Fundación Rehue, Ñuke Mapu, and Mapuche International Link.[19] These four websites emerged in the late 1990s and shared a common objective: to report on the political situation and on Mapuche culture while concentrating on the promotion and defense of Mapuche collective rights (Foerster and Vergara 2001). A further similarity between these information sites was that their respective content consisted mainly of highly complex points of view formulated by Mapuche intellectuals, who succeeded in outlining clear, in-depth arguments with regard to Mapuche self-representation (Foerster and Vergara 2001).

The discursive reflexivity of the content of the first Mapuche websites like Ñuke Mapu—maintained by Jorge Calbucura, professor at the University of Uppsala—addressed numerous issues in written and visual forms, including historical memory; Mapuche national sovereignty; territorial recuperation; religious worldview; Mapuche heroes and martyrs; delegitimization of the Chilean nation State, judicial system and media

discourse; the demand for freedom for Mapuche political prisoners (Maldonado 2012); disagreements between nature-based and urban-based ways of life; scenes of daily Mapuche life; and other issues external to Mapuche culture that provide evidence of mestizaje (cultural and ethnic intermixing) and hybridization (García 2014, 179).

In the transition from Internet websites to the interactive and social media sites of Web 2.0, Mapuche actors also sought to occupy these new spaces with a discourse that retains the aforementioned content patterns, but which adapt to the demands of social media platforms such as Facebook, Twitter, and YouTube. Accordingly, Mapuche communications are evolving from being traditionally reflexive in nature into becoming more expressive form and content. This new approach utilizes the communicative aesthetics of social media that include its iconicity and culture-jamming strategies, use of satire and parody, while also retaining its primary focus on content.

SOCIO-ENVIRONMENTAL CONFLICTS: THE MEHUIN PIPELINE

As social media provide new possibilities for social collective action, platforms are being used to coordinate actions that include protests in defense of Mapuche territory. Such approaches communicate the rationale behind protests and gather public opinion in support of the Mapuche viewpoint, as well as forge links and alliances that reinforce the overall Mapuche position.

One of the main areas of conflict between the Chilean State and Mapuche groups relates to conflicts between local communities and private corporations. Specifically, these conflicts involve extractivist, energy, forestry, mining, and fishing industries that intend to develop investment projects on Mapuche territory and that have frequently secured support and relevant authorization from the State to do so. Major conflicts have become part of the norm in terms of interethnic relations, like the recent examples of the Neltume and Pilmaiquen hydroelectric power plants, the Boyeco landfill, and the Celulosa Arauco (CELCO) pipeline in Mehuin.

According to César Pineda, the environmental dimension of these conflicts has cultural implications that relate to the defense of sacred territories, the ethno-environmental reality of the reproduction as a people, and as a demand for the recognition of spaces of control and regulation before

the Chilean State. In response, collective action in these socio-environmental conflicts has materialized in different forms, from community resistance involving land recuperation and road closures, to institutional legal defense based on territorial claims made within the framework of Indigenous rights (Pineda 2012).

The Mehuin case is paradigmatic in several ways: it is a socio-environmental conflict in which a coastal territory with links to the Mapuche people, particularly local riverside communities (the *Lafkenche* communities), is in danger of being lost to contamination. This threat is both ecological, as industrial waste from the paper and pulp industry is dumped into the bay, as well as cultural, since the area is highly significant to the Mapuche.

The Mehuin pipeline project has affected Maiquillahue Bay, an area located close to the town of Mehuin in southern Chile, where CELCO planned to construct a pipeline for the transportation of liquid industrial waste. As news of the project became public, a lengthy social conflict ensued between CELCO, the local Mapuche, and non-Mapuche communities of Mehuin. This conflict has since become emblematic of social resistance and environmental conservation in Chile (García Mingo 2014).

The $1.4 billion pipeline project is associated with the establishment of a pulp mill for bleaching. In this particular case, CELCO would undertake the bleaching process using chlorine dioxide, a highly toxic compound. The project's useful life was meant to last 20 years, with an annual production of 550,000 tons of pulp, which would have almost doubled the total production of the company. The project secured the support of State authorities, who pointed to the importance of investment and to the subsequent economic benefits generated for the local region and the entire country.

There are 13 Lafkenche communities that live in the nearby coastal area to the south of Mehuin. Members of these communities travel to Mehuin in order to buy and sell a wide array of local goods and products. These communities, in conjunction with the local Chilean community in Mehuin, opposed the pipeline. In this instance, the protection of the coastline against contamination succeeded in uniting a diverse array of local stakeholders, including various environmental groups.

Importantly, the territory inhabited by the Mapuche-Lafkenche communities is a central component in their identity construction, while the coastline, and especially the sea, represents a highly significant repository of cultural meanings. The defense of the coastline aims to safeguard the

local ecosystem, including numerous aspects related to the sea, land, air, and nearby native forests, among others (Alliende 2011, 90).

Subsequently, the 'No Al Ducto' (No to the Pipeline) campaign was created to strengthen joint efforts to preserve the coastline and reject the use of the sea as a dumping ground for waste material. The strategy employed by local communities was to directly impede CELCO from conducting its technical studies in the area; studies that were necessary in order to secure the legal authorization from the State prior to beginning pipeline construction. In July 1996, local Mehuin activists formed a committee called the *Comité de Defensa del Mar* (Committee for the Defense of the Sea).[20] The Committee was composed of representatives from several groups, including fishermen, local residents, small-scale entrepreneurs, and Mapuche-Lafkenche Indigenous communities. This organization coordinated the opposition to the pipeline with the support of an advisory team by managing matters related to the environmental impact of the proposed plan, the human rights perspective, and the development of a communications strategy.

As part of its communications strategy, the Committee, in conjunction with other organizations opposed to the CELCO pipeline, launched the blog noalducto.com in August 2008. This blog contained information about the conflict dating back to 2006, including audio-visual materials, research findings, and links to organizations and support groups working to defend the local coastline.

A Facebook public group was also created.[21] On Twitter, several tweets were published using the hashtags #NoAlDucto and #mehuinsinducto (Mehuin Without a Pipeline). In addition, audio-visual messages were produced and streamed on YouTube, including videos made by stakeholders and agents who were not members of the Committee.[22]

The use of video activism, involving musical groups, artists, and environmental activists uniting with Mapuche-Lafkenche communities in the defense of the Mehuin coastline, was a new tactic in the Chilean media sphere. Despite this innovative and multi-pronged approach, the campaigns did not achieve significant attendance or following. However, they succeeded in generating cohesion among the communities working together to defend Mehuin against the various attempts by CELCO to divide the activists and move the construction of the pipeline forward. The will of the local community to resist resulted in the de facto blockade of the research activities of the company, to the extent that the legal requirements for pipeline construction have not, to date, been met. The company

has not renounced the construction of the pipeline but has not had new opportunities to continue their preparatory work.

Conflicts Related to Human Rights and Criminal Justice

One of the most dynamic aspects of Mapuche online activism has been the use of counter-information campaigns regarding the arguments and narratives of mainstream media that link acts of violence to members of the Mapuche community. Mainstream media organizations tend to associate Mapuche demands to violent conflict and classify the demands as terrorist activity. Likewise, Mapuche protests are also categorized as criminal in nature resulting in the negative portrayal of activist groups thus promoting their broader social rejection. Mapuche activism on the Internet seeks to overturn these views and instead, present a view of conflicts as rooted in collective appeals to justice.

'Sumando Voces' (Adding Voices): Luchsinger Case 1

Another landmark event in the Mapuche conflict has been the Luchsinger case. The facts of the case were as follows: At dawn on 4 January 2013, Werner Luchsinger (75 years old) and his wife Vivian Mackay (69 years old), residents of Vilcún, died inside their house in a fire caused by arson.[23] A year later, in February 2014, Machi[24] Celestino Córdova was convicted as responsible for this murder.

Immediately following the death of the couple, mass media outlets, both print and television, pursued an editorial line that widely linked the Mapuche political movement to the Luchsinger-Mackay murder. On the television news and news-related programs and channels, "the event was immediately linked to Mapuche communities or groups, without waiting for more in-depth information about the case to emerge" (González and Norambuena 2016, 94). The actions attributed to Mapuche groups were described as terrorist in nature, as violent attacks, and characterized as destructive, menacing, and worse.

The consequences of the alleged homicides were linked to public concerns and fears, and reports by the mainstream media used phrases such as "increasing the number of police officers" and "filing anti-terrorist lawsuits." The media's primary intention was to link violence and terror to

the actions of certain Mapuche individuals (95). The printed press amplified these claims and in early 2013 created a decidedly hostile atmosphere towards the Mapuche across Chilean society.

The mainstream media deployed in the news coverage of the Luchsinger case a strategy of immediate linkage of the murder with Mapuche political organizations and ideas, which they called the "Mapuche cause." This treatment concealed the variety of opinions and action strategies of different organizations, where dialoguing groups are distinguished from radicalized others. One feature of this strategy is to avoid presenting the point of view of Mapuche actors in news media coverage. The media reduce the Mapuche political world to its more radical versions, seeking a perspective that ensures that all of the political demands, and not just those of the radicalized ones, lose legitimacy and remain isolated before public opinion (Bresciani et al. 2018, 73).

One example of digital activism organized by Indigenous peoples in response to the Luchsinger case was the 'Sumando Voces' (Adding Voices) campaign. This was a digital activism campaign, meticulously and professionally planned with defined strategies by its creators, using social media content, including short videos with messages advocating reconciliation and peace that sought to dispel the impulsive association created by the mainstream media between the Mapuche and violence. This campaign was designed and carried out by the Latin American Coordination of Cinema and Communication of Indigenous Peoples, or CLACPI by its Spanish acronym.[25]

CLACPI is a Pan-American media organization founded in 1985 as the Latin American Council of Cinema and Communication of Indigenous Peoples, within the framework of the First Latin American Film and Video Festival of Indigenous Peoples. The entity was established to promote the use of communications related to processes of self-assertion of Indigenous communities and organizations in the Americas.

In January 2013, CLACPI used its YouTube and Vimeo channels to disseminate several short videos, some of which included messages delivered by renowned artists and politicians. The video messages encouraged viewers to adopt a new outlook, one that is rarely found in traditional media or public opinion. Working in conjunction with influential opinion makers, the campaign issued a call across Chilean and Latin American society, to recognize the importance of discussing the demands of Indigenous peoples in an informed manner and beyond mere conjecture. It also emphasized the consequences that the systematic denial of the

Indigenous perspective has had on the construction of identities in countries across the region.[26]

Participants in this campaign included the writers Eduardo Galeano and Pía Barros, the poet Elicura Chihuailaf, former judges Juan Guzmán and Baltasar Garzón, former student leader Giorgio Jackson, journalist Matías del Río, former journalist Alejandro Guillier; and actors Claudia Pérez, Ana María Gazmuri, Loreto Valenzuela, Liliana García, Daniel Alcaíno, and Hugo Medina.

The campaign had a meticulous design and a careful dissemination strategy that used Facebook and Twitter. Nevertheless, despite high-profile spokespeople, the campaign consisted of recorded messages without an aesthetic elaboration that might have helped to generate broader-based interest online. Instead, it relied on the content of the messages and the personalities involved. The campaign achieved a minimal presence on the major social media networks and had little repercussion across the remaining media ecosystem. Indeed, the media simply continued to communicate in the biased discourse, lacking nuance with regard to the Mapuche and their presumed association with terrorism.

The Defense of Machi Linconao: Luchsinger Case 2

Another method employed on social media in relation to the Luchsinger case was far less organized but more effective. It focused on media activism undertaken in response to the fate of Machi Francisca Linconao Huircapán, one of the accused in the murder of the Luchsinger couple.

Machi Linconao was a well-known spiritual authority. She gained recognition for confronting the forestry industry and successfully obtaining the first ruling in Chile to uphold the rights enshrined by the International Labor Organization Convention 169, via a constitutional protection appeal passed in September 2009. In the case, she filed charges against Palermo Limited, a forestry company, for the illegal logging of native trees and shrubs in the Palermo estate, which involved the unlawful entry into and destruction of a site of cultural significance called the Menokos[27] (Huenchumil 2018, 9).

In a further development of the Luchsinger case, Machi Linconao was arrested at her home in a police raid following the fire at the Luchsinger home in January 2013. During the arrest, police claimed to have found pamphlets containing references to Mapuche demands along with a firearm in her possession. Subsequently, Machi spent long periods of time in

preventive detention prior to her acquittal by the criminal courts on 18 October 2013. She subsequently filed a complaint seeking reparations for maltreatment, including the infringement of her status as a Mapuche spiritual authority.

Later, in 2016, she was investigated and detained again in connection with the same Luchsinger case. She spent over nine months in preventive detention and the case attracted widespread public attention, since medical reports emerged on sites such as Mapuexpress that outlined her delicate health.[28] Machi Linconao was highly active in writing letters to the incumbent president, Michelle Bachelet, but this correspondence was never made public by the mainstream press. Furthermore, several organizations acting in support of Machi published a series of messages that, despite appearing on social media sites, were never reported in the mainstream press.

Nevertheless, in addition to the interviews and messages that appeared on YouTube,[29] messages were disseminated across Facebook and Twitter and images circulated with photos and memes of Machi Linconao in support of her release and innocence. This online movement transformed her into a social media icon in Chile.

Messages posted on social media in favor of the Machi succeeded in generating discussion that inserted her into the general public, which coalesced as expressions of solidarity from other social movements, such as some feminist networks, as well as international support networks (Yoly 2018).

The preventive detention measures against her were downgraded by the courts to house arrest and, in both her second and third trials, she was acquitted of all charges due to lack of evidence. The second trial acquitted all those accused, although this judgment was subsequently annulled. Thus, a third trial took place, and in early 2018, Machi Linconao was acquitted once again of all culpability in the Luchsinger case. The Luchsinger case has been a long legal battle, where the pressures of conservative groups to obtain severe convictions were confronted by a broad strategy of Mapuche social media that especially favored Machi Linconao, showing an image of her that was different from that projected by the mainstream media.

'Monedas de Libertad' (Coins of Freedom) Campaign

On 12 October 2018, the digital media outlet Aukin issued a call to action when it posted a video on YouTube, Facebook, and Twitter. The core issue for this call was to produce and disseminate images that symbolically drew upon Chilean currency, specifically the CLP100 coin. Aukin dubbed the campaign the #monedasdelibertad.

Aukin describes itself as "a Mapuche media outlet that seeks to contribute to the reconstruction of the Mapuche nation. From a counter-hegemonic point of view, it is committed to creating [the] conditions for the adequate understanding of the territorial conflict in Wallmapu, with the perspective of the *Lovs* (a basic form of social organization) and the Communities in Resistance, and their project of self-determination which is based on territorial control and the *kume mongen* (good life) as the key theme for dissemination and analysis."

Since its release into general circulation in 2001, one side of the CLP100 coin bears the image of a Machi. The Aukin campaign called for people to take a photo of the coin with the part of the seal on which Machi appears marked with three vertical black lines. The black lines were to imitate the bars of a prison cell and, as such, the campaign was a form of protest to the treatment of the Mapuche, their repression, subjection to unfair trials, persecution, preventive measures, and excessive prison sentences.[30]

Several renowned Chilean artists who joined the campaign included singer Quique Neira, Alonso González, the vocalist of the Santaferia band, Juan Sativo from the band Tiro de Gracia, and actors Ariel Mateluna and Nathalie Nicloux.[31]

Although this campaign was a highly original idea with a visual aesthetic that matched the visual-formal styles of online communication, it failed to produce broader mobilization in the real world, in contrast to the online activism undertaken in the case of Machi Linconao. Consequently, the #monedasdelibertad campaign was unable to gain a firm footing in either social media or in the rest of media system.

Conclusions

The predominance of stereoypes and stigmatization in traditional Chilean media form part of the daily denial of Mapuche demands and the invisibility of Mapuche viewpoints across the country. Mapuche digital activism

on the Internet may explain the emergence of a diverse range of organizations in this community that seek to take advantage of the possibilities afforded by digital media tools to generate spaces of counter-information, Indigenous memory, and identity.

The evolution of the Internet towards social media/networks has provided a range of new possibilities and expands on the early efforts of organizations such as Mapuchexpress.org, Azkintuwe, and Werken. However, as the cases presented demonstrate, recent Mapuche participation in social media and blog activism has been less influential than it was during the initial stages of Internet development.

The first Mapuche websites provided spaces for reflection that offered relevant content at a time when the World Wide Web was not yet flooded with information. While Mapuche blogs now offer multiple and distinct sources of political and cultural information, and daily use of social networks magnify these efforts, which also include instant messaging applications such as WhatsApp, there have been few well-organized digital activism campaigns.

Media activism campaigns on social media platforms that have indeed been successful in Chile, show a well-coordinated use of the possibilities that sites like Facebook, Twitter, and YouTube have to offer (Millaleo and Cárcamo 2014). This planning is based on organizations or networks that have both the presence and capacity for off-line mobilizations, such as the student movement or environmental organizations. The coordination of digital activism in social media with street mobilizations has been key to these actions. In addition, the combination of the visual aesthetics and language of digital networks with content intended for audience impact, requires personal efforts and the use of professional and financial resources.

The number of organized campaigns on social media is small but seems to be growing, to the extent that Mapuche organizations learn from the examples provided by other cases of community digital activism in Chile, such as the student movement (2011–2018), environmental activism such as Patagonia sin Represas,[32] or feminist protests against sexual harassment in 2018. Although the spontaneous use of Twitter, Facebook, YouTube, and Instagram, among others is a common way to generate counter information, recruit participants, request support, and coordinate protests, there are still few cases that demonstrate strategic campaigning for digital social media activism among Mapuche movements.

In some instances, digital media campaigns have been launched to disseminate Mapuche viewpoints and mobilize solidarity and public opinion. This is evident in cases where the State has criminalized Mapuche protest or disproportionately applied criminal charges, particularly those under the Antiterrorist Act, to members of the Mapuche communities.

The campaigns 'Sumando Voces,' 'Monedas de Libertad' and the activism pertaining to the liberation of Machi Linconao attempted to maximize the opportunities afforded across social media. Each media response has specific strengths resulting from greater knowledge of content strategies, the use of social media narratives and aesthetics. However, they have come up against systematic obstruction by the mainstream media, as we can see in Luchsinger case, albeit with some exceptions in the case of Machi Linconao. This is a determining factor in their limited ability to have a genuine impact on Chilean public opinion. Significantly, as the Machi Linconao case shows, where there was an effective relationship between street mobilization and online digital content, this obstruction is weakened precisely when there is a strong coordination between digital activism online and protests by the Mapuche movement in the real world.

As a result, the Mapuche digital activism provides a useful example of the importance of digital activism for Indigenous peoples. However, the cases presented here also demonstrate the limits of digital Indigenous media in the face of a hostile media environment, in a hybrid media system, and the importance of ensuring coordination with social protest movements in the real world in order to achieve success.

Notes

1. For more information visit the Mapuexpress organization website: www. Mapuexpress.org
2. For more information visit the Colectivo Konapewman website: www. galeon.com/pewman
3. It used to be available at www.galeón.com/Mapuexpress. Now, all content can be found at www.Mapuexpress.org.
4. In Mapuche language and culture it means 'to communicate like a Werken.'
5. The werken is a traditional figure of authority in Mapuche culture who acts as an adviser to the lonko, or head of the community. The werken is usually the spokesperson for their community, responsible for communicating messages orally to other communities or to non-Mapuche groups. In the past, werkenes were required to memorize long messages.

6. Tz'ikin: Realizadores Independientes de Guatemala. For more information please visit the website: www.realizadorestzikin.org/noticias/abya-yala/167-la-clave-es-werkenizar-las-comunicaciones-susurros-de-la-lucha-del-wallmapu

7. For more information see Enlace Indígena: www.movimientos.org/es/content/catorce-años-de-Mapuexpress-con-nueva-plataforma-informativa

8. For more information visit the Red Defensa de Territorios website: www.facebook.com/pages/category/Community/Red-Defensa-Territorios-676030592501025/

9. For more information visit the Diario La Opiñón website: www.laopinon.cl/noticia/sociedad/red-por-la-defensa-de-los-territorios-anuncia-movilizaciones-por-proyectos-energeti

10. For more information see Mapuexpress, "Comunicado Público Red de Medios de los Pueblos: Defensa a Mapuexpress por querella criminal." Available at: www.Mapuexpress.org/?p=19358

11. All past editions of Azkintuwe until 2012 are still available at Periódico Azkintuwe. The last issues were not uploaded until 2018. Available at www.issuu.com/azkintuwe

12. For more information visit the Mapuche Times website: www.issuu.com/mapuchetimes

13. For more information visit the Werken Noticias website: www.werken.cl/contacto/

14. For more information visit the Elvis Quilapi blog: www.wallmapu.blogspot.com

15. For more information visit the Natividad Llanquileo blog: www.natividadllanquileo.blogspot.com

16. For more information visit the Müpülem Mañke blog: www.mvpvlen-manke.blogspot.com

17. In 2017, active Twitter user Richard Curinao, @RichardCurinao, was one of the communicators whose postings were intervened and who was under illegal surveillance under "Operation Hurricane," where intelligence officers of the Carabineros police conducted illegal follow-up work and forged evidence to accuse Mapuche leaders of terrorism. Previously, in 2016 the journalist had been pressured by the Police of Investigations (PDI) to reveal his information sources.

18. It used to be available at www.werkenkurruf.cl (now offline). Now, all content can be located at www.radiokurruf.org

19. At present, only the following remain active: Mapuche International Link https://www.mapuche-nation.org; El Centro de Documentación Mapuche, Ñuke Mapu www.mapuche.info

20. For more information, visit the Movimiento por la Defensa del Mar website: www.movimientoporladefensadelmar.wordpress.com/
21. For more information visit the Mehuin Sin Ducto website: www.facebook.com/groups/25603876116/
22. For more information see: "P.N.U.– Mehuín Sin Ducto," YouTube, www.youtube.com/watch?v=fDoUkwqHINg&NR=1; See: "#MehinSin Ducto," www.youtube.com/watch?v=xzqfJ8z889Y; "Mehuín sin ducto," https://www.youtube.com/watch?v=YMavf6Lenmo; "Mehuin sin ducto (15 years)," https://www.youtube.com/watch?v=jwp-Dnji39E; "Videos of Mehuín Sin Ducto LA VOZ DE LOS NIÑOS," https://www.youtube.com/watch?v=Yh8a3o9mNUo
23. For more information visit the website: www.emol.com/noticias/Nacional/2017/10/25/880703/Cronologia-del-Caso-LuchsingerMackay-desde-el-ataque-a-la-absolucion.html
24. A Machi is a traditional spiritual, medical, and religious authority in Mapuche culture, whose primary functions are to heal the sick and provide spiritual guidance to the community.
25. Coordinadora Latinoamericana de Cine y Comunicación de los Pueblos Indígenas, http://www.clacpi.org
26. For more information, visit the Comunicarte: Asociación Guatemalteca para la Comunicación el Arte y la Cultura website: www.noticiascomunicarte.blogspot.com/2013/01/clacpi-lanza-campana-pueblo-mapuche.html
27. The Menokos are wetlands inhabited, according to the Mapuche worldview, by sacred forces that provide healing powers to the medicinal plants (lawen) that grow there.
28. For more information visit the "Informes médicos dan cuenta de crítica situación de la Machi Francisca Linconao," www.Mapuexpress.org/?p=14776
29. For more information see "Spiritual Mapuche Leader, Machi Francisca Linconao," www.youtube.com/watch?v=BJlv0BbhXR8, "Free Machi Francisca Linconao," www.youtube.com/watch?v=FycRe7wZQ0g; "Mapuche: Apoyo Internacional a la Machi Francisca Linconao en Chile," www.youtube.com/watch?v=g4d49sdgsgM; "La Machi/Ber Stinco," www.youtube.com/watch?v=R5s68QC2PIs
30. For more information see "Campaña invita a rayar monedas de $100 en apoyo a los presos Mapuche," website: www.soychile.cl/Temuco/Sociedad/2018/10/18/561986/Campana-invita-a-rayar-monedas-de-100-en-apoyo-a-los-presos-mapuche.aspx
31. For more information, see: "Artistas incentivan inédita campaña 'Monedas de la Libertad' para protestar por los pro-

cesos judiciales que enfrentan los mapuches," www.emol.com/noticias/Nacional/2018/10/13/923907/Artistas-incentivan-inedita-campana-Monedas-de-Libertad-para-protestar-por-los-procesos-judiciales-que-enfrenta-el-pueblo-mapuche.html
32. Patagonia Chilena sin Represas! www.patagoniasinrepresas.cl/final/contenido.php?seccion=nuestracausa

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Practitioner Perspective. Feminist Cyberactivism in Theory and in Practice

Natalia Angulo Moncayo

INTRODUCTION

This chapter examines the articulation between the prefix cyber and the suffix feminism that collectively designates political action against tyranny of the body, gender roles, and the objectification of women in society. Additionally, it describes and analyzes the ways in which online and offline political advocacy strategies cohabit, with emphasis on the configuration

This article puts me in a double position: it refers to my activity, on the one hand, as a cyberculture researcher and teacher, and, on the other, as an activist, individually and collectively with my colleagues, working against all forms of violence against women. It is undoubtedly a complex exercise to share my voice as both an academic and activist, but it is important insofar as it makes it possible to begin to understand how we might take cyberfeminism from theory to practice. The experiences discussed here are part of the network that we have woven together over the years, based on the experiences and processes of other feminist companions and collectives, and own processes. These have forced us to think through the theoretical and methodological wagers of our daily actions inside and outside our classrooms.

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245

of communication for feminist cyber activist purposes. The main argument is that cyberactivism makes feminist alternative agendas that challenge views presented in politics and traditional media visible.

This chapter aims to bring theoretical perspectives regarding cyberfeminism as a philosophy and theoretical perspective into dialogue with cyberfeminism as a social practice, through three case studies: *Vivas Nos Queremos-Ecuador*, Daría #LaMaracx Marika TransFeminista, *marika*[1] transfeminist, and the collective *Universidad Púrpura,* (Purple University) in Quito, Ecuador. The research is based on testimonies of feminist communication strategies for social and political advocacy from, for, and in cyberspace. These were collected through semi-structured interviews, and via the observation of Twitter and Facebook pages, to understand the situation of Ecuadorian women in relation to their communication practices on the web, with a focus on the production of communication strategies and representation of women in situations of violence. The identification of their experiences starts from a shared political, social, and economic vantage point in Quito, Ecuador between 2015 and 2018.

Cyberfeminism from Theory to Practice

To better understand the concept of cyberfeminism, it is important to consider the theoretical prefix cyber in relation to commonly used suffixes, such as space and culture. If the term "cyberspace" was configured within illusory, fictional, and journalistic writing (Bell 2007), cyberculture denotes a cultural practice that takes place in cyberspace and involves a series of rubrics of the virtual. Lèvy argues that "the neologism 'cyberculture' designates the set of techniques (material and intellectual), practices, attitudes, ways of thinking and values that are developed together in the growth of cyberspace" (2007, 1).[2] From this perspective, cyberactivism can be understood to refer to thinking about "the mutation of the format of the post-alphabetic mind" (Berardi 2010, 25).

This analysis of feminism and cyberactivism requires more detailed analysis of how realities are represented on the web, the effects of meaning on discourse and how representation of people who have moved to another type of digital data register are constructed. On the other hand, cyberactivism is based on understanding and assessing which channels and discourses to use to reach people who are not only concerned about local issues, but who have created other networks of interests and local struggles.

In many countries, cyberactivism has influenced the formulation of public policies through a range of tactics, including targeted cyber guerrilla warfare, starting from the fundamental principle of sharing information and knowledge to intervene in the public sphere. Dyer Whiteford argues that computers and videogames provide a means of observation, regarding the democratization and virtual sharing of information. He points out that "we can thank them for spreading the knowledge and *savoir faire* necessary for the re-appropriation of digital technologies of cognitive capitalism" (Boix 2004, 58).

Donna Haraway first developed the concept of cyberfeminism in her essay, *A Cyborg Manifesto: Science, Technology and Socialist Feminism in the Late Twentieth Century,* published in 1985 and later included in *Simians, Cyborgs and Women* (1991). The term "cyberfeminism" addresses the complexity that lies in seeing technology and its artifacts, always referenced by men, producing a gap in relation to women's use, generating "computer science domination". According to Haraway, if knowledge was the heritage of women in primitive societies, it is evident that reflections concerning access to knowledge, about things and their techniques are also related to the need to rethink the way in which women are represented in the process of creation of those things.

Reflecting on Haraway's theoretical perspective, Braidotti claims that Haraway's work continues to constitute a relevant and productive perspective in feminist thinking because "the cyborg is the post-nuclear and post-metaphysical representation of a subject that has stopped being universalist" (2015, 145) and in this way, cyberfeminism, in its own words, goes beyond gender. This makes it possible to use a philosophical as well as a pragmatic framework that goes beyond both Western and gender dualisms.

Regarding feminist cyberactivism, stories related to art and hacktivism are often used as examples. Between the journalistic stories and fictional literature, an increasingly complex set of concepts seems to have developed due to the term's semantic flexibility. In the words of Zafra:

> the protagonism of female artists and creative contexts in recent debates about symbolic representation and identity is worth highlighting …. making it visible is only possible in the domain of artificiality, where the body finds itself faced with the parody of being symbolic whilst at the same time being a body, attached as a fragment of the factitious. (2010, 287)

While the first expressions of cyberfeminism come from female artists "in parallel to the development of artistic cyberfeminism, emerges social cyberfeminism" (Boix 2004, 160) that contained a number of practices by women online, not only from art, but also embracing different counterhegemonic political positions and this enabled cyberfeminism to take on different forms as well as allow it to operate politically.

Cyberfeminism therefore makes it possible to reclaim and occupy media spaces, developing new agendas and concerns that broaden the approaches to solving problems such as violence. This is achieved by articulating perspectives and actions through art, ecofeminism, transfeminism, and other positions that imprint plural, and subversive meanings. In addition, the cardinal feature of cyberfeminism is its potential for transformation and the freedom to be different, something not often found in other spaces.

Cyberactivism as it relates to feminism is thus not just philosophy but also a strategy, making a wide range of activities and reflections possible, which go beyond the narratives generally told in traditional media and film. In other words, cyberfeminism cannot be narrowly delimited due to its fluidity of definition and constant transformation:

> The term cyberfeminism flows in cyberspace without materializing in a univocaldefinition, freely navigates in search of a body that supports it, although perhaps the absence of definition provides it with a body character, a polymorphic body. This indefinite fact of the term seems to suit certain cyber feminist collectives, since immateriality provides a certain anti-hierarchical air that in turn leads to identity tactics, which confers freedom to be able to adopt any facet. (García 2007, 14)

Drawing on theoretical discussions of cyberactivism in relation to feminism, this chapter explores some concrete examples of cyberfeminism in Ecuador. These experiences show how cyberfeminism presents itself as a stage of possibilities, under permanent construction, whereby strategies and tactics of political activity come together, appropriation of public spaces and social protest. All of this emanates from a process of analysis of the situation and its actors, which gives rise to action planning and narrative which impacts on opinion and on public policies related to the feminist struggle.

Cyberactivism in Ecuador from a Feminist Perspective

Articulating theories of cyberfeminisn with the testimonies of activists on the ground in Quito, Ecuador, at an individual and group level, is useful to advocacy work, especially that which considers has communication at its core. This work takes on different nuances and forms of understanding about the communication and its execution and the coexistence between offline and online strategies. This chapter will consider how Ecuadorian cyberfeminists take on the mobilization of political actions and make use of emotions and experiences on the web. It is particularly interesting to examine the ways in which cyberspace, people, and groups operate to make visible and draw the attention of public opinion issues such as violence against women and transgender people. Moreover, cyberactivism aims to position a political agenda that works at all levels, including the legal frameworks at national and international levels concerning human rights.

Our first case study, *Vivas Nos Queremos* (We Want to Stay Alive)—Ecuador, established in 2016, aims to raise awareness about violence against women, a process already taking place in several countries in Europe and Latin America. The fundamental objective of this feminist organization is to show the unofficial reality in relation to government mainstream media coverage of femicide, first, by calling the murder of women femicide, specifically. A second objective is to show the need for public policies to prevent violence, protect victims, and punish aggressors.

In 2016, several general assemblies gave way to the first national march "*Vivas Nos Queremos – Ni Una Menos*[3]". These marches that have been held every year since. For the organization, it is clear that, from the virtual environment, speech is leveraged, imaginaries are challenged, and fake news are counteracted. Although offline actions do not remain in the background, the strategies and tactics for social media are increasingly being perfected, and through them messages are conveyed, and many actions are materialized. One informant explains these strategies:

> In 2017, the doors of many media were closed. With traditional media we were not going to achieve it. We said we must turn the strategy towards non-traditional media, but also to the street. This year we developed a more focused strategy, we made messages for virtual media, audio, the Vivas song, the stop motion video, and although it was material designed for social networks it should be material that would allow us to virilize it in other spaces. (Jeaneth Cervantes[4] n.d.)

Meanwhile, the case of Daría #LaMaracx Marika TransFeminista, who considers herself a marika transfeminist, from 2018, as a result of participation in different processes of activism and social movements demonstrates how cyberfeminists use social media in particular to defend human rights. Her active participation in groups and organizations working on the eradication of machismo in all its expressions and the defense of human rights led her to unleash an unstoppable struggle to respect the rights of transgender people. Daría #LaMaracx Marika TransFeminista understands that the many forms of violence affecting this social group are shared by all women, but at the same time, transgender individuals go through additional maltreatment, harassment, and discrimination.

Through her activism, Daría #LaMaracx Marika TransFeminista has come to view social media such as Facebook, Instagram, and microblogging on platforms such as Twitter as the spaces where she has been able to demonstrate the need to raise the level of debate concerning transgender people. She uses these spaces to combat transphobic and chauvinist discourses through cultural artifacts typical of the web and uses sarcasm and irony as a form of discursive and political resistance. She explains how she became involved on social networks:

> I combined some approaches. And as a result, in my case, when people consider me to be gay, then a Marika and then as a transsexual, things changed, in other words, I couldn't remain in a binary conundrum of being addressed in the feminine. It was necessary to shift my way of thinking to social media, which in effect provides space for my struggle as well as that of many female trans feminist friends. (Daría #LaMaracx Marika TransFeminista,[5] n.d.)

Our third case study, Universidad Púrpura, is a group that works mainly through social media and web platforms, with most of the activity happening between 2015 and part of 2018, against all forms of violence in the university environment. The group was created in the School of Social Communication of the Central University of Ecuador, with the participation of students, professors, and the Vice Dean of the institution.

It began as a study group and soon took on various forms, becoming a space for reporting cases, accompanying victims, carrying out visibility actions, and demanding a comprehensive policy against harassment and abuse at the university level. Presently, only the "Radio Purple" show, which is one of the components of the main project,[6] is still active. Since 2015, the show was broadcast in different stages by different radio

broadcasters at a local and national scale and is currently disseminated through social networks.

> Our project was divided into three components: research, rights and political advocacy. In the latter, we sought a permanent campaign in digital media to generate a high incidence and positioning within the School, in order to look for a mechanism by which people react to a problem of violence. (Milena Almeida[7] n.d.)

In the interest of bringing theory and practice together, it is especially important to examine experiences around the management of digital communication toward meeting policy objectives. This interest led the group to review policies for the creation and dissemination of content in social media, which resulted in an analytical descriptive exercise concerning acts of communication, from the transformation of gender roles and a paradigm shift concerning the representation of women, both in discourse and in online communication production.

As in many civil society organizations, feminist groups also go through different processes of diagnosis, identification, and planning of actions. This means that the diversity of ideas is also expressed in communicational cartographies and "a map is drawn that speaks to us of the diversity of cyber feminisms – social, ludic, challenging – and the important use of the internet by social movements as a way to influence the definition of the real world" (De Miguel and Boix 2013, 38).

Rossi Braidotti argues that cyberfeminism provides opportunities to launch the feminizing action on the internet from the reflection of nomadic vitalism, which he says that it "is neither organismic or essentialist, but pragmatic and immanent" (2013, 171). This reflection is similar to Remedios Zafra's observation for whom "the new feminist configurations, in the contemporary context, may be heirs of the Cyborg philosophy…liberating ourselves of the need to clarify inherited stories on the bodies" (2010, 300).

This underscores the importance of new spaces for the legitimization of voices, in contrast to elite discourses that invalidate the practices of women, no matter if they are academic, artistic, and scientific, because these productions often take place in spaces led by men.

The three case studies illustrate that the Internet is a space that should not go unnoticed and has become a space whereby not only relationships, but meanings and collective proposals are intertwined. The ways in which

these connections form socially interconnected accounts and new horizons for reflecting about women's social problems. For this reason, one of the first arguments is that compared to traditional spaces of dissemination and communication, cyberspace uses different processes of assembling messages and complaints that do not fit into the traditional logics of information and communication. The following sections will discuss two main issues: (1) cyberfeminism in Ecuador: women on the net, by examining communication production in, from, and for cyberspace, starting with the role of women in the communication production processes, and their discursive tactics; and (2) representation, by discussing new forms of representation of women and the feminine in social media.

Cyberfeminism in Ecuador: Women on the Net

Political work starts with the examination of roles and how the work is structured "from within", eliminating sexism when allocating responsibilities and actions. It is also important to assess conceptualizations, planning, communication production, and information management from the female collaborators. For the Universidad Púrpura collective, for example, responsibilities were shared equally among its members. In addition, the voice of women was the most important at the beginning of the exercise to create messages and communication products, because they are the ones who live the day-to-day violence at the university. The general coordinator of the group explains how the group decided to use social media to explain their realities:

> Suddenly we saw ourselves as teachers and students (women) conceptualizing the approaches of what we were going to do in social media, thinking about the narrative of the products, directing and recording the videos or designing the materials for social networks, from our voices, from our realities. (Milena Almeida)

Transforming traditional roles around content management on the internet is one of the first points evidenced in the three cases,[8] where cyberfeminism is key to the construction of alternative spaces, and the work of women and dissident bodies are exposed on equal terms. Art is not called art because others have validated the work, nor are scientific productions based solely on precepts of male standards of science. Historically, the responsibility in the conceptualization and management

of information has been assigned to men as generators of spaces for dialogue and especially with roles that are tied to social and political impact.

This aspect was a fundamental starting point. The masculinization of work in digital communication has been an element that has impoverished the vision and inclusion of women in more creative activities such as cutting-edge conceptualizations, photography, design and programming, coding or media production for virtual environments. As a result, Garcia argues that "the cyberfeminists looked for a new way, to a feminism that seemed stagnant and that in the network had become an approach dominated by the logic of male domination of technology" (García 2007, 2).

In this practice of exclusion, where only the achievements of men have been exalted "gender thought has been concerned with exploring the limits between the real and its discourse, proposing unprecedented and socially open-horizontal and participatory appropriations of the most deeply-rooted codes of identity, such as the categories of man/woman, human/machine or nature/culture" (Pérez 2006, 45). Examining roles and actions is therefore necessary when analyzing feminist practices in cyberspace, because it is not enough to address the issue from the level of dissemination or discourse, but also to analyze who has access, uses, and appropriates technology.

Considering the data and experiences from the Universidad Púrpura, one of the campaigns that most impacted the Central University of Ecuador, came from the Purple University and was initially disseminated through Facebook as "#EnLaFacsoSeDice".[9] This campaign was created by the students who founded the group and the objective was to reflect on the abuse and symbolic violence of everyday language. It was based on the logic of a social mirror, constructed through simple, direct, and powerful posts, drawing on the voices of students, teachers, and administrative staff to understand that language "is a form of action" (Fairclough 2008) and as such, brings to light the patterns of abuse from the micro spaces such as the corridor, the yards, the offices, and the classroom:

> An online campaign that directly confronts issues of abuse of power was conceptualized by the girls in the group and was named #EnLaFacsoSeDice. That campaign, when it was taken from the online space to the offline space, generated a lot of controversy. I think that they realized the power and seriousness with which the students, who were part of Universidad Púrpura, were thinking about the issues of violence and abuse in university spaces. (Almeida n.d.)

For Universidad Púrpura cyberfeminists, the planning and implementation of actions were not delegated but assumed to be an integral part of the process. Therefore, the direction of the creative process, the feasibility and impact analysis, as well as the development and implementation were always done by cyberfeminist students who, from their voices and from their realities, shaped many of the web products that on the Universidad Púrpura official Facebook page:

> The Purple University, as a project, allows us to open a channel of protest in order to demonstrate the existence of violence and harassment in the university's classrooms. (Daniela Martínez[10] n.d.)
>
>   We were able to interact with fellow students and see their needs. Look at the problems of discrimination and violence from within. The project allowed me to learn and think differently. (Verónica Arias[11] n.d.)

This initiative marked a turning point in the feminist political struggle at the university. This action marked a move toward a transgressive view compared to other previous actions based on conciliatory discourses, docile and disciplined actions. More than 15 stills were developed based on real situations and quotes, captured in situ within the institution. These, together with other online and offline political advocacy actions paved the way for the creation and execution of the "General Protocol for Prevention, Attention and Sanction of Sexual and Gender Violence" at the Central University of Ecuador, pioneering regulations aimed to resolve violence and abuse.

This and other campaigns on Facebook significantly amplified antiviolence discourses at the University. The logic of creation and production of the campaigns made it possible for cultural artefacts such as memes, gifs, micro videos, social experiments, and lip dubs to go viral because "unlike others, their simplicity makes a multisignal discourse reflect a social, political or economic issue with direct and easy-to-understand language, conforming in turn, new 'knots of meaning'" (Angulo and Porto 2017, 2).

The case of Daría #LaMaracx Marika TransFeminista is especially illustrative of how violent attacks of machismo can be addressed, based on the use of a variety of resources that allow her as a transfeminist to subvert the discursive order. Daría #LaMaracx Marika TransFeminista's main virtual strategies for example, are oriented around challenging the attacks and the binary positions regarding male and female rationality. By considering the

ways in which these strategies operate, the initial meaning of cyberfeminism can be recovered.

After nearly 30 years of work, VNS Matrix (Josephine Starrs, Julianne Pierce, Francesca Da Rimini, and Virginia Barrat) rescued irony and sarcasm to reflect the disparate realities of access, knowledge, work, and representation of women in virtual spaces. Transfeminists like Daría adopt similar tactics and maintain clarity concerning their initial involvement in cyberspace and argue that we must use different mechanisms in terms of style, format, aesthetics, and discourse because "cyberfeminists are women, fresh, witty, irreverent with the politically correct, with a dose of voluntarily uncontrolled aggressiveness and irony that want to appropriate cyberspace" (Bernárdez 2005, 50). Daria explains her approach to Twitter and how it often leads to disagreements: "My virtual disputes on Twitter also happen because I use a form of absolute ridicule. Drag queens taught me a strategy: take mockery to the extreme" (Daría #LaMaracx Marika TransFeminista n.d.).

Mockery, sarcasm, and irony are historical forms of resistance, and in this case, confront heteropatriarchal rationality. Both Facebook and Twitter are used to evidence other realities outside of male discourses that are legitimized socially. Thinking as activists and cyberfeminists implies reflecting on that ambivalence conferred by technology that, on the one hand, refers to the control and segmentation of the public, but, on the other, thinking from the cyborg "is to call a coding of communication and intelligence to subvert the command and the control" (García 2007, 23).

The idea of subverting the discursive order in cyberspace involves incorporating new elements around the ways in which tactics are established within the political strategy in social media. In the words of Butler:

> Discourse should be understood as a complex array of converging chains whose "effects" are vectors of power… the power of the discourse to materialize its effects in agreement with the power it has to circumscribe the sphere of intelligibility. (2002, 267)

That is why for cyberfeminism, irony, sarcasm, and humor are opportunities to reconfigure the social dialogue, question gender binaries, and intervene in the online media agenda. At the discursive and textual level, humor, irony, and sarcasm are comprised of inter-textual and intra-textual devices, which means they become mechanisms of discursive, and as a result also conversational, enlargement because the joke emanates from a

shared perspective of reflection which becomes more permeable in the different sectors of society.

From the ironic and the humorous, complex and evidently conflictive spaces are generated, because similar and opposing discourse can be found there and this is probably its strongest characteristic. Jokes become viral faster because they are easier to understand in particular contexts due to the fact that humor does not require much explanation if it originates in a familiar context or if it is part of everyday life, in which opportunities arise to discuss and react to different political views and ideologies.

The strategies of the Universidad Púrpura and Daría #LaMaracx Marika TransFeminista draw very much on parody and through nuance, they draw on these tactics to show subversive realities in relation to what is constructed as a natural order. Does it matter? Yes, and this can also become a way to access the discussion of certain taboo subjects as when we talk about transfeminism.

> If I say "cuerpa" (referring to the word body, but in feminine), nobody could draw me one. A "cuerpa" is unique, it exists tangibly but it is unique. Virtual space enables me to fight against all of those violent machos. I cannot have the same fight or give the same furious response offline. (Daría #LaMaracx Marika TransFeminista n.d.)

Daría's experience shows the openness and range of activist positions committed to the struggle for the rights of all people. Knowing that technology is not neutral, social media is also being used on web platforms, not just to shape public policy, but to create new environments, historically occupied by men.

Discursive tactics, however, not only have to do with the tone and the way in which the emotions are activated by what is said, but it also involves an exercise of deconstruction on the representation of the woman in a situation of violence. The interesting thing is that virtuality promotes another way of thinking and from there, the cyborg provides the possibility from fiction to reality of a new social and political being constituted over the dominant western binarism (De Miguel and Boix 2013), located in different coordinates to the physical and unsettled reality of its historical, political and cultural legacy.

Representation: New Discourses About Women on the Net

Cyberfeminism in Ecuador is a space in constant construction, an enabling environment in order to confront the representations and the everyday images of women, reinforced in family, social, and religious settings, or in the educational system in which fear as pedagogy and tradition as the norm prevail. In the words of Sherri Turkle: "we never "graduate" from working on identity; we simply rework it with the materials we have at hand" (2011, 158). As a result, the virtual becomes an important space for the battle of representation:

> cyberfeminism, new information technologies and the politics of economic globalization, are perceived as the new cause of the creation, in the virtual space, of a territory where identity, or identities, are shown in crisis. (Nuñez and Sánchez 2011, 7)

Cyberfeminism seeks to speak from the unnatural, arguing that essentialism ceased to be the answer to explaining women and the feminine. Technology, in the case of cyberfeminism, allows us to challenge standardized and normalized discourses concerning what it means to be a woman and draws attention to the fact that it probably never will be. This leads us to discuss the representation of women in terms of discursive strategies in virtual spaces. Representation thus entails an exercise of reflection on themes that become the prolongation of bodies.

Violence against women, as depicted in the media, tends to report stories of defeat and victimization, narratives that are common for media companies that construct news from a sensationalist perspective, and the weakness of the victims. As Luce Irigaray argues: "the subjectivity denied to women, is without doubt, the mortgage guarantor of all undiminished construction of the object: of representation, of object, of desire" (2007, 119). Analyzing, for example, violence against women, there are many stories of defeat and narratives of revictimization, very common on television, radio, and in newspapers. This dispute for new imaginaries, however, is also taking place on online territory, representing women as empowered persons, beyond situations of abuse.

How are ideals shaped about women and the violence that surrounds them? On the one hand, it is possible to affirm that organizations and activists are countering stereotypes of representation. On the other hand, it is exciting to identify new trends coming from a different philosophy,

which places women within a scenario of possibilities. Reading this from the virtual allows us to shift the balance toward promotion, dismantling delegitimizing discourses, and subverting imaginaries that infantilize, demonize, or materialize the actions and the areas of women. In the view of Boix: "we must be very cautious with the vindication of the maternal representations of women ... we have a subject that is defined in relation to others, which is nothing substantial in itself" (2004, 164). This is echoed by Daría #LaMaracx Marika TransFeminista: "I do not like the projection of abused women. This is not how we want to represent ourselves" (Marika trans feminist). Refer to Fig. 1 for a photo report of the *Vivas Nos Queremos* March in Ecuador in November 24, 2018. Women represented by their struggle.

The experience of Vivas Nos Queremos-Ecuador is an example of how discourses about women are changing. Above all, in social media, there is a permanent concern for how to work on the graphics, relationships,

Fig. 1   *Vivas Nos Queremos* Ecuador 2018, women represented in their struggle. (**Source:** Vivas Nos Queremos Ecuador 2018. (Please refer to the original post at the following website: www.facebook.com/VivasNosQueremosEcuador/photos/a.740238686338769/740239039672067/?type=3&theater))

political policies, and the vitality of the new sensibilities, especially with regard to what it means to be women. In the words of a Vivas Nos Queremos organizer:

> We do not reinforce stereotypes; this is an agreement on our political and communicational actions. There are many things we already know how to do and how to say them. We are very careful in the use of language and of course in audiovisual products. We work on storylines and develop content following these guidelines. (Jeaneth Cervantes)

The experiences of Daría, Vivas Nos Queremos, Universidad Púrpura, and other organizations that use technology to defend equality, diversity, and the right to participate in the creation and use of virtual spaces, demonstrate possibilities for the deconstruction and transformation of social media. These strategies therefore recover the coexistence between the online and offline environments. As interviewees explained, it is in the neighborhood, at school, at university, and in the domestic space where you need to come up with clear, tangible, and strong messages against the need to eradicate gender violence.

The context also determines the types of discursive and campaign strategies that need to be used. Cyberfeminists understand that interventions in physical spaces are fundamental and that, with its particularities, these must also be carried into virtual spaces. As our three case studies make clear, it is important to examine more deeply the challenges and possibilities of technologies and their impact on the social world, especially in terms of public policies and that in order to achieve that, it is necessary to start up a communicational machinery from cyberspace.

The opportunities offered by social networks are varied, not only in terms of the dissemination or amplification of discourses, but also in terms of self-management and support for feminist struggles. It is important to recognize the work of joint efforts, voices, and the support found on social networks like Facebook to manage information and activate transgressive discourse. Publications with illustrations, photos, data, videos, and podcasts are assembled according to mobilizing action on Internet that is known as a "call to action".

This can be an exercise, not only at a policy level, but strategically, as one that is effectively implemented according to the need to self-manage material resources and sustain the process with the participation of more people. Thus, discourses, compared to those of a few years ago, when the

problem was more visible, now seek to increase actions based on the potential of each woman and the available resources. Calls for marches, assemblies, support for victims and/or their families, collaborations and assistance to spaces of political support are materialized through a discursive aesthetic that calls for unity, from the identification of common realities, and from another form of representing ourselves as fighters, brave, resilient, and subversive.

Refer to Fig. 2 for a call via Facebook to gain support for the march of November 24, 2018 Vivas Nos Queremos Ecuador.

Using this framework, it is possible to think of cyberfeminism as a key, first because at the tactical level it opens up virtual means and channels to

Fig. 2 Facebook Call for *Vivas Nos Queremos Ecuador*
Translation: Let's make the walls speak in the national march: *Vivas Nos Queremos.* How can you participate? If you are an artist, you can donate your wall, you can donate paint. (**Source:** *Vivas Nos Queremos Ecuador* 2018. (Please refer to the original post at the following website: www.facebook.com/VivasNosQueremosEcuador/photos/a.323500321345943/719695545059750/?type=3&theater))

gather these worldviews between people and organizations connected from different places, and second because when it comes to social dialogue it opens spaces for convening and supporting. When strategies and tactics are involved, Vivas Nos Queremos-Ecuador, political action from cyberspace must be carefully designed, especially because feminist discourse is often the target of attacks from the most basic to the most visceral argument. Nonetheless, actions require a lot of clarity and assertiveness in the processes of defining storylines and maneuvering within the political times in which the information is disseminated. One activist discusses how every detail of timing must be planned:

> Within communication, everything is political: When we send a mailing, when we make a statement, when we tweet a viral campaign and many of those decisions are made holistically. (Jeaneth Cervantes)

Hence, in this first point it was interesting, beyond the description of products and actions, the essence of the communicative process that is activism, which highlights the presence of women in the creation of feminist senses, concepts, and discourses in the network, in terms of clearly defined political objectives, vindicating three affirmations in the process of communication management: (a) that women are doing what they are doing because they can and because they want to, (b) women in cyberspace can speak according to their realities, and (c) cyber sisterhood is about giving and supporting.

Possibilities and Challenges

The beginning of this chapter raised questions concerning the relationship between feminism and cyberactivism and the extent to which it may deepen political action in the virtual arena and the extent of overlap between philosophy and praxis. At an individual and group level, cyberfeminism sets in motion different discursive strategies that accompany the tactics of intervention in public opinion, through non-sexist communicative production, not dependent on men and their statements, divorced from stereotypes and bringing together different voices to establish new realities.

For collective groups, political action is made possible by recuperating spaces of diversity and dissidence as legitimate options for building democratic processes and sharing a heterogeneous range of issues and interests

and placing them on the public agenda. This is especially done through web platforms that allow conditions of symmetrical dialogue between all[12] participants and to visualize refractory realities through different voices and stories. This relates to what Butler (2007, 21) points out as a collaboration with activists of the International Human Rights Commission of Gays and Lesbians regarding "that the affirmation of universality can be proleptic and performative, invokes a reality that it no longer exists, and discards a coincidence of cultural horizons that have not yet been found".

Testimonies, theory and observation pertaining to the contents of Facebook pages in our study demonstrate the matrices of thought with which individuals and collectives operate through dissident and transgressive representations of the feminine. This exercise reaffirms that cyberfeminism opens new possibilities for broadening thinking about women, our problems, and the scenarios in which we live. This is amplified by combining knowledge, democratizing the word, communication, and digital knowledge, but above all by valuing difference and dissidence, making this process complex but fertile.

It is inevitable that cyberfeminism transforms from being narrowly defined to include the diversity of histories, needs, and philosophical viewpoints. New paradigms are therefore developing around feminist practice within cyberspace. However, activism from this environment must be examined not only in terms of its potential, but as Sibilia (2005) argues, we need to be aware of the universal digitization that is part of our era, where the body emerges in an environment amalgamated with artifice, upgrading itself as if it were a machine, changing and modifying its parts. According to their positionality, cyberfeminists seek to function in line with the changes of technological artefacts, thus as cyberactivists, we also look to update ourselves according to a technological compass.

It is important not to get overly enthusiastic about the relationship between technology and women, as it also involves what Haraway (1991) proposes is a new scale of integration of the home, factory and market where the place of women is crucial but also vulnerable. As she points out with absolute clarity, the modification of the new forms of production have an unequal impact on social groups. It is precisely in the domestic space where the modes of operation are an evident pretext to do everything from the comfort of home.

As our case studies demonstrate, the political action of the feminist groups largely depends on overtime work and volunteer time. However, despite struggle and resistance activists cannot always guarantee their material conditions in political collectives, which, in many cases, reinforce

the patterns of dependence and repressive employment, and cyberfeminist activists often remain in a position and unequal negotiation, with their partners, when it comes to the care of children and family. The potential of networking and collaborative work is important, not just concerning work, but also in personal spaces. These include rethinking familiar areas such as such as male dominated sports, such as football and wrestling and the spectatorship around these in the home.

Finally, in terms of cyberfeminist challenges (individuals and groups in Ecuador), web and social media platform creation is urgent, as so far, most of the effort in Ecuador has been made using popular social media such as Facebook, Twitter, and Instagram. Of the interviews conducted, it follows that one of the aims in the short term, is precisely to generate online spaces, involving using the code in favor of feminism.

In conclusion, it is important to reaffirm that cyberfeminism promotes permanent reflection concerning the complex relationship between technology and women because its potential transforms communication and technology itself, opening new spaces for new connections between the feminist struggle and resistance groups of different characteristics. Different approaches, challenges, and articulations of cyberfeminism complement each other, through intersecting points of view.

Therefore, cyberfeminism is considered so dangerous within the patriarchal system, because it is a game changer, proposing different forms of communication, understanding communication as a social process, where the answers were insufficient and further questions needed to be answered (Vizer 2006). This was evident through the voices of women presented here and the diverse bodies that have become politically active with strategic work on social networks and via web platforms, without which sustaining the struggle would be much more complex.

This sphere of analysis raises the possibility of a transition toward a fourth feminist wave, concerned with combating all types of violence against women. Around the world, news headlines draw attention and denounce violence against women and echo many of the issues presented here. In Ecuador, the feminist movement with a history of five decades is now drawing on new mechanisms of communication and information to consolidate and amplify its messages.

NOTES

1. Marika is a term originally used aggressively, mockingly, or violently to refer to homosexuals in Latin America. At present some people use it as a flag of struggle and resignification.
2. The analysis here is based on my doctoral thesis (in progress) "The face of the citizen 2.0: the fictions of conversation and political participation in social networks, from the construction of a typology of Twitter users in the account of Rafael Correa, former president of Ecuador", National University of Cuyo, Argentina.
3. Ni Una Menos- Not one less is a slogan that gave name to a Latin American feminist movement that first emerged in Argentina in 2015 as a protest collective that opposes violence against women and its most serious and visible consequence, feminicide.
4. Jeaneth Cervantes is part of the communication commission of Vivas Nos Queremos-Ecuador.
5. Daría Castro is a marika transfeminist.
6. The general project ceased to exist in mid-2018, however, from other spaces teachers and students continue to develop actions to eradicate, mainly harassment and abuse of power. This project is considered a pioneer in the fight against violence in the university space and has served as a reference for other universities in the country, especially in the construction of antiviolence protocols.
7. Milena Almeida is a general coordinator of Universidad Púrpura.
8. In the case of Vivas Nos Queremos-Ecuador responsibilities and communicational work were shared between male and female members.
9. #InTheFacsoItIsSai. Facso is the abbreviated form to refer to the Faculty of Social Communication of the Central University of Ecuador.
10. Daniela Martínez is a former student of the Faculty of Social Communication and part of the project.
11. Verónica Arias is a former student member of the Universidad Púrpura.
12. In the collective group Vivas Nos Queremos Ecuador, men also participate and collaborate in activities; however, they have not played roles as spokespersons for the group.

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Documenting, Representing, and Strengthening Indigenous Language and Culture

Re-presenting Indigenous in Ecuadorian Media: A NewsFrames Approach

Belén Febres-Cordero, Iria Puyosa,
and Juan Diego Andrango Bolaños

INTRODUCTION

Focusing on the experiences of collaborative projects developed alongside individuals from two Ecuadorian Indigenous nations, this chapter explores some of the contributions that media literacy initiatives and open access analytical tools may offer to misrepresented and underrepresented communities. The chapter starts by summarizing an analysis of the coverage of the Sarayaku Indigenous nation in the Ecuadorian media, conducted using tools and methods implemented by the NewsFrames initiative.

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It then discusses the participatory media analysis sub-project entitled "Reframed Stories", which invited Ecuadorian Indigenous activists to analyze data around Indigenous representation in the media, and to respond to such representations from their own perspectives. Finally, the chapter reviews audiovisual and digital narratives constructed by Indigenous collectives as their own representations within their struggle for their ancestral space/territory and their culture, as well as an identity built upon memory and resistance.

NewsFrames is a *Global Voices* initiative aimed at understanding trends in media framing and developing online tools for collaborative media analysis. The initiative, which took place between 2016 and 2018, set out to answer questions related to how news stories are framed, whether bias plays a role in reporting, and how media analysis may help to overcome the shortcomings of news framing. The NewsFrames initiative was not an academic project, but a collaborative initiative bringing together researchers, software developers, journalists, and media activists interested in fostering a less biased media environment that is better suited for promoting democracy and social justice.

The project discussed in this chapter uses NewsFrames media analysis methods for examining the framing of news stories. There are two pillars in the methodology, the usage of computerized text analysis tools and the participatory approach. Participants in the project shared a general understanding of what "frames" are and why they matter. The project did not involve formal instruction concerning the conceptualization of framing, which evolved from communication and social psychology research from the 1980s and 1990s (Entman 1992; Fiske and Taylor 2013; Gamson 1994; Kahneman and Tversky 2009; McCombs et al. 2009; Snow 2007). Nonetheless, participants learned that the selection of pieces of information to be highlighted is itself a framing task. Same as providing salience— making more noticeable or memorable—to aspects that led to a problem definition, causal interpretation, or moral evaluation (Entman 1992; Fiske and Taylor 2013). Furthermore, workshops comprising analysis and open discussion helped participants to become aware of how framing also works by driving attention away from other aspects of an issue (Kahneman and Tversky 2009) and by omitting explanations and evaluations (Entman 1992).

Media coverage was explored using *Media Cloud*, an open source platform developed by the MIT Center for Civic Media and the Harvard Berkman Klein Center for Internet and Society. This software suite

aggregates, analyzes, clusters, and provides visualizations from a large sample of news stories in order to pose inquiries about the content of online media.

NewsFrames analyses were mostly exploratory. The unit of analysis was the news story, and frames were issue-specific. Emphasis was placed on how frames are used to define issues and to qualify actors in the context of news reporting. Findings were typically presented by way of short or medium-length posts published on the NewsFrames website. Methodologically (Matthes 2009), the analysis was text-based and computer-assisted, so that frames were identified inductively, focusing on textual discourse and using quotes from the text to back up claims.

NewsFrames collaborated with the Rising Voices initiative of *Global Voices* and created a sub-project called "*Reframed Stories*". Reframed Stories is a participatory media literacy and data-driven digital storytelling endeavor created with the objective of sharing media analysis tools and methods developed by NewsFrames with communities around the world that do not have access to gather evidence-driven knowledge about their representation in the media. Following this objective, Reframed Stories works with Indigenous people and other traditionally misrepresented and underrepresented groups to analyze media representation, and to elicit participants' responses to dominant themes and issues appearing in news coverage about their communities. As such, it offers people the opportunity to share their initial thoughts about the way the media talked about their communities and the topics that interest by creating their own stories, which are then translated into multiple languages and shared in the NewsFrames and Rising Voices project sites.

The first series of Reframed Stories was developed in close collaboration with the Indigenous community of Sarayaku and the Shuar nationality, both situated in the Ecuadorian Amazon. The project then expanded to workshops implemented together with local partner organizations in five countries in Latin America.

In the following section, the analysis focuses on the news coverage of the Sarayaku people in Ecuadorian media to demonstrate the type of work conducted in News Frames. The participatory media analysis workshops for the Reframed Stories series are presented in more detail in the second section. Most of the Reframed Stories participants are Indigenous activists who are deeply concerned with communication hegemony and are engaged in radical media (Downing 2001). The final section of the chapter is devoted to discussing the audiovisual narratives imbued with the

spirit of everyday resistance and discontent (Scott 1989) by those who oppose elites in power.

ANALYSIS OF COVERAGE IN ECUADORIAN MEDIA OF THE SARAYAKU USING NEWSFRAMES TOOLS

Ecuador has a sizeable Indigenous population—around 8% of its citizens self-identify as members of one of the 13 official Indigenous nationalities and more than half the country's population has Indigenous background (Instituto Nacional de Estadísticas y Censos 2010). For decades, Ecuadorian Indigenous peoples and nationalities have been working to build organizations to fight structural discrimination. We used NewsFrames tools to explore trends in the coverage of the Indigenous people of Sarayaku in Ecuadorian media. Sarayaku is a small Indigenous community in eastern Ecuador near the Amazon rainforest. Twice in the past five years, they have gleaned the attention of Ecuadorian national media.

Between September and November 2014, the Sarayaku suddenly appeared in Ecuadorian media coverage (see Fig. 1). On September 30, the Ecuadorian government issued an apology for allowing mining companies to exploit Sarayaku land without the permission of the Indigenous community. In our *Media Cloud* search, some 204 stories appeared with "apologies" (*disculpas*) in regard with the Sarayaku community.

Two years later, the apology followed a ruling by the Inter-American Court of Human Rights (IACHR) issued on June 27, 2012, that condemned the Ecuadorian state for violating Sarayaku rights to communal

Fig. 1 "Sarayaku" *Media Cloud* search 2014
Description: *Media Cloud* over "Sarayaku" in the NewsFrames Ecuador collection in September–October 2014

property. Two years later, the Ecuadorian state complied with the ruling and apologized in a special intercultural ceremony. The apology was a political and media victory for the peoples of Sarayaku, as well as for Indigenous groups and activists who mobilize against oil exploration. The Sarayakus benefited from the broad media coverage of the apology that was broadcast widely in both Spanish and *Kichwa*.

After the spike in coverage following the apology, coverage of the Sarayaku disappeared from the Ecuadorian media agenda. But in December 2016, news stories about the Sarayaku resurfaced (see Fig. 2).

On December 19, through the official Facebook page Sarayaku, defensores de la selva ("Sarayaku, defenders of the jungle"), the Sarayaku reported that they were holding 11 Ecuadorian Army soldiers who were in their territory without permission. Most of the Ecuadorian online media, including some pro-government media, covered the story by quoting the Sarayaku community Facebook fan page,[1] without including official statements from the army or the government. Initial statements from the Sarayaku's Facebook fan page claimed that the soldiers were "invited to a dialogue" after entering the Indigenous territory without permission, and also that the soldiers were "*under the protection*" of the community.

Later that evening, Ecuador's President Rafael Correa described the incident as "kidnapping". In a national broadcast he declared: "this is unconstitutional, arbitrary detention, this is **kidnapping** because everyone who stays inside the territory without doing anything illegal must have free mobility respected".[2] Despite the president's statement, it is important to note that the Sarayaku narrative prevailed. Throughout the week, the word *secuestrados* (kidnapped) was only used by the media to quote statements from President Rafael Correa or his minister of defense Ricardo Patiño. Most online media coverage gave prominence to the

Fig. 2 "Sarayaku" *Media Cloud* Pulse 2017
Description: *Media Cloud* Pulse on "Sarayaku" in the NewsFrames Ecuador collection in October 2014–July 2017
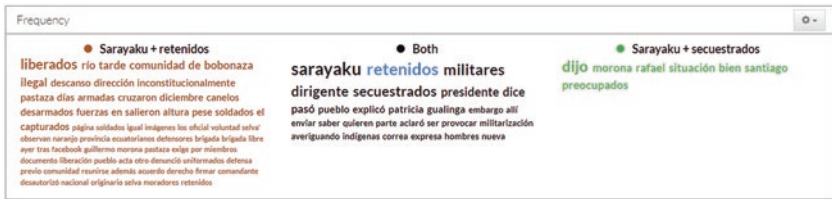
Fig. 3   Media Cloud word comparison
Description: *Media Cloud* comparison among words "*retenidos*" (literal translation: detained) and the word "*secuestrados*" (literal translation: kidnapped). December 2016

Sarayaku version, using the word *retenidos* (*detained*) instead of *secuestrados* (*kidnapped*) and referred to the extraordinary militarization in the region (see Fig. 3).

After a negotiated release of the soldiers, it was the word *retenidos* (literal translation: *detained*) used by the Indigenous leaders that prevailed in news coverage over the word *secuestrados* (literal translation: kidnapped). Digital media opted for using *retenidos*. In the end, even the press release from the government agency Secretary of Communication (SECOM) employed the language of the Sarayaku, noting the following:

> Just as there are rights there are also obligations that must be respected to safeguard those same rights like for example, free mobility in the national territory. For this reason, the Government categorically rejects **the detention** of eleven soldiers of the Armed Forces by the arbitrary decision of some leaders of the *Kichwa* Sarayaku community. (SECOM 2016)[3]

This case study[4] shows that despite the prevailing view of Ecuadorian media as being highly conservative and somewhat racist, the Sarayaku enjoyed positive coverage in their conflict with the Rafael Correa government. In the case of the "apology", mainstream media positioned the news story within the larger frame of the dispute between the Citizen Revolution and Indigenous populations around fundamental human rights issues. In the 2016 incident, the Sarayaku strategically framed the story when they broke it on their Facebook page. Though President Correa reframed the news stories in other instances using public media, he was unsuccessful in the retention case. Certainly, both private media and Indigenous radical media fought against Correa's policies even if for

different reasons and with different arguments (Puyosa 2017). Nonetheless, as highlighted in the following section focusing on the Reframed Stories sub-project, activists still argue that Ecuadorian media coverage of the issues affecting Indigenous peoples and nationalities is often incomplete and tends to contribute to obscuring the roots of the conflicts being reported.

Reframed Stories As Media Appropriation and Self-Representation

Part of the NewsFrames' goal consisted in bringing the tools and methods developed through this initiative to groups which do not always have access to gather evidence-driven knowledge about the way they are represented in the media, and to offer them the possibility to respond to this representation in their own voices. As describe earlier in the chapter, NewsFrames joined with the Rising Voices initiative of Global Voices to work toward this objective. Together, they created the Reframed Stories sub-project, which collaborated with Indigenous and other traditionally misrepresented and underrepresented groups to create a starting point for dialogue and discussion about communities' portrayal in a collection of media outlets, as well as avenues to strengthen people's self-representation efforts through digital media.

As Juan Diego Andrango who participated in the project illustrates in the quote below, people often found that open access software tools for media analysis could offer multiple contributions to misrepresented and underrepresented communities:

> Tools for media analysis could allow us to understand the way in which words, information, and discourse are being managed by the media. They add to collaborative processes of our own communication because they show that mainstream media tends to represent aspects more linked to commercial interests, but it does not generate information from the reality of Indigenous communities and nationalities. These tools can become an element to analyze our communication work and guide us in choosing the best way to respond to the information generated by traditional media. (Febres-Cordero 2018)

The first series of stories in this sub-project was developed in close collaboration with the Indigenous community of Sarayaku and the Shuar

nationality, both situated in the Ecuadorian Amazon. These groups have been protesting extraction projects in their territories for years and have taken their fight to the national and international level. For this reason, they have important insights to share about the media coverage of community resistance.

Reframed Stories thus collaborated with the Sarayaku and Shuar groups, as well as individuals who worked closely with them, to explore Shuar and Sarayaku representation in Ecuador's national media using the *Media Cloud* tool described above and creating stories that respond to the coverage from *Sarayaku* and *Shuar* perspectives.

Media Cloud allows the creation of word clouds, to help us understand how the conversation about a topic may be framed by showcasing the keywords that appear more frequently alongside specific search terms in a determined time period. The larger the word in a word cloud, the more often it appears in the *Media Cloud* database sample of news reports, blogs, and other media. For instance, the *Word Cloud* below depicts the dominant words from 97 articles published between January 2017 and April 2018 where the word "*Sarayaku*" is mentioned within 3 Media Cloud collections of Ecuador's Spanish-language media outlets (see Fig. 4).

The experience with Reframed Stories points toward some of the contributions that media literacy initiatives, such as NewsFrames, and open
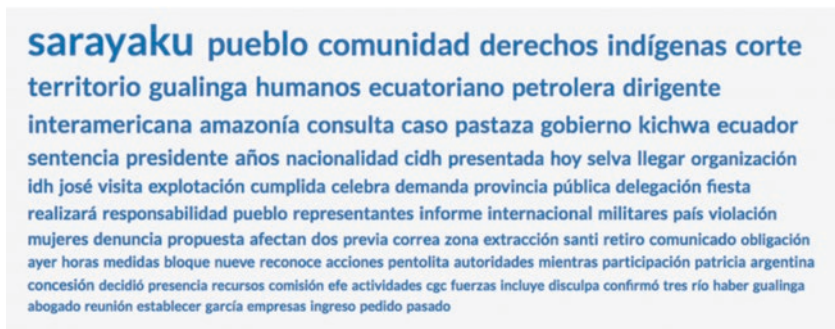
Fig. 4   "*Sarayaku*" *Media Cloud* Search 2017–2018
Description: Media Cloud search over "Sarayaku" in the NewsFrames Ecuador collection January 2017–April 2018

access software tools like Media Cloud can offer to Indigenous and other historically marginalized groups.

What Can We Learn from This Collaborative Project?

The experience with "Reframed Stories" demonstrates some of the possible ways in which initiatives and tools focusing on media analysis could support and strengthen efforts toward self-representation. According to the insights offered by the participants in Reframed Stories, one of the main contributions that tools such as *Media Cloud* can offer is to give communities a deeper understanding about the way in which they are being represented in the media. Participants often mentioned that although they had some general idea about their representation in the media, analyzing the word clouds created with *Media Cloud* allowed them to have a different perspective of how the media presents their groups and topics of interest. For example, when commenting on the word cloud of stories including the word "Sarayaku" between April 2013 and June 2017 in four *Media Cloud* collections of Ecuador's Spanish-language media outlets, Andrés Tapia, the person in charge of communications for the Confederation of Indigenous Nationalities of the Ecuadorian Amazon (CONFENIAE) in Ecuador states:

> I notice that there are several important words missing in this graphic. For example, I do not see terms that demonstrate that many of the problems that Indigenous communities in Ecuador have derive from issues fundamentally related to extractivism, and I do not see words like "militarización" that talk about the problems that Indigenous communities face. Maybe the media is covering certain topics and providing a general overview of things, but the roots of the problems, and the perspectives of the Indigenous communities and nationalities, are missing. (Cited in Febrés-Cordero 2018)[5]

The participants in this project also found that media analysis tools could help Indigenous and other underrepresented and misrepresented communities to consider new ways to strengthen their internal communication and self-representation efforts. For instance, by making use of these tools they could see how the issues important to them, such as militarization and extractivism, are not being covered by the media, providing

insight toward the directions that they need to take with their communication strategies to make sure that their views are taken into account.

Moreover, tools such as NewsFrames provide participants with a new way to encourage and build collaboration within and among communities. For example, Abigail Gualinga, a Sarayaku youth leader, considered that new technologies could empower young people to get involved in the efforts initiated by their elders and other community leaders, and encourage them to continue their legacy by arguing the following:

> We need to find avenues to bridge generations closer together, so that people of all ages can collaborate in the topics that are important for our communities, and in the issues that affect us all. (Cited in Febres-Cordero 2018)

Jose Santi, one of the people in charge of *Sarayaku*'s blog, *Sarayaku: El Pueblo del Medio Día*, added that tools such as NewsFrames that encourage collaboration could also extend beyond a specific community, weaving networks across borders:

> Besides creating our media such as our blog, we are interested in collaborating with different media and groups using new tools and technologies so that people both inside and outside Ecuador can know more about what we are doing in Sarayaku and in other places of the country and we can join efforts and learn from each other. (Cited in Febres-Cordero 2018)

Inspired by these insights and following methods similar to the ones implemented in the first series developed with *Sarayaku* and *Shuar* members and partners, in 2018 several on-site workshops were held in seven Latin American cities (Quito, Ecuador; Esmeraldas, Ecuador; *Sarayaku*, Ecuador; Bogotá, Colombia; Osorno, Chile; Oaxaca, Mexico; and Cochabamba, Bolivia). These workshops were coordinated in collaboration with local organizations and invited people from different groups, including Indigenous communities, LGBTQ and feminist rights activists, and human rights defenders, to share their initial comments on particular word clouds of a topic of their interest created with *Media Cloud* tools. A collaborative series of stories gathered from the preliminary data analysis shared by the 44 participants were created and published on the NewsFrames, Rising Voices, and Global Voices website and in Spanish-language sites.

The activities implemented through these series and workshops are only one of the diverse range and shape of interventions that media and information initiatives such as Reframed Stories and NewsFrames could take. *Media Cloud* and other tools provide several possibilities. These include deeper content analyses from specific articles, more comprehensive consideration around media sources and outlets, and more detailed examination of the trends in coverage of a particular topic over a period of time. In other words, the experience of Reframed Stories also provided some lessons to be considered when implementing initiatives of this kind. While initial collaborations using tools such as *Media Cloud* can offer an important starting point for preliminary data analysis among misrepresented and underrepresented communities, it is crucial to add avenues to strengthen and maintain an on-going and long-lasting work with individuals and communities to reach a more in-depth analysis, and to do so in a sustainable way. It is also required to consider different mediums to conduct and present the analysis in formats relevant to each community, which could include audiovisual or graphic material, to name a few. Finally, the need for imagining forms of merging online and offline work to engage with digital tools in different ways that respond to unique contexts should also be addressed.

Overall, the insights gained through Reframed Stories point toward some of the multiple possibilities that digital tools and media literacy initiatives could offer to communities around the world. Such contributions could support these groups to resist hegemonic representations created by others about them, and to explore new ways to tell their own stories. There are multiple methods and tools that these groups could use to make their knowledge, lived experiences, and voices more widely heard. As the next section suggests, the narratives emerging from Indigenous and other misrepresented and underrepresented groups, created with participatory methodologies and audiovisual and digital materials, could be promising avenues toward this goal.

Self-Representation, Saying/Doing, and Indigenous Visual Narratives from Ecuador

The experience with Reframed Stories illustrates the need for original narratives to emanate from the actual voices of the communities as they respond to media dynamics. This section considers different avenues that

could be taken to achieve this goal. It discusses insights gained through the Reframed Stories experience, especially those obtained with other digital tools and from audiovisual materials. It thus explores the possibility of expanding media coverage with different narratives that emerge from Indigenous communities in Ecuador through diverse digital materials. The resulting new digital spaces are important and necessary for rendering visible the needs of communities. They also help to build and weave collaborative and alternative dynamics of knowledge, told through the voices, participation, and experiences of those who are involved in the subject of the stories that are shared.

This analysis builds on the work conducted in the project "Symbolic representation in the construction of the other audiovisual in the narratives of communities and nationalities" (Andrango cited in Febres-Cordero 2018). This project seeks to better understand the Indigenous context in Ecuador, and to use the new tools and digital platforms available. The project consists of the collaborative support and production of micro-documentaries that add to reframing how symbolic aspects of Indigenous groups and nationalities have been represented by others. It suggests that these tools are important to their struggles, resistance, and recognition of rights. This project complements the production of the audiovisual materials with workshops, conversations, and exchanges aimed at strengthening Indigenous ways of knowing and doing. As such, it draws on the dynamics and understanding developed over the years by the Ecuadorian Indigenous movement, narrated and told through audiovisual materials, and exhibited through diverse digital mediums. In other words, it considers how the use of the new platforms could help render visible, enduring, and collaborative the building of audio/visual memories addressed through the wisdom, knowledge(s), and practices of the communities. More importantly, and similar to Reframed Stories, the representation created through digital media could amplify people's views and the meanings that they attribute to the symbolic.

Digital media can assist in the recovery of collective memory of different Indigenous communities of the country and in understanding the actual reality. Such recuperation is projected as an emergent process against the new forms of coloniality that currently affect different societies at a global level. Simultaneously, this memory contributes to render visible the subjectivities, imaginaries, and pedagogical and community/collaborative practices of the organizations that resist, fight, and try to disassociate the epistemic extractivism from their territories from and to the people of the

same community. They do so through the new documentary and digital narratives that help build and reconstruct community identities.

These dynamics and use of resources begin in people's bodies and minds; in the work of their hands as they work the land and in the crafts that they produce, which are woven texts of resistance. These are transformed through survival mechanisms of their cultural and social characteristics, thus expanding the dialogue about the creation of news stories and audiovisual narratives. In this case, they serve as tools for the resistance and decolonization of the AbyaYala[6] and of the different spaces that have been subjected to cultural and social features and dynamics left by colonization, and still present today. The audiovisual image and the alternative stories emerging from the communities, thereby reconstruct the collective memory inherited from their elders.

The possibility of getting closer to "the other" has emerged from different positions. The cultural roots and the inquiries that arise from these positions are based on the desire to learn more about people's social organization with the objective of creating stories in both written and audiovisual formats. However, the creation of these materials should not seek to break into people's spaces and interrupt their routines with dynamics that could inhibit their daily collective lives. They should not create a colonizing presence within different contexts where the social organization takes place, either. In other words, it is important that the producers of the materials created do not reproduce epistemic extractivism and interventionism.

It is certain that there will be divergence and contraposition in the process of constructing narratives, but it is just as crucial to take into account the positionality of the content producers, as it is to make sure that they do not have a superior viewpoint. Instead, the objective of this educational/investigative and collaborative/participatory method should be to contribute to the processes of development and collective work through people's own efforts, representations, and resistance. It is therefore mandatory that the learning process created out of the exchange of experiences is a mutual one, and that the view leading to the project of the creation of new narratives is one of curiosity, encouraging people to mobilize and become the creators of their own stories (Fig. 5).

Audiovisual materials and new digital tools can be seen as mediating artifacts within social processes that have opened the space for social empowerment and people's appropriation of new technologies. These technologies are useful for reframing prior narratives and for fostering Indigenous resistance, which is based on values, identities, and imaginaries

Fig. 5 Inti Raymi
Description: *Inti Raymi* (Sun Celebration) Festival in Cotacachi, Imbabura, Ecuador, July 2018

(Rey 2010, 14). These tools have the potential to strengthen such identities and representations in the visual narratives shared in different platforms, which support cultural diversity and encourage citizen participation. In this way, they contribute to creating community work that is based on consent and responds to the common wellbeing inside communities. At the same time, they open up spaces for the construction of new learning processes, community work, social struggles, and self-representation from the digital and audiovisual arts.

Over the years, Indigenous media organizations' digital media use has included several approaches to narrative creation. On one hand, stories focused on registering or visually portraying the events that take place in different communities or contexts. These follow the work of an itinerant journalist. On the other hand, there are efforts that validate the rights of the communities, and make others hear the voices of protest and resistance of each of the members of the community. In this way, they do not only inform, but also join in the struggle and fight through these spaces.

The use of digital technological tools as avenues for political and economic resistance, and for social protest—independent of those in power at

any given moment—provide spaces for communication, instruments for dissuasion, and authentic alternatives for the Indigenous and community realities against mainstream media, giving voice to those who have been silenced for years.

There are multiple ways of understanding the uses of digital media. Some authors have different theoretical positions concerning the use of digital media and understand this secularization and independent process as a configuration that underestimates the creative and experimental forces of the symbolic production (García Canclini 2005). Others see the globalization processes as avenues for separation and social segregation in relation to the use of technologies and audiovisual materials, but not in relation to the message that is transmitted through them (Bauman 1998).

Due both to the convergence and divergence of theoretical views, technological resources are located in each of our imaginaries as their use and meaning can be attributed when they are appropriated by communities to democratize knowledge and develop avenues for collective, multicultural, and participative learning (Bauman 2003, 12). In particular, the focus of its use should be as social benefit so that it represents the words and actions of communities, as well as the recovery of knowledge(s) and teachings. This would allow us to move toward the creation of new social and cultural policies that emerge from people's voices. Accordingly, new technologies could become supportive spaces from where to render more visible the work and reality of the communities. They could also become digital spaces for dialogue where ideologies of the hegemonic powers are contested, and to create narratives to generate an echo so that people's voices can be heard and acknowledged, even without an authorized discourse.

At present, talking about "the other" has become a form of substantive takeover, moving from "talking about" to "talking for" others (Spivak 1998, 6). Projects such as the "other audiovisual" and Reframed Stories aim to break with this structure. Coming closer to communities reconciles the positioning of the subject against hegemonic thinking. It is also a heuristic recovery of the reasoning logic of the emancipation of Indigenous communities and nationalities in Ecuador and elsewhere in the world by gaining deeper knowledge through visual culture and digital media. As discussed, these create spaces for sharing experiences and knowledge and, above all, for recuperating historic memory and for transforming reality by using people's narratives in search of a better way of feeling and living.

The audiovisual digital narratives influence and help in the constructive process of a new way of depicting and facing reality in the world. But in order for this to be realized, the critique must not just remain in words. It must also be a practice of doing, rendering visible not only what "the other" producer of these narratives wants to demonstrate, but also giving voice to the stories that emerge from the perspective of the spectator (who constructs reality), through resistance and symbolic struggle.

Closing Remarks

Our analysis suggests that the narratives created by mainstream media about Ecuadorian Indigenous groups conflict with those that the members from these communities and the people working closely with them want to communicate. These incongruencies point toward the need to increase and strengthen the production of spaces for self-representation, which can be done through different methods and media, such digital media analysis tools used in NewsFrames. When analyzing the narratives published in the Ecuadorian media, there is a discrepancy between what the communities want to communicate and the information that is presented in mainstream media, both private and government-run. This suggests that it is necessary to strengthen the creation of more spaces for self-representation using different media and methods, including, but not limited to, digital audiovisual production.

It is equally important to consider the challenges that such tools and methods might bring with them and continue to create ways to overcome them. Some of the goals in this regard can be to find the means for long-lasting collaboration between groups; to consider different mediums and formats for data analysis and presentation relevant to each context; and to aim for a balance between online and offline participation to meet each community's unique needs.

Finally, it is crucial to consider the different digital instruments available, including audiovisual material and media analysis tools, as avenues to facilitate the production of knowledge without neglecting the experiential aspect of collaboration and participation amongst groups. In other words, it is important to find ways for digital tools and methods to be integrated in daily lives and spaces, so that they are not only used in isolated instances, but become a part of people's everyday practices and efforts related to critical analysis, communication, and collaboration geared toward self-representation, community mobilization, group identity integration, and other common goals.

Notes

1. The Sarayuku community fan page is called "Sarayaku, defensores de la selva".
2. In Spanish: "…*esto es inconstitucional, es detención arbitraria, esto es **secuestro** porque todo el que permanezca dentro del territorio sin hacer nada ilegal se le respeta la libre movilidad*".
3. In Spanish: "*así como hay derechos también hay obligaciones que deben ser respetadas para asegurar esos mismos derechos como por ejemplo el de la libre movilidad en el territorio nacional. Por ello el Gobierno rechaza categóricamente **la retención** contra la voluntad de once soldados de las Fuerzas Armadas por decisión arbitraria de algunos dirigentes de la comunidad Kichwa Sarayaku*".
4. The dataset is available at: https://github.com/globalvoices/NewsFrames-Data/
5. Actually, "militarization" comes out in the coverage of the Sarayaku during December 2016 when the incident of the retained soldiers occurred, but the word does not stand as clearly when looking to the four-year period. For more info, see: https://rising.globalvoices.org/blog/2017/10/07/we-should-talk-about-Indigenous-struggles-but-acknowledge-our-achievements-as-well/
6. AbyaYala is a term commonly used by Indigenous peoples to refer to the American continent prior to Europeans' arrival. It is an identity symbol, which means land of vital blood, or noble land that shelters everyone.

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Challenging Asymmetries of Power and Knowledge Through Learning Communities and Participatory Design in the Creation of Smart Grids in Wayúu Communities

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[M]eaning belongs to a linguistic category, that is systemic, therefore, the units of meanings of different languages can be incongruent, depending on various parameters (descriptions of contents, volume, and place in the system), [and] a category of communication, which is subject to differences in language and can be expressed through different linguistic means in different languages. (Lvovskaya 1985)

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INTRODUCTION

This chapter analyzes the interactions between a *Wayúu* community, a private energy company (ISAGEN), and Los Andes University research members of the Faculty of Engineering, in a project seeking to introduce alternative wind and solar energies in Indigenous Wayúu communities in the La Guajira department in Colombia. Using a learning communities approach (Lleras 2003), the project examined patterns of communication and interaction within a context of domination and considered its impact, reconfiguring these relationships through participatory design. New knowledge produced derived significant meaning by incorporating the Wayúu worldview. Using the methodological strategy of participatory design and by consciously structuring communication spaces, actors challenged the asymmetries of power-knowledge associated with colonialism, such as those produced by scientific knowledge in relation to local community knowledge, which hinder the recognition and understanding of "the other" in the process of participatory design. The project resulted in community empowerment through a proposal for sustainable energy, through a process of cultural recognition. The information obtained was essential in the design of smart grids.

Engineering projects associated with electric networks often include digital technologies in a configuration called a smart grid. A smart grid seeks two-way communication in the supply chain to help improve efficiency, reduce energy consumption and cost, and maximize the transparency and reliability of the electric system. These energy networks aim to develop efficient processes in different moments of the technical process, starting with the generation of energy and finishing in the commercialization of electricity to users. Smart grids look for efficiency depending on the control, measurement, and monitoring information that circulates in the process. Examples include the Telegestore in Italy that began in 2005, connecting approximately 30 million consumer homes, using broadband communication through power lines; the mesh network of Austin, Texas, which has been running since 2003; and the smart grid in Boulder, Colorado, dating back to 2008. Another branch of smart grid-based projects is the smart microgeneration system, which has demonstrated benefits for communities in the use of alternative energies. Thanks to their flexibility in terms of management and the possibility of integrating different

types of energy, smart microgeneration systems can be adapted easily to different contexts (Peppermans et al. 2005).

Several community projects have been implemented using smart grid networks in both urban and rural contexts. The methodological approach used to achieve these electricity systems considers the community's point of view and their inclusion in different stages of the process. The community thus actively participates from the network design on, not only as an end user (Nourai et al. 2010). In Latin America, for example, there has been an emergence of methodological approaches that integrate relevant community actors throughout the process associated with the conception, implementation, and maintenance of the network (Herrera and Jiménez 2013). From a communication perspective, the project presented in this chapter aimed to construct spaces for defining and structuring the information and the knowledge circulating in the interactions, previous to its digitalization. For the Wayúu community, this approach strengthened Indigenous knowledge and culture. It is increasingly clear that the success and efficiency of a project like this are not only the products of the infrastructure, supporting digital communication and its technical information. Its success also depends on the definition of information that is relevant to communities and the knowledge associated with their culture.

In this project, the meeting of cultures was based on people's interpretations of their own culture. The context of the project is therefore simultaneously an affirmation of cultural identity, an expression of a way of life, and a space for the construction of boundaries between cultures (Barth 1976). This chapter presents a case study of communication patterns and interactions in the development and adoption of alternative energies (mainly solar and wind energy) by Indigenous Wayúu communities living in the La Guajira department in Colombia. From the perspective of learning communities (Lleras 2003), the project was developed using a critical systemic approach. This approach included Soft Systems Methodology (SSM) developed by Peter Checkland (1970) and Participatory Action Research (PAR) articulated by Orlando Fals Borda (2001). This methodology accounts for patterns of communication and interaction in a context of domination and its effects, and proposes to reconfigure these relationships through participatory design, based on the construction of vital meanings based on the Wayúu worldview.

The process included two years of dialogic work (Bakhtin 1981) with the community as well as the use of spaces for open communication and citizen participation. Three relevant actors participated in the project: a private energy company (ISAGEN), research members of the Faculty of Engineering from the Universidad de los Andes (Colombia), and the

Indigenous Wayúu community. This learning communities critical systemic approach uses participatory design methodologies whereby the actors can overcome the asymmetries of power-knowledge which hinder the recognition and understanding of others in the process of participatory design. The project demonstrates community empowerment through a proposal for sustainable energy, designed through this process of cultural recognition.

Consequently, this chapter highlights a methodological perspective that fosters structures for the development of recognition and understanding, a space for dialogue that emerges from cultural understanding and facilitates translation to produce meanings. The following sections describe the main actors and the political circumstances of the interactions within the context of the project.

The Context of the Project

This section describes the geographic and cultural context of the Wayúu population an their territory. It also explains the political circumstances that shape the interactions between a group of Wayúu communities, a private energy company, and a university research group in a project wanting to introduce alternative wind and solar energies in the La Guajira department in Colombia.

Located on the Guajira Peninsula in the north-western part of the South American continent and covering 13,000 km², the department of La Guajira is one of the most energy-rich regions in the country containing coal, natural gas, solar radiation, and wind (Ardila et al. 1990). This territorial expanse is the Colombian part of the Wayúu ancestral territory, and also borders with Venezuela.

Despite its wealthy natural resources and the economic importance of the department at a national level, La Guajira has significant social problems, suffering some of the highest poverty levels in the country. Upper and Central Guajira are deserts characterized by a very dispersed, low population. In this extreme landscape, there is little provision of essential services such as access to water, energy, education, and health (Ardila et al. 1990).

Although La Guajira is a mining-energy region with the largest open-pit coal mine in the world, the resources from the extractivist model have negatively impacted Indigenous populations within the territory (González-Plazas 2008). Moreover, the area is experiencing a complex

political situation both at the national level—the region is purported to have one of the highest rates of corruption in the country—and at an international level, as the Colombian-Venezuelan border.

The Wayúu population were a nomadic culture, but today they demonstrate patterns of poly-residence. Their ability to transit the border between Colombia and Venezuela is central in maintaining their survival. Wayúu society is divided into 30 matrilineal clans, in which the woman is the leader and organizer of the clan (Harker 1998). The family nucleus includes mother, father, and children, and the dominant male figure in the extended family is the maternal uncle, who arbitrates in family problems. Part of the role of the uncle is to be the mediator,[1] who is the maximum figure arbitrating inter family conflicts. The mediator guarantees the system of justice and the historical memory of the Wayúu people.

Wayúu territory and the community settlements are known as Rancherias. These are made up of nearby houses, generally formed around the extended family, a place for sharing resources and collective rights. Collective goods include water, the garden, and the cemetery. The authorities of the Wayúu communities and the communities themselves have been historically recognized for strong organization and the capacity to maintain an autonomous society despite more than 500 years of colonial domination. Nowadays, both Colombia and Venezuela recognize the Wayúu as a people with rights and territory. Fundamental goals for the Wayúu are the defense of their culture and community social welfare. Conflicts emerging in these communities are related to fuel smuggling and criminal activities on the Colombian-Venezuela border.

Currently, the design and development of potential projects for the use of energy resources in these territories are a matter of national and global interest (REN21 2017). In 2014, the Colombian Government approved the Law 1715 promoting private ventures in the funding of renewable energy projects that address the dual dimensions of efficiency and the demand of energy resources. These projects have been developed in the area by various energy companies over the past seven years. The projects generally seek to generate alternative energy sources with the aim of benefiting communities, substantially improving living conditions.

Colombian law requires a consultation process with Indigenous communities, such as the Wayúu, prior to and during project design and implementation of a 2011 mining project. Other similar projects failed because populations did not adopt the technologies proposed, or in certain cases they were adopted but they lacked sustainability plans. The lessons

learned from the issues associated with previous projects in the area served to address potential future problems. One such lesson is the need for prior consultation as an instrument for the planning and development process that also considers and includes the rights of Indigenous communities to participate in decisions about projects and activities within their territories in order to protect cultural integrity.

Company Interests and Partner Relations Before the Project

The context of the project was determined by company, community and research interests, and the dynamics and interests of the actors involved affect the way they interact with each other. In this section, we describe the fundamental dynamics and interests among the different actors.

Corporations looking to use wind and solar energy sources generated actions in two fields and diverse types of specialized knowledge. On the one hand, they need to research and develop projects of a technical nature to incorporate new energy sources into existing ones and strengthen their service portfolio. This technical knowledge is frequently acquired through partnerships with relevant actors such as universities and engineering researchers (Casas 2003). The electric company ISAGEN initially contacted the university requesting two types of technological knowledge inputs. First, they were looking for the technical knowledge of energy renewal sources in each one of the communities. Secondly, they sought to design a renewable energy model coherent with the unique cultural elements of the community. In this sense, community appropriation of the renewal model was considered fundamental.

This power dynamics when the study began between those interested in the projects meant that the university and its research members of the Faculty of Engineering had autonomy in the technical and social analysis, and all participants signed a confidentiality agreement. Based on six years of prior contact between the company and the community, the visits to the community were collective meetings and included the company, the university, and the community representatives.

On the other hand, companies need to reach agreements and confirm commitments with the communities. There must be a participatory process in which the Indigenous community becomes a relevant partner in any decision over the use of the land, and when appropriate, establish the income the inhabitants will receive as a benefit from the operation of the

projects. As mentioned above, the consultation process with the Wayúu community was essential prior to and throughout project design and implementation stages. In most cases, the Wayúu receive an economic payment from the company as payment for the introduction of instruments into the area to measure the wind potential. According to the theoretical model adopted, the consultation process was participatory. This participation implied reaching agreements with each community as well as their knowledge. The community recognized their context, its characteristics technical, social, and culturally relevant. This requirement demonstrated the need to establish intercultural relations between the private companies in the energy sector and a group of Wayúu communities.

Company-community relationships over the past six years have aimed to build spaces for interaction, understanding, agreement, and commitment, such as developing strategies based on the resources they exchange. Two years ago, the company considered the feasibility of including products and services associated with alternative energy and started a new phase of the project. This new phase brought to the table expert knowledge in technical and social issues as part of the university-company alliance with the community.

In 2016, a new strategy to engage communities emerged in the exchange of resources, as the company sought to make energy to the community available through micro-networks, smart grids that take advantage of the wind and sun in the region. This led to the design of an engineering project bringing together three relevant actors seeking to exchange resources:

- A private company in the energy sector interested in incorporating alternative energy to its portfolio of services in coherence with its organizational identity, which would allow them to increase their participation at the national level.
- An engineering faculty, interested in the project as a research opportunity. Los Andes University had two leading roles, the first in research and design; and the second as a mediator in the asymmetrical relationship between the community and the engineering team.
- A group of Wayúu communities associated with the territory where the engineering project would be installed. The communities have a chance to improve their quality of life and decide to participate vol-

untarily. The original territory was composed of 13 communities, each one associated with a rancheria with an average population of 100 inhabitants. The selection of the two communities followed three criteria, a technical approach, the voluntary commitment of the community and prior contacts that had developed between the community and the energy company.

In academic fields, the practical importance of keeping the social and technical spheres differentiated has become more evident. The structuring of the design associated with the interests of diverse actors and communities implies understanding the process as a game in the expression of ideas (Suwaa et al. 1998) and an issue of social construction (Checkland 2010). During the conceptual phase (Valkenburg and Dorst 1998) and the detailed design of the project, (Srinivasan and Chakrabarti 2010) optimization is generally favored, but there are indications that recurrent conversations redefine the diverse products.

The learning process of a community is central to the ideation of projects and the proposal of practices and strategies to improve the effectiveness of the participatory design (Lleras 2004). From the socio-cognitive perspective, the prevailing process is that of co-design, which is the combined expression of the different actors in decision-making. According to this perspective, engineers need to establish mechanisms to deal with the views of all relevant actors that affect the decisions that are shaping the structure of the design. In the first visits, the community considered that they did not have the expert knowledge to participate in co-design process, but during the workshops they found that the expertise they had could be considered technically relevant. Researchers from the Faculty of Engineering at the university faced the challenge of designing an approach that would respond to the technical and social spheres of the project and the articulation of specialized knowledge from university-community, and enterprise.

In the social sphere, the University-business collaboration began with the broad characterization of the Wayúu ethnic group, initially relying on secondary sources to begin to define options for working together. Then, the university focused on communities that had already been contacted by another company in the energy sector, referencing work and studies before entering the design phase, which was facilitated by the ISAGEN. This allowed for building understanding and relations with Wayúu communities. The approach, recognition, understanding, and analysis of these

communities thus led to the definition and selection of the community in which the project developed the co-design strategy. The university team visited the area and identified the specific ways where participatory design spaces could be built.

The Analysis of Relationships from the Perspective of Cultural Exchange

The exchanges between project stakeholders can be analyzed from the interactions between actors in culturally differentiated spheres of business, academia, and Indigenous communities. From an anthropological perspective, Barth (1976) suggests that the relationships of exchange between these actors can be interpreted by the participants from the purview of their own culture. Furthermore, in these exchange relationships there is a meeting of cultures, because in practice the project itself establishes the meetings, but then is mediated by the interpretations produced by the different worldviews, interests, and objectives of the participants.

Similarly, in relationships of interaction the communication is at the same time an expression of life and an affirmation of cultural identity. For example, the description mentioned above shows how the company, considering its organizational interests, emphasized a worldview and purpose based on the framework of its own culture and organizational identity. In the business case, its strategic action is fundamentally an expression of corporate interests and an affirmation of its organizational identity; different from that of the university and the community.

In addition, in contrast to the communicational dimension of cultural exchange, are the actions of each as builders of differentiated worlds (Echeverría 2003). In this sense, speech acts are central in the space of effective communication between actors seeking to exchange resources and reach agreements and commitments on these exchanges (Flores 2015). Among these speech acts, statements receive special attention since statements tell us about the world that each actor wants to build according to their interests and refers to their actions in order to achieve an exchange according to their interests, as will be explained below.

According to its interests and as an affirmation of organizational identity, the company declared that it was ready to begin a design stage, performing strategic actions in order to build a new social world by articulating relevant actors in new exchange relationships. From this perspective, for

example, the central issue for the company was not to inquire about the meaning of the micro-network, but rather its relevance within the construction of the world within a specific cultural framework (Heidegger 2016).

The main argument in this chapter is how to address language games (Wittgenstein 2007) in the communicational domain with categories such as sense, as opposed to rational constructions of meaning. In the context of participants building social worlds, the category of sense addresses what is not spoken since it belongs to the cultural domain, but which is demonstrated in intercultural relations (Wittgenstein 2017).

In the project, when an actor expressed that something did not make sense, this can be understood as a claim that did not make sense for that specific actor, according to the worldview of the person who expresses it. Through communicational actions, participants establish a dialogue and the functionality of the network in a differentiated way, according to their interpretations and culture. For example, for the company, the macro-network is a necessary device to assure viability of the wind project at the national level. Similarly, for the community, the network can be understood as a functional artifact, insofar as it is useful to its interests of cultural reproduction (e.g., giving the energy to facilitate textile work, or for food and health issues). Therefore, the micro-network in this project is a collective construction according to the sense made of it by the company as well as that of the community.

Following this initial work, the University of Los Andes and the research members of the Faculty of Engineering proposed the methodology and theoretical approach of learning communities. This approach involves the design of interactive spaces where people from different cultures can participate in facilitating constructions of the world. The communicational space starts with the recognition of peoples' life projects, the expression of their interests as a matter of creation of sense, and their cultural identities. An intercultural project promotes respecting the limits of what can be said and what can be shown, the linguistics of meaning and sense.

From a technical perspective, the complexity of contemporary sociotechnical relations leads to a profound resignification of the methodological approaches now used for the design, production, and implementation of technologies, in which communities appear as a new reference for methodological proposals (Liua and Boylea 2009). The concern for communities arises because of the possible influence of these collective actors

at the level of technical design according to the dynamics of populations which modulate both products and services (Løkkegaard et al. 2016).

Thus, as mentioned at the beginning of the chapter, an intelligent micro-network involves the active participation of the community of users, which calls them to define whether the energy offer potential is consistent and functional to their needs. This case must thus be defined and digitized in the network design. At the time of implementation, the content must be monitored and analyzed to ensure that it leads to decisions improving the systems. Conversely, as the next section will argue, when the vision of the community is excluded from the design and management of the macro-network, the digitized information is neither relevant for the management or the decision-making and improvement of the system.

The Notion of Learning Community in the Design Process

Some of the main challenges concerning the concept of learning communities relate to the possibilities of dialogue and conversational capacities. During moments of creation and conceptualization, the conversational capacities expressed in the dialogue can open up possibilities that when configured in a collective scope propose new alternatives for social action (Echeverría 2003). When discussing possibilities, participants identify possible futures from the present situation.

In the design process, innovation occurs in the gap between what has been discussed and what exists. Gaps can lead to new conversations about reconfiguring the problem-solution relationships and establish new agreements and commitments in a process of mutual adjustment. Accordingly, co-design is also a process of learning to communicate effectively in spaces of participatory design.

Moreover, the problem-solution relationship underlies the idea of management, as design practices are driven toward producing desired results. Management implies that the actors will develop interaction capacities that lead them to organize activities toward a collective project. In this dynamic, successful design does not temporarily solve prior needs but manages a change in the practices in a sustained way. Accordingly, challenges encountered during the project included differences among the communities, political problems, and changes of residence. For instance, during the project, one of the members of the community had a violent encounter

with a member of another community. As a result, one of the men died, and the victim's community demanded financial restitution. This was impossible because the community that had to pay restitution moved away, and left the Rancheria. These circumstances required modification to the project and instead, a new community was included.

The concept of learning community is one that aims to build social worlds together with others, including the awareness of diverse actors, perspectives, and interests. The process of dialogue is central and recognizes meaning and sense by *observing relations* (Lleras, 2004). The latter implies monitoring three main relational aspects: (1) power relationships, (2) communicative relationships, and (3) production relationships (Lleras 2004).

First of all, power in human relationships exist in two necessary forms, either symmetric or asymmetric and could manifest in multiple ways. In the latter type, actors try to dominate each other and thus have "power over" the other, which is evident in daily practices and asymmetric relations.

Secondly, communicative relationships manifest primarily in two forms. The first is "dialogue" (Buber 1999), which is horizontal, empathic, aiming to understand the other's position, and opens the possibility for future action. The second is "co-ordinating practices" through "acts of speech" (Searle 1990) that recognize that there is responsibility about what is said. The basis of these communication relationships according to Heidegger (2016) is "care". A language is a form of expression of care. Emancipatory relations imply dialogue, which is based fundamentally on the concern for others and the mutual need for understanding.

Finally, relationships around production are essential to coordinate work, but also to establish new possibilities while creating a pleasant and playful environment (Lleras 2003). One tool to observe products and services is to check their COPE (Spanish for quality, opportunity, pertinence—which stresses relations with others regarding the products or services they provide to others in a working environment) and effectiveness. Products should be negotiated with the intended receivers. Relative to the Wayúu community the line of direct descent is matrilineal and thus established by the mother. There is a lineage of women leaders who make political and social decisions in the community. Economic activities in the community include raising goats, making handicrafts, and gasoline smuggling, and they all needed to be considered in defining the final project.

Participatory Design, Community Participation, and Meaning Creation Through Dialogue

There are three fundamental elements in the construction of adequate dialogue interactions: participatory design, spaces of participation, and the construction of meaning through dialogue. Co-design is about engaging all of the actors involved in the design process, their interests, abilities, and possibilities. Cultural relevance is also essential in co-design for it recognizes the expertise of each participant and thus the possibility of applying their creativity to solving a problem (Sanders 2002).

Participatory Design: Learning Communities

According to the learning community's methodology, a useful and successful project for a community must be flexible in design as well as adaptable to relevant social dynamics. The learning communities are committed to collective learning, to developing self-organizing capacities based on local autonomy (Lleras 2003), which structure personal and social skills relevant to project management. The community must sustain its socio-technical practices with support networks that participate in the processes of redesign or maintenance of the technologies.

This systemic approach emphasizes the configuration, permanence, redesign, and maintenance of spaces where collective construction of products and services has been carried out (Akrich et al. 2002a, b).

In the design spaces, we sought to establish symmetrical power relations where all participants were on equal terms. Regarding how to address an intervention based on a learning communities approach, the fundamental instrument for the construction of relationships based on understanding and trust was dialogue (Lleras and Gutiérrez 2008). The recognition of actors as co-designers is made possible by the appropriation of language (dialogue) so that relevant actors share experiences, expectations, and possible contributions. Moreover, actors who do not belong to the community but enroll in the project are part of the support network that provides and makes it viable. For instance, the community should be able to understand and express the fundamental aspects of an electric micro-grid and from there, look at its usefulness. Expert technicians should be able to express and digitize information about the utility of the

energy potential for the community. Therefore, participatory construction with the different actors involved models made possible by the exchange and understanding of different knowledge, expertise, and views despite language differences, as the Wayúu speak *Wayuunaiki*, while the engineers are Spanish speakers.

Communities and the Intercultural Spaces of Participatory Design

Contact with Wayuu communities began with scheduled visits by research members of the Faculty of Engineering of the university and ISAGEN. In the Wayúu traditional representative authority, the daughter and granddaughter, according to the matriarchal leadership relations, officially accepted micro-networks of alternative energy in their territory and considered it beneficial to the community.

A paradoxical perspective was evident from the first encounters with the Wayúu. On the one hand, there was an expression of distrust in local and regional authorities, yet a willingness to establish trusting relationships with academics. The Wayúu are proud of Wayúu culture, which is expressed through symbolic and material elements. Their material culture is remarkably rich. The Wayúu mochila for example, a woven backpack is recognized as a way of reproducing material culture. This confection is taught from mother to daughter, and in the process of making the backpack, the culture is shaped and reproduced in the symbols that form part of the mochila's design and that make up the Wayúu cosmovision.

In the visit to the territories, the Wayúu showed how they have assimilated elements of the material culture of the *Arijunas* (the term used to designate people who do not belong to their culture, equivalent to the word foreigner). In contrast to the traditional dress worn by the Wayúu female leaders in their daily lives, the majority of the Wayúu men wore Western clothing. This situation is also evident in other areas of material culture, such as housing and food, and the education of the *Arijuna*. Besides, there are varying degrees of influence of western material culture in different communities, as it is possible to find two different types of house construction, a traditional and a western one (Fig. 1) and housing and recreational areas coexisting in the rancheria.

Fig. 1 Different material culture and housing styles coexisting in the same community

Dialogues and Construction of Meaning

The Wayúu were offered the space of the school as the site to establish the intercultural relations with the community where participatory design activities of the micro-network project would be carried out. The process was based primarily on dialogue, beginning with interactions with the leaders, and with the support of co-design tools. The construction of models was a useful co-design tool to overcoming language barriers. Models worked as a mediating element between technical knowledge and local knowledge. The models also mediated between the Spanish language of the university and the company team, and the Wayuunaiki spoken by the Wayúu community. Although the youngest members of the community spoke Spanish, some people in the community only speak Wayuunaiki. Moreover, while Wayuunaiki is the privileged language for community decision-making and political communication, once the workshop was over and decisions were made in Wayunaiki, in other contexts, some members of the community, including the leadership, spoke Spanish.

The Process with the Community: Modeling the Future

The learning community sought to design their dreams. During the process, the recognition of difference, similarities, expertise, and interests was essential. In the modeling workshop, some of these elements were part of the dialogue in order to co-construct. The dialogue included verbal and non-verbal communication as described in this section.

The initial process included dialogues with representatives from each of the actors involved. These dialogues were essential to the creation of trust and the recognition that each view is relevant and fundamental for working together. In the first meeting with the community, the leader and the interpreter established that the community understood the use of energy but did not believe that the modeling was going to be possible. Initially, neither ISAGEN nor the community thought it was possible to model an energy system. After the dialogue between the representatives, the workshop was named Following a Dream.

The strategic use of dramatic enactment played was a central co-design strategy for the university group to articulate the design practices they sought to develop, and for participants to make decisions about how to organize the design teams. Dramatic enactment worked as a complement to the translation team and included the Wayúu who participated in the workshop design. The community was summoned to the workshop by the leader, who established the place and time. Families attended the workshop together with participants ranging from 10 to 90 years old, spending the day in the rancheria. Although several political activities held on the same day the main one was the Following a Dream workshop.

In the Following a Dream workshop, the relevant role of the university engineers and the company group was to observe project modeling, to understand the meaning and sense that the design groups created around energy, as well as investigate the problem-solution relationship that emerged in each design group. Energy solutions surfaced by examining the uses of energy according to the community's interests. The priorities for the design responded to a common perspective, which was voted on by the inhabitants. The leaders introduced energy needs for two central purposes: education and the promotion of traditional culture.

In the first instance, Wayúu participants considered that the educational sphere was important in the instruction of Wayúu children. They argued that local and regional authorities must address problems like the lack of

school supplies, the difficulty of getting to the school, and the dearth of food reserves. The strategic objective was thus to obtain resources to improve this situation.

The second concern regarding the use of energy was the incorporation of elements of traditional learning in the consolidation of Wayúu identity. Community participants noted that this process would require the creation of physical spaces that support the re-creation of culture. In the project, traditional authorities included cultural expressions such as the *La Yonna* dance and the weaving of traditional fabrics as areas of energy interest. The absence of training in these cultural elements in the school led the leaders to start thinking about how possible uses of energy could improve them.

These two perspectives demonstrate a problem-solution relationship upon which leaders began to build the sense of having and using alternative energies. Traditional authorities acknowledged that it is in their best interest to have energy support for the projects they manage, particularly for those that maintain and reproduce culture. A pertinent example is the usefulness of the lighting provided by the micro-network to the school and the main house, spaces where culture is transmitted and where weaving is taught and shared. Additionally, the community pointed out that the school is an intercultural space that seeks to mobilize activities and improve the quality of life of the members of the community. For instance, the school space was used by health brigades to vaccinate and feed the children.

Each model that was conceived therefore represented the vision and interest of the members of the community who participated in the design process. The design work involved establishing dialogues, considering a proposal sketched on paper, and then in participatory construction using models, and the development of a 3D structure made with materials provided by facilitators from the university and those available around the school (Fig. 2).

The design construction process by the design teams resulted in the creation of several models. The community organized the models into a set of specific interests. Some of the design groups that emerged included:

- Shepherds and farmers. The groups saw the potential for having water in specific locations for the use of animals and crops built model X. If animals walk a shorter distance to the source of water,

Fig. 2 Model
construction workshop

their feeding needs are reduced which in turn improves energy
consumption

- Food preparation and cooking group. This group identified having
  filtered drinking water from water treatment plants; energy sources
  power and run appliances and they built model X.
- Artisans. This group was interested in incorporating lighting and
  energy outlets in their workshops, so they built model X.

This participatory process made possible the construction a socio-
technical design that crafted different versions of problem-solution rela-
tionships. After the design groups built their models, they shared them
with the community in order to make decisions together about the useful-
ness and relevance of renewable energy in community life. The dialogue
between actors concerned exploring diverse knowledges and expertise—
made evident in the modeling process promoted a complex view of the
technology. Models also included the cultural significance of technological
artifacts, their aesthetics, and location in the social and territorial map.
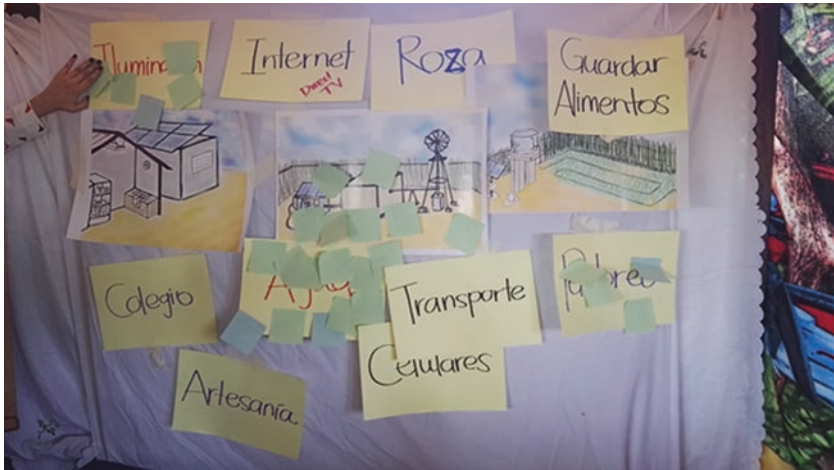
Fig. 3 Co-design workshop results

Finally, through participatory voting, the community decided and prioritized by relevant degrees the value of having electricity. Figure 3 illustrates some co-design workshop results.[2] It highlights elements that either exist or not in the community, such as illumination, internet, race, stored food, school, water, artisanries, cellphones, transportation, and poverty.

The creation of different models also made it possible for the community to build several problem-solution relationships, evaluating them first within the design group, and then within the community in order to propose the initial agreements between all the actors. It was a process of sense-construction, which finally confirmed the importance of the micronetwork for the Wayúu. In short, through dialogue and with the support of modeling the community built a projection of how the energy infrastructure was articulated into its world construction, which was sufficiently shared to support community decision-making on these issues.

Conclusions

The purpose of the project was to build an alternative energy solution based on the sense-making frameworks of Wayúu communities. Engineering projects mainly associated with electric networks thus incorporated digital technologies within a smart grid. The project demonstrated that efficiency is particularly sensitive to the definition of content built on the information that is relevant to communities and the knowledge associated with Wayúu culture. In order to create an appropriate renewable electrical system and its micro-networks, this methodology was significant to foster dialogue between actors and interests in order to co-design a cultural, contextual, and appropriate system. Similarly, on a communication level, the present project sought to construct a space to define and structure the content of the information and the knowledge circulating in its exchange, a necessary requisite to understand what must be digitized. Our theoretical approach included learning communities and co-design principles.

Developing a learning communities methodology included at least three types of activities: The first involved the development of pedagogical abilities, the second involved the development of productive capacities, and the third with the political capacity for self-management of the community. The main and dynamic axis for the construction of pedagogical spaces was the practice of dialogue. For dialogue to be possible, relations between people should not be dominated by one actor but based on cooperation. In order for relations of cooperation to work, it is fundamental that self-recognition and recognition of others take place. These pedagogical spaces revolved around three key moments:

- The moment when the problem could be understood by all of those involved
- The moment of planning, decision-making, or deliberation
- The moment of action or organization

In the processes outlined above, the idea was to develop technologies based on collaborative work and participatory design. During the organization, active dialogue through modeling was a good alternative for productive co-design.

Dialogue and co-design enabled through modeling was central to the construction of meanings. For the community, dialogue and co-design

made it possible to articulate the sense for having an electrical infrastructure on their territory and the technical system oriented by community interests. Centering the project on community interests made it possible for the infrastructure project to respond to the community's agenda as well as reside within the framework of the cultural identity of different actors. Thus, the technical system articulated the vision of the world of the community from the problem-solution relationships in both material and immaterial cultural perspectives.

The uses of technology inscribed in the modes of production, communication, and management are the product of the construction of sense and the recognition of situations that the community faces with respect to its cultural identity. Thus, for example, the political dimension became evident regarding how worlds are constructed when technologies are articulated within the activities that people do when they take charge of their own lives by making their own decisions.

In terms of communication, dialogue incorporates fundamental elements for the construction of meaning and worlds. Meanings such as intuition, empathy, emotions, a sense of transcendence go beyond the use of reason. Furthermore, communicative interaction involves learning processes that seek to respond to people's vital concerns, addressing existential situations that are worth working for, and that allow people to understand the responsibility they have in front of their vital construction, including building a world together.

Dialogue provided the possibility to transcend differences, and through co-design modeling, information relevant for the constitution of micro-networks. Technical knowledge for the design of the micro-network was combined with the local community knowledge associated with the use of the energy potential and allowed the construction of an energy renewal source for the community. Within this process, modeling proved to be a tool that served to mediate between languages and achieved a participatory construction by the community, and one viable from a technical point of view.

In terms of the community-company relationship and their interests, the resulting proposal was achieved through agreements and commitments by representatives of these actors and legitimized by the community.

Many challenges were encountered throughout the design of the project. The theoretical model of learning communities recognizes the asymmetries of power-knowledge existing between the different actors (academia, business, and community). However, recognition does not

always result in strategies that positively address the asymmetries or contingencies associated with the dynamics of each culture.

In the case of challenges presented during the project, operational changes within ISAGEN management and a change in its priorities affected project schedules. In addition, incidents in the community, such as the death of one of the leaders and the respective transition to a new leader, were dynamic elements that demanded adaptation of timelines and workshop schedules.

As for the management of power asymmetries, it is not always clear how to build spaces of trust and mutual understanding that in turn may reconfigure these relationships into more balanced ones. For future work it is essential that these issues be addressed. The co-design process, however, was particularly useful in challenging earlier working relationships between the Wayúu community and the energy firm and in determining guidelines for the consolidation of the electrical system, its micro-network, and sustainability.

Notes

1. Editor's translation for the Spanish word "*palabrero*".
2. Gutierrez, Jimenez. 2017. *Project Report*. Bogotá: Colombia.

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Indigenous Journalism in Ecuador: An Alternative Worldview

María Belén Albornoz and Gema Tabares Merino

Communication is the backbone of humanity. We have exercised this right since our people began to walk Mother Earth. We are called upon to regain our own words, to decolonize them, to work together in order to communicate from our own diversity, from our own cosmovision. We have to create a media capable of expressing who we really are. (IV Cumbre Continental de los Pueblos y Nacionalidades del Abya Yala, 2009)[1]

Indigenous journalism in Latin America has received little academic attention, except for the work of the very few scholars who theorized Indigenous communication in the 1980s and 1990s (Alia 2010; Villoro 1998). Indigenous media and research outputs in this area have increased

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311

considerably in recent years in Latin America and internationally (Becker 2004; Hanush 2013; Morán 2016; Skogerbø et al. 2018). Nevertheless, while Indigenous media has played an important role in informing Indigenous societies, Indigenous journalism as a field remains under-explored. A comprehensive analysis of the practices, structures, and outputs of Indigenous journalism is therefore necessary, against a background that "affects the way in which Indigenous peoples conceptualize and practice newsmaking" (Hanush 2013, 82). Moreover, Indigenous news making represents an emergent Indigenous public sphere controlled by Indigenous people (Grixti 2011), and a more diverse arena of previously silenced voices that emerges in the context of new technology tools (Markelin 2017).

Around the globe, Indigenous peoples are reclaiming political and cultural references after centuries of repression, building news reporting and storytelling narratives from inside communities, rather than being marginalized by voices from the outside (Skogerbø et al. 2018). Identity construction is thus happening in a mediated world where cultural heritage is a powerful source of inspiration within a collective quest for meaning. This includes cultural patterns, language, territory, and a sense of inherited differences (Levo-Henriksson 2007).

As Anderson (2006) argues, journalism can be an instrument for nation-building, and, provides possibilities to consolidate existing imagined Indigenous communities. In doing so, journalism thus becomes part of a larger network of politically significant forms that contribute to the negotiations, experiences, and contestations, maintaining certain perspectives, within historic, cultural, and political contexts. Within these contexts, digital technologies are contributing to the potential of Indigenous communication and journalism. Websites and social media are strengthening networks and sense of belonging as well as consolidating Indigenous identities. Crossing cultural and geographical borders, the Internet is an important site for close collaboration between Indigenous journalists and the endorsement of goals for communal and linguistic revitalization (Pietikäinen 2008).

In addition, within these contexts the watchdog function is increasingly an important feature of Indigenous journalism, since there is a need for accountability regarding topics that are relevant to audiences, and accountability of those who are in power (Hanush 2014). This is not always easy due to the risks associated with reporting from a critical point of view in State-controlled societies. As a result, some journalists

regard themselves as both "guerrilla" and "legitimate journalists" (Sammut 2007).

Drawing on these theoretical contributions and ethnographic research, this chapter analyzes Ecuadorian Indigenous journalism, focusing on the experience of the Ecuadorian Network of Bilingual Intercultural Communicators, *Red de Comunicadores Interculturales Bilingües del Ecuador* (REDCI). It considers the role of the network as enabling Indigenous voices to actively participate in journalism. Specifically, it examines how REDCI initially began to create digital media content in order to break away from dominant, westernized media discourses and notions of communication. Our main argument is that the emergence of this journalistic experience in Ecuador is an important case study of the new ways of mediating knowledge, cosmovision, and cultural practices of Indigenous Peoples of the Abya Yala.[2]

The Context of Indigenous Journalism in Ecuador

This section explores the historical context of journalism in Ecuador and REDCI's development, describing the first Indigenous media projects from the 1930s and the political claim for a plurinational state, as a cornerstone of the Indigenous journalistic practice which laid the foundations for REDCI in the twenty-first century. Between the 1930s and 1940s, young Indigenous writers of the Ecuadorian highlands repeatedly attempted to develop Indigenous media projects without lasting success. The first record of an Indigenous media project was the newspaper Ñucanchic Allpa, which means Our Land in the Highland Kichwa language. This Spanish/Kichwa bilingual production was published with the support of the communist party in the 1935 (Morán 2016; Becker 2004).

In terms of Indigenous news production, shortly after the constitution of the Ecuadorian Indigenous Federation in 1944, *Ñucanchic Allpa* became the official publication of the Federation and broadly distributed in rural areas in the Ecuadorian mountains (Becker 2004). The newspaper was short lived, partly because the government considered publishing in a language other than Spanish as a threat, with the only recognized official language of Ecuador being Spanish. It was only decades later, in 2007, that another Indigenous publication, the *Wiñay-Kawsay,* began to have broader readership in Ecuador's northern province of Imbabura. Currently, Wiñay-Kawsay has a website and a Facebook page and actively publishes in Kichwa and Spanish. This overall scarcity of Indigenous newspapers and

journals in the country has, however, prevented in-depth studies of Indigenous communication.

Radio has been another important source of Indigenous news production. In the 1960s the first Popular Radiophonic Schools were designed to support Indigenous literacy programs, at a time when the illiteracy rate was at a rate of 60% for Indigenous populations (Vásquez 2016). This radio project was run by the Liberation Theology movement of the Catholic Church under the lead of Monsignor Leonidas Proaño in the province of Chimborazo, and later became the basis of bilingual communication in the country (Bebbington 1992; Guerrero 1983). Radiophonic Schools in Ecuador were based on the project of *Sutatenza* Radio in Colombia (Vásquez 2016), for its best practice in terms of radio training. At first, the program was seen as an unrealistic project. After six decades on the air, however, Radiophonic Schools have become an excellent learning space for Indigenous journalists. Over the past six decades, hundreds of Indigenous leaders and journalists have been trained in radio programs, founding Indigenous radio stations throughout the country.

It is also important to note that the context of Indigenous journalism has been influenced by several key political developments. Following decades of Indigenous activism seeking not only recognition but also rights of Indigenous peoples, the Confederation of Indigenous Nationalities of Ecuador (CONAIE)[3] advocated for plurinationalism arguing for the "real and undeniable existence of the Nations and Peoples of Ecuador, as cultural, political and economic entities" (CONAIE 2001). In 2007, the quest for a plurinational State thus became part of a political project adopted by the government of Rafael Correa. This project deemed that legal recognition of an intercultural society was insufficient and instead focused on historical justice a central objective (García 2008a). In 2008, Ecuador finally became a plurinational state, adopting a new constitution that recognized different ethno-cultural groups within the framework of the state.[4] In other words, plurinationalism can be understood to stand for producing innovative forms of citizenship.

The concept of plurinationality came, to a certain extent, from the demand to replace the theoretical concept of nation, conceived of it as the "common belonging to an ethnic group, culture or religion" (de Sousa Santos 2010, 95). Moreover, Latin American scholars who study Indigenous movements in Ecuador generally view plurinationality, within the framework of collective rights of Indigenous Peoples and nationalities, as a way to eliminate social discrimination and transform social

participation into the political participation of Indigenous peoples in national politics (Guerrero 1991).

With respect to the legal framework for communication, Article 57 of Ecuador's Constitution notes that collective rights are recognized and guaranteed to communes, communities, peoples, and Indigenous nationalities and groups, such that the "dignity and diversity of their cultures, traditions histories and aspirations should be reflected in public education and the media; the creation of their own means of social communication in their languages without any discrimination" (Constitución de la República del Ecuador 2008).

However, Indigenous journalism in Ecuador is also strongly connected to demands for rights such as freedom of expression and collective rights. On the one hand, in December 1966, the International Covenant on Civil and Political Rights of the United Nations ratified the right to freedom of expression[5] (www.ohchr.org). This was reaffirmed in 2010 by the Inter-American Commission on Human Rights defended such rights as a core element of democracy.[6]

On the other hand, Indigenous collective rights gained some ground in 1989, when the International Labor Organization signed the Indigenous and Tribal Peoples Convention No. 169 which was followed by a significant debate about the rights of Peoples and Nations in Ecuador (www.ilo.org). The ratification of this international instrument by the Ecuadorian government resulted in its automatic incorporation into the Ecuadorian legal system, setting a legal precedent for its inclusion in the 2008 Ecuadorian constitution. According to the organization Tukui Shimi,[7] the new constitutional framework in Ecuador was used by the CONAIE to define "other forms of citizenship" (CONAIE-Fundación Tukui Shimi 2009), which are distinct from eurocentric visions based on the condition of individuality. According to the CONAIE, Indigenous collective rights represent a collective form of citizenship, which challenging modern political theory and practice at the base of a structured form of individualized citizenship (Ibid).

REDCI thus emerged within this specific political context with communication representing the political changes of the time, acknowledging the historical silencing of Indigenous voices. In 2010, 14 young journalists from several Indigenous Peoples and Nations of the CONAIE founded REDCI with the purpose of creating intercultural communication strategies that would perpetuate culture and languages more broadly (REDCI in Tabares 2011). Most of these young Indigenous journalists graduated from the

communication program based in Central University in Quito and took up the challenge of contributing to the quest of the emergence of the Ecuadorian Plurinational State. REDCI received no financial support from any organization and was founded first and foremost on the hard work of these graduates who defended the right to live life with dignity and equality.

REDCI aimed to create a new kind of journalism to communicate the discourses and world views of Indigenous communities to other groups in the Global South. Moreover, REDCI sought to share these knowledges and practices within the country and Latin America. REDCI began as a space where Indigenous voices would be both articulated and heard. Firmly locating their work within representations of the Abya Yala, a new geographic regional concept based on the Kichwa term, mature earth, was created where Indigenous movements could re-affirm their identity and re-appropriate their culture (Tilly 2013), replacing the colonial term "the Americas". REDCI also actively promoted the self-determination of peoples at a continental level spanning from Patagonia to the Arctic (López 2004). Concurrently, the organization remoted the convergence of indigeneity as a transversal and legitimate claim with political diversity. The intention of this new plurinational region was also to overcome obstacles concerning the continental mobility of Indigenous peoples, embodied by political and linguistic national borders that historically emerged as a result of colonial patterns and practices.[8]

Indigenous journalism, particularly in Ecuador, can therefore be understood as adopting the territorial denomination of Abya Yala rather than the Americas. In "the Americas", history begins with colonial genocide and the disqualification of the historical value of pre-Colombian roots (Mattelart 2002). The term Abaya Yala, in contrast, represents the theoretical concept for collective awareness of a new narrative at the core of Indigenous cultural and political practices. It also contributes to the reformulation of much of the political vocabulary to be used in order to legitimize public demands. In addition to referring to the geographical scope of the term, Abya Yala defines a new symbolic and ideological space embedded in daily and political life.

Eventually, Abya Yala became the new endogenous and cultural referent for Indigenous geopolitics (de Sousa Santos 2010). Furthermore, the foregrounding of Indigenous groups as subjects, which had been historically silenced contributed to the articulation of various Indigenous movements on a global scale, and the configuration of new communication and

information discourses. Communication thereby became seen as a right that could be exercised with autonomy, profound spiritual respect and plurality, as well as a specific type of power used to influence society and policymakers to guarantee communication rights and access to information (Miralles 2002).

Indigenous journalism in Ecuador has come to be envisioned and practiced as a means of transmitting ancestral knowledge through oral structures and Indigenous cosmovision (Hanush 2013). In contrast to the corporate and public media models, Indigenous journalism confronts corporate media and its racist structures, as well as the concentration of political power in public media (Grixti 2011, Skogerbø et al. 2018). By 2010, Indigenous journalism was at the forefront of a new form of communication in Ecuador, which was of great importance in terms of fair and nondiscriminatory journalism.

The creation of REDCI can be understood as representing a new form of journalism in Ecuador, not only in reference to intercultural rights and values, but by emphasizing journalistic practices, including the anonymity of the journalists. This was not just to protect its members, but to highlight a collective voice. As will be discussed below, journalistic writing was not signed but collectively to give priority to the community voice. For a period of three years, REDCI's website became a main platform for exercising freedom of expression rights and interconnecting voices from all over the Abya Yala (Markelin 2017; Pietikäinen 2008).

This chapter examines the news-making practices of REDCI during the three years its website became a political space for sharing a novel form of journalism in the country. We later explain why this communication project came to an end, and how other Indigenous journalistic projects became imbedded into the new digital agenda proposed by REDCI.

Methodological Approach

In order to explore Indigenous communication and rituals, we used an ethnographic approach.[9] Participant observations in Indigenous summits in Latin America were particularly key. Critical insights into Indigenous cosmovision emerged from the IV Continental Summit of Indigenous Peoples of Abya Yala, which brought together Indigenous communities of Latin America to Puno, Perú in May 2009. However, the most significant participant observation took place in Piendamó-Cauca, Colombia at the First Continental Indigenous Communication Summit where many rituals

regarding communication were performed and shared between Indigenous communities. Most relevant to this case study were the harmonization ritual and rituals pertaining to the collective voice of the community.

Website content was analyzed as part of an interpretative study of the digital practices of Indigenous journalism. Each platform entry was examined in the interest of understanding the difference between traditional media and REDCI's journalistic proposal. Furthermore, review of REDCI social media and interviews were conducted in 2019 among Indigenous activist and scholars in order to understand the discontinuity of REDCI's journalistic project. This chapter does not simply focus on REDCI's adoption of social media activities, however, it highlights REDCI's foundational moment and organizational activities which took place in a short period of time, and demonstrate the alternative worldview embedded in culture-based independent journalism.

Over the course of the research process, we experienced a shift in our understandings of communication practices. This included rethinking what it means to communicate, who produces information, and how is it exchanged and circulated. REDCI also introduced a new analytical dimension to our case study, whereby communication became the means of the production and reproduction of culture through the process of intergenerational transmission of tacit knowledge and Indigenous languages.

Rituals, Icons, and Practices

Indigenous traditions can be characterized by their diversity, recognizing that each people or nation has its own vision of the origins of the universe, thus shaping social behavior. Within the framework of Indigenous cosmovision, rituals are of paramount importance when articulating communication practices. Rituals form part of cultural identity that should be respected, and the means by which cultures imbed and preserve Indigenous knowledge how this knowledge is handed down, and shared.

REDCI used a harmonization ritual to imbue power to communicate many visions in the name of the community as an integral part of its operation. Journalists asked Mother Nature and Greater Spirits permission to perform communication acts, to preserve and adapt Indigenous information, thereby ensuring its use to communicate with others inside and outside the community. Just as mass media carries messages generated outside of local communities, Indigenous discourses also contain localized narratives and demands. The harmonization ritual, or so-called Amazonian

ritual, is part of these narratives. By using vital elements of Mother Earth as water, REDCI provided a context and a situated meaning to its communication process. "Indigenous nations inherit a historical commitment to communicate the truth […] and to ensure the integral nature of communication, to decolonize their thoughts, to regain the task of raising our voices along with the words of the wise men" (IV Continental Summit of Indigenous Peoples of Abya Yala).[10]

In order to reinforce its identity as an Indigenous organization, REDCI used the rainbow colored Abya Yala flag to symbolize the continental scope of the organization and its relation to the Indigenous movement. It also drew on two prominent figures of local Indigenous history: Rumiñahui[11] and Dolores Cacuango[12] as symbols of the organization.

REDCI also used symbolism structured on gendered terms to depict the dual nature of the Indigenous struggle. The male dimension, represented by Rumiñahui, demonstrates resistance against colonialism and slavery. Cacuango, who founded the Ecuadorian Indigenous Federation and was an activist for agrarian reform, bilingual education, and access to land, represented the female dimension and an enemy of the feudal system reproduced in the Ecuadorian Republic. The flag and the Indigenous figures united the globality of Abya Yala, the historical transcendence of resistance against colonialism and its reproduction in republican modernity. REDCI thus turned collective identity into a strategic resource.

In terms of journalistic production, REDCI conceived of reporting as a collective practice eschewing the use of individual authorship. Instead, every communication was signed by "*Coordinación* REDCI". From a conventional standpoint, this collective authorship is often understood as a way to protect the freedom of expression of journalists working in a complex environment in Ecuador. Nevertheless, our ethnographic research suggested another motivation. Removing individuality in the production of information meant that journalists represented the voice of the community and a collective response to specific issues. REDCI's emphasis on oral traditions recognized a common voice rather than the individual. Even though Indigenous journalism tends to be practiced within a culturally appropriate environment based in Indigenous values and practices (Grixti 2011), REDCI took this further by incorporating protective measures not incorporating authorship into journalistic practices that would be at odds with Indigenous cosmovision.

Furthermore, orality is part of a belief system crucial for registering and storing cultural values and information. Therefore, Indigenous languages

are of paramount importance in the reproduction of tradition and the promotion of peoples' own worldviews. Indigenous communication both embodies and enacts a much more radical proposal that challenges not only the dominant politico-legal structures of the State but also their cultural foundations.

Digital Media Practices

REDCI used digital media as central strategy to convey Indigenous forms of representation and expression. In March of 2010, it created a digital media project, which provided an alternative vision of citizen participation that challenged conventional media depictions of Indigenous activism. Indigenous culture was promoted with the aim of creating both social and political alternatives, through various digital platforms, code writing, and virtual spaces for communitarian participation, cultural resistance, the Sumak Kawsay, and the Suma Qamaña.[13]

Although it is indisputable that the Indigenous movement has "democratized Ecuador to a great extent" (Martínez 2007, 349) by incorporating social demands of ethnic minorities into the public sphere and the decision-making process, it has not brought measurable improvement to the living conditions of Indigenous communities, nor has it brought the leadership of the militant factions closer together. The mainstream press has interpreted the role of Indigenous leaders by equating it to Indigenous participation itself, circumscribing their political participation within the Ecuadorian public sphere. Such is the case of Pachakutik, a left-wing political party, which is considered an Indigenous party. Or the CONAIE, which is perceived as articulating Indigenous demands at a national level, rather than considering these demands as citizen demands for all Ecuadorians.

The evolution of Indigenous movements is rooted in the reconstruction of an ongoing repression of historical memory. Hence, the political struggle is also a cultural struggle to reconfigure cognitive structures that frame Indigeneity as negative or pejorative. According to de Sousa Santos (2010), despite the so-called achievements of the Indigenous movements, the re-foundation of the state requires a civilizational process to promote an intercultural dialogue that mobilizes different cultural universes and concepts of time and space. REDCI recognized that Indigenous journalism in Ecuador presented a challenge at both the political and cultural level. The challenge was to bring leaders and Indigenous communities closer, and to create a space for ordinary people to express and inform

without the mediation of the movement's leaders. With strategies of ethnopolitics and the introduction of information and communication technologies (ICTs), REDCI expanded the spaces of democratic participation and reimagined national identities (Radcliffe 1999; Yashar 1999).

Internet and digital platforms are large-scale sociotechnical systems with great capacity to transform human ends while adapting to technical means. According to Winner, technologies are *forms of life* when they are "woven into the texture of everyday existence, the devices, techniques, and systems we adopt shed their tool-like qualities to become part of our very humanity" (Winner 1986, 12). Moreover, technologies reveal the conditions of political issues and relations as the REDCI communication strategies demonstrate. Technologies can also be part of an adversarial design aimed at identifying new themes and forms of contestation as well as new trajectories for action. The adversarial concept is used to describe the character of designed artifacts, which "function to prompt recognition of political issues and relations, express dissent and enable contestational claims and arguments" (DiSalvo 2012, 12).

Within this adversarial strategy, information and communication technologies have been introduced in cultural life not only by instruments, processes, and artifacts but also through metaphors. Because technologies do not improve human existence by themselves, we must pay attention to how they are socially assimilated (Bustamante 2008). In the case of the Indigenous movements in Ecuador, political communication is organized through websites to express Indigenous political agendas and to represent Indigenous voices, such as CONAIE, FENOCIN, and other Indigenous organizations.

REDCI used its online platforms initially as an act against traditional media power and sought to legitimize its role as the official voice of the Indigenous Peoples and Nations. As such, they actively configured imaginaries of Indigenous communication and journalism by becoming the first organization to promote communication practices with an alternative worldview. The creation of REDCI's website was followed by a Facebook page, a Twitter account, and a radio broadcast. The website was active until September 2013, the Twitter account was closed at the end of 2018 and only the Facebook page still remains active, but no longer contains journalistic content.

The use of open access is another key strategy of Indigenous journalism promoted by REDCI. The free access to information circumvents market hierarchies and the concentration of information by not reproducing the

commercialization of communication. Other heterodox tactics have also been enlisted to promote solidarity and replace control of information by traditional media and the State. REDCI journalists sought to curtail the cycle of official disinformation including the reproduction of derogatory perceptions of Indigenous life, and the omission and distortion of Indigenous culture and political participation.

REDCI introduced a new set of values that contextualized social representation and journalistic production. The REDCI website was created to position Indigenous voices throughout communication practices, addressing political issues such as presidential elections, the popular vote, or legislation pertaining to Indigenous rights. The digital platform was not conceived as a neutral space. On the contrary, it sought to discuss political issues impacting Indigenous groups and generate support for their political agendas. The website also became a transnational network connecting peoples and nations transnationally, beyond Ecuador's borders.

The following posts provide an account of such possibilities of exchange of ideas and support between different Indigenous communities:

So good to have you back online. I am the Director of monthly *Indigenous Struggle* and we use much of the information published by you. Over the few months that REDCI have been on the Internet you have already encouraged unity within the Indigenous community on the national and the international levels (REDCI in Tabares Merino 2011, 58).

Greetings from Boston USA, I am writing to ask what is going on in our country, specifically with Indigenous people. REDCI is already a news space that we share with other brothers within USA and this helps to shorten the distance that separates us. I hope to have prompt news from you, to be able to reconnect with other brothers, to acknowledge the government response to the Indigenous issues, and to be aware of similar struggles that are taking place in other places (REDCI in Tabares Merino 2011, 58).

It is a shame about the government abuse. The same happens in Peru and other Latin American countries. Brothers, peasants, and ethnic people, the true owners of the Pachamama are mistreated, and if we claim our rights we are treated as terrorists. Keep on going brothers of Ecuador, do not give up. ANCASH-Perú (REDCI in Tabares Merino 2011, 58).

At the same time, REDCI digital media made it possible to encourage the use of the native languages of Ecuadorian peoples and nations:

Chicham, Kandoash, Awapit, Cha'Apalaa, A'Ingae, Siapede, Kichwa, Waotededo, Paicoka, Baicoca, Tsafiqui, and Sapara Atupama. After Spanish, Kichwa was the most widely used language on REDCI platforms, a reflection of its ubiquity in the mountains and in the Amazon region.

Topic: Imanallla ima willlaykunata charipankichik
REDCI journalist response: "Imanalla. Ari tawka willaykunami punchanta llukshin, shinapish pakta ama chinkarinakushun. Kutinkama" (REDCI in Tabares Merino 2011, 59)

Several Indigenous actors have used REDCI as a launchpad to boost their participation in national politics and exercise their democratic right to communicate and to promote cultural diversity. For instance, the Indigenous organization part of the Confederation of the Indigenous Nationalities of Ecuador (ECUARUNARI), which is part of the Confederation of the Indigenous Nationalities of Ecuador (CONAIE), supported the production of endogenous material to reinforce notions of Indigenous identity. In this way, REDCI contributed to strengthening communication processes within the Indigenous movement. It also served as an advocate in the policy-making process.

This model of Indigenous activist journalism demonstrates an alternative intercultural means of communication, transcending national borders and generating synergies around common struggles. Moreover, it shifts focus from a western-dominant media discourse and perception of communication. As a result, it reframes the collective cognition and grounds for the re-foundation of the Ecuadorian state.

However, it is important to note that despite the Correa government's appropriation of the plurinational project, which made these types of activities possible, several Indigenous leaders were repressed and incarcerated during this time. REDCI's website did not only reference the arrest, it also promoted a contextualized debate of the social protest and the role of the Indigenous leaders as defenders of the common good. Such was the case of the Shuar leader Pepe Luis Acacho, who was arrested in February 2011 while protesting the presence of mining corporations in the Ecuadorian Amazon. REDCI's front page stated: "Why does the Indigenous movement support pluri-national protests?" (Tabares Merino 2011, 67).

In contrast, corporate media outlet headlines instead emphasized the arrest rather than the context of the protest:

El Expreso newspaper: "Pepe Acacho, Pedro Mashiant and Fidel Kaniras were arrested in Macas" (REDCI in Tabares Merino 2011, 68).
El Universo newspaper: "Judge agrees with Indigenous people. Arrests were made on a 'whim'" (REDCI in Tabares Merino 2011, 58).

This is a clear example of how, in contrast to other news outlets, REDCI was able to offer contextualize the news creating new points of entry concerning this story. Rather than replicating it, REDCI asked important questions about the event and debated the reasons that gave rise to the arrest.

By giving context and opening space for debate, REDCI became a public arena where others Indigenous peoples also chose to participate. Such was the solidarity extended from Peru:

> The Peruvian National Teachers Association of Bilingual Education (The Continental Summit of Indigenous Communication of Abya Yala took place from 8th to 12th of November, 2010, in Misak Territory in the Cauca Department of Colombia. ANAMEIB PERU) expresses its solidarity with our brother, the Indigenous leader Pepe Luis Acacho, who is being held by the current Ecuadorian government. We recognize his struggle to defend Mother Earth against mining companies that continue to create land, water and air pollution. Pepe Luis Acacho's cause is the cause of the children of the Abya Yala. (REDCI in Tabares Merino 2011, 65)

These journalistic practices coincide with REDCI's mission statement to contribute politically to strengthen democracy through mechanisms that empower people in the political arena across the Abya Yala. This represents a network of peoples and nations and generates stories focused on diverse social interests of Indigenous movements through a multiplicity of national contexts, bridging linguistic barriers, and state borders. In this way, REDCI became a space to counter traditional forces through an Indigenous worldview. The resulting internationalization recognized the need for an endogenous means of communication encouraging heterodox models of broadcasting and became a key element in the symbolic emancipation of Indigenous communities.

In terms of content, REDCI generated its news from three different sources: (i) external media stories pertaining to issues relevant to the Indigenous communities, (ii) broadcast information produced by other

Indigenous and civil society organizations, and (iii) produced its own information.

When REDCI used information from other media on its website, it did not simply rebroadcast this content. Its journalists critically engaged with polemic information. News stories published from social organizations were reproduced and commented on, such was the case of CONAIE's demands of constitutional guarantee on Indigenous institutions.

The resignification of the information highlighted the absence of Indigenous worldviews in traditional media. Lastly, REDCI's own content production shaped an alternative narrative based on national, intercultural issues. Through these multiple approaches, it created content based on a new set of journalistic conventions to produce meaningful communication for its audience.

The use of digital media, based on an interconnected and socially oriented platform where journalists, social organizations, and individual citizens could express and transform their social reality, represented an alternative to the powerful structures of conventional media. Indigenous journalism attempted to open a public space where popular culture, public policy issues, and new ideas could intersect. As such, it recognized the pressing need to offset authoritarian and monopolistic control of dominant communication systems in the media industry, as well as the State.

REDCI's digital platform became a technological framework through which Indigenous communities interacted in different languages and territories. Each one of these social actors had diverse levels of multi-dimensional inclusion (Brunn and Hukkinen 2008) that allowed them to craft a reality out of contrasting cosmovision. Different voices were heard from different geographies where Indigenous organizations gathered together to debate about important topics such as the "*buen vivir*". This was the case of the media covering of the open forum organized by the Andean Coordinator of Indigenous Organizations (CAOI)[14] to talk about the Suma Qamaña-Sumak Kawsay in Peru, Colombia, Ecuador, and Bolivia.

In various instances, REDCI challenged corporate media as well as statist coverage of practices of Indigenous justice. Even though Article 171 of the 2008 Constitution recognizes the competence of Indigenous authorities to apply their own norms and procedures for resolving internal conflicts, provided they don't violate the Constitution or human rights, Indigenous justice is often labeled as torture and lynching, which creates an image of cultural barbarism and natural inferiority (García 2008b). This

depiction underscores the bias in perspectives on crime by mainstream media and shows its unwillingness to contextualize facts, accept different cultural approaches to crime, punishment, and justice.

Indigenous journalism promoted by REDCI aimed to break away from media isolation, the segregated handling of information, and safeguard the integrity of the Indigenous cultural heritage by creating mechanisms against exclusion and the reproduction of racism.

Re-signifying Technology

The re-signification of technology involves the creative repurposing of existing technology to create new meaning (Thomas and Buch 2008; Vercelli and Thomas 2007). REDCI digital media created a novel-political virtual space to showcase other approaches to social change. By drawing on other symbolic resources, it provides alternative opinions and beliefs (Zald and McCarthy 1987) at the core of the Ecuadorian Indigenous movement. The representation of the peoples' interests counteracted the symbolic hegemony of the white-mestizo culture, prevalent in traditional media. REDCI's online presence became part of a technological appropriation process (Bijker 1987) intertwined with political activism and the use of Indigenous languages (Bennett 2003).

The introduction of technology within Indigenous communication practices explains how the use of a technology also requires a coherent social model in which the technology may be embedded. Without such conceptualization, the use of technology is far less fruitful. REDCI's website is an example of how technologies are encoded with preferred forms of use and how a technological artifact is socially constructed. Between journalists and the audiences, a more democratic space was designed via a process of technological appropriation. Actors attributed a specific meaning to technology. At the same time, technology mediated human action by facilitating and constraining the performance of the actors. Not just anyone could publish a journalistic piece because the website as an artifact only allowed REDCI's members to do so. Therefore, the "public" was only allowed to comment on news produced by REDCI. Nevertheless, this created a public sphere whereby technology mediates perception and action within a human-technology interplay (Delaney 2010).

The digital platform also aimed to redefine the concept of territory as something closer to Abya Yala, thereby helping to legitimize and normalize the new practices of Indigenous journalism (García Canclini 2004).

This subtle process allowed political communication and technology to be incorporated into daily life and habits (Silverstone and Hirsch 2005).

REDCI thus became an instrument to mediate knowledges, cosmovision, and practices of Indigenous Peoples. Its communication strategy relied on information and communication technologies to connect the Abya Yala with the world. Technology can thus be understood as a tool that deliberately transforms individual and collective habits, perceptions, social relationships, and to restructure political boundaries.

As a sociotechnical network (Latour 1987; Pinch 2008), REDCI allowed people and artifacts to perform actions together in order to improve Indigenous political participation. A hybrid network of humans and non-humans that functions as a whole. It is not possible to address REDCI without the intermediation of technology. REDCI existence was constrained to the online platform and social media. Outside the virtual space, REDCI had no material offline presence; therefore the technological artifact was an ontological element of the communication project for freedom of expression and a key instrument of Indigenous journalism in Ecuador.

An Ending with New Beginnings

In 2013 REDCI discontinued its online journalistic work but has kept the website open through the posting of limited informational content. The 14 founding members couldn't find financial support to keep the project alive. Once a political space for sharing a novel form of journalism, REDCI's website was transformed into a depoliticized social media strategy when it ceased to be updated regularly in September 2013, although there remains some activity to present day, managed by some of the founding members. The decision to pivot to social media[15] as a sole communication strategy drew a line between Indigenous journalism and other regular form of online information posting. Therefore this case study devoted particular attention to the three years when REDCI became a unique expression of Indigenous journalism in the country.

Once REDCI's website became inactive, Indigenous journalism was no longer exercised by its members and storytelling and news production ceased to be published online. Some of REDCI's journalists became media coordinators in other Indigenous organizations, such as CONAIE, and other members started their own media projects, such as *Riksinakuy: let no one silence your voice*.[16] *Riksinakuy* has grown to develop an editorial line

based on investigative journalism with 37 columnists collaborating on the website. It is also a platform to share poetry, eBooks, videos, and interviews. Its slogan is "*Paktawillaywan kikin arininakunapi yanaparinki kaypi tarinkimi*" (A good decision is the result of documented and comprehensive information. This is what this website is all about). The website is linked to a Facebook Page, a Twitter account, and a Youtube channel (Fig. 1).

REDCI also broke new ground for new media projects media such as *Lanceros Digitales*, which continues to strengthen the sense of belonging and Indigenous identity. In December 2017 a group of young Amazonian

Ángel Criollo   Ángel Ramírez Eras   Arturo Muyulema   Aymé Quijia
Artículos   **Artículos**   **Artículos**   **Artículos**

Inti Cartuche   Curi Sisa Atupaña   Bolívar Yantalema   Cristobal Quishpe
Artículos   **Artículos**   **Artículos**   **Artículos**

Ángel Medina   Isaías Quinatoa   Iván Cañarejo   Jorge Bastidas
Artículos   **Artículos**   **Artículos**   **Artículos**

Fig. 1   Columnists of *Riksinakuy: let no one silence your voice*

Indigenous journalists developed a Facebook page to report through social media the political persecutions and communities expelled from Indigenous territories by oil companies in Provinces such as Sucumbíos, Napo Pastaza, Morona-Santiago, and Zamora.

As many other community-based communication projects around the world, REDCI exposed the fragility of non-profit, activist media existence. It also demonstrates how cyberspace is increasingly important in boosting collaboration between Indigenous journalists and social actors, in order to demand the accountability of those who are in power. Furthermore, it demonstrates how knowledge, cosmovision, and cultural practices of the Peoples of the Abya Yala may be understood as mediated practices.

As we stated in the introduction, there is a significant lack of academic literature regarding Indigenous journalism in Latin America, and more theoretical emphasis on the analysis of community and intercultural journalism. We have used a conceptual framework derived from media and technology studies in order to describe how REDCI became an iconic Ecuadorian project of Indigenous journalism during a short period of time. Its emergence can be considered and adversarial experience that implemented new forms of contestation and courses of action for Indigenous peoples. As well, as a sociotechnical network that functioned to prompt recognition of political issues within the Indigenous communities, creating a political public sphere controlled by its own people.

REDCI set itself apart from other news organizations by basing its news-making on a collective community voice, supplanting western standards of individual authorship. It was the community and not the individual who had the power to communicate, therefore, Indigenous journalism was embedded and inseparable from cultural, spiritual, and political life. By incorporating the demands for autonomy of Indigenous peoples and nations into a western paradigm of journalistic practice, it represented an alternative journalistic practice.

Repeatedly, mechanisms of decolonization were evident through Indigenous journalism recreation and consolidation of cultural diversity and Indigenous identity. On the political level, the Indigenous movement adopted new forms of citizen participation and redefined the contours of national political life by legitimating plurinationality and interculturality. Indigenous peoples also reclaimed a fundamental right, usurped by colonization, to exercise freedom of expression through mutual learning and solidarity. Lastly, they took advantage of far-reaching digital networks to provide open access to information and citizen journalism. From this

perspective, the conception of technology is not artifactual or instrumentalist. Rather, technology constitutes a network of relationships that are socially and culturally situated (Tabares Merino 2012).

NOTES

1. Official Statement of Communication Section at the IV Continental Summit of the Indigenous Peoples of Abya Yala. Puno -Peru-, May 27–31, 2009. Original Spanish text: "La comunicación es la columna vertebral de la humanidad. Éstaha sido ejercida desde que nuestros pueblos comenzaron a caminaren la Madre Tierra. Estamos llamados a recuperar la palabrapropia, a descolonizarla, a retomar la tarea de caminar lapalabra junta, unida en nuestra diversidad y comunicar desde lavisión de nuestros pueblos construyendo medios de comunicaciónque expresen realmente lo que somos".

2. Guna Language "Earth in full maturity, or land of vital blood" (López 2004, 4).

3. The Confederation of Indigenous Nationalities of Ecuador (CONAIE) represents 15 Ecuadorian Nations: Achuar, Andoa, Awá, Chachi, Cofán, Épera, Kichwa, Wao, Secoay, Shuar, Shiwiar, Siona, Tsa'Chila, Sapara, and Quijos. All these nations are geographically distributed along the Ecuadorian highlands and the Amazon basin.

4. A plurinational state is considered a model of political organization for the decolonization of nations and peoples, recuperating, reaffirming, and strengthening their territorial autonomy (Fontana 2014; Yashar 1999).

5. Article 19 of the International Covenant on Civil and Political Rights states as follows: (1) Everyone shall have the right to hold opinions without interference. (2) Everyone shall have the right to freedom of expression; this right shall include the freedom to seek, receive, and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any media of his choice.

6. Tenth Anniversary Joint Declaration: Ten Key Challenges to Freedom of Expression in the Next Decade. Once again, the fundamental importance of freedom of expression—including the principles of diversity and pluralism—both inherently and as an essential tool for the defense of all other rights and as a core element of democracy.

7. Tukui Shimi is the expression in Kichwa for "All the voices".

8. "The life, cosmovision, identity, values, culture, native languages, and dreams of the Peoples and Indigenous nations. Such communication only makes sense within the framework of our own culture in the service of life. Its main goal is to make known to all people of Abya Yala the People's rights, their fight for the land, their dignity and integrity" Official Declaration of the Continental Summit of Indigenous Communication of Abya Yala in 2010.

9. This project was conducted from 2009 to 2011. In 2018–2019 further research and interviews were conducted in order to fully contextualize why REDCI discontinued its news-making practices.

10. The Continental Summit of Indigenous Communication of Abya Yala took place from 8 to 12 November 2010, in Misak Territory in the Cauca Department of Colombia.
11. Rumiñahui, the most important General of the Inca Empire at the service of the only Ecuadorian Inca: Atahualpa. He represents Indigenous resistance in the Spanish conquest.
12. Dolores Cacuango (1881–1971). She represents certain kind of continuity on the historical process of resistance of the Indigenous Peoples and Nations in Ecuador, as well as an iconic figure in the history of the Ecuadorian Indigenous Political Movement.
13. Expression of the Aimara language in Bolivia that represents the Good Living.
14. Acronym in Spanish for Coordinadora Andina de Organizaciones Indígenas (Andean Coordinator of Indigenous Organizations).
15. The social media used were Twitter and Facebook.
16. English translation for "que nadie calle tu voz". www.atuplan.com is a website of Indigenous journalism based on information, opinion, and interpretation.

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Practitioner Perspective. Digital Communication Strategies for Strengthening and Empowering Amazonian Peoples and Nationalities: Community Radio and the *Quijos* Nation

Etsa Franklin Salvio Sharupi Tapuy

Author's Opening Remarks

To share, live, fight, and experience from the same essence of life on a path that continues in the search for a "Concrete Utopia". This is a task that goes beyond daily community experiences; a vision, a horizon, and a millennial thought from the jungle. With its own actors on the road to reach the same origin of communication, which comes from the same forest and returns to itself; from the cosmos, from the sacred waterfalls, from the voices of the High Amazon, irremediably to understand from ourselves, to

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335

make known and to share our ways of evoking the beautiful message of the original ethnic groups of the basins of the Amazon river. These vibrant voices that come from the actors themselves become invisible to the public mass media. Privately owned, mass media monopolize radios of the world, the same ones that do not contribute at all to the horizontal conscious reasoning of human beings, or the ontological dilemmas of thinking and feeling of the people. This is simply a point of continuity and departure within a collective universe where digital spear bearers of the Amazon act as the tip of the spear, aimed with accuracy to eliminate the exploitation of peoples who are not allowed to speak. At this time in history, what is spoken and done by the subjects of life in the Amazon must be shared. Based on our own voices and representation, with the tools and instruments of communication, the community communicator is the foundational element that sustains the word.

INTRODUCTION

In the discussion that follows, I reflect on the importance of online digital communications to advocate for the safeguarding of Amazonian cultures, improve the visibility of their political and social fights, and exercise our fundamental human rights. I also build on specific examples taken from my experience. First, I discuss the work completed while working for ten months with the Kayu Ayllu Shinalla community radio program (2016–2017). I then discuss the making of short documentaries produced in collaboration with national and international universities, as tools of resurgence and empowerment for the Quijos nation.

I will share key aspects concerning originary nations in the Americas, and specifically the originary nations[1] of the Ecuadorian Amazon. This documentation is important for our nations, organizations, leaders, youth, men, and women as well as academic researchers, and the institutions of the Ecuadorian state. My work has the overall aim of building a significant contribution to legal norms, relying on many of the same tools used for revindication in the historical struggles of Indigenous nations. These include community communication as it relates to public policies, examining the Constitution of Ecuador within the framework of the plurinational state and in relation to the concept of intercultural society, as well as building international communication tools and alliances.

The Resurgence of the Quijos Nation and the Kayu Ayllu Shinalla *Radio Program*

Working on communication practices together as a community has served to consolidate an understanding about Quijos foundations. We are particularly interested in learning and teaching about the process of resurgence and empowerment of our Quijos nation through our history. The Quijos officially came to be recognized as an Indigenous nationality by the Ecuadorian state in 2013. The Quijos now possess the historical, ethnological, anthropological, archaeological, and linguistic evidence to corroborate the historical presence of our nation, laying the foundation of our present existence, based on ideals with principles and mastery of our own wisdom and thought; the same ideals that form the original foundations of the Quijos nation. Each millenarian culture and civilization has its own ideological and sociological position, based on elements of its founding identity. This has also become the main basis of the Nationality Quijos (NAOQUI) programming, which we called Kayu Ayllu Shinalla—"Like United Families".

Through close work with our radio audience during our ten months on the air, our Indigenous audience increased thanks to our focus on the local Indigenous scene. The radio show was heard in all the cantons, parishes, provinces of Napo, and Quijos communities. Our radio programs were received with much affection and warmth. At the national level, the radio program was also broadcast online, with our main listeners coming from the Amazonian provinces of Morona Santiago, Pastaza, and Andean Pichincha, Imbabura, Tungurahua, and Cotopaxi.

At the international level, our programming was available online at radioidealtena.net, with a wide range of international listeners, including in Sweden, Switzerland, France, Canada, Mexico, Argentina, and Colombia. We discovered that researchers were especially interested in listening to our historical study within a 20-minute time slot, which we called "Drinking Guayusa", between 4:40 a.m. and 5:00 a.m.

The main aim of the radio program was to celebrate community cultural practices based on the study of Quijos identity, history, and culture. Its content included ancestral and formative themes, such as education, science, history, research, and music. Some of the content that we developed was more focused, and by general request of our collectives and listeners, on the historical, investigative, and cultural content. These programs played a very important role in positioning the Quijos Original

Nation locally, regionally, nationally, and internationally. It was especially important to make our process of historical vindication known, with its roots dating back 481 years (Oberem 1980, 62).

During our live program, which ran Saturday and Sunday mornings from 4 a.m. to 6 a.m., we transmitted knowledge, research, and provoked debates. I will explain the reason why we decided to launch the community radio program Kayu Ayllu Shinalla. I will also discuss how we created a space where our audience could listen both to the radio broadcast, and beyond the dial have the freedom to interact with the program team and each other online, through Facebook or Facebook Messenger.

How and why did we decide to conduct our own community radio program to amplify the resurgence and revitalization of the Quijos nation? When we set out to conduct our program in collaboration with the Radio Ideal Station in the city of Tena with our own programming, we were asked to present a script with a main narrative of the program and its proposed content. By mandate of the communities it was considered key by the government council of the Quijos Nation (*NAOQUI*) that we should become trained community reporters and announcers. It was our time to speak into a microphone, but what would be our role? And what would our programming be for? I will outline our reasoning and approach here.

For more than 35 years, our leaders have fought to make the existence of our Indigenous Quijos nation known. The resurgence of our nation is an essential task and remains fundamental to our medium- and long-term agenda. We want the Quijos language to be studied again. According to ethnohistorical data, we are the same brothers and sisters who define ourselves as Quijos and/or Napurunas, who speak the Kichwa language (Oberem 1980).

In addition, the Quijos organization is still in the process of demarcating its territories. Quijos territories were not originally limited by provinces, cantons, or parishes. The Quijos had extensive and continuous territories, without boundaries. According to our free self-determination, like all the Indigenous nations in Ecuador, the Quijos need to be further recognized by the Ecuadorian state not just as a nation but also in terms of territory. Since we have always lived in these territories, we aim to recuperate the historical traditions taught to us by our grandparents, and through the tools of certain historians and their texts that relate our culture.

The Quijos are subjects of a millennial history. Like all nations, we exist with our own customs and traditions, our own territory, and our own

language which are all being researched and in order to be revitalized. When we talk with Indigenous and other political leaders, we talk openly about these issues as Quijos. We also aim to attract the interest of researchers to deepen the study of the current movement and actions of our nation.

The main axes of our cultural and mystic practices are the bilingual intercultural education, the community economy, our own justice system, traditions and their safeguarding, such as drinking guayusa, ayahuasca, tobacco, and Datura. The topics studied and the interviews conducted with the *Kayu Ayllu Shinalla* program, have all played an important part of resurgence and empowerment for the Quijos Nation. We have our own identity, a consequence of a complex transculturation process (Oberem 1980).

Programming

In our programming, we shared community announcements, activity reports, press releases, interviews, political-organizational acts, and academic scholarship. We shared native Amazonian music and perspectives with our listeners. Regarding educational content, we initiated a process of socialization beginning with Quijos youth and their communities. Our work with the youth has been received warmly by the communities and the results quickly became evident with interested young Quijos leaders who now defend the historical claim of the Quijos.

The History of the Quijos

To discuss the Quijos heritage and history in our program content, we presented pedagogical studies on the radio program Kayu Ayllu Shinalla. At the beginning of our program in November 2016, we studied and analyzed, together with the audience, Udo Oberem's masterpiece *Los Quijos: historia de la transculturación de un grupo indígena en el Oriente ecuatoriano*, published in 1980. This publication provides historical tools and data spanning more than 482 years (Oberem 1980, 62) that document the existence of the thousand-year-old Quijos nation in the regions of the Upper Napo, Sumaco, the provinces of Pastaza, Orellana, Sucumbíos, and Pichincha, which are ancestrally continuous territories.

Key content in our programming was the study of *Jumandi*, a book by Wilson Gutiérrez Marín (2014), who wrote about the revolutionary

resistance of Jumandi, a man who for the Quijos represents the *wankiri*, or master healer. Jumandi was declared a national hero and symbol of the anti-colonial resistance by the National Assembly of Ecuador on November 29, 2011. He is considered a powerful master of all powers and gifts of wisdom and knowledge of the Quijos culture. Jumandi is the symbol of struggle and the redeeming father and the example of liberating warrior of the lineage of the great ethnic nation Quijos of the Upper Napo.

We also spent several months studying an edited book containing three chapters about the Quijos, their territory, language, and customs from Spanish historical chronicles. The compilation by Fernando Santos Granero (1992) talks about the importance and existence of the Quijos nation in the sixteenth, seventeenth, and eighteenth centuries. These articles document the Quijos economy, Quijos struggles, the genocide, and ethnocide during the Spanish conquest.

In addition, our program documented the revival of Quijos culture, which is evidenced through the cultural revival of dance and music by reporting on the Quijos dance groups *Yami* and *Samay Paqcha*, and the Quijos female singer Kuty Sisa's music. As a result of this cultural resurgence, more than 80 communities now define themselves as Quijos (personal conversation with Marcos Tanguila 2019).[2]

Shillipanu, the Roots of the Quijos *Vernacular Language*

The study of Quijos language roots was fundamental within our community programming. The basis of this research has become integrated into our *NAOQUI* organization. Its importance has managed to transcend in some key areas that we need to keep sharing, studying, and investigating so that we can make the existence of an original nation known that perhaps is thought to no longer exist or that it disappeared. Currently, many who identify as Kichwa or *Napuruna* deny the existence of the Quijos, even though we all have the same genealogical roots as the descendants of Jumandi. The Quijos, however, have existed for more than 527 years, preceding the Spanish invasion of Abya Yala (Banacloche 1989, 27–34).

This idea that the Quijos do not exist is therefore erroneous and has come about due to transculturation (Oberem 1980). For those of us who identify as Quijos, Amazonian Kichwa is considered a derivative of *Quechua*, a language brought from Cusco, rather than a culture in and of itself. The Kichwa language came to the area as a language of cultural and commercial exchange (and is the main Indigenous language of the Andes).

With the arrival of the Spanish conquest and evangelical missionaries, Kichwa was imposed as a language of dogmatization and domination.[3] Due to profound and serious consequences, the Quijos suffered genocide and an incomparable ethnocide along with other Indigenous cultures that have completely disappeared. Over the centuries, the Quijos from the Upper Napo learned the Amazonian Kichwa language and came to consider it a culture. As Quijos, we are now in a process of a cultural resurgence and empowerment and we are seeking to recover the Quijos *Shillipanu* language, which many academics and linguists consider to be a dead language. Many neighboring nations, like Amazonian Ecuadorian *Andwas* and *Sapara* people are also in the stage of revitalizing their native languages (Bilhaut 2011).

To contextualize the topic of discussion of *Shillipanu*, which we consider to be the originary language of the Quijos, it is necessary to underline that those who consider themselves Amazonian Kichwa speakers or *Napuruna* of the upper Napo speak an Amazonian Kichwa, that is intermixed with local *Shillipanu* terms and other local terms from of other disappeared local peoples whose languages no longer exist. These particularities enrich the language with tonalities of a unique cultural beauty from this specific region of the Amazonian forest.

On our radio program we examined information from different sources concerning *Shillipanu* with our audience and have also presented our own initial research results. To give a few brief examples, the *Shillipanu* term Quijos, comes from *qui* (abundance) y *jus* (expansion). The word *sha* is another term proper to our area and is used to conclude an idea. Translated it means "until here, thank you". The term *kutimbu* is an armadillo. *Panu* is a male name and designates the eponym river and village. *Tsalag* is the name of a species of fisher bird and also refers to a river which flows into the wider river Napo and is the name of a local village. Our thesis as Quijos is that, many names of animals, fish, plants, rivers, and others are also unique to the territory as place names of the original *Shillipanu* language of the Quijos and it is these early words specific to our area, that we seek to better understand, in terms of how they have been used and where the words may have come from.

The Plurinational State and Intercultural Society: Visions from the CONAIE

Another important part of our programming was the examination of a text that represents the foundation and political horizon of the Indigenous movement led by of the Confederation of the Indigenous Nationalities of Ecuador (CONAIE), which is the largest Indigenous organization in Ecuador. Our study examined the text entitled *Proyecto político para la construcción del Estado Plurinacional e Intercultural. Propuesta desde la visión de la CONAIE 2012* (CONAIE 2013). This text remains a key reference for the construction of plurinational states and intercultural societies today. This text is also a political declaration, outlining the political and ideological principles (e.g., plurinationality, interculturality, territoriality) and an action plan with three main foci. It begins with a focus on spirituality, cultures, and knowledge. The second focus is on economy of the community, and the third main point is plurinationality. This document provided important discussion points that served to explore issues such as collective rights, bilingual intercultural education, as well as the self-determination of original nations.

DIGITAL STRATEGIES AND INTERACTIVE PROGRAMMING

Community radios have played a key historical role for the Amazonian nations. They have broadcast news for many years, implementing education, culture, and music programs. Today in the twenty-first century, not all our communities have access to the Internet, so our radio programs can be heard in all communities first and foremost through the radio system. There is access online for people in towns and cities, who may not have radios, but cellphones or computers. However, not everything can be done through radio and, as many of our communities are now connected with access to the Internet either on a smartphone or on a computer, we reflected on implementation strategies to share knowledge, ideas, and struggles. Our goal is to strengthen ourselves as a culture using tools from the global system in our own way.

As we conducted our radio program, alongside social networks, we received a wide range of local and international online interactions and have developed communication activities through digital media and social networks. Through free and open software, it has also been possible to

report, write articles, press releases, specific notes, comment, and share. Social networks have proven useful for sharing news about national situations and everything related to the Indigenous movement and community communication.

Most of this has taken place through Facebook, which is full of news that have already reached a high level of popularity and recognition from organizations, leaders, and academic institutions. For instance, we received Facebook "likes" and messages on Facebook messenger such as "we are listening to you in *Tsalag* drinking guayusa tea", or "we hear you in Sweden", and "Etsa play us Kambak's song Sikuanga". We also received endearing requests from Quito: "play me Peruvian Antologia music that I like, you already know which, *Etsita*". These anecdotes at dawn encouraged us to continue and were a source of strength for our program. We elaborated communication plans through our radio programming that remain active within our social networks. For local communication regarding our fight to protect our rights and land, we have created very strong groups and networks of digital communication within Facebook, WhatsApp, and Twitter.

As a result, as Quijos journalists we are now also contacted by mainstream media seeking to understand what we are doing in our networks and in our organizations. Now, it is also possible for our sources to be quoted and included in local, national, or international news.

Evolution of Radio Programming in the Amazon: Lanceros Digitales

In 2017, a new emblematic communications network was launched in the Ecuadorian Amazon: *Lanceros Digitales* (*Digital Lancers*). Trained for community and social communication, we cover events, assemblies, congresses, press conferences, protests marches, cultural ceremonies, festivals, community *mingas*,[4] and meetings. We also cover dialogues, struggles at the community, regional, national, and sometimes international levels. Thanks to this regional network, we have managed to raise awareness of local actions at a global level.

As *Lanceros Digitales*, we transmit news stories from any place where we find ourselves with a cellphones or a computer. The *Lanceros Digitales* began in 2017, specifically launching their activities during the protest march that traveled from the base organizations CONFENIAE

and CONAIE to Quito. Between November 27 and December 11, 2017, highest level authorities of Indigenous peoples sat down in the hopes of having a dialogue with the President of Ecuador, Lenin Moreno. We were able to cover and record live through many media channels (Fenash-P Communication, and on my Facebook profile). The event was covered on the Facebook network every day for 15 days. It was a good starting point since we had millions of viewers, across the nation and we entered the category of "national trend" on Twitter.

Also, in March 2018, we covered the Indigenous women's march from the Amazon. I was invited as an Indigenous community journalist to cover the event in the Carondelet presidential palace to the dialogue with the President of the Republic. In the presence of President Lenin Moreno, I streamed the live coverage on my personal Facebook channel—an unprecedented and historic event for the Quijos and community journalists of the Amazon. The *Lanceros Digitales* have thus started a project with a strong mission and vision, and a historical line of struggle on digital platforms. We see ourselves as the guardians and direct actors of life projects for the communities, peoples, and Indigenous nations. We are also responsible for leading the Indigenous media discussion of the political project for the construction of the plurinational state and an intercultural society, which is a contrast from the colonial, extractive, bureaucratic, homogenous, and dogmatic state.

Digital Documentation, Inter-Institutional Collaborations, and the Quijos Resurgence

For me, the process of scientific research is a key issue and something that I have been able to develop in collaboration with national and international universities. This is helping to disseminate and to show its importance, especially in relation to the work of archaeologists, ethnologists, anthropologists, and historians. One of our main aims is to research our history, from our own perspectives, not as objects, but subjects and researchers within our own studies and in order to do so we need to give importance to international collaborations.

We have worked with researchers from a wide range of national and international universities like the National Autonomous University of Mexico (UNAM) in Mexico City, Bournemouth University in England and York University in Ontario, Canada. Our work has also been

presented in France and Sweden. We achieved an important goal of being published in the magazine *Alerta!* at the Sörängens Folkhögskola University of Sweden by Alexandra Jerlstad and Hanna Rissler. We have also worked with a wide range of national universities, including the University of the Americas (UDLA) and San Francisco de Quito University (USFQ).

In our radio programming, we also invited academics and community leaders to share in our discussions. Sarah Dichy-Malherbe from the Paris Nanterre University discussed the concept of interculturality and our own Quijos expert education leader of NAOQUI Francisco Alvarado, shared his perspective on bilingual intercultural education. Much of this work was jointly conducted with organizations such as the *Shuar* Language and Knowledge Commission, the French Institute of Andean Studies (IFEA), the Federation of the Shuar Nationality of Pastaza (FENASH-P), the CONFENIAE, CONAIE, and the Coordinator of Indigenous Organizations of the Amazon Basin (COICA) to develop the spaces of community communication.

Other important collaborations include work with universities, such as the Ecuadorian University of the Americas (UDLA) and University of San Francisco de Quito (USFQ), we continue to research the history of the Quijos and the promotion of the Quijos culture. Since 2017, we have developed our work through communication and visual arts tools and research techniques. We have produced nine short audiovisual documentaries about the Quijos culture and Shillipanu language.[5] To carry out this work, actors have been directly involved as Quijos youth, authorities, communities, within Quijos territorial spaces, and involved in activities based on ancestral wisdom and knowledge. This included the documentation of the wisdom and experience of their grandparents, grandmothers, who also participated as researchers and experts in the process. These materials were generated collectively through Summer Schools with Ecuadorian, Argentinean, Peruvian, British, Canadian, and Italian students and professors from Europe and North and South America who worked with us in building linguistic and audiovisual know-how as well as interviewing skills in order to be able to sustain this work.

These cultural and scientific products target a range of different groups, including the Quijos communities, teachers, students, young people, children, academics as well as non-governmental organizations and institutions of the Ecuadorian state. They are also targeted at international research organizations with the aim of promoting the study of the Quijos

linguistic heritage and culture. However, above all, these products are meant to be used locally to strengthen the cultural and linguistic identity of the great Indigenous Quijos nation.

When we say that the "forest speaks to you in *Shillipanu*" (title of one of the last video shorts that we produced), we refer to our intentions to return to the originary roots of knowledge, the language of nature and recover our native language which has become integrated into the Amazonian Kichwa language. Our approach is to rediscover the essence of our vernacular language by focusing our attention in particular on the sacred plants and places, the trees, the birds, place-names, surnames, animals, the spirits of the waters, cosmos, fish, rivers, hills, volcanoes, mountains, and the voices of mythical beings, which all contain names that are specific to our region.

In addition, we are training Quijos young people in leadership and communication through a national community communication project, supported by the CONFENIAE and the CONAIE, in cooperation with the Central University of Ecuador (UCE) in Quito, State University of the Amazon (UEA) in Puyo, Churo Comunicación and Fes-Ildis Non-Governmental Organizations (NGOs).

This research is now available via credible sources, including research and educational studies. It is also available on important websites, such as Wikipedia and YouTube.[6] Our documentary shorts and dramatizations demonstrate examples and are a window onto our world which is a free means for us to share our media production and research.

Challenges and Recommendations for Indigenous Community Radio

I consider it important to address the criticisms of the community radios which have recently received their frequencies from the State as part of my discussion of community radio in the Amazon. First, many programs lack character and content. It is not as simple as standing in front of a microphone, playing music, and sending greetings. Indigenous community radio programs need to play more than reggaetón music, bachatas, vallenatos, cumbia, and not leave out the Ecuadorian Amazonian music of our distinctive Amazonian peoples. There are programs that have not lasted long or have been delayed due to lack of trained presenters and radio staff. Some directors may not understand the nature of creating a

radio program, and in some cases, Indigenous leaders do not coordinate or do not understand what it means to promote a community radio program.

Secondly, radios that are presented as community radios sometimes base their programming around topics including religion and dogmas from outside our communities. Examples include catholic and evangelical radios and their many national frequencies.

The radio station called The Voice of *Arutam*, belonging to the Interprovincial Federation of *Shuar* Centers (FICSH in Spanish)[7] of Morona Santiago is one of the oldest community stations in Ecuador. In its first years, it played a fundamental role for the Shuar especially in education; however, since 2006 it came to be an arm of the government of the citizen revolution of former President Rafael Correa in office until 2017 and remained in the hands of a pro-extractivist leadership till March 2019.

Thirdly, given the power of the State, sometimes our community radio actors have been coopted into supporting government objectives, rather than the objectives of the community. The radio station *Arutam*, under the former President Rafael Correa, is a poignant example, as this station completely blocked the strategic fight of the Shuar people in the Ecuadorian Amazon. Through this radio station it was once possible to denounce the abuses that occurred in relation to oil and mining companies, including the violations of the fundamental human rights of the Indigenous peoples. The radio also announced political persecutions targeted at Indigenous Shuar and Achuar leaders, including many that to this day have not been clarified or legally resolved. All of this changed once this radio station came to be run by supporters of the government when actions resisting persecutions related to extractivism by the government ceased to be reported.

Conclusions: Strategies for the Revitalization and Empowerment of the Quijos Nation

The work carried out within the Quijos nation over the past five years for the recovery of our own knowledge, including the Shillipanu language, as well as collective work with the Quijos youth drew on digital strategies and tools. After reflecting what we have developed over the years, we

formed a communication team after researching our target, aims, and objectives. Originally, the radio program was scheduled to air in the morning and was aimed at adults and seniors in order to make them aware of the progress in strengthening our organization.

Short documentaries were also produced in collaboration with UDLA, York, and Bournemouth Universities, to awaken the interest of young people about the importance of knowing their own cultural origin and roots. With this younger target in mind, we decided to also make documentaries with animated components. We decided that for the resurgence and empowerment of the Quijos culture to take place, it needs to be based on digital techniques and tools that are currently the most accessible common means of communication.[8]

For us, digital communication and social networks are a strategic tool to raise the organizational image of our nation focusing on our history, the ancestral territory, the collection of linguistic terms of the *Shillipanu*, and also provide the possibility to raise the profile of leaders, their speeches, and their ways of thinking.

Over the last years of studies and training, working with sister institutions, we have managed to obtain certain concrete results and we now have projections for future productions. We still need to train ourselves more in management skills, and high-level digital communication techniques (to replicate the quality that is published by state institutions, NGOs, corporations, and other institutions that have highly technical communication equipment). These projections with a long-term vision will enable the training of our community to become experts in photography, sound, video cameras, social networking, and content writing. We also need training for community announcers, interviewers, editors, programmers, and graphic designers. One of our setbacks is that we only use our smartphones.

These are our needs in the short, medium, and long term. Our agenda is now centered on looking at how we might reach our goals. One of the most desired dreams for our Quijos communities, and for the people of Napo, is that a community radio program of their own and the Kayu Ayllu Shinalla radio program of the NAOQUI can be a self-sustaining and an enduring daily program, without having to depend on private radios to grant programming space through institutional agreements.

Thanks to our radio programming and the use of digital tools, together with inter-institutional alliances, we have found spaces to be able to train young people in community communications. We have been trained in

digital editing, interviewing, filming, and social networking. These basic elements have made it possible to embark on sharing the daily experiences of our communities, our organizations, and our national reality. We now have an organic task of training ourselves so that we can echo the importance of community communications.

Many years ago, we formed our own communal political groups and followed certain ideologies in our communities. We took initiative to be trained in congresses, assemblies, meetings, summits, and other structural scenarios. By taking this long path and building on this experience, we have become very aware that digital communication tools are an important instrument for structuring reporting and for amplifying our own voices with sense and impact. We have in our heads the speeches of our community leaders, and we have carried on their messages.

In this context, how can we not think about social networks? For us, as rational and conscious leaders, we understand that it is necessary to use these new technologies. We know that the people living in their own communities have a wide range of activities that many would like to document and share online, such as festive celebrations and ceremonies. Social media is also useful for documenting rituals, communal economy, and day-to-day life. However, we strive to steer away from the values of a globalized system focused on the commercialization of products, which form the basis of Western consumer culture. The organizational political transcendence of the communities must be linked to a strategy for the use of social networks and digital communication technologies that is local. In this way we will be following above all the path set out by our communities and organizations.

Recognizing the importance of communication technologies, youth is the most essential resource for the medium and long-term plans to sustain and give impetus to the content, character, vision, and purpose of our peoples. Through our knowledge, our own research, and thanks to these new virtual tools, today more than ever, we are carrying out the process of revitalizing the Quijos ethnicity and providing empowerment of Quijos nation through its history. Each nation must define its own true purposes. Free self-determination is a fundamental principle for recognition, the assessment, and existence of a culture, achieving its survival in time and in space.

My research and communication work with the Quijos were made possible through unprecedented, and self-taught techniques, community and academic training over the past few years. As part of my experience, this

work has focused on transferring oral narratives to a written form, then returning to writing again and back to orality, reproducing our words again, often through tools such as video and transcription. This approach, which views orality and the written word as a continuum, is how we approached our work in Quijos communications work and in the newly launched *Lanceros Digitales.* Focusing on using simple, popular, natural language, aimed at our communities and the people is particularly important.

Being successful in Indigenous community digital communications requires not only being a good speaker and conversant in at least two languages, Spanish and the vernacular language. It also requires Indigenous communicators to master an understanding of important issues, national situations, and agendas of the Indigenous organizations. One must first and foremost demonstrate coherence and commitment to the struggles of the Indigenous movement, defending community demands and examining how they are rooted in important historical causes.

Notes

1. The category "originary" is a term that I seek to promote to explain our foundations according to our free self-determination, based on our own cultural and identity origin.
2. This data will be ratified at the next Quijos Congress in 2019.
3. Federico Aguiló writes: "Coincidiendo con esta subida de estatus social de los puquinas, podemos ver toda la problemática de la evangelización de esas etnias: de ahí que surgiera el planteamiento de las "lenguas generales", como una forma de sistematizar la evangelización entre los diversos grupos con lengua propia. La mayoría de estas lenguas todavía no eran conocidas ni expresamente estudiadas por los misioneros. De esta manera, como algo funcional y estratégico se escogen como "lenguas generales" a aquellas que eran más universalmente habladas, y que servían de puente para entenderse con las otras lenguas de horizonte más limitado" (2000, 13).
4. *Minga* is a Kichwa term that has become integrated into Ecuadorian Spanish and refers to the gathering of friends and neighbors in solidarity to work together. This is often followed by a generous meal offered by the beneficiaries.
5. There are several Quijos video productions, including the *Naoqui* YouTube channel: https://www.youtube.com/channel/UCJbBbeCgNaD43E5buKJC9gw/videos and also watch: *Shillipanu Historias míticas* on https://youtu.be/vB8w-Pw-hl0, *La Selva te habla en*

shillipano on www.youtu.be/aeKn0FLrmfI, *Yo Hablo Shillipanu* on www.youtu.be/HX06loG5zm8 and *Sha*, on www.youtu.be/UxwDMPf1Nfc

6. For more information, see specially https://en.wikipedia.org/wiki/*Quijos-Quichua* and the *Quijos Naoqui* YouTube channel.

7. The Voice of *Arutam*, is a Radio Station that belongs to the Federación Interprovincial de Centros Shuar (FISCH) (Interprovincial Federation of *Shuar* Centers).

8. Watch, for example: *Historias míticas* on https://youtu.be/vB8w-Pw-hl0

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Index[1]

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[1] Note: Page numbers followed by 'n' refer to notes.