Hybrid Communication in Action

Exploring Digital and Traditional Communication for Participation and Mobilization in Socio-Environmental Activism in Bolivia

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To my family,
For your unwavering support.
And boundless patience.

Abstract

This thesis investigates how hybrid communication – defined as the deliberate integration of digital media (social networks, messaging apps, websites) with traditional channels (community radio, assemblies, printed materials) – is applied and perceived by five Bolivian civil society organizations (CSOs) engaged in socio-environmental activism. The central methodological contribution is the development and application of five original indicators that translate theory into an operational analytic: diversity of communication tools, integration of hybrid communication, participation, mobilization, and perceived effectiveness. These indicators, structure both data collection and analysis and constitute a reusable instrument for future research.

Empirically, the study employs a mixed-methods design comprising an online content analysis, an anonymous online survey of practitioners, and semi-structured online video interviews. Interpreting the evidence through Emiliano Treré's triad of media ecologies, imaginaries, and algorithms, José Candón-Mena and David Montero-Sánchez's technopolitics of coexistence, and Jun Liu's theory of relational affordances, the analysis relates observable practices to the political-communicative conditions of Bolivia.

Findings show consistently high, if uneven, repertoire diversity. Environmental non-governmental organization sustain broader toolsets; grassroots collectives and Indigenous federations deploy more selective mixes anchored in assemblies, radio, and messaging apps. Integration is intentional and sequenced: offline deliberation authorizes and legitimizes action; digital channels circulate, memory-keep, and coordinate. Participation is strengthened not only by the speed and reach of digital tools but by their anchoring in culturally resonant offline spaces that afford trust and inclusion across multilingual publics. Mobilization is more contingent. While hybrid strategies accelerate coordination and preserve narrative traces, the conversion of online visibility into physical presence depends on trust networks, political

opportunity, and risk calculations; sensitive calls frequently move through encrypted or face-to-face channels – an instance of strategic non-integration and selective opacity.

Perceived effectiveness is defined relationally rather than metrically. Practitioners value inclusion, legitimacy, identity continuity, adaptability, and influence on decision-making alongside visibility. Cross-cutting constraints include connectivity disparities, limited staff capacity, platform dependency and algorithmic volatility, and the broader dynamics of data colonialism. The results confirm core elements of Treré's framework while extending it in three ways: they foreground multilingual, place-based publics as ecological drivers; they identify strategic non-integration as a protective tactic under risk; and they highlight culturally resonant scarcity—fewer, more authoritative posts—as a participation strategy in trusted networks.

For Communication for Development and Social Change, the thesis demonstrates that hybrid communication is a relational, political practice rather than a technological fix. Practical implications include diversifying channels to reduce dependency, sequencing offline trust-building with online amplification, designing redundancy across tools, and evaluating success beyond platform metrics. The indicator set offers a portable methodology for comparative and longitudinal research, including studies of transitions toward open-source or community-controlled infrastructures in similar socio-environmental contexts.

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1. Introduction

Socio-environmental conflicts are prevalent in Bolivia, driven by extractivism in mining, hydrocarbons, agribusiness, and deforestation. This leads to environmental degradation, territorial dispossession, and social inequalities, often coupled with political contention. Indigenous, rural, and urban groups – frequently organized through civil society organizations (CSOs) and grassroots collectives – confront corporate-state coalitions that prioritize macroeconomic growth over environmental and social justice (Svampa, 2019). These conflicts manifest not only in courts and streets but also in the communicative sphere, where narratives, evidence claims, and public legitimacy are produced and contested. In this sphere, communication serves as both a strategic tool and a contested terrain. CSOs and grassroots networks utilize diverse channels to mobilize support, build alliances, and counter dominant narratives. This involves hybrid communication – the integration of digital tools such as social media, messaging apps, websites, and data visualization with traditional channels like radio, community assemblies, printed materials, and local networks. Digital media offer speed and transnational connectivity, while traditional media provide cultural legitimacy, embodied trust, and accessibility for populations at the margins of digital infrastructures. Each entails constraints: commercial platforms can create dependencies and surveillance risks; traditional channels may be slower and resource-intensive.
Understanding how CSOs navigate these trade-offs is crucial to explain how communication translates into participation – engagement in decision-making – and mobilization – activation towards collective action.
This thesis examines how CSOs in Bolivia utilize hybrid communication to shape participation and mobilization in socio-environmental activism. The central research question is: **How is hybrid communication applied and perceived by civil society organizations in Bolivia for participation and mobilization in socio-environmental activism?** Two sub-questions guide the analysis: What digital and traditional communication tools are used, and how are they combined? and How do organizations assess the outcomes of

hybrid communication for participation and mobilization? The working hypothesis is that Civil society organizations using hybrid strategies perceive greater participation and mobilization, although these outcomes are influenced by structural factors, including infrastructure and digital literacies, audience fragmentation, political repression, and dependence on commercial platforms.

1.1 Bolivia's Context and the Study's Relevance

While global studies have examined digital activism in movements like the Arab Spring, 15M, and Occupy (Barranquero, 2021), empirical research on hybrid communication in Latin American socio-environmental struggles remains limited. Existing literature often focuses on digital tools alone, overlooking the broader hybrid media ecologies. Recent critiques emphasize moving beyond digital-centric approaches to encompass integrated digital and traditional media (Treré, 2019, 2020; Bennett and Segerberg, 2014; O'Brien, 2021; Castells 2015, 2024). This thesis aims to fill that gap by analyzing the perceived affordances and constraints of hybrid communication among CSOs engaged in environmental justice struggles in Bolivia. With its 11.5 million inhabitants, Bolivia provides a revealing context for this. The country's political economy relies heavily on extractive revenues, exacerbating environmental conflicts. Additionally, Bolivia's rich associational landscape – inclusive of trade unions, Indigenous organizations, and Non-Governmental Organizations (NGOs) – supports diverse collective actions, though these vary regionally and culturally. Infrastructure disparities are prominent; urban areas enjoy rapid broadband expansion, while rural regions depend on low-bandwidth connectivity and local media. These differences underscore the necessity of understanding hybrid media ecologies, requiring actors to merge channels across technological, linguistic, and geographic divides. Moreover, cycles of polarization and state pressure create risks that influence communicative choices; messages that are effective online may expose activists to harassment, while offline strategies may lag in scalability. Analyzing how CSOs adapt can yield insights applicable to other Latin American contexts facing similar challenges.

1.2 From a Bolivia-Peru Design to a Bolivia-focused Study

Initially, the research aimed for a comparative analysis between Bolivia and Peru to explore hybrid communication across two Andean countries with similar conflict ecologies but different media infrastructures, regulatory environments, and movement histories. However, recruitment skewed toward Bolivian actors, reflecting the authors's denser professional networks there. Only one Peruvian CSO expressed interest in participating, necessitating a focus narrowed to Bolivia.

Case selection aimed for maximum variation sampling across organizational type, geography, and communicative repertoire. Five organizations participated: the Centro de Documentación e Información Bolivia (Documentation and Information Center Bolivia), CEDIB, in Cochabamba, a documentation and research center focused on socio-environmental conflicts and rights defense; the Centro de Investigación y Promoción del Campesinado (Center for Research and Promotion of Peasantry), CIPCA, in Santa Cruz, which implements rural development and territorial governance initiatives; the Coordinadora Nacional de Defensa de Territorios Indígenas Originarios Campesinos y Áreas Protegidas (National Coordination for the Defense of Indigenous and Peasant Territories and Protected Areas), CONTIOCAP, in La Paz, which articulates territorial defense claims across Indigenous and peasant constituencies; Salvaginas, an ecofeminist collective active in La Paz, El Alto, and other cities that foregrounds anti-patriarchal and anti-extractivist frames; and the Colectivo Wasi Pacha (Wasi Pacha Collective) in Oruro, which focuses on Indigenous and peasant rights, environmental protection, and the revitalization of ancestral knowledge. These organizations represent various scales, audiences, and media repertoires, providing a comprehensive overview of hybrid communication under diverse structural constraints.

The researcher's seven-and-a-half years of work with NGOs on environmental and climate justice in Bolivia fostered access and trust while necessitating reflexive protocols to manage positionality and power asymmetries. Earlier work on the feminist #NiUnaMenos movement in Latin America underscored the connection between online reach and offline mobilization amid structural

inequalities (Heinzelmann, 2022). These insights motivated this study's focus on how specific combinations of communication channels mediate participation and mobilization across diverse audiences.

1.3 Theoretical Orientation and Methodological Overview

This analysis engages three complementary frameworks. First, Emiliano Treré's (2019, 2020) hybrid media ecologies framework emphasizes the coexistence of old and new media, collective visions, and the influence of platform governance, warning against reductionist fallacies like digital centrism and visibility bias. Second, José Candón-Mena and David Montero-Sánchez's (2021) technopolitical approach highlights how movements mix autonomous infrastructures with commercial platforms based on audience needs and risk assessments. Finally, Jun Liu's (2021) focus on relational affordances shifts the analysis from a tool-centric view to understanding how context and relationships shape the meaning and efficacy of communication tools. Together, these perspectives reject technological determinism, foregrounding the material, cultural, and political contexts in which communication takes place. Methodologically, the study employs a comparative-within-case exploratory design, utilizing three sources of evidence: an online content analysis of organizational channels to map tool diversity and thematic focus; an anonymous online survey to capture practices and perceived outcomes; and semi-structured online video interviews to explore lived experiences, strategic reasoning, and contextual constraints. All procedures adhered to ethical standards regarding informed consent, anonymity, and data security; in light of heightened risks for activists, no data is traceable to individuals.

1.4 Contribution of the Thesis

Empirically, this thesis documents the diversity of tools, patterns of hybrid integration, and perceived outcomes among CSOs operating under various infrastructural and political conditions. Analytically, it connects these

observations to current debates on hybrid media systems, technopolitics, and affordances, revealing how structural mediators shape communicative choices and effectiveness. Practically, it identifies strategies for enhancing accessibility and trust while navigating platform dependence and repression.

Results indicate that hybrid communication is perceived as beneficial for participation and mobilization, particularly when digital outreach is rooted in trusted offline relationships and culturally relevant formats. However, effectiveness varies based on audience composition, access to infrastructure, and risk environments; under certain conditions, hybrid strategies may amplify existing divisions rather than bridge them. These findings specify the contexts in which hybrid communication can translate into sustained collective action.

2. Literature Review

Communication for Social Change (C4SC) is closely allied with Communication for Development (C4D) and offers a framework for understanding how communicative processes enable collective transformation among marginalized groups. C4SC prioritizes participation, deliberation, and cultural specificity, foregrounding inclusion, equity, and justice (Walsham, 2017; Heeks, 2017; Tufte, 2017). Scholars such as Tufte (2017), Servaes (2020), Manyozo (2012), and Thomas (2019) argue for horizontal models that amplify subaltern voices and embed dialogue in local knowledge systems. In socio-environmental contexts, these orientations connect communication to self-determination, identity, and resistance. Today's media environment extends C4SC toward a hybrid perspective attentive to both analog infrastructures and digital platforms. Over the past decade, research on communication, mobilization, and participation has moved from medium-centric to relational, context-sensitive approaches that attend to organizational ecologies, identity, language, and risk. Early optimism regarding the mobilizing power of digital networks has moderated as evidence shows that digital effects are contingent on political opportunity structures, media regimes, and organizational infrastructures. Bennett and Segerberg's (2012) theory of connective action – emphasizing personalized digital networks – has been reappraised for downplaying durable collective structures and unequal access (Milan & Treré, 2020). Analytical attention now asks how diverse tools are integrated under particular constraints – and with what outcomes (Gerbaudo 2012).

Hybridity underpins this shift. Building on Treré (2019), Kidd (2019) conceptualizes hybrid media activism as practice that exceeds online/offline and old/new dichotomies, tracing how activists deploy WhatsApp, community radio, assemblies, flyers, and livestreams within tactical repertoires shaped by cultural imaginaries and algorithmic constraints. Communication functions as an organizing principle, structuring engagement across temporal and spatial dimensions. Hybrids are treated as ecologies whose interrelated elements – sequencing, audience segmentation, and risk management – bear directly on

results. A second strand examines how hybrid repertoires scale contentious claims. Baran and Stoltenberg (2024) show how co-hashtagging and cross-platform diffusion can connect geographically rooted struggles and produce scale shifts, situating local grievances within broader frames. Their European cases demonstrate a general mechanism: frames traverse platforms, but their resonance remains anchored in place-based identities and grievances. This has clear relevance for Andean conflicts, where localized claims circulate first via radio, assemblies, and WhatsApp before entering national debates on Facebook or Twitter/X. These discussions ground this study, which centers on Bolivia, where hybrid communication unfolds amid linguistic diversity, infrastructural disparities, and political risks. Concepts developed in the Global North retain explanatory power but require testing against contexts shaped by offline media traditions, collective decision-making, and uneven connectivity. Hybrid communication can be understood as the intentional integration of digital and traditional tools to achieve movement objectives: visibility, coordination, alliance-building, and memory work (Heany and Rojas, 2014; Showden et al., 2025). Castells (2015) describes such practices as cultivating "spaces of autonomy" that merge digital networks (the space of flows) and physical gatherings (the space of places). This aligns with hybrid media activism's claim that strategies are simultaneously infrastructural and symbolic, material and affective.

2.1 Communication in Latin American Contexts

Latin American research provides essential context for Bolivia. In contrast to North Atlantic settings with relatively uniform connectivity and deep platform penetration, regional movements often combine new digital tools with established forms such as community radio and face-to-face assemblies. This hybridity is driven by geographic heterogeneity, connectivity gaps, and multilingual publics spanning Spanish, Quechua, Aymara, and other Indigenous languages. Following Bhabha (2004), activists operate in a "third space" where connective logics of digital networks intertwine with community-rooted logics of territory and collective governance.

Studies show selective, tactical uptake of Information and Communication Technologies (ICTs) within this landscape. In Ecuador, Lupien and Chiriboga (2019) find that Indigenous civil society organizations deploy social media to complement – rather than supplant – traditional assemblies and radio, which remain key for deliberation, legitimacy, and linguistic inclusion in rural contexts marked by unequal access. Similarly, Quiceno-Castañeda (2019) observes that NGOs in Colombia segment audiences across media: social media for visibility, press outreach for legitimacy, and interpersonal networks for deeper participation. The result is a layered repertoire where each channel serves distinct movement goals, countering assumptions of wholesale digital transition. Salas-Pilco (2025) extends these insights through a continuum of pro-, para-, and per-Indigenous integrations of information technology and Indigenous knowledge. The emancipatory potential of digital media depends on design control, language, and collaborative institutional frameworks. Examples from Bolivia and Peru – community-run servers, bilingual education platforms, and grassroots ICT initiatives – illustrate per-Indigenous approaches that foster autonomy rather than dependency. By contrast, para-Indigenous projects – often externally designed and weakly embedded in local epistemologies – can inadvertently reproduce inequalities. Communication infrastructures thus appear as contested terrains rather than neutral conduits.

Regional scholarship also underscores the ambivalence of digital visibility. Milan and Treré (2020) note that tools that empower also expose: platforms that disseminate grievances can heighten risks of surveillance, harassment, or smear campaigns. Hybridity therefore functions as both shield and sword – enabling outreach while protecting participants. This ambivalence is acute in Bolivia, where Indigenous movements negotiate territorial rights and articulate plurinational identities amid extractive pressures. Communication choices entangle representation, legitimacy, and survival – dimensions overlooked by narratives that equate online presence with political efficacy.

2.2 Scale, Place, and the Politics of Visibility

Research on scaling clarifies how movements connect local claims to broader publics without dissolving place-based identities. Baran and Stoltenberg (2024) demonstrate how co-tagging and cross-platform diffusion can knit dispersed struggles into shared narratives, strengthening resonance. The process is recursive: local rootedness supplies depth and legitimacy, while digital amplification extends reach and accelerates circulation. Poor integration, however, can weaken either dimension, threatening territorial integrity or diffusing claims beyond recognition.

Treré and Bonini (2024) refine this account by foregrounding algorithmic agency. Activists do not merely use platforms; they confront and adapt to opaque systems that govern visibility. Tactics such as hashtag experimentation, timing, and format selection become responses to platform governance. In Bolivia, organizational strategies display media literacy: social media campaigns in urban arenas target policy influence and solidarity, while in rural spaces, encrypted messaging and community radio remain primary for trust and autonomy. Hybrid ecologies thus mirror cultural logics and infrastructural needs, confirming communication as a constitutive element of mobilization rather than a mere adjunct.

2.3 Structural Inequality and Platform Governance

Structural conditions strongly shape communicative impact. Carmody (2024) critiques linear “digitization” narratives in the Global South, highlighting consumption cycles that prioritize market logics over social needs; initiatives inattentive to language, culture, or sustainability often falter and deepen dependency. Barranquero (2021) cautions against digital fetishism: equating social change with platform presence risks eclipsing the role of analog infrastructures – radio, community assemblies, street art – in cultivating participation, trust, and identity.

Platform governance constitutes another constraint. Couldry and Mejías (2019) conceptualize “data colonialism” as the extraction of value from communicative labor under corporate governance that limits agency. For activists, algorithmic opacity, shadow-banning, and moderation regimes condition visibility and access. Lupien, Chiriboga, and Machaca (2021) show how state actions can indirectly discipline civil society communication through surveillance, litigation, or media co-optation, thereby imposing risks that must inform hybrid repertoire design. Framing communication as both opportunity and constraint, this study explores how Bolivian CSOs assess effectiveness and risk, shaping strategies of audience segmentation and framing. Repertoires are not arbitrary; they emerge from practical reasoning as actors experiment with, recalibrate, and institutionalize combinations suited to particular territories and constituencies.

2.4 Contribution and Positioning of This Study

The reviewed literature supports several claims. First, communication in activism is relational and strategic, resisting simple categorization by medium. Second, the influence of digital tools is embedded within power structures – from platform governance to data colonialism – that shape access and outcomes. Third, hybrid communication ecologies are the norm in contexts of linguistic diversity, infrastructural inequality, and political risk. Finally, conventional research often isolates media elements, under-integrating analog and digital forms and insufficiently connecting communication strategies to participation and mobilization. This thesis advances a movement-centered, context-sensitive analysis of hybrid communication among Bolivian CSOs engaged in socio-environmental struggles. It diverges from platform-specific analyses and tool inventories by asking how organizations assemble repertoires across media, why certain combinations are deemed legitimate or effective, and how these evaluations shape decisions about reach, inclusion, and safety. Methodologically, it privileges practitioner knowledge via interviews and surveys, situating observable outcomes within an ecology that includes radio, assemblies, and interpersonal networks – media often overlooked by digital metrics yet vital for participation and decision-making.

The study also contributes to debates on platform governance and knowledge politics by embedding digital practices within the Andean social landscape. Drawing from Latin American critical traditions that valorize participatory communication and Indigenous epistemologies, it places often-marginalized perspectives in conversation with analyses of algorithmic agency and data extraction. In doing so, it offers an empirically grounded account of how hybrid communication both enables and constrains socio-environmental mobilization in Bolivia. Across this literature, media appear not as neutral conduits but as forces that shape participation, construct imaginaries, and mediate power. In Bolivia, hybridity emerges from necessity as movements navigate multilingual publics, uneven infrastructures, and layered risks. Communication strategies must therefore balance visibility and safety, inclusion and control, tradition and innovation.

3. Theoretical and Conceptual Framework

This chapter delineates the theoretical architecture guiding the analysis of hybrid communication within socio-environmental activism in Bolivia. Building on insights from the literature reviewed in Chapter 2, it synthesizes key scholarly perspectives into an integrated analytical framework to examine how civil society organizations in Bolivia navigate and perceive hybrid media environments. The overarching premise is that hybrid communication – defined as the strategic combination of digital and traditional communication tools – is best understood through a critical, context-sensitive lens that foregrounds agency, power, and situated practice, rather than through technological determinism.

At the center of this framework stands Emiliano Treré's (2019) tripartite model of media ecologies (media diversity, coexistence), media imaginaries (collective meanings, identities), and algorithms (platform governance, visibility, algorithmic control/resistance), developed to critique dominant paradigms in digital activism research. This model is complemented by Candón-Mena and Montero-Sánchez's (2021) theorization of technopolitical appropriation, which emphasizes the coexistence of traditional and digital communication logics in activist practice. Jun Liu's (2021) concept of relational affordances further enriches the analysis by focusing on how activists strategically choose, adapt, or reject media tools in response to specific socio-political conditions. Together, these three frameworks provide a multidimensional, non-reductionist foundation for analyzing hybrid communication in Bolivia's plural, diverse, and politically contentious environments.

3.1 Treré: Hybrid Media Activism

Emiliano Treré's framework, articulated in "Hybrid Media Activism" (2019), provides the central analytical scaffold for this thesis. His model challenges dominant approaches to digital activism that rely on five conceptual fallacies: spatial dualism (treating online and offline spheres as separate), the one-

medium fallacy (privileging one platform or technology), technological presentism (fetishizing novelty), technological visibility (overvaluing measurable aspects), and the fallacy of alternativeness (idealizing corporate platforms as inherently emancipatory). Treré argues that these fallacies limit our understanding of how activists actually engage with media. In contrast, he proposes a dynamic model centered on hybrid media ecologies, which conceptualize activism as situated in heterogeneous environments where analog and digital, corporate and autonomous, human and non-human elements interact. This perspective shifts the analytical focus from individual tools to the broader constellation of communicative practices that activists assemble in response to structural constraints, cultural norms, and organizational goals.
In Bolivia, such hybrid ecologies are particularly salient. Activists in both urban and rural contexts mobilize WhatsApp, Facebook, and live streaming alongside community radio, flyers, and neighborhood assemblies. Rather than viewing these as successive stages of technological development, Treré's ecological perspective emphasizes their simultaneous and strategic coexistence, shaped by infrastructural precarity, linguistic diversity, and experiences of surveillance and repression (Kidd, 2019; Barranquero, 2021; López-Ferrández, 2021).
Complementing this ecological lens is Treré's concept of media imaginaries, which encompasses the symbolic and affective meanings assigned to media practices by movements. These imaginaries encompass not only technical affordances but also collective visions of horizontality, reciprocity, transparency, and autonomy. For example, in Bolivia, the use of community radio or bilingual messaging could be associated with notions of cultural sovereignty and collective legitimacy, while engagement with corporate platforms may reflect a desire for external solidarity or national visibility. The third pillar of Treré's model – algorithms – adds a structural layer to the analysis by highlighting how platform logics shape what is seen, shared, or suppressed. Algorithms are not neutral conduits, they actively govern the visibility of content, favor certain formats and behaviors, and pose strategic challenges for activists. Navigating algorithmic systems becomes a form of political labor, as CSOs must determine optimal posting strategies, tagging practices, and platform selections to maximize reach while upholding safety and ethical standards. Treré's approach

aligns with Andrew Chadwick's (2017) theory of the hybrid media system, which emphasizes intersections between old and new media. Other scholars (Gainous and Wagner, 2015; Lawrence, 2015; Lee, 2024) similarly stress hybridity as a defining feature of contemporary communication. Together, the concepts of ecologies, imaginaries, and algorithms offer a relational and layered understanding of activist communication, connecting infrastructural practices, symbolic aspirations, and algorithmic constraints. This triadic model forms the foundation of the theoretical framework of this study.

3.2 Candón-Mena/Montero-Sánchez: Technopolitical Appropriation and the Coexistence of Logics

Candón-Mena and Montero-Sánchez (2021) contribute a complementary perspective through their theory of technopolitical appropriation, which challenges linear or evolutionary accounts of media use. Rather than assuming that activism moves from analog to digital, they argue for a plural media ecology in which old and new communication logics coexist. This coexistence is not simply a matter of technological limitation but reflects deep-rooted cultural values, political strategies, and deliberative practices. Central to their analysis is the distinction between tactical appropriation and autonomous infrastructure. Tactical appropriation refers to the strategic use of corporate platforms such as Facebook, Instagram, or WhatsApp to mobilize quickly, generate visibility, or disrupt dominant narratives. These platforms offer speed and scale but carry risks related to surveillance, censorship, and algorithmic demotion. By contrast, autonomous infrastructures – such as community radio stations, self-managed websites, or encrypted messaging networks – provide greater control, security, and cultural legitimacy but may lack the reach or technological resources of corporate media.

This distinction is particularly relevant in the Bolivian context, where movements navigate both high-level national struggles and hyper-local community concerns. In rural regions, CSOs often rely on Quechua- or Aymara-language radio and in-person assemblies to ensure inclusion and legitimacy. In

contrast, urban actors may prioritize social media campaigns to attract attention from policymakers, journalists, and international allies. Yet even in cities, traditional communication forms are not abandoned; rather, they are reconfigured within hybrid deliberative spaces that combine online coordination with face-to-face validation. Candón-Mena and Montero-Sánchez thus offer a view of activism that resists digital universalism. Their technopolitical lens brings into focus the political stakes embedded in media design, choice, and use. It foregrounds the agency of activists who deliberately modulate visibility, balance immediacy with deliberation, and adapt tools to the needs and constraints of their communities. Importantly, it resonates with Latin American traditions of participatory communication and collective sovereignty, which remain central in Bolivia's plurinational social fabric.

3.3 Liu: Relational Affordances

Jun Liu's (2021) theory of relational affordances adds a micro-level analytical layer to this framework by interrogating how media tools are perceived, used, or rejected based on the interplay between design features, user goals, and socio-political context. Liu departs from traditional affordance theory, which often treats the functions of technologies as inherent or stable. Instead, he argues that affordances are relational: they emerge from the situated interaction between a tool's design, the user's capacities and intentions, and the broader environment in which use occurs. This relational approach is particularly useful for understanding communication practices in Bolivia, where CSOs must continuously calibrate their media choices. In remote Amazonian regions, for example, community radio remains the most trusted and reliable channel, not only because of infrastructural limitations but also due to its linguistic inclusivity and historical legitimacy. Conversely, in urban mobilizations, Facebook live streaming or WhatsApp groups may be preferred for their immediacy and potential reach – but such tools are often avoided in more sensitive or repressive contexts to mitigate exposure risks.

Crucially, Liu's framework allows for the analytical inclusion of non-use as a deliberate strategy. The decision to forego live streaming, to encrypt messages, or to favor radio over social media is not merely a technical choice but a politically and culturally informed response to specific threats, capacities, and goals. By foregrounding this strategic agency, the concept of relational affordances ensures that communication practices are not treated as uniform or dictated by the affordances of the technology alone, but as reflective of context-dependent rationalities. In sum, Liu's theory sharpens the analytical resolution of this study by explaining the fine-grained, everyday decisions that shape hybrid communication repertoires. It reinforces the idea that tools are not simply adopted for what they offer, but for what they allow within particular social, political, and infrastructural constraints.

3.4 Integrating the Framework

Collectively, the frameworks of Treré, Candón-Mena and Montero-Sánchez, and Liu converge in their critique of techno-determinism and their emphasis on situated, strategic, and plural media use. Treré provides a macroscopic structure grounded in hybrid media ecologies, symbolic imaginaries, and algorithmic logics. Candón-Mena and Montero-Sánchez extend this by highlighting the political dimensions of technopolitical choice and the coexistence of digital and traditional logics. Liu brings a micro-level understanding of how relational dynamics shape affordances and media selection. This integrated framework enables a multi-scalar analysis of hybrid communication, one that attends simultaneously to infrastructures, symbolic meanings, governance structures, and user agency. It is particularly attuned to the challenges and strategies of activism in Bolivia, where linguistic diversity, infrastructural asymmetries, and political volatility make hybrid media strategies not only common but essential. By grounding the research in these critical and context-sensitive theories, the study is able to move beyond generalized claims about digital activism and toward a more nuanced understanding of how socio-environmental organizations in Bolivia assemble, evaluate, and adapt their communication

repertoires. This conceptual and theoretical foundation serves as the basis for the methodological chapter that follows, where it supports the development of original indicators for analyzing hybrid communication in Bolivian socio-environmental activism.

4. Development of Indicators and Methodology

This chapter details the methodological design used to examine how Bolivian civil society organizations (CSOs) engaged in socio-environmental activism communicate across digital and traditional media, and how those practices relate to participation and mobilization. The approach is exploratory and mixed-methods, combining qualitative and quantitative techniques to capture both observable practices and situated meanings. It translates the theoretical architecture developed in Chapter 3 – Treré's hybrid media ecologies, imaginaries and algorithms together with Candón-Mena and Montero-Sánchez's technopolitical perspective; and Liu's relational affordances – into five indicators and a concrete plan for data collection and analysis that is sensitive to infrastructural constraints, political risk and cultural diversity. Throughout, the analysis sustains a double focus: the materialities of communication (which tools are used, how they are combined) and the interpretive valuations attached to those practices (how actors perceive participation, mobilization and effectiveness).

4.1 Five Indicators for Studying Hybrid Communication

The central methodological contribution of this thesis is an original set of five indicators designed to operationalize hybrid communication in socio-environmental activism: diversity of communication tools, integration of hybrid communication, participation, mobilization, and perceived effectiveness. The author developed these indicators specifically for this study to translate the theoretical architecture advanced in Chapter 3 into a coherent analytic instrument that can be applied consistently across content analysis, survey evidence, and interviews. Their derivation followed an abductive and iterative path. It began by mapping each of Treré's three dimensions – ecologies, imaginaries, and algorithms – onto empirical observables that could plausibly appear in Bolivian CSOs' repertoires, then layered Candón-Mena and Montero-Sánchez's technopolitical lens to distinguish corporate from autonomous

infrastructures and to attend to coexistence rather than replacement. Finally, it integrated Liu's notion of relational affordances to ensure that the indicators captured situated choices, including deliberate non-use, and the reasons actors give for those choices. As a common analytic spine, the indicators align platform audits with the material side of the repertoire, survey items with practitioners' assessments and rationales, and interview analysis with contextual narratives about language, risk, legitimacy, and organizational routines.

Indicator 1: Diversity of Communication Tools

Diversity captures the breadth of each organization's media repertoire across digital and traditional channels. Its theoretical anchor lies in Treré's ecological insistence that movements act within plural, historically sedimented constellations. In practice, the author assesses diversity as more than an inventory of platforms by distinguishing communicative functions such as public broadcasting, dialogic coordination, evidentiary documentation, and legitimacy-building. The technopolitical distinction between tactical appropriation and autonomous infrastructures is embedded by coding whether a channel is corporate or community-controlled and by interpreting the organizational meaning of that choice. In Bolivia, diversity often translates into blending high-trust, low-tech channels such as community radio, assemblies, or printed flyers with digital platforms such as WhatsApp, Facebook, or organization websites. Liu's relational affordances are incorporated by attending to actors' rationales: interview segments that explain why radio is retained for trust, why WhatsApp is avoided in specific communities, or why a website remains dormant despite technical capacity are treated as part of the diversity construct rather than as mere background. Empirically, visible diversity is established through a structured investigation of platform use and output; perceived and enacted diversity is elicited in the online survey by asking respondents which digital and traditional tools their organizations privilege; contextualized diversity is reconstructed in interviews through narratives about language accessibility, geography, and risk. The main limitation is under-visibility: security practices, encrypted channels, and unpublicized offline

communication may not appear in public traces. Self-reports can also inflate nominal diversity by listing channels that are technically available but rarely used. The study therefore treats observed repertoires as conservative estimates and triangulate claims across sources before drawing conclusions.

Indicator 2: Integration of Hybrid Communication

Whereas diversity asks how many and which tools are present, integration moves from the presence of tools to the extent that they operate as a system. The theoretical impetus comes from Treré's insistence on relations across the axes of physical/digital, corporate/community, and internal/external communication, combined with Candón-Mena and Montero-Sánchez's emphasis on balancing openness with protection. Integration is evidenced by sequences and linkages: assemblies that feed decisions into WhatsApp coordination, coordination that is framed publicly through Facebook posts, or radio announcements that direct listeners to in-person meetings. From Liu's perspective, integration is strongest when choices reflect situated affordances, for example, keeping sensitive deliberation strictly offline while using digital channels for framing and alliance-building. Analytically, the study identifies integration in the content analysis by tracing cross-reference practices, hybrid documentation, and hybrid multimedia sharing (for instance, posts that report on assemblies or point to radio schedules), by asking survey respondents to describe typical cross-channel workflows, and by coding interview accounts of integration practices. Fragmentation – multiple channels with little cross-reference, or public calls without offline follow-through – counts against integration. Two caveats are important. First, temporality is difficult to recover from public traces alone; an apparently isolated post may belong to a broader sequence not visible on the same platform. Second, low integration can be intentional in high-risk settings to compartmentalize information; in such cases, minimal linkage is a strategic strength rather than a weakness. The author therefore interprets low integration cautiously and weigh interview evidence about intentional compartmentalization.

Indicator 3: Engagement Level – Participation

Participation refers to sustained, lower-threshold forms of engagement that constitute the everyday life of a movement. The construct is grounded in Treré's notion of imaginaries – collective meanings and expectations that make participation recognizable and legitimate – and in C4D traditions where inclusion, horizontality, and cultural resonance matter. Treré's concept of imaginaries explains how participation is shaped by collective visions of horizontality, reciprocity, and inclusion. Candón-Mena and Montero-Sánchez's technopolitical lens helps interpret the participatory meaning of channel selection; for example, communication in Indigenous languages on community radio is not merely a reach tactic but a participatory claim to legitimacy. Liu's relational viewpoint ensures to read participation through the eyes of users in context: the same WhatsApp group can either enable inclusion or reproduce exclusion depending on device access, literacy, and group governance. Liu reminds us that tools are not always adopted simply because they are available; their relational affordances determine whether they foster meaningful inclusion or alienation.

Operationally, in this study participation is reconstructed in the online content analysis using social media interaction metrics such as reactions, shares, and comments; in the survey through items on perceived changes in engagement and in partnerships; and in interviews through narratives about how hybrid practices enable or constrain everyday involvement. A limitation is measurement validity: online metrics are poor proxies for meaningful participation, and offline participation is often under-documented for privacy reasons. The author therefore privileges thick descriptions from interviews and treat platform metrics as contextual rather than determinative evidence.

Indicator 4: Engagement Level – Mobilization

Mobilization denotes higher-intensity collective action, such as turnout for demonstrations, coordinated petitions, community monitoring brigades, or formal engagement with state actors. It derives from the same imaginary dimension as participation but isolates the moments when engagement

becomes action. Treré's analysis of algorithmic visibility and repression, together with Candón-Mena and Montero-Sánchez's coexistence of public and protected spaces, underwrites the expectation that effective mobilization often depends on hybrid choreography: a public call for legitimacy and reach on corporate platforms coupled with low-visibility channels for secure coordination. Liu's relational affordances clarify why, in certain settings, the most effective mobilization deliberately avoids digital visibility to reduce exposure. In the data, mobilization appears in the content analysis through explicit digital calls to action, collaborative efforts, and references to offline activities; in surveys through respondents' assessments of changes in mobilization capacity and outcomes; and in interviews through campaign narratives that illuminate sequencing, risk calculations, and the role of trust networks. Attribution is a central limitation: communication is only one element in mobilization, which is also shaped by political opportunities, pre-existing networks, and risk assessments.

Indicator 5: Perceived Effectiveness

The indicator is designed explicitly to resist the fallacy of technological visibility: rather than equating impact with platform metrics, it asks respondents to assess effectiveness across trust, inclusivity, security, continuity, and influence on decisions, while still allowing them to discuss reach and analytics where they deem these meaningful. The conceptual grounding is twofold. Treré warns against equating visibility with impact, emphasizing the importance of avoiding the fallacy of technological visibility. Treré's discussion of algorithms motivates attention to volatility, demotion, and format adaptation; Candón-Mena and Montero-Sánchez's technopolitics bring autonomy and resilience to the foreground as success criteria beyond exposure; Liu's relational approach frames effectiveness as situated and contingent, such that, for instance, a localized radio announcement may outperform a widely shared post in moving the specific audience that matters. This indicator also links back to Treré's emphasis on algorithms, since platform logics shape how effectiveness is perceived and experienced.

Empirically, this indicator is derived primarily from survey modules focused on benefits, challenges, and overall effects, supplemented by interview prompts inviting comparison across channels and tactics. Because perceived effectiveness is a judgement rather than an external measurement, the authors treats it as a window onto practitioners' criteria of success and as an interpretive compass for understanding why they combine tools as they do, not as a universal metric.

The indicators structure the entire coding architecture while remaining sensitive to method-specific affordances. In the content analysis, posts and linked materials are read for evidence relevant to the first four indicators: the presence and function of channels for diversity; cross-referencing and sequencing for integration; documentation of assemblies and feedback for participation; and explicit calls and reports of action for mobilization. In the survey, closed items map directly onto each indicator to ensure comparability, while open items elicit rationales that are coded thematically and folded back into the constructs. In interviews, the guide is anchored in the indicators but allows participants to narrate their own sequences; analytic memos capture how their stories instantiate or complicate the categories. The indicators enable a non-reductionist description of hybrid repertoires that keeps both material infrastructures and symbolic imaginaries in view; they support triangulation across heterogeneous materials by offering a shared conceptual spine; and they render visible the technopolitical trade-offs – between visibility and security, reach and legitimacy – that characterize Andean socio-environmental activism. They also have limits. They do not establish causal effects of specific channels on mobilization outcomes; they identify plausible mechanisms and convergences but stop short of causal inference. They are not exhaustive of all dimensions salient to Bolivian activism; resource flows, legal opportunity structures, or internal governance matter but remain peripheral unless they surface as rationales within the constructs. Finally, because organizations operating under surveillance will hide parts of their repertoire, the indicators capture what can be ethically observed and reported rather than the totality of

practice. In high-risk contexts the author therefore treats low observed diversity or weak integration with caution and privilege actors' judgements in the effectiveness construct.

By designing and defending this original indicator set, the study provides a portable, theory-sensitive instrument for analyzing hybrid communication beyond this single study. The indicators are directly derived from Chapter 3's theoretical commitments: ecologies are rendered as diversity and integration; imaginaries as participation and mobilization; and algorithms and technopolitics as perceived effectiveness attentive to governance, risk, and autonomy. They anchor the mixed-methods analysis that follows and make it possible to compare organizations working in distinct geographies and traditions without flattening their specificity.

4.2 Research Design and Case Selection

The study adopts an exploratory mixed-methods design (Creswell and Plano Clark, 2018) to accommodate heterogeneous organizational forms and media practices. Qualitative depth is achieved through semi-structured video interviews, while systematic breadth is introduced through a structured content analysis and an anonymous online survey. This combination is appropriate because hybrid repertoires are simultaneously observable – through channels used and the ways they interlink – and interpretive – through the meanings that practitioners attach to participation and mobilization under inequality and repression.

Cases were selected purposively to ensure variation in geography, organizational structure, and communicative capacity. Organizations active in socio-environmental advocacy that combined digital and traditional media and agreed to participate were prioritized. To preserve confidentiality in a sensitive field, participating organizations are anonymized into broad categories – environmental NGO (ENV), Indigenous federation or organization (IND), and grassroots collective (GRC) – while retaining the contextual cues needed to interpret communication strategies. This strategy balances the need for

empirical specificity with the ethical imperative to minimize risk. Working with organizations confronting powerful economic and political interests required careful attention to ethics. The study followed principles of informed consent, anonymity, and data minimization. Participants were briefed about the aims of the research, the voluntary nature of participation, and the handling of data. Identifying details were removed from transcripts; organizations are anonymized; and raw files are stored securely and used solely for academic purposes (Banks and Scheyvens, 2014; Franzke et al., 2020). The design also reflects a decolonial concern with non-extractive practices by prioritizing dialogic engagement, giving participants opportunities to clarify or retract sensitive materials, and ensuring that the analysis represents their perspectives in their own terms rather than imposing externally derived evaluative frames.

4.3 Data Collection Procedures

Data collection proceeded along three coordinated streams. First, the online content analysis focused on Facebook because it was the only platform consistently used across all participating organizations and the one with the largest observable audiences. A two-month sampling window allowed for systematic capture of campaigns, calls to action, and cross-channel references. Posts and accompanying media were archived and coded according to the indicator-based frame. Where posts referenced offline events – assemblies, workshops, or radio programs – these instances were recorded to assess integration and to avoid over-representing digital traces. Second, an anonymous online survey gathered perceptions from practitioners about tool choice, sequencing, audience reach, barriers to participation, and experiences with mobilization. The instrument combined closed items to structure comparisons across organizations with open prompts inviting respondents to narrate constraints and trade-offs in their own terms. Given security concerns, no personally identifying information was collected and items were framed at the organizational rather than individual level. Third, five semi-structured interviews with communication practitioners and activists provided situated

accounts of strategy formation and adaptation. The guide reflected the five indicators but was deliberately flexible: conversations began with concrete episodes – a recent campaign, a contentious episode, a successful or failed mobilization – and then moved back to the categories to test resonance. Interviews were conducted in Spanish via secure video calls, recorded with consent, and transcribed for analysis.

4.4 Operationalization and coding scheme

The operationalization of the five indicators resulted in a hierarchical coding scheme used consistently across content analysis and interview transcripts, with survey items aligned to the same concepts for triangulation. For **diversity**, coding captured the presence and use of distinct channels in the content analysis and survey (for example, Facebook pages, WhatsApp groups, community radio segments, printed materials, and in-person assemblies). In interviews, diversity was operationalized through the breadth of narrations regarding channel repertoire and rationales for retaining traditional channels alongside digital ones. **Integration** required a relational approach, focusing on connections among channels rather than their mere presence. In the content analysis, coding identified cross-promotion practices, hybrid documentation and feedback cycles, and hybrid multimedia sharing. Survey and interview data were coded for examples of integration and fragmentation, changes in strategies, and barriers such as connectivity gaps, language, or security concerns. **Participation**, as an indicator of ongoing engagement, was operationalized through social media interactions in the content corpus and through perceptions and examples in interviews and the survey, including references to internal participation and collaboration. **Mobilization**, representing high-intensity action, was coded in the content analysis across digital calls to action, collaborative mobilization, and indications of offline action; in the survey and interviews, mobilization coding focused on links between communication sequences and action, risk assessments shaping visibility, and the role of pre-existing trust networks. Finally, **perceived**

effectiveness was operationalized through self-assessments in the survey and interviews. In the content corpus, the author also noted reflective posts that reported outcomes, acknowledged limitations, or documented learning. Effectiveness is treated as reflexive and context-bound, not as a proxy for causal impact.

4.5 Validity, Reflexivity and Limitations

Triangulation across content analysis, survey, and interviews enhances the credibility of findings by allowing the same constructs to be observed and narrated from different vantage points. Nonetheless, limitations persist. The platform focus of the content analysis risks over-representing digital traces relative to offline work, despite explicit coding of references to assemblies, radio, and print. The temporal scope provides a limited window on strategies that may evolve with political cycles or organizational resources. The small survey sample reflects access constraints and time pressure rather than population parameters; responses may be skewed toward more communicatively active practitioners. The author's own positionality – as a researcher with professional experience in Bolivian environmental NGOs – facilitated access and interpretive sensitivity but may also predispose the author to notice certain dynamics more readily than others; reflexive memos and member-checking of interpretive summaries were used to mitigate this risk. There are also limits internal to the indicators. Diversity is easier to count than to evaluate; a wide repertoire is not inherently better than a focused one. Integration can be under-detected in public traces because some consequential links are intentionally opaque for security reasons. Participation and mobilization are culturally inflected, and what qualifies as meaningful involvement differs across organizations; the study addresses this by privileging practitioners' definitions in interviews. Perceived effectiveness is susceptible to short-term impressions and to the influence of platform metrics, which may or may not correlate with the outcomes organizations value most. These constraints are acknowledged alongside the findings to avoid over-extension of claims. In sum, the mixed-methods design operationalizes hybrid

communication through five original indicators – diversity, integration, participation, mobilization, and perceived effectiveness – translated into a consistent coding scheme across content analysis, survey, and interviews. The next chapter applies these indicators to the empirical material, showing how organizations in Bolivia assemble and evaluate their hybrid repertoires under conditions of inequality and political risk.

5. Analysis and Findings

This chapter analyzes how hybrid communication strategies shape participation and mobilization among civil society organizations (CSOs) engaged in socio-environmental activism in Bolivia. It draws on three complementary sources – an online content analysis of organizations' public channels, an anonymous online survey, and semi-structured online video interviews – and organizes the interpretation through the five indicators developed by the author in Chapter 4: diversity of communication tools, integration of hybrid communication, participation, mobilization, and perceived effectiveness. The discussion below situates each empirical pattern in the Bolivian political-communicative context and explicitly relates it to the theoretical lenses guiding the thesis – Treré's hybrid media ecologies, imaginaries, and algorithms; Candón-Mena and Montero-Sánchez's technopolitics of coexistence; and Liu's relational affordances. Where appropriate, the analysis identifies points at which the findings confirm these frameworks and where they refine or extend them.
The empirical corpus comprises five civil society organizations, anonymized in the analysis and referenced by organizational type in interview excerpts (e.g., "Environmental NGO," "Indigenous Federation," "Grassroots Collective"). The content analysis concentrated on Facebook because it is the only platform used by all five CSOs and consistently holds their largest follower counts. The survey (n=6) and interviews (n=5) were designed to triangulate what is publicly visible with how practitioners reason about strategy, risk, and context. Throughout, the analysis proceeds indicator by indicator, and then returns to cross-cutting themes that speak to the broader argument of the thesis.

5.1 Diversity of Communication Tools

Social Media and Internet Platforms

	Facebook	YouTube	Instagram	Tiktok	X (Twitter)	Website	LinkedIn
CEDIB	1	1	1		1	1	1
CIPCA	1	1	1	1	1	1	
CONTIOCAP	1				1		
SALVAGINAS	1	1	1			1	
WASIPACHA	1		1				
TOTAL	**5**	**3**	**4**	**1**	**3**	**3**	**1**

Table 1: Social Media and Internet Platforms used by the civil society organizations.

The first indicator maps the breadth of the media repertoires. The content analysis shows that all organizations use Facebook; most also maintain Instagram and, to a lesser extent, X; several operate websites; and two employ TikTok. One promotes a Telegram channel. No organization systematically uses alternatives such as the decentralized microblogging platform Mastodon or the secure messenger Signal, though messaging apps – especially WhatsApp – feature centrally in survey and interview accounts. Traditional channels remain salient: workshops, printed materials, public events, face-to-face meetings, community meetings, and, in some cases, community radio as part of their regular practice. The online survey confirms this mixture: every respondent reports social media for external communication, most report messaging apps and websites/blogs, and all report in-person workshops among traditional tools. Interviewees emphasize the same pattern while explaining it in contextual terms: community radio reaches rural audiences without reliable Internet; assemblies and neighborhood meetings carry legitimacy and allow sensitive information to circulate without digital traces; Facebook provides immediacy and scale; and WhatsApp connects dispersed collaborators quickly and cheaply.

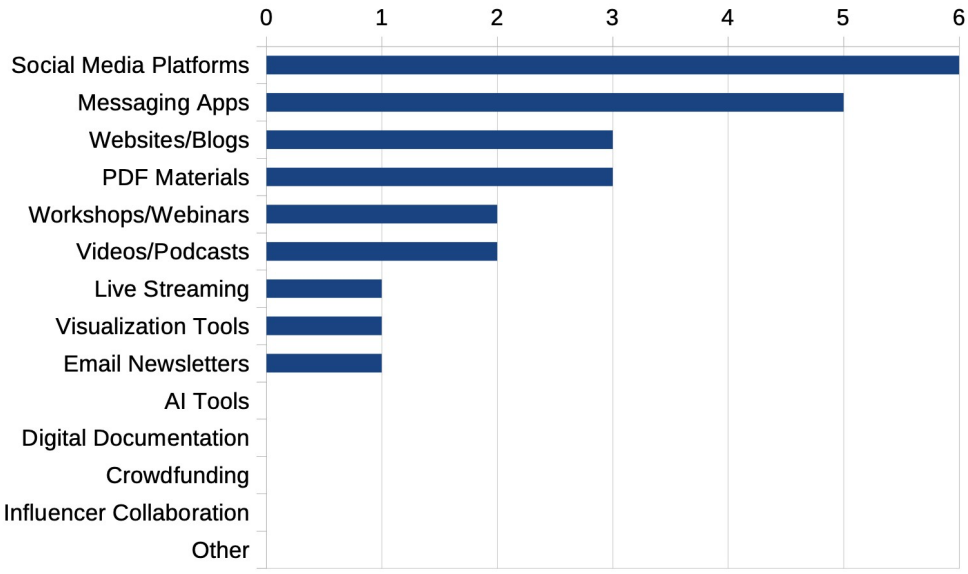

Table 2: Number of CSOs using different digital tools for external communication.

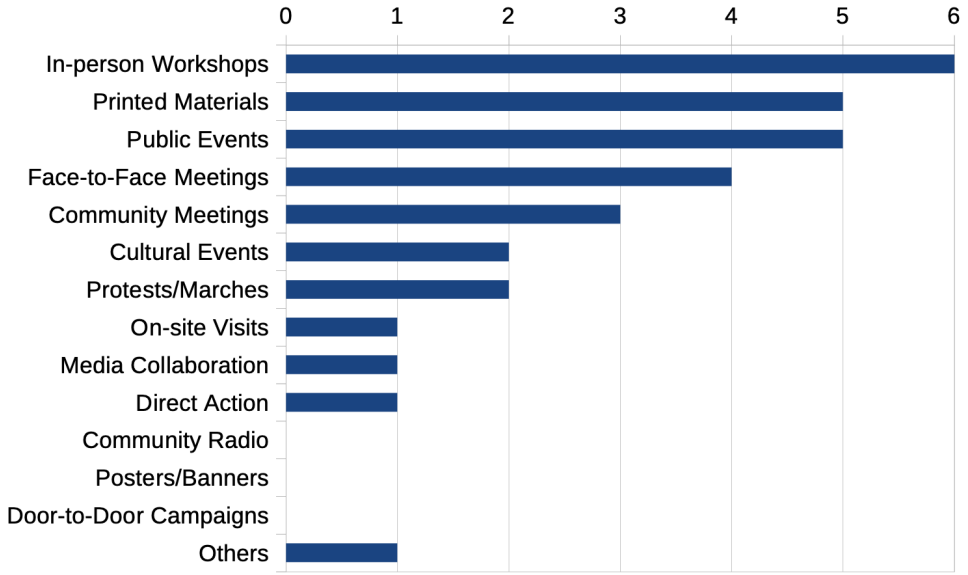

Table 3: Number of CSOs using different traditional tools for external communication.

Interpreted through Treré's notion of media ecologies, this breadth indicates a living, adaptive ecology rather than a menu of substitutable tools. Diversity is not merely inventory; it is the ecological condition that allows activists to sustain communication when infrastructures are uneven, algorithms are volatile, and political risks are non-trivial. The finding therefore confirms

Treré's critique of the "one-medium fallacy" and of technological presentism. In the Bolivian case, "old" and "new" travel together: the same campaign that posts on Facebook may also rely on radio segments in Spanish, Quechua, or Aymara and then follow with printed flyers distributed through allied networks. The interviews make clear that this is not redundancy for its own sake, but a cultivated pluralism that hedges against platform failure, content takedown, or sudden shifts in reach. Such pluralism also aligns with Candón-Mena and Montero-Sánchez's emphasis on coexistence rather than replacement: corporate platforms are adopted tactically for visibility and speed, while autonomous or community-controlled channels help preserve legitimacy, continuity, and security. That duality surfaces, for instance, when an Indigenous organization explains that sensitive information is kept to assemblies and conveyed orally, while non-sensitive updates circulate on Facebook.

Liu's relational affordances help explain why specific combinations recur. In rural lowland areas, radio affords broad language-appropriate reach regardless of Internet bandwidth, whereas TikTok affords little if stable connectivity and device access are absent. In urban settings, livestreams, Facebook reels or Instagram stories afford rapid attention and perceived transparency, but in some conflictive contexts the same visibility could expose participants to retaliation; thus, the affordance is not inherent to the tool but emerges from the relation between tool, user aims, and risk. This relational logic also clarifies why alternative or even more secure platforms like Mastodon, Peertube or Signal make almost no appearance: they do not afford audience access where Bolivian publics actually are. What the findings add to the theory is a sharpened sense of audience-anchored affordances in multilingual, infrastructurally uneven settings. The repertoire is not only diversified across "old/new" but across publics divided by geography, language, and connectivity. The ecological picture therefore pushes beyond generic calls for hybridity by specifying that, in Bolivia, diversity is inseparable from multilingual inclusivity and from strategies that respect face-to-face deliberation as a condition of legitimacy. In this sense, diversity is not a technological catalogue but a linguistic-territorial strategy that aligns repertoires with constituencies.

5.2 Integration of Hybrid Communication

Integration practices on Facebook (May and June 2025)

	Category	Posts	Cross-Promotion Practices	Hybrid Documentation and Feedback	Hybrid Multimedia Sharing
CEDIB	ENV	39	0	1	27
CIPCA	ENV	157	27	110	29
CONTIOCAP	IND	6	0	4	5
SALVAGINAS	GRC	10	0	1	8
WASIPACHA	GRC	13	0	0	0
TOTAL		**225**	**27**	**116**	**69**

Table 4: Integration practices on Facebook (May and June 2025)

Diversity does not, by itself, yield coherence. The second indicator therefore tracks how tools are combined, sequenced, and linked. To operationalize this, the content analysis coded three practices on Facebook: cross-promotion between online and offline spheres; hybrid documentation and feedback (posting outcomes or summaries of offline activities and inviting input); and hybrid multimedia sharing (circulating video, audio, and imagery that bridges onsite events and online publics). The pattern is uneven across organizations. An environmental NGO with substantial communication capacity posts frequently and excels at hybrid documentation and feedback, leveraging its page as a living archive and as a public accountability channel. By contrast, other organizations show less systematic cross-promotion in their public feed, especially a grassroots collective and an Indigenous federation, while hybrid multimedia sharing appears more evenly distributed among organizations with at least minimal production capacity.

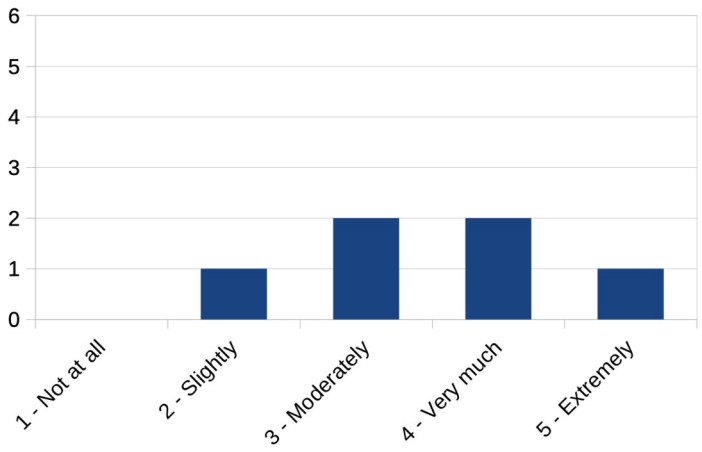

Table 5: Integration of digital and traditional tools for hybrid communication

Survey responses converge with this picture. Most organizations self-assess their integration as moderate to high and offer examples that map onto the same practices – announcing a workshop on social media while also using community radio; following an in-person event with a digital summary of a political position that has been decided upon; or clipping a community radio segment for online recirculation. Interviews deepen the mechanism and make visible the rationales behind sequence design. Integration is a way to bridge audiences separated by connectivity and to produce redundancy by design. One organization records fragments of its radio program and posts short clips on social media so that the main message crosses platforms and publics; another digitizes printed magazines and disseminates PDFs alongside physical copies to extend reach and preserve materials as memory objects.

Theoretically, these practices confirm and concretize Treré's ecological emphasis: integration is the connective tissue that binds physical/digital, corporate/community, internal/external elements into sequences that move people from awareness to deliberation and, potentially, to action. The finding also corroborates Candón-Mena and Montero-Sánchez's technopolitical claim that movements build hybrid deliberative spaces. Assemblies, for example, are both legitimizing and constitutive of authority in Indigenous and rural organizations; hybrid documentation extends the deliberative trace to external publics without replacing the primacy of face-to-face decision-making. Integration appears, in this sense, less as amplification of the offline than as a choreography of authorization and circulation: the assembly authorizes, the digital channels circulate and memory-keep, and messaging apps coordinate.

Liu's relational affordances clarify why not all combinations are pursued. Cross-promotion requires extra planning, staffing, and technical skill; in small organizations, the opportunity cost can be prohibitive. Hybrid documentation that includes identifiable images may be avoided if participants fear reprisals; here, the affordance of visibility flips into an affordance of exposure, and the organization responds by privileging text summaries or anonymized visuals.

The interviews show that partial integration is sometimes a strategic ceiling rather than a failure. This nuance extends the theory by foregrounding strategic non-integration as a relational practice: intentionally keeping some links weak

or absent can reduce risk, maintain trust with base communities, and respect local expectations about how and where knowledge should travel.
Finally, the integration patterns reveal a subtle but important point about algorithms. Organizations report that Facebook is prioritized because “that is where the audience is,” but the relative absence of cross-platform migration (e.g., toward alternatives) is also shaped by algorithmic convenience and the sunk costs of followers and content history. Treré’s dimension of algorithms is therefore visible not only in tactics to game visibility but in the ecological stabilization around a single corporate platform that structures integration choices. The analysis does not claim determinism; it shows how algorithmic infrastructures become part of the ecology that organizations must navigate, often pushing them toward a pragmatic concentration on the few channels that afford predictable reach in Bolivia.

5.3 Participation

The third indicator concerns participation as sustained engagement in the life of the movement, encompassing both public-facing and internal forms of involvement. On the public side, the content analysis used Facebook metrics – posts, reactions, shares, comments – as a limited window on participation. The pattern is instructive. Organizations with long-standing reputations and broad thematic scope generate high comment volumes, signaling dialogue and the co-construction of meaning, while an Indigenous federation, despite few posts, achieves exceptionally high average shares, indicating that targeted, culturally resonant content can travel far even without high output. This suggests that per-post resonance, not mere frequency, is the stronger predictor of circulation when an organization speaks from a position of recognized authority for a specific community or cause.

Participation metrics on Facebook (May and June 2025)

	Category	Posts	Reactions/Likes	Average R/L	Shares	Average Shares	Comments	Av. Comments
CEDIB	ENV	39	1237	31,72	663	17,00	71	1,82
CIPCA	ENV	157	3785	24,11	1126	7,17	67	0,43
CONTIOCAP	IND	6	162	27,00	322	53,67	13	2,17
SALVAGINAS	GRC	10	22	2,20	16	1,60	0	0,00
WASIPACHA	GRC	14	1095	78,21	84	6,00	23	1,64
TOTAL		**226**	**6301**	27,88	**2211**	9,78	**174**	17,79

Table 6: Participation metrics on Facebook (May and June 2025)

Survey responses indicate perceived increases in accessibility and diversity of participation tied to hybrid communication. Respondents describe reaching previously excluded groups, expanding the "base of activists," and forming new collaborations for monitoring and action. Internally, every respondent reports messaging apps and in-person meetings, with many also using video conferencing. Respondents perceive improvements in both internal engagement and the exchange of ideas, values, and goals when hybrid formats are combined. Interviews explain how and why. Assemblies and community meetings give people "the certainty that their voices matter," while radio ensures those without Internet "can follow the conversation and contribute." Online posts that feature participants themselves catalyze a sense of ownership: people "share content where they appear," extending the message beyond the organization's own channels. A widely noted example from a grassroots collective recounts how a Facebook post about a cancelled government meeting went viral in local debate groups and forced authorities to reverse course within two days. Yet interviewees also warn about "replicator" dynamics – superficial digital engagement that does not necessarily deepen involvement – and about periods in which digital participation drops because of complaints, infiltrations, or harassment. Trust then becomes the primary currency, and offline spaces regain priority.

Taken together, these patterns confirm Treré's insistence that imaginaries – the collectively held visions of horizontality, reciprocity, and accountability – shape participation. In these organizations, imaginaries of collective decision-making are inseparable from place-based, face-to-face forums. Hybrid communication supports these imaginaries when it extends and archives participation without undermining the authority of assemblies. The finding thus goes beyond the

simple “online/offline” dialectic by showing sequential complementarities: offline deliberation anchors legitimacy; messaging apps coordinate tasks and sustain conversation; and social media frames the deliberation for wider publics and allies. It also speaks directly to Candón-Mena and Montero-Sánchez’s hybrid deliberative spaces: legitimacy is earned offline, visibility is gained online, and both are necessary for participation to be felt as meaningful rather than performative. Liu’s relational lens explains the persistence of in-person meetings as an internal default despite the convenience of digital tools: the affordance of trust – the sense that contributions are heard and attributed fairly – emerges more reliably in embodied interaction, particularly in contexts where memories of political manipulation and surveillance are recent.

The Bolivian setting amplifies these theoretical points. Multilingual publics, uneven connectivity, and a history of contentious state-movement relations mean that participation cannot be reduced to metrics. The content analysis corroborates this by showing high shares per post for a low-volume Indigenous federation: a small number of carefully framed interventions, often anchored in territorial rights or environmental defense, mobilize existing trust networks that share and reinforce messages in ways opaque to generic engagement algorithms. Where the analysis adds something new to Treré is in identifying culturally resonant scarcity as a participation strategy: less frequent but more targeted posts can travel further within a trusted network, precisely because they echo offline deliberation and carry the weight of collective authorization.

5.4 Mobilization

Mobilization activities on Facebook (May and June 2025)

	Category	Posts	Digital Calls to Action	Collaborative Mobilization	Offline Action Mobilization
CEDIB	ENV	39	4	5	0
CIPCA	ENV	157	7	113	0
CONTIOCAP	IND	6	5	4	0
SALVAGINAS	GRC	10	5	7	0
WASIPACHA	GRC	13	0	0	0
TOTAL		**225**	**21**	**129**	**0**

Table 7: Mobilizations activities on Facebook (May and June 2025)

The fourth indicator addresses the transition from engagement to collective action. The content analysis coded three sub-practices in public posts: digital calls to action, collaborative mobilization with partners, and offline action mobilization. Collaborative mobilization is visible, especially among environmental NGOs, while explicit public calls to offline protest were not recorded in the period analyzed. The absence of such calls in public feeds should not be mistaken for an absence of practice. Interviews clarify that sensitive convenings are often coordinated via private or encrypted channels, or through face-to-face visits, precisely to reduce exposure to surveillance or harassment. The survey mirrors this ambivalence. Some respondents state that hybrid communication increases capacity to organize, “even at the national level,” whereas others note that their organizations do not convene protests or that mobilization is oriented toward accompaniment and lived practices rather than street demonstrations. Responses on whether hybrid strategies improve mobilization outcomes are equally mixed: visibility and responsiveness improve, but conversion into physical presence is not automatic.
The interviews give shape to these dynamics. When mobilization succeeds, hybrid repertoires enable rapid alerts, circulation of visuals from the street, and coordination across territories; WhatsApp groups, in particular, speed diffusion and allow granular updates. Participants also emphasize the memory traces that hybrid communication creates: even when turnout is low, the posters and videos that remain on social media “keep a memory of the event alive” and continue to make the issue visible after the action. Conversely, respondents describe political constraints – dividing tactics by authorities, discouragement of protest,

risks of infiltration – that make digital channels a safer, if imperfect, option for voice when physical mobilization is blocked. Several interviewees explicitly acknowledge the "online/offline gap," noting that "digital mobilization happens" but often "rarely translates into street protests." To bridge the gap, organizations pair digital announcements with personalized phone calls, secure commitments in offline meetings before publicizing, and ensure that the visual language of the campaign is physically present in the protest space so that people can recognize the continuity between the online frame and the offline event. This evidence confirms Treré's caution against conflating visibility with impact (the "technological visibility" fallacy). Algorithms can help generate attention but cannot substitute for relational work, political opportunity, or perceived safety. The findings also sharpen the technopolitical perspective of Candón-Mena and Montero-Sánchez: where repression or surveillance risks are salient, organizations strategically de-publicize parts of the mobilization chain and rely on autonomous channels – assemblies, trusted messengers, encrypted groups – while using corporate platforms primarily for narrative framing and post-hoc documentation. Liu's relational account clarifies why this is not inconsistency but calibration: the affordances of public social media for calls to action are low when the cost of exposure is high; the affordances of private messaging and in-person canvassing increase when trust, deniability, and selective reach are valued.

Where the Bolivian case arguably goes beyond existing theory is in the explicit articulation of selective opacity as a mobilization tactic. The organizations' choice to leave no public digital trace of a call to protest during the analyzed period is not a deficit but a strategy that manages risk and preserves agency. In such cases, the ecology is hybrid not because every stage is public across platforms, but because the *sequence* itself is hybrid: authorization and logistics are offline or encrypted; the event becomes visible in the moment through participant-generated media; and the memory is curated afterward to shape narratives, invite solidarity, or exert pressure on institutions. This sequential opacity illustrates how media ecologies are adapted under pressure and how imaginaries of protection and care structure communication choices. Selective opacity therefore emerges not as a deficit but as a movement protection

practice, consistent with Andean norms of collective care under risk.

5.5 Perceived Effectiveness

The final indicator turns to practitioners' evaluations. Survey responses identify reach to diverse audiences, accessibility and inclusion, and increased visibility as the most important benefits of hybrid communication, followed by flexibility to adapt to different contexts and the strengthening of collective identity. Challenges cluster around audience fragmentation, limited internal resources, and the digital divide, with some respondents also highlighting restrictive legal-regulatory environments and difficulties integrating new technologies. Overall assessments of hybrid communication are strongly positive, with respondents emphasizing that internal participation and the exchange of ideas are "notably greater when both forms are combined" and that rapid digital communication is indispensable for timely coordination. Interviews echo these themes. Participants value immediate feedback loops that enable real-time correction, the preservation of organizational memory, and the capacity to connect generations by documenting the knowledge of elders and founders. They also name obstacles candidly: insufficient staffing to sustain multi-format production, unpredictable algorithmic visibility, political risks, and the persistent necessity of face-to-face interaction to build trust.

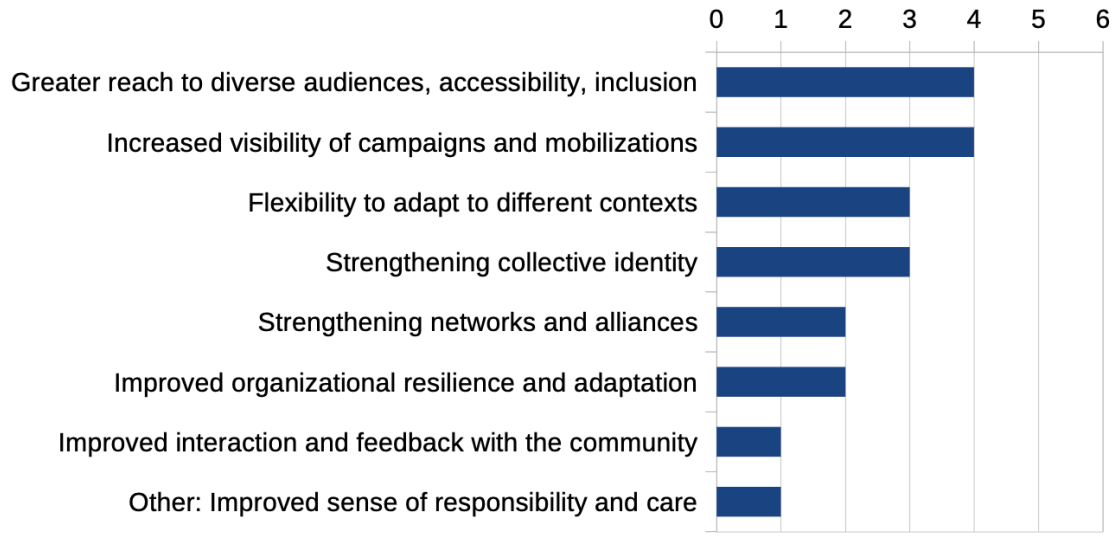

Table 8: Main benefits of hybrid communication for participation and mobilization in CSOs

Analytically, these perceptions align closely with the theoretical architecture of the thesis. They validate Treré's separation between visibility and efficacy and reinforce his account of algorithms as shaping, but not determining, communicative outcomes. They also corroborate Candón-Mena and Montero-Sánchez's argument that autonomy and resilience often matter more than raw reach: organizations choose channels that preserve control even if they reach fewer people because trust, safety, and continuity are core to their imaginaries of effective action. Liu's relational perspective is visible in the insistence that "not everything can be digital and not everything can be face-to-face," a recognition that effectiveness is situated and that the same tool can help or harm depending on context. The emphasis on audience fragmentation suggests an emerging refinement: hybrid expansion can dilute coherence unless organizations invest in integrative practices that restitch publics across platforms and spaces. In other words, greater ecological breadth can produce a centrifugal effect that must be countered by strategic sequences and clear narrative anchors.

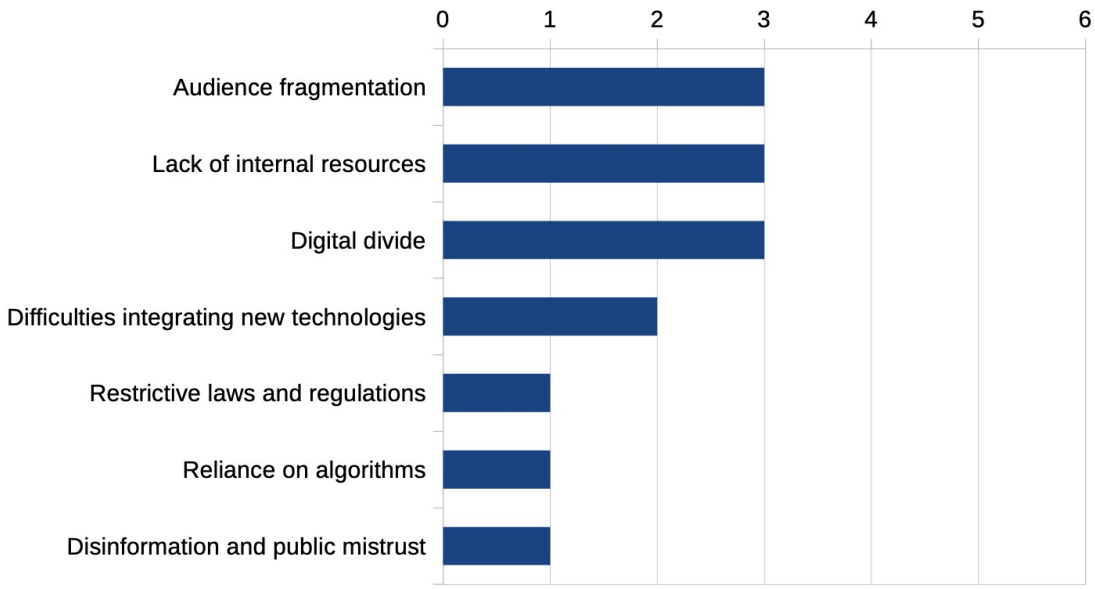

Table 9: Main challenges when implementing hybrid communication in CSOs

What this indicator adds to the theory is its articulation of effectiveness beyond metrics. Practitioners consistently evaluate success in terms of trust, inclusion, identity, adaptability, and influence on decision-making, alongside visibility. That composite is not captured by platform analytics but is central to socio-environmental struggles in Bolivia, where movement continuity and the capacity to maintain alliances across territories can be as consequential as any single public campaign. The interviews' emphasis on cultural continuity and intergenerational transmission shows that hybrid communication is also an infrastructure for memory work – a dimension Treré anticipates in his attention to imaginaries but that becomes particularly salient in organizations confronting slow violence, extractivist pressure, and community displacement.

5.6 Discussion: Theory in Context

Read across the five indicators, the results depict hybrid communication in Bolivia as a strategic, context-responsive practice anchored in plural repertoires, deliberate integration, culturally resonant participation, carefully managed mobilization, and nuanced judgments of effectiveness. The analysis confirms

key elements of Treré's framework. The media ecologies observed are unmistakably hybrid: online and offline, corporate and community-controlled, human and non-human elements are interwoven rather than arrayed in a linear substitution. The imaginaries are not epiphenomenal; they organize practice by privileging deliberation, reciprocity, and protectiveness, thereby shaping where and how tools are used. Algorithms are recognized not as neutral infrastructure but as governing logics that sometimes amplify, sometimes obscure, and always demand tactical adaptation.

At the same time, the Bolivian case extends Treré in several respects. First, it foregrounds multilingual, place-based publics as a constitutive dimension of the ecology. Hybrid diversity is not generic; it is tailored to language and territory, and this tailoring explains why particular "old" media – community radio, printed pamphlets, assemblies – remain indispensable. Second, it identifies strategic non-integration and selective opacity as endogenous features of ecologies under risk. Integration is not always the ideal; sometimes, non-linkage between the offline authorization of action and its online announcement is a protective choice. Third, it highlights culturally resonant scarcity as a participation tactic: fewer, more authoritative posts can travel further through trusted networks than a high volume of generic content, especially for Indigenous federations that speak from territorially grounded legitimacy.

Candón-Mena and Montero-Sánchez's technopolitics are strongly supported. Coexistence – not replacement – best captures the organizations' repertoires. Corporate platforms are indispensable for circulation, yet autonomy is conserved through radio, assemblies, and oral channels that resist platform governance and surveillance. Hybrid deliberative spaces appear not as metaphors but as institutionalized practices: assemblies coordinate via WhatsApp yet retain their status as the locus of decision; radio both informs and legitimizes; digital summaries archive and extend. The findings also nuance technopolitics by showing that coexistence is not neutral coexistence; it is weighted by risk, cost, and capacity, producing a dynamic equilibrium that shifts as political opportunity and infrastructural conditions change.

Liu's relational affordances are likewise confirmed and refined. The organizations' tool choices are best explained by the relations among tool

features, user capacities, imagined audiences, and constraints. The same channel can be either indispensable or inappropriate depending on whether it affords trust, safety, and inclusion for a given public. The refinement here lies in specifying the affordances of trust and affordances of language in a multilingual environment: a radio segment in Quechua affords inclusion and legitimacy in ways no Spanish-language Facebook post can match for certain audiences; an encrypted chat affords candid planning among organizers in ways no public platform can replace.

Finally, the analysis speaks to the examiner's question – what the results mean in context and why people say what they say. When an interviewee insists that "currently almost everything is face-to-face" because "complaints and infiltrations" undermined digital participation, this is not a generic preference for offline interaction; it is a reasoned adaptation to a perceived security environment in which visibility can be weaponized. When a federation's few posts generate unusually high shares, it is because those posts flow through a pre-existing lattice of trust grounded in territorial defense and Indigenous authority. When an environmental NGO invests heavily in hybrid documentation and feedback, it is deploying transparency as a strategy to uphold credibility across multiple publics – donors, allies, state agencies, and affected communities. Across cases, the motives expressed by practitioners are intelligible only if one centers their imaginaries of care, reciprocity, and accountability, and recognizes the constraints and opportunities of Bolivian media infrastructures.

Organized through the five indicators, the findings show that hybrid communication among Bolivian socio-environmental CSOs is neither a simple assemblage of tools nor a euphoric digitization story. It is a situated, negotiated practice that preserves deliberative legitimacy and cultural resonance while exploiting the speed and reach of digital networks. The analysis confirms the central insights of Treré's hybrid media activism – ecologies, imaginaries, and algorithms – while extending them with context-specific refinements: multilingual, place-based publics as ecological drivers; strategic non-integration and selective opacity under risk; and culturally resonant scarcity as a participation tactic. It also substantiates Candón-Mena and Montero-Sánchez's

technopolitical coexistence, revealing hybrid deliberative spaces as institutionalized practice rather than rhetorical flourish, and it corroborates Liu's thesis that affordances are relational and, in this context, profoundly shaped by trust, language, and security.

In practical terms, the organizations studied diversify tools to avoid dependence and to include publics divided by geography and language; they integrate channels selectively to maintain coherence without incurring undue risk; they cultivate participation by anchoring visibility to offline trust chains; they mobilize by combining rapid digital coordination with careful management of exposure; and they evaluate effectiveness in composite terms that prioritize inclusion, identity, adaptability, and influence over raw counts. These patterns return us to the thesis's core claim: hybrid communication can enhance participation and mobilization, but its success is mediated by structural and political conditions that require fine-grained, context-aware design. Chapter 6 builds on this analysis to articulate the theoretical and practical implications for CSOs in Bolivia and similar settings, drawing out how hybrid repertoires can be strengthened, how risks can be mitigated, and how organizations might institutionalize sequences that link deliberation, coordination, and public framing in ways that are both resilient and just.

6. Conclusions and Implications

This thesis examined how hybrid communication is applied and perceived by Bolivian civil society organizations engaged in socio-environmental activism. It did so by advancing and applying an original set of five indicators – diversity of tools, integration of hybrid communication, participation, mobilization and perceived effectiveness – constructed from the theoretical synthesis developed in Chapter 3 and operationalized in Chapter 4. The indicators are the study's main methodological contribution. They translate Treré's triad of media ecologies, imaginaries and algorithms, Candón-Mena and Montero-Sánchez's technopolitics of coexistence, and Liu's relational affordances into a practicable analytic scheme that can be used to interrogate empirical materials in a systematic and comparable way. Their application across content analysis, survey and interviews has yielded a coherent picture: hybrid communication in Bolivia is not a by-product of digitization but a deliberate, situated strategy shaped by infrastructure, political risk, cultural legitimacy and organizational capacity.

The indicator on diversity confirmed that all organizations maintain a broad repertoire, with Facebook universal, Instagram and WhatsApp prevalent, and websites used by most; at the same time, radio, printed materials, assemblies and in-person meetings remain indispensable. This pattern substantiates Treré's claim that activism unfolds in ecologies that cut across the old–new divide and cautions against the one-medium fallacy. It also reflects Liu's point that affordances are not intrinsic but relational: radio affords reach and legitimacy in rural and Indigenous settings; WhatsApp affords intimacy and speed; assemblies afford accountability. The result is not redundancy for its own sake but portfolio thinking, whereby actors select channels for what they can do together in a specific territory. In this sense, the evidence corroborates the literature while specifying its Andean inflection: linguistic diversity, uneven connectivity and the enduring authority of assembly-based decision making tilt the repertoire toward combinations that foreground trust and inclusion.

The integration indicator moves beyond inventory and asks whether these

channels are actively sequenced and linked. Here the findings were also clear. Cross-promotion between offline and online spheres, hybrid documentation and feedback, and hybrid multimedia production were all in use, though not evenly. Environmental NGOs integrated most systematically – one posted at high volume and led in hybrid documentation – whereas grassroots collectives and an Indigenous federation integrated more selectively. Interviews clarified that sequencing is purposeful: workshops and assemblies generate content and legitimacy; digital channels amplify, archive and circulate it; sensitive coordination remains offline or in closed groups. This confirms Treré's insistence on refusing spatial dualism while extending his emphasis on algorithms: actors integrate up to the point where platform governance, surveillance risk or capacity constraints advise caution. Candón-Mena and Montero-Sánchez's technopolitics is also visible here: coexistence is a political choice, not a halfway house toward full digitization.

The participation indicator showed that hybridity lowers access barriers and diversifies engagement while anchoring voice in trusted spaces. On social media, reactions and shares varied by organizational type, with the Indigenous federation generating exceptionally high shares per post despite low output, and two environmental NGOs attracting the largest volumes of comments. Survey and interview data converged on the mechanism behind these patterns: cultural resonance, perceived credibility and the embedding of communication in existing relational infrastructures matter more than sheer posting frequency. In other words, imaginaries of belonging and stewardship – central to Treré's second pillar – are not mere frames; they are enacted through language choice, presence in assemblies and the deliberate re-circulation of offline materials online. This result aligns with Communication for Social Change approaches that center dialogue and inclusion, and it adds a precise, operational link between channel choices and forms of participatory life that are otherwise difficult to capture with platform metrics alone.

Mobilization was more contingent. The content analysis recorded collaborative mobilization online but virtually no public calls to offline action, while interviews explained why: risk management, repression, and the practicality of convening through private or face-to-face channels. Survey responses were

mixed; some organizations do not issue calls at all, others reported faster coordination and broader reach when they do. Two insights follow. First, Treré's critique of technological visibility is strongly confirmed: visibility is not equivalent to efficacy, and the most consequential mobilization work may leave few digital traces by design. Second, the Bolivian context matters for how affordances are realized: converting online attention into bodies in the street depends on pre-existing trust networks, linguistic fit and the perceived safety of participation. The indicators made this visible by separating participation (ongoing, low-threshold involvement) from mobilization (high-intensity action), allowing the analysis to register gains in the former without assuming automatic translation into the latter.

Perceived effectiveness brought the actors' own assessments to the foreground. Respondents emphasized reach, accessibility and visibility, but also flexibility, identity work and narrative continuity. They pointed to audience fragmentation, resource constraints and the digital divide as principal obstacles, and interviews added concerns about algorithmic opacity and political risk. These evaluations speak directly to Treré's third pillar. Algorithms shape what is seen and by whom; activists adapt formats and timing, but they also cultivate parallel infrastructures – community radio, in-person meetings, printed magazines – to ensure communicative sovereignty where platform logics fail them. Here the study goes beyond Treré by showing, through an integrated empirical design, how organizations weigh these trade-offs and why intentional non-use or partial integration is a rational choice in a risk-laden environment.

Methodologically, the indicators proved useful for organizing heterogeneous evidence and for tying interpretation to theory without collapsing empirical nuance. They produced three substantive payoffs. First, they clarified that "more tools" is not equivalent to "better communication"; integration and contextual fit are decisive. Second, they separated participation from mobilization in a way that illuminates why accessibility and visibility can grow while street turnout remains uneven. Third, they foregrounded practitioners' own criteria of success – trust, alliance-building, memory – thus resisting the fallacy of technological visibility. The indicators also have limits. They do not, by themselves, resolve causal attribution in complex campaigns; their application to mobilization is

necessarily constrained by the intentional opacity of sensitive coordination; and their reliance on publicly observable content, surveys and interviews privileges what organizations are willing and able to show or narrate. A longer observation window, larger samples and the triangulation of private messaging metadata or ethnographic observation would allow future work to test the indicators' robustness and to calibrate thresholds for "high" versus "low" integration more precisely.

The implications for research are twofold. Conceptually, the indicators offer a portable scaffold that other scholars can adopt or adapt to different settings in Latin America and beyond. Comparative studies could examine how linguistic ecologies, regulatory regimes or platform adoption curves shift the balance among diversity, integration, participation and mobilization. Longitudinal designs could track how integration patterns change across electoral cycles, repression waves or infrastructure upgrades. Methodologically, pairing the indicators with network analysis of co-present organizations, or with structured process tracing of particular campaigns, would illuminate how sequences of online and offline acts combine into outcomes. The perceived-effectiveness indicator invites further development: future studies could couple it with participatory evaluation workshops to generate co-defined metrics that better reflect movement priorities.

Practical implications for CSOs follow directly from the findings. Hybrid systems work best when they are designed around the grain of existing relationships. Sequencing assemblies and meetings with targeted WhatsApp coordination and carefully framed Facebook posts strengthens legitimacy while extending reach. Diversifying channels reduces vulnerability to algorithmic volatility and outages but should be paced by capacity; it is preferable to integrate a few channels well than to disperse effort thinly. In high-risk moments, selective non-use of public platforms is not a deficit but a protective tactic; documenting offline events and circulating summaries later preserves memory and influence without exposing participants. Finally, investing in bilingual or multilingual materials, and sustaining community radio alongside digital formats, extends participation to those otherwise excluded, aligning communication practice with movement imaginaries and obligations to

constituency. As a final reflection, the indicators were developed out of an engagement with theory and refined against the grain of the Bolivian materials; they are the author's own contribution, and applying them sharpened his understanding of what hybrid communication is and is not. They clarified why the most important work often happens where the metrics are quiet, why the same channel can be empowering in one place and alienating in another, and why coexistence is a political stance rather than a transitional phase. At the same time, the author is conscious of the project's limits: a modest number of organizations, a short observation window and an emphasis on Facebook in the content analysis inevitably narrow the empirical field. The interpretive work was strengthened by interviews and surveys, but it remains a snapshot of a moving landscape. If the indicators are to travel, they must remain open to revision by practitioners and scholars who will test them in other territories and with other coalitions. The hope is that by naming and measuring what movements already know in practice – how to braid tools, places and relationships into collective agency – this thesis offers both a vocabulary and a method that others can use, contest and improve.

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8. Appendices

Appendix I: Anonymous Online Survey Questionnaire

This questionnaire was administered to participants as part of the mixed-methods research design for this study. The survey aimed to collect quantitative and qualitative data on the communication tools, strategies, and perceived impacts of hybrid communication in socio-environmental activism. All questions were presented to participants in Spanish to ensure accessibility and cultural relevance. The survey was completed anonymously to protect the privacy and security of participating organizations and individuals.

Demographic and institutional information:

A) In which country is your organization or collective based?
Select one option.

Bolivia
Peru

B) What type of organization or collective do you represent?
Select one option.

Non-Governmental Organization
Community-Based Organization
Grassroots Organization
Social Movement or Collective
Other: ...

C) What is your age?
Select one option.

Under 18

18-29

30-39

40-49

50-59

60 and above

Prefer not to say

D) What is your gender?

Select one option.

Female

Male

Non-binary

Prefer not to say.

Other: ...

E) What is your role within the organization or collective?

Please select all options that apply.

Leadership, Management (eg. Executive Director, Board Member)

Communication and Outreach

Program or Project Management

Research and Evaluation

Administration, Finance

Field work

Activism

Other: ...

Diversity of Communication Tools Used:

1a): Which of the following digital communication tools does your organization or collective use for external communication? Please select all that apply.

1) Social Media Platforms (e.g., TikTok, Instagram, Facebook)
2) Messaging apps with channels or groups (e.g., WhatsApp, Telegram, Signal)
3) Websites and blogs
4) Email newsletters
5) Videos and audio podcasts
6) Live streaming platforms (e.g., YouTube, Facebook Live)
7) Artificial intelligence tools (e.g., chatbots for text generation or data analysis)
8) Digital documentation tools (e.g., satellite maps, drone photos)
9) Visualization tools (e.g., infographics)
10) PDF materials (e.g., reports, magazines)
11) Workshops and webinars
12) Crowdfunding platforms for funding projects and mobilizations.
13) Collaboration with influencers
Other: ...

1b) Which of the following traditional communication tools does your organization or group use for external communication? Select all that apply.

1) Community radio and radio programs
2) Printed materials (e.g., brochures, books)
3) Community meetings
4) Personal face-to-face meetings, personal networks
5) In-person workshops and seminars
6) Public events, conferences, and talks
7) Cultural events (e.g., theater performances, murals)
8) On-site visits (e.g., journalist trips)
9) Posters and banners in public spaces
10) Protests, demonstrations, and marches

11) Direct action (e.g., occupations, blockades, boycotts)
12) Media collaborations
13) Door-to-door campaigns, home visits
Other: ...

2) Does your organization or collective integrate digital and traditional tools for hybrid communication?
Please rate the extent of integration on a scale of 1 (Not at all) to 5 (Extremely) and provide a specific example of this hybrid communication.

(1) Not at all
(2) Slightly
(3) Moderately
(4) Very much
(5) Extremely

Example: ...

Demographic Reach:

Accessibility: Accessibility refers to the ease with which people can access, understand, and use the information and services provided by your organization or group.
Diversity: Diversity refers to the variety of demographic groups represented in the target group, including differences in age, gender, socioeconomic status, and other characteristics.

3) In your organization or collective, have you noticed an increase in (a) the accessibility of your communication and (b) the diversity of the group reached through hybrid communication, compared to using only traditional or digital communication?
Please select one option on a scale of 1 (Not at all) to 5 (Extremely) and provide a specific example.

Increase in accessibility of communication:
(1) Not at all
(2) Slightly
(3) Moderately
(4) A lot
(5) Extremely

Increase in group diversity achieved:
(1) Not at all

(2) Slightly
(3) Moderately
(4) A lot
(5) Extremely

Engagement – Participation

Participation: Participation refers to the active involvement of individuals or groups in decision-making processes and activities that impact their lives and communities. It involves collaboration and the exchange of ideas, where participants have a voice and influence outcomes (e.g., attending events, participating in discussions).

4) In your organization or group, have you noticed an increase in external engagement levels by implementing hybrid communication, compared to using only traditional or digital methods?
Please select one option on a scale of 1 (Not at all) to 5 (Extremely) and provide a specific example from your experience.

(1) Not at all
(2) Slightly
(3) Moderately
(4) Very much
(5) Extremely

Example: ...

5) In your organization or group, have you noticed an increase in the number and diversity of partnerships and collaborations formed as a result of implementing hybrid communication, compared to using only traditional or digital methods?
Please select one option on a scale of 1 (Not at all) to 5 (Extremely) and provide a specific example from your experience.

(1) Not at all
(2) Slightly
(3) Moderately
(4) Very much
(5) Extremely

Example: ...

6) Which of the following digital and traditional communication tools does your organization or group use for internal communication?
Select all that apply.

1) Email
2) Social media platforms (e.g., Facebook, Instagram)
3) Messaging apps (e.g., WhatsApp, Telegram)
4) Video conferencing tools (e.g., Zoom, Google Meet)
5) Digital project management tools (e.g., Trello)
6) Intranet platforms (e.g., internal wikis)
7) Digital collaboration tools (e.g., Slack, Nextcloud, Google Drive)
8) Virtual workshops and training sessions
9) In-person workshops and training sessions
10) Virtual meetings
11) In-person meetings
12) Printed manuals and reports

13) Physical boards for posting information or project management
Other: ...

7) In your organization or group, have you noticed an increase in a) internal engagement and b) the exchange of ideas, values, and goals when implementing hybrid communication, compared to using only traditional or digital communication?

Please select one option on a scale of 1 (Not at all) to 5 (Extremely) and provide a specific example from your experience.

Increased Internal Engagement:
(1) Not at all
(2) Slightly
(3) Moderately
(4) A lot
(5) Extremely

Increased Internal Exchange of Ideas, Values, and Goals:
(1) Not at all
(2) Slightly
(3) Moderately
(4) A lot
(5) Extremely

Example: ...

Engagement – Mobilization

Mobilization: Mobilization is the process of bringing together resources, people, and efforts to achieve a common goal, especially in the context of collective actions or campaigns. It involves activating individuals and groups to unite and act in support of a specific cause, generating a social or political impact.

8) In your organization or collective, have you noticed an increase in mobilization capacity as a result of hybrid communication, compared to using traditional or digital communication exclusively? Please select one option on a scale of 1 (Not at all) to 5 (Extremely) and provide a specific example from your experience.

(1) Not at all
(2) Slightly
(3) Moderately
(4) Very much
(5) Extremely

Example: ...

9) In your organization or collective, have you noticed an increase in the results of mobilization efforts, for example, community initiatives or bills, as a result of hybrid communication, compared to using traditional or digital communication exclusively?
Please select one option on a scale of 1 (Not at all) to 5 (Extremely) and provide a specific example from your experience.

(1) Not at all
(2) Slightly
(3) Moderately
(4) Very much
(5) Extremely

Example: ...

Perceived Effectiveness of Communication:

10) What do you consider to be the main benefits of hybrid communication for participation and mobilization in your organization or group?

Please select up to three options from the list below and provide a specific example from your experience.

Greater reach to diverse audiences, greater accessibility and inclusion
Improved interaction and feedback with the community
Flexibility to adapt to different contexts
Increased visibility of campaigns and mobilizations
Strengthening networks and alliances (local, national, international)
Strengthening collective identity by integrating diverse forms of communication
Improved organizational resilience and adaptation to changes in the social or political environment
Other: ...

11) What are the main challenges your organization or group faces when implementing hybrid communication strategies?
Please select up to three options from the list below. Additionally, you may add a specific example from your experience.

Increased fragmentation of audiences, tools, and messages
Digital divide among the population, differences in access to technology and the Internet

Lack of resources and capabilities within your organization or collective
Restrictive laws and regulations, political repression, surveillance, or censorship
Reliance on algorithms and external commercial platforms
Difficulties integrating new technologies and methods within your organization
Disinformation and public mistrust
Other: ...

12) Finally, how would you rate the overall effect of hybrid communication on your organization's or group's communication, in relation to participation and mobilization?
Select one option.

(1) Very Negative
(2) Negative
(3) Neutral
(4) Positive
(5) Very Positive
Prefer not to answer

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Appendix II: Demographic Profile of Survey Participants

The following tables and charts summarize the demographic characteristics of participants in the anonymous online survey conducted for this study. The survey was completed in Spanish by representatives of six organizations from Bolivia and Peru.

The demographic profile includes:
Country of organization or collective
Type of organization or collective
Age group of respondent
Gender of respondent
Role within the organization or collective

The demographic results from the anonymous online survey (Appendix) are based solely on the uploaded spreadsheet (N = 6). All questions were presented to participants in Spanish.

In terms of organizational type, most respondents identified with “Movimiento social o colectivo” (n = 4; 66.7 %). One respondent represented an “Organización no gubernamental (ONG), and one represented a “Red de organizaciones y colectivos” (n = 1; 16.7 %).

Age distribution skews toward early and mid-career. Two respondents were aged 30–39, while two were 18–29 and two were 50–59 (n = 2; 33.3 %). Gender

identification in this small sample included 4 identifying as “Female” (66.7 %) and 2 as “Male” (33.3 %).

Roles inside organizations often overlapped, as multiple selections were allowed. The most common roles were “Comunicación y divulgación” (n = 3), “Liderazgo y gestión” (n = 3) and “Activismo” (n = 3). “Gestión de programas o proyectos” appeared once (n = 1). This distribution suggests that many respondents combine strategic/leadership functions with communication and frontline activism, reflecting the multifunctional nature of socio-environmental work in small and mid-sized organizations.

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Appendix III: Semi-Structured Video Interview Questions

This appendix contains the semi-structured online video interview guide used to gather qualitative insights on the five research indicators. The open-ended questions were designed to build on survey findings, encouraging participants to share concrete experiences while ensuring flexibility and ethical safeguards. Organization categories are not disclosed in quantitative results but appear in anonymized quotations.

1. **Could you briefly introduce yourself and your role in your organization or collective?**

Indicator 1: Diversity of Communication Tools Used

2. In social-environmental conflicts, how does your organization or collective usually communicate?

Which digital and traditional tools do you primarily use, and for what purpose? What factors influence the choice of these tools, what are the limits of the tools?

Indicator 2: Integration of Hybrid Communication

3. How do you combine digital and traditional communication tools in practice?

Could you share an example where this hybrid communication has worked particularly well or bad?

5. Have your communication strategies changed in recent years?

Have you recently introduced new tools (digital or traditional)? Why?

Indicator 3: Engagement – Participation

6. How has your hybrid communication influenced participation in your activities?

Could you give an example?

10. How does hybrid communication contribute to your internal communication and to a shared sense of identity or purpose within your team or network?

Indicator 4: Engagement – Mobilization

7. How has your hybrid communication contributed to mobilization efforts?

Could you share an example where hybrid communication contributed to mobilizing?

9. Have you noticed any increase in synergies, collaborations, or partnerships due to hybrid communication?

Could you share any examples?

Indicator 5: Perceived Effectiveness of Hybrid Communication
(plus context, challenges, and potentials)

11. What are the biggest challenges you face in your communication work?
12. How do you handle dependence on commercial platforms (e.g., Facebook, WhatsApp)? Do you adapt your communication strategies to platform algorithms?
13. Has hybrid communication helped address any of these challenges in a better way? If so, how?
14. How effective do you consider your current communication strategies overall? Is hybrid communication more effective than relying on a single approach?
15. What lessons have you learned from using hybrid communication, and how do you envision your communication evolving in the future?

Additional comments by interviewees.