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On Reparative Science

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ABSTRACT

Through a radical re-reading of Orlando Fals Borda's conceptualization of participatory action research (PAR), I argue that PAR is more adequately grounded within the broader Fals Bordian framing of *ciencia popular*, defined as science for, with, and propelled by social movements. I problematize key elements of Fals Borda's works that illuminate the historical silencing of feminist thought and street-level movement leaders of the Colombian left. Using the space created by Fals Borda's conceptual shortcomings, I share lessons learned through my friendship and shared movement space with Jhon Restrepo and Daniela Maldonado, organizers who embody a new kind of *ciencia popular*, which I call reparative science. I conclude with forward thinking on next steps for reparative science and articulate possible pathways forward toward a science that centers collective care in protective spaces that grow in distance from the dehumanizing structures of the nonprofit and academic industrial complexes.

RESUMEN

A partir de una relectura radical de la conceptualización de la investigación-acción participativa (IAP) propuesta por Orlando Fals Borda, sostengo que la IAP se sitúa de manera más adecuada dentro del marco más amplio de la ciencia popular falsbordiana, entendida como una ciencia para, con y movida por los movimientos sociales. Problematizo elementos clave de la obra de Fals Borda que dejan en evidencia el silenciamiento histórico del pensamiento feminista y de les líderes y lideresas de base de la izquierda colombiana. Aprovechando el espacio que abren estas limitaciones conceptuales en la obra de Fals Borda, comparto los aprendizajes derivados de mi amistad y de los espacios de organización compartidos con Jhon Restrepo y Daniela Maldonado, organizadores que encarnan una nueva forma de ciencia popular, a la que llamo ciencia reparativa. Concluyo con una reflexión sobre los pasos a seguir para la ciencia reparativa y articulo posibles caminos hacia una ciencia que centre el cuidado colectivo en espacios protectores que crezcan a distancia de las estructuras deshumanizantes del complejo industrial académico y de las organizaciones sin ánimo de lucro.

1 | Introduction

In this paper, I engage with the global South origins of *ciencia popular*,¹ a term set forth by sociologist Orlando Fals Borda in his writings on participatory action research (PAR), roughly interpreted as science emerging from grassroots movements.

Through this lens, I contemplate the meeting point of organizing and scholarship in dialogue with two Colombian social movement leaders, Jhon Restrepo and Daniela Maldonado, who have taught me over the years, through their everyday actions and ethos, the grounded meaning of *ciencia popular*. For the last two decades, Restrepo and Maldonado have led radical social

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movements against state and paramilitary² violence in two principal cities in Colombia, Bogotá, and Medellín. These *maestres*³ have taught me so much through their struggle for liberation from the violent grip of the police state and paramilitary-led homophobic and transphobic terror. Restrepo and Maldonado are not mere examples of Fals Bordan *ciencia popular*; they are the living legacies and the teachers of so many (including myself) about the possibilities of a reparative science—a science that centers healing and accountability (through repair as a short-term action addressing historical harm through acts of redistribution and restructuring). Restrepo's teachings on the meaning of repair and his experience leading reparative justice initiatives for LGBTQ+ victims of paramilitary violence mark crucial guideposts for understanding how a movement-driven science can play a key role in holding fascist regimes accountable for state violence through processes of individual and collective repair and redress. Similarly, Maldonado's teachings on a care-centered militancy involve direct confrontation with the police state and carceral logics more generally through embodied and arts-driven praxis. This care-centered militancy is necessarily anti-imperialist, abolitionist, decolonial, and trans-feminist and draws from research to inform organizing goals and slogans that counter dominant carceral and imperialist narratives on the frontlines of abolitionist struggles in the streets. Our militancies should work daily and materially to counter and undo colonial logics, legacies, discourses, structures, and institutions, learning from Latin American decolonial thought and other key histories and geographies that contextualize the lessons and differences between anti-colonial, postcolonial, and decolonial canons (Asher 2013). Through militant dance against the police, vogue-marching in the midst of street-level social protest, this performative action challenges the classist, racist, and transphobic patterns of criminalization and carceral logics more generally in Colombia.

Through Maldonado and Restrepo's teachings of abolitionist resistance and repair, and inspired by the teachings of Ruth Wilson Gilmore on the relationship between liberation and place, I revisit the legacy of Fals Borda as a central figure in the transdisciplinary literature on PAR, as a means of asking the following question: What core methodologies uplift the principles and praxis of radical geography and radical traditions in the human sciences more generally? I answer this question as a continuation and critique of my previous interpretation of key Fals Bordan and Freirean concepts deemed as central to PAR principles and praxis (Ritterbusch 2019). In presenting what I call "reparative science" in learning from key movement teachers, I offer a new framework that summarizes my attempt to enact a daily radical geography that involves three components: (1) a critical re-reading and repositioning of canonical scholars; (2) collective approaches to knowledge gathering, data collection, publishing, and community impact rooted in movements that learn from the South and challenge imperial and carceral structures; and (3) an intentional recentering on the relationship between liberation and science by placing the concepts of *ciencia popular* and militant research in dialogue with Katherine McKittrick's (2021) provocations on Black life and livingness in *Dear Science*.

Aligned with previous calls from scholars speaking before particular disciplines and canons, a reparative science challenges

us—organizers, activists, scholars, and those identifying somewhere in between these movement- and university-based identities—to decenter the North Atlantic-centric traditions of PAR as we continue to learn from radical movements in the South (Roy 2020) to guide the way forward and beyond the daily praxis of *ciencia popular*. I ask that this practice of looking South center the feminist, movement-based figures too often silenced and obfuscated by the macho militancy of Latin American leftist thought leaders, politicians, and activists. While multiple teachings of Fals Borda remain important to embrace as a means of understanding the global South origins and genealogy of PAR, I call to lay Fals Borda's figurehead to rest. This gives us analytical space to uplift the living legacies of his work, while re-righting and rewriting (Smith 1999) the stories of so many radical organizers and other criminalized identities on the frontlines who are left unmentioned in his texts. Restrepo and Maldonado's legacies offer a reconceptualization of repair and militancy, as care-centered, performative praxes that directly confront structures of oppression and create tactics that strengthen us as we struggle forward toward liberation. Although reparation appears as a central provocation in this paper, repair is merely a point of entry for the building of new worlds beyond policing, prisons, and the university and nonprofit industrial complexes.

2 | Foundations of Reparative Science: On PAR, *Ciencia Popular*, and Militant Research

In this section, I describe the core components of a reparative science, building on conceptualizations of PAR, *ciencia popular*, and militant research in conversation with radical geographers leading this work in different parts of the world.

2.1 | On PAR and Liberation

As Fals Borda asserted two decades ago while addressing geography students at the National University in Colombia, PAR is a philosophy that moves us toward liberation. Fals Borda's statement asserts:

...PAR as a life philosophy. PAR, along with Geography, ecology and systems theory, recognizes that [these] are slow processes of individual adjustment and social change [aiming] to improve local conditions, stimulate, the power and dignity of the people, and to reinforce the trust of the people in their communities. [PAR] also produces immense personal satisfaction within the researchers. This is why [PAR] is important support for those of us who search for peace by means of territorial planning and a better use of geographies. It's a new type of social liberation.

(Fals Borda 2003, 102)⁴

In defining the key principles and praxis of reparative science, I urge us to center Katherine McKittrick's discussion of the relationship between science, Black life, and liberation as a

means of radicalizing Fals Borda's provocations on liberation. Whereas Fals Borda discusses liberation as a category, McKittrick presents liberation as the outcome of intellectual work and struggle:

Description is not liberation ... The goal is not to *find* liberation, but to seek it out. The process of seeking will, ideally, be persistently unsatisfied with ideas that are and were constructed alongside the “ambivalent legacy of emancipation and the undeniably truncated opportunities available to the freed” [Hartman 1997, 12]. The process of seeking is one of inquiry and curiosity ... I hope this story provides us, as academics and thinkers who compulsively seek out liberation, with the intellectual mechanisms to do this work in a variety of university settings that, as we know, were not built to honor the lives of black and other marginalized communities. Seeking liberation is rebellious.

(McKittrick 2021, 44, 47–48)

So what does reparative science do and what are the principal praxis and theoretical inspirations? A reparative science radicalizes Fals Borda's conceptualization of PAR and liberation and is inspired by McKittrick's focus on liberation as rebellion and as driven by anti-colonial storytelling. A reparative science remembers the troubling entanglement of the academy with chattel slavery and colonialism but insists on reaching beyond the representational limits of suffering to uplift Black life, joy and livingness, and rebellion. Fals Borda's *ciencia popular* effects liberal policy change through direct contributions to the human rights clauses of the Colombian Constitution of 1991 through careful learning from agrarian and racial justice movements since the 1960s and 1970s, whereas McKittrick's conversation with science inspires us to seek liberation beyond incremental change and nods to human rights, and welcomes us to center joy, rebellion, and alternative ways of living and presenting ourselves to the structures that attempt to annihilate us (McKittrick 2021).

These ideas drastically alter our understanding of participatory approaches to science; instead of being employed to make research feel less extractive or a set of bluffed community-driven phases of participation in research design, it becomes a beautiful, troubled history of people fighting collectively, through a “blended but fractured we” across multiple axes of power and difference,” toward their liberation (Nagar and Shirazi 2019, 237). Debates of apparent proximity to Fals Borda and McKittrick's reflections on science, such as “people's geography” (Harvey 2001), “public science” (Torre et al. 2012), “street science” (Corburn 2005), and “community geography” (Fischer et al. 2022), are central to global North framings of a science that seeks to partner or collaborate with communities to work against inequalities in society but does not articulate a pathway or pursuit of collective liberation. “Partnership,” in this context, is a term that we may well want to retire, as partnership and reparation (a key consideration for the short-lived future of reparative science) are terms that are difficult to reconcile. Additionally, as participatory geographers have argued previously, “[w]e should

also beware of slippage between ‘participatory’ and ‘public’ geographies. While some synergies exist, there can be significant differences in philosophies and practices across a wide continuum of engagement” (Pain et al. 2012, 121).

2.2 | On Ciencia Popular and Militant Research

Orlando Fals Borda was the founder of the first department of sociology in Colombia and contributed to the 1991 Colombian Constitution, a document shaped by the legacies of former M-19 militants, indigenous revolutionaries including Quintín Lamé and other social movements overwhelmingly affected by state violence and persecution. For both his academic and political work, Fals Borda drew strength from multiple social movements in Colombia, including agrarian struggles, indigenous movements, and other popular social justice-driven initiatives in the greater Córdoba and Atlantic coastal regions from where he originated. Fals Borda's family background represented the privileged few of the Colombian elite who could access higher education in general and an even smaller percentage of individuals in those times who could continue their studies in the United States (Moncayo 2009; Rappaport 2020).

Fals Borda completed postgraduate degrees in sociology at the University of Minnesota and the University of Florida in the early 1950s. He felt restricted while learning about science that was clearly not intended for the people of Colombia, especially for the peasant communities whose struggles were so informative to his career (Moncayo 2009; Rappaport 2020). Upon his return to Colombia, Fals Borda also survived incarceration, exile, and the loss of his dear comrade Camilo Torres Restrepo, who left the university to join the ranks of the ELN (Spanish acronym for National Liberation Army) and who was Fals Borda's principal companion in the initial years of intellectual leadership at the National University.

In addition to his individual and institutional trajectory, we can also learn from the legacy of *La Rosca*, a collective occupying the terrain between organizing and scholarship that represented an important part of Fals Borda's movement family. Rappaport (2020) interprets the term *La Rosca* as meaning “in-group”; however, this leaves out important contextual precision in the discourse alluding to structures of class power and oppression specific to Colombia. “*Rosca*,” in Colombian Spanish, refers to a group that exercises power and influence in society, oftentimes used to describe networks of clientelism leading to political posts or a means of gaining access to other spheres of power. I imagine that founding members of *La Rosca* chose this name as a means of naming the very class relations and systems of oppression that they mobilized against, to describe the power of the people in toppling the toxic class relations that continue to perpetuate inequality in our country. *La Rosca* was founded in 1970 during the time when Fals Borda was in exile in Geneva, Switzerland (Rappaport 2020).

The founding members of *La Rosca* were individuals living on the margins of the mainstream Colombian left and of an academic empire in the global South that was heavily dominated and funded by counter-insurgent US political activity in Latin America (Bonilla et al. 1972).⁵ Fals Borda founded *La Rosca* in a

moment influenced strongly by Freirean thought, as movements aligned with popular education strengthened and spread from the revolution of the urban margins to peasant movements in rural areas throughout the country.

Not only did the collective function as a publishing press (founded in opposition to mainstream forms of academic dissemination) but, most importantly, *La Rosca* provided a space of support and survival in a time when their work on the frontlines was often met with state persecution and death (Rappaport 2020). Each member of the collective aligned their work to struggles connected to their own pathways of liberation. Fals Borda, for example, was drawn to peasant movements and land struggles near and surrounding his hometown of Barranquilla (Rappaport 2020).

Fals Borda and comrades define “*ciencia popular*” in terms of a movement-derived purpose or cause (*causa popular*) and make reference to the intellectual who builds their pathway toward an emancipatory cause or purpose by inserting themselves into historical processes on various scales (Bonilla et al. 1972).

The practice of “*ciencia popular*” implies:

...breaking the inadequate molds of explanation and action. To this effect, some of us abandon university spaces (recognizing that they are, in general, factories of capitalist imperialism) or we have placed in quarantine the reference points for the orthodox and packaged science transmitted by the traditional university ... we left for the territory then to practice interdisciplinarity, to reformulate concepts and to work with the grassroots movements in society ... the guiding principle was to place our knowledge at the service of the grassroots interests...

(Bonilla et al. 1972, 33–34, translation by author)

As the cofounders of *La Rosca*, Bonilla, Castillo, Fals Borda, and Libreros defined a guiding method of *ciencia popular* as “critical recovery (*recuperación crítica*),” which occurs when “militant researchers arrive to communities to study and critically learn from the traditional grassroots culture by paying particular attention to those elements or institutions that have been useful for confronting, in the past, the enemies of the exploited classes. Once these elements have been determined, they then proceed to reactivate these elements for similar class struggles in the present” (Bonilla et al. 1972, 51–52, translation by author).

A second guiding method of *ciencia popular* was “systematic devolution” (*devolución sistemática*), which is a praxis that ensures direct application of knowledge toward justice-seeking in class struggles against structures of oppression (Rappaport 2020).

Bonilla, Castillo, Fals Borda, and Libreros described *devolución sistemática* as requiring of the militant researcher an ethics that “rests on the assumption that the popular class, the peasantry for example, although illiterate, is not for that reason ignorant

but on the contrary is the owner of a rich experience of struggle, it knows countless ways and means of learning, surviving and defending itself, it often participates in a collective memory that is a respectable ideological and cultural base, and therefore understands that any step forward that is intended to be taken must be based on this already existing knowledge” (Bonilla et al. 1972, 45–47, translation by author).

Reference to research militancy was often mentioned in the works of Fals Borda and *La Rosca* comrades and this term is often invoked to illustrate how research is done by activists and organizers not affiliated with universities. As Halvorsen states

Militant research is an approach that sees research and activism as co-constituted and is oriented solely “by invested militant activists for the purpose of clarifying and amplifying struggle” (Team Colors Collective 2010, 3). The starting point for militant research is not an academic researcher seeking to further a particular strand of knowledge, but the context of political struggle. Thus for Shukaitis and Graeber (2007, 9) militant research “is not a specialized task, a process that only involves those who are traditionally thought of as researchers. It is an intensification and deepening of the political.”

(Halvorsen 2015, 467)

Similarly, Russell describes organizing as a central tenet of militant research and also states that the university is not a strong reference point in this approach to knowledge building. Russell (2015, 225) underscores how the “process of militant research necessarily ‘starts from the understandings, experiences, and relations generated through organizing as both a method of political action and as a form of knowledge’ (Shukaitis and Graeber 2007, 9).” Furthermore, it is essential to explore how research can transform movements (and not the other way around, as happens most often in watered-down versions or participatory or public science). Instead:

Militant research is thus a process of being critically committed to a given political milieu—at once committed to the milieu through critical attempts to transform it. The intention is not to take detached, static and explanatory snap-shots—like much of “social movement theory” (for example, Tarrow 1998) ... Rather the point of militant research is to contribute to processes of critical reflection and transformation of our movements.

(Russell 2015, 226)

Additionally, drawing from experiences of organizing toward housing justice in Catalonia, Ferreri et al. (2024, 473) explain how a methodological openness “to the situation that drives the research is understood not simply in terms of a political conjuncture but also of intense individual and collective commitment to both militancy and research.” Ferreri, García-Lamarca and comrades define the political objectives of the broader movement work and explain how their militant research agenda contributes to

movement toward this objective. In this case, the research collective engaged in over 30 public presentations ranging from protest-to policy-level to counter the harmful and stigmatizing discourse of squatting. Their methodological openness as militant researchers, therefore, created space for the broader movement to define how knowledge building, both qualitative and quantitative, can be politically useful to a radical justice-seeking agenda.

Fals Borda and colleagues of *La Rosca* spend the majority of their book on *ciencia popular* relating this concept of institutional divestment to the definition of militant research and the practices of militant researchers (Bonilla et al. 1972). For Fals Borda and colleagues, militant research involves expropriating knowledge from the academy for movements, which is necessarily anti-imperialist and requires constant research agenda oversight and judgment by the people (Bonilla et al. 1972).

It involves methodological work that “depends, largely, on the global strategy of social change that has been adopted and on short- and medium-term tactics ... thus, methodology is not a pure and simple enumeration of certain rules and principles without reference to a global understanding of social change, as has been set forth by the social movement” (Bonilla et al. 1972, 38, translation by author).

Fals Borda and comrades of *La Rosca* described militant research as a practice dependent on the arrival of the macho “militant researcher (*investigador-militante*),” who goes to the “territories” to place his knowledge at “the service of grassroots interests”:

We then went out into the territory to try out interdisciplinarity, to reformulate concepts and to work with the people at the grassroots of society, discarding the three attitudes previously indicated as characteristic of the alienated intellectual: the naïve, the moralistic and the consciously-committed to the system. The guiding concept was to place knowledge at the service of the people’s interests...

(Bonilla et al. 1972, 33–34, translation by author)

Militant researchers, for *La Rosca*, appear as “*el investigador-militante*” or “the militant researcher” prefaced and formulated using masculine pronouns. Beyond the binary logic of gendered pronouns in Spanish, they describe the key roles for the building of knowledge in limited terms, listing, for example, the importance of consulting with “sympathetic public authorities,” “clergymen,” “public officials,” and “doctors” (Bonilla et al. 1972, 41). Such a list in itself stands in stark contrast to the work of Cruz Hernández (2020) and feminist collectives in the global South, who describe frontline work against the state and other colonial institutions as the insurgent labor of women in their daily struggle for and with land and their socio-emotional territories (Cruz Hernández 2020).

This Fals Bordian or “Roscian” notion of militant research reproduces the very imperialism and extractivism they intended to depart from by describing movement from university space to a “territory” of struggle and then offering their knowledge as

a service to the community (Bonilla et al. 1972). This replicates problematic divisions between those who bring knowledge, as opposed to collective formulations of knowledge building and also replicates imperialist “immersive” practices that read more like antiquated ethnographic modes of immersion rather than anti-imperialist or anti-colonial creative work in territories that produce knowledge outside of these traditional practices. Furthermore, as demonstrated below, Fals Borda and comrades of *La Rosca* conceived of an anti-imperialist militant research involving the following terms:

That the emerging concepts and hypotheses find their confirmation or rejection in the direct and immediate contact with reality and in the usefulness they prove to have in the hands of the key sectors and groups, for the formation and development of their class consciousness, and according to the organizational force they are capable of generating. Consequently, this confirmation is not sought in the theoretical schemes of “great thinkers” of “universal science” which in this sense cannot exist because that which is so considered is but part of the apparatus of domination imposed by the metropolises over us...

(Bonilla et al. 1972, 47–50, translation by author)

So instead of an emphasis on the confirmation of concepts and “hypotheses” through contact with reality, with grassroots movements, as suggested by Fals Borda and colleagues (Bonilla et al. 1972), what I have learned from movement leaders in Colombia is that the concepts, praxis, and essence of this new, care-centered formulation of *ciencia popular* emerges in the opposite logic, not impelled by a “militant researcher” that joins as a means of confirming, but rather a collective of struggle that builds concepts together, without these reifying divisions that Fals Borda attempted to dissolve but reinforced through his language and writing.

Within a reparative science frame, researchers should be useful to the movement, should make active contributions to the attainment of movement goals, and should work in the daily to counter racist, classist, and imperialist violence. Drawing from the teachings of abolitionist organizers, Hayes and Kaba (2023),⁶ I underscore their differentiation between activism and organizing. The former is defined in terms of individual advocacy, whereas the latter draws strength from accountability to others as we collectively fight toward liberation. In reparative science, beyond expressing vague commitment to a political struggle, the notion of accountability to an expansive movement of struggle is key.

Finally, it is critical to bring attention to the citationary practices that continue to uphold the focus of the North Atlantic-centric PAR canon and the canon, even as we look South, that upholds certain academic figureheads over key movement leaders (Roy 2020). It is therefore imperative to embrace Roy’s (2020) call to “kill the Angel in the House,” as we reach toward notions of accountability beyond citationary practices and contemplate the troubled relationship between the neoliberal academy⁷ and frontline social leaders such as Jhon Restrepo and Daniela Maldonado in the global South.

3 | Reparative Science I: Critical Reading of Canonical Texts

3.1 | On Liberation, Science and Re-Reading Fals Bordian Participatory Thought

In this section of the article, I invoke bell hooks in a methodological sense to critically re-read the canonical work of Fals Borda. I do so by uplifting hooks as modelling an ethics of critique from the global North that pays close attention to potential colonial tropes surrounding North–South encounters across epistemic communities, power, and positionality. I suggest that a critical re-reading or reencounter with canonical texts is a generative practice for radical geography, in that it invites us to revisit key concepts, potentially unlearn them and adjust our guideposts as we think forward. hooks models a principled critique by distancing her reflections on Freire from those of her white feminist counterparts in the global North. Here, I underscore the complexity of my reliance on Black feminist and geographic thought to uplift the work of movements that do not directly identify as Afro-Colombian. As we cite radical traditions in any context, we must exercise critical consciousness of the implications of placing particular movements and racialized, classed and gendered identities in dialogue. In this case, what are the implications of placing movement leaders in the global South representing a range of Afro-Colombian, indigenous and mestizo backgrounds in Colombia in conversation with feminist authors of the Black radical tradition in the global North? What can we learn from these dialogues? How can these dialogues revolutionize our radical geography modes of inquiry and organizing? I believe we can practice renewed forms of critique between global North and South in times where decentering US and Eurocentric canons is crucial for anti-imperialist and anti-colonial movement building, which is one of the key arguments hooks (1993) makes in her analysis of her learning relationship with Freire.

Not present in most discussions of Fals Borda's legacy are the *machista* silences and exclusions in his work that speak volumes. In examining these silences, I find myself in a complex place of paradox wherein the masculinist lens so present in his writing all but eclipses the profound wisdom of his participatory and decolonial ideations. When reading Fals Borda's original texts, as is the case when reading the reflections of many Latin American thought leaders such as Galeano and Boal, my reaction is similar to that of bell hooks regarding her relationship with the teachings of Freire:

There has never been a moment when reading Freire that I have not remained aware of not only the sexism of the language but the way he (like other progressive Third World political leaders, intellectuals, critical thinkers such as Fanon, Memmi, etc.) constructs a phallogocentric paradigm of liberation—wherein freedom and the experience of patriarchal manhood are always linked as though they are one and the same. For me this is always a source of anguish for it represents a blind spot in the vision of men who have profound insight. And yet, I never wish to see a critique of this blind spot overshadow anyone's (and

feminists in particular) capacity to learn from the insights.

(hooks 1993, 147)

I acknowledge that in earlier moments of my work looking for liberatory models beyond the global North canon of participatory models for science, Fals Borda's writings on participatory action-research (PA-R, as he writes, emphasizing action and research as inextricable) were crucial lifelines for me as I tried to make sense of my own work and place in both the academy as well as in movements against state violence in the global South. In those early days of organizing and scholarship, Fals Borda, as hooks describes of Freire's work, “gave me [and my students and comrades in Colombia] a language. He made me think deeply about the construction of an identity in resistance” (hooks 1993, 145). She makes mention of a specific phrase written by Freire that she notes as revolutionary for her struggle against a colonizing mindset:

“We cannot enter the struggle as objects in order later to become subjects.” Really, it is difficult to find words adequate to explain how this statement was like a locked door—and I struggled within myself to find the key—and that struggle engaged me in a process of critical thought that was transformative. This experience positioned Freire in my mind and heart as a challenging teacher whose work furthered my own struggle against the colonizing process—the colonizing mind-set.

(hooks 1993, 145–146)

Like hooks in reference to Freire, the work of Fals Borda gave me a language for analyzing my experiences as an organizer and professor in the Colombian academy. Fals Borda's writings on his solidarity organizing and research in Colombia, beyond Bogotá and in the rural margins of the country, provided an example and historical mentor for my work in the absence of colleagues with whom I could discuss my encounters with class violence at the university and the colonial and racist logic that made my skin, accent, and colonized name legible for some and unspeakable for others. Reading Fals Borda, in Spanish, represented the beginning of a lifelong process of decolonization of my body and forced displacement from Colombia, of reading in a language that I was denied, of reading as a way of connecting to movements that organized and rebelled, within Colombia, against the powerful elite who criminalize instead of attempting to heal or repair society, embodying the logic of colonizers. Reading Fals Borda with more pause was a challenge to myself to decenter North Atlantic canonic PAR literatures. However, as I came to understand his relationship to structures of oppression in Colombia, through the legibility of his class privilege and family background, through the glorification of masculinized militancies that obfuscate other possibilities of struggle, reparation, and collective care and healing, I call for a reimagining of *ciencia popular* as he wrote it, and I call for a return (or perhaps re-placement or arrival) of this concept to the streets, as a metaphor, speaking from my lived experience, for the place where our fight originates, where our indignation becomes entangled with and fuel for collective justice dreaming.

And as we re-place *ciencia popular*, I believe we can do this while still embracing the power of his teachings, as bell hooks describes in the following passage about Paulo Freire's work:

In talking with academic feminists (usually white women) who feel they must either dismiss or devalue the work of Freire because of sexism, I see clearly how our different responses are shaped by the standpoint that we bring to the work. I came to Freire thirsty, dying of thirst (in that way that the colonized, marginalized subject who is still unsure of how to break the hold of the status quo, who longs for change, is needy—is thirsty), and I found in his work (and the work of Malcolm X, Fanon, etc.) a way to quench that thirst. To have work that promotes one's liberation is such a powerful gift—that it does not matter so much if the gift is flawed.

(hooks 1993, 147–148)

While I agree with hooks that dismissal of the South must be done carefully, especially from white feminist standpoints situated in global North academics, I believe that contextualizing the flaws of Fals Borda is also an important part of the work of both embracing the historical emergence of and re-placing the sites of learning about *ciencia popular*. As I expose participatory histories drenched in patriarchy, colonialism, racism, and classism, I also revisit my own interpretation and employment of Fals Borda's work in previous reflexive work, in dialogue with bell hooks and her reflections about her learning process in direct engagement with Freire. I am also committed to a citationary practice that connects freedom dreaming scholarship from the global North, such as that of bell hooks, with movement leaders in the global South in ways that challenge us to question the silencing hierarchies in both university and movement spaces. Her beautiful description of the contradictions she feels, as she embraces and simultaneously critiques Freire's work, is an important lesson for our praxis as radical geographers.

It is through these interrogations that we make space for the living legacies of those practicing a reparative science that is revolutionary, that centers the life-saving praxis of organizers dedicating their lives to their movements toward liberation.

4 | Reparative Science II: Research Practice

4.1 | Lessons for Organizing Beyond Ciencia Popular

While maintaining the critiques of Fals Borda present, we learn from two extraordinarily brave movement leaders, who have embraced me with their friendship and taught me so much over the years. The critique of Fals Borda in the above sections comes to life below, as I believe that a reimagined *ciencia popular* must emerge from such teachings: a framework I call reparative science, wherein the theories and new lifeline language for the future are shaped by the knowledge emerging from militancies of collective care, healing, and reparation. The two social leaders

highlighted here not only embody this new framework but also guide us in establishing the very tenets of it.

Jhon Restrepo founded and ran *Casa Diversa* (Diverse House), a grassroots organization in *la comuna 8*, a profoundly underserved community on the precipices of Medellín. *Casa Diversa* is a human rights organization that works for the survival and reparation of LGBTQ+ victims of the armed conflict in Medellín and also supports children and youth activism in this marginalized zone of the city. *Casa Diversa* provides a community space of refuge, love, and care for young people who experience violence in their households, at the hands of police and paramilitary rightwing militant groups.

Daniela Maldonado is a founding member of *La Red Comunitaria Trans* (The Trans Community Network), a grassroots organization based in Bogotá but of national and regional presence. *La Red Comunitaria Trans* is a trans rights organization that works for the survival and justice-seeking of trans communities throughout Colombia and catalyzes street-level, abolitionist, and policy-level initiatives that seek to eliminate the transphobic structures of oppression in Colombia.

My teachers are the beautiful *maestres* of reparative science I invoke in this text, written to honor their legacies (and to cite and uplift their work alongside bell hooks and Fals Borda). These *maestres* are all individuals who hold deep love for their communities, who will fight until death for a space of refuge from a society that seeks their annihilation.

4.2 | Jhon Restrepo's Teachings: Ciencia Popular Beyond Recognition—Refuge as Radical Reparation

Jhon Restrepo has been a key teacher of reparative science through his organizing and research used to inform reparative justice initiatives that hold the Colombian state accountable for decades of fascist, homophobic, and transphobic violence against his community in the context of the armed conflict. As Fals Borda and *La Rosca* comrades argue, social movements must take us in a different direction, toward the redefinition of both science and research (Bonilla et al. 1972). Aligned with McKittrick's provocations on science and liberation, Jhon Restrepo's movement-driven knowledge production, entailing the gathering of evidence to demonstrate war crimes against his community, is clearly about building a pathway of repair toward collective liberation. When Fals Borda speaks of participation, he is referring specifically to the role of grassroots organizations in knowledge production and dissemination of wisdom that emerges from the depth of their struggles for justice. In the case of Jhon Restrepo, this wisdom emerges from a necessary space of survival in the face of multiple assassination attempts following his forced displacement from Medellín by paramilitary actors. These acts of violence emerge as an attempt to tame Restrepo and comrades' public presence defending the rights of LGBTQ+ youth and creating visible spaces for creative expression and community-building in the neighborhood. The multiple acts of violence against Restrepo and his organizing community have been classified as war crimes because of the context of persecution by paramilitary actors and also as a crime based on prejudice,⁸ due to the context of

homophobia and transphobia that underpin the motivation of these acts of violence and terror against Restrepo and other community members.

In an attempt to erase Restrepo's presence, paramilitary actors have perpetrated severe violence against him. Restrepo has been left to die on the doorstep of his home and movement headquarters, stabbed multiple times. Restrepo's fight for justice, for the rights of LGBTQ+ youth in his community, therefore, emerges in spite of and against these acts of violence. This physical violence is coupled with paramilitary attempts to erase the street art presence of LGBTQ+ youth in Restrepo's community. In one instance, paramilitary actors altered an arts-driven message of healing in a mural created by Restrepo and comrades to send a chilling signal of reappropriation of the neighborhood by reinscribing paramilitary power onto the urban walls of key walkways that connect multiple communities in the margins. By crossing out one word in the mural, these paramilitary actors changed an anti-war message from Restrepo and comrades to a war-inciting message inscribed in the urban landscape.

I first met Jhon Restrepo in 2016 as part of a research project when I was a professor at Universidad de los Andes in Bogotá. I was captivated by Restrepo's tireless work to put his socio-spatially marginalized neighborhood, *la comuna 8*, on the map through a community-driven social cartography initiative in Medellín. I immediately felt connected to his commitment to radical geography. Without connecting explicitly to discourse, theory or cartographic practices within the discipline, Restrepo embodied, for me, what many geographers strive for in terms of fighting for justice, and for freedom in the city, through radical spatial practices. Nationally and internationally recognized for his organizing, Restrepo is fighting for the recognition of his community in the midst of persecution from paramilitary actors, state violence, and state abandonment. Recognition, here, can be understood in the most basic sense, starting from the recognition of the rights of his community, which includes formally recognizing the urban territory of his *comuna* as part of Medellín, including access to running water, electricity, and sanitation services including the most difficult-to-reach areas.

Restrepo's cartographic research, not accompanied by academics but rather through his personal conviction to reclaim land and basic survival services, produces knowledge that demands recognition of an urban territory from which the LGBTQ+ community has been violently displaced. This adds another layer of complexity to Restrepo's fight. What does it mean to fight for recognition in territories where your death is sought? Restrepo's conviction is the radical, geographic embodiment of a reparative science, a type of science deeply embedded in social movements in the global South, a type of science of and for the most oppressed in society. It is knowledge production that pushes bravely toward liberation and is necessarily linked to its global South origins, in particular Latin American, including the underpinning connection to place and to urban territories of refusal. It is about cartographic practices in the margins that cultivate spatial practices of reparative justice and that create an evidence base that will be used in legal processes to hold the Colombian state accountable for the violence it has both facilitated and directly exerted against historically marginalized communities.

Restrepo's fight for recognition and refuge has always been placed in close proximity to the violent actors that threaten his life and that of many LGBTQ+ youth and social leaders in Colombia. Restrepo and the *Casa Diversa* movement family built the first headquarters of the grassroots organization with their hands, brick by brick, overlooking the entirety of Medellín from the mountainous margins, in hopes of building refuge and protection in this urban space marked by generations of violence. Restrepo built this first headquarters space against the supporting wall of his mother's home, as a means of anchoring his strength and the base of his movement work to her strength and lifelong fight against dispossession and displacement of indigenous communities in Colombia. This headquarters is just steps away from a well-financed military base, located in the urban center of paramilitary occupation. It is within this space of conflict and violence that Restrepo builds his dreams for freedom out loud, in direct opposition to the surveillance of the military base and homophobic right-wing militancy that haunt the corridors of the *comuna 8*.

Casa Diversa is the first LGBTQ+ collective to be recognized by the government as a subject of collective repair in the international transitional justice framework of reparations granted to victims of the armed conflict in Colombia. *Casa Diversa* used the reparations funds to support youth organizing in *comuna 8* and to build new, much larger headquarters to house their programming in defense of the freedom of LGBTQ+ youth in the *comunas* of Medellín. The devastating part of this is that as Restrepo immerses himself in a formal truth commission process, he can still not safely set foot in his own neighborhood for which he demands reparations. Material reparations from the government accompanied a rebuilding of an organization's physical headquarters, but not a life-affirming rebuilding of the people, their sense of safety and right to exercise freedom in their communities. Restrepo's place-based sense of loss in relation to his community of activism still remains. What we learn in this exchange is that material reparation will never be enough, as scholars thinking about freedom have addressed before (Kelley 2002). Restrepo's teachings show us the importance of seeing reparations as both material and emotional and as a potential starting point for the rebuilding of life-affirming institutions and foundations of social life (Kelley 2002) over the generations to come. I have learned so much through my work with Jhon Restrepo, especially through our collective research about gender-based, physical and psychological violence against LGBTQ+ activist communities and youth (see Simbaqueba et al. 2020). In the process of conducting interviews with Restrepo and our comrade Arena, and through the process of collectively writing the resultant report submitted to the National Truth Commission, we understood the responsibility of sharing these stories with the state entity in charge of discerning patterns of harm and violence in order to establish a plan for reparative justice. Although our report for the National Truth Commission is a harrowing read, packed with testimonies of the patterns of violence we documented through interviews, we chose to center arts-driven dreaming, organizing and poetry of the community members we interviewed, following Tuck's (2009) provocation to suspend damage-oriented research and find ways to center joy and desire as a means of building lifeways toward the repair and redress of historical harms.

Our collective work on multiple projects, including this one, felt restorative in itself as we spent as much time on formal research as we did sharing space through friendship and supporting one another and other community members that participated through testimony. Our meeting place in Medellín in Restrepo's home was at once an interview site of heart-wrenching testimony and care-centered recovery from storytelling, a place to nourish ourselves and share a meal, a place to process grief and think through solutions together and a place of creativity and deep processing as we thought toward the future of our struggles. I remember the evening preceding our human rights report launch in Medellín in November of 2020. As we prepared for the event to be held the next day at the Museo Casa de Memoria (Memory House Museum) in Medellín, a site created by the government for acts of reparative justice for victims of the armed, we focused on both preparing content and leaning on each other to process grief, fear, and frustration in our own lives of organizing and surviving. Together we have embraced life and celebrate escaping death. We celebrated Restrepo's survival after the assassination attempt earlier that year in March of 2020 and also grieved the ongoing reality of persecution. We mourned comrades whom we have lost over the years and also dreamed together about the ways we hope to continue our pathways of healing together.

Reparative science, then, is about reacting immediately when death and violence is near, and is about embracing joy when it appears. This balance is so necessary—in the spaces in-between our reactionary movements of justice-seeking as we put out the fires of fascism—we hold space for creativity, living, dreaming together, which opens up the alternatives we are seeking to build the world that we dream of for future generations. After Restrepo survived the 2020 assassination attempt, I worked swiftly with colleagues regionally to mobilize protections for our comrade. And similarly, as I searched incessantly for my family in Colombia, Restrepo was there to accompany me and share in my grief and joy. Our friendship is our space of refuge. And this connection should not be confused with the tropes of saviorism but rather understood as radical accompaniment in our pathways toward repair and justice. These moments are what make this mode of science, reparative science, feel different than watered-down versions of participation and community-based science. This space of radical accompaniment with comrades like Restrepo makes me believe that we can really overcome our encounters with the most treacherous corners of society—that we can continue to dream, that it is possible to pick yourself up from the sidewalk, and that the sutures of the community of care that surround you hold the answer that will keep us from bleeding out.

The uneven geographies of reparation present new frameworks for formulations of reparative science. Restrepo teaches us that reparative science emerges from the urgent need for healing beyond particular sites of paramilitary and state violence. Just as Restrepo's radical qualitative and cartographic research catalyzed a process of material reparation aiming to repair violence and erasure in particular places, the pathway forward addressing the spatialities of justice for Restrepo is less clear. Where is refuge? How can it be guaranteed? Just as paramilitary actors strategically erased movement messages in urban space, they continue the erasure of Restrepo's legacy from the map of *la*

comuna 8. Here, Restrepo teaches us that reparative science praxis must be accompanied not only through material repair or acts of recognition of community knowledge (which we have learned, from Fals Borda and others, is a key principle of PAR praxis) but also by acts of rebuilding that reach beyond the material. This may take the form of immediate protection from future harm, where acts of healing and dreaming concrete futures of freedom can occur in creatively imagined spaces of refuge.

Reparative science, therefore, requires that we find immediate ways to support healing and to create spaces of refuge for organizers and others seeking protection from state violence and genocidal regimes. Can the academy carve out spaces of refuge, especially in the context of the current attacks on academic freedom in the United States and beyond? The remaining programs, such as Scholars-at-Risk, Activist-in-Residence programs, and related initiatives that direct university funds to support organizing and movement leaders (both protecting their creative time and protecting their physical integrity in times of heightened state persecution), will most likely be weakened or eliminated in the fallout of fascist restructuring of the academy and society at large. As leftist Colombian President Gustavo Petro mentions in a statement, “*lo que vemos en Gaza es el ensayo del futuro*” (what we see in Gaza is a rehearsal for the future) (Muñoz 2023). And this rehearsal, unfortunately, is not positioning universities on a firm standing ground of struggle against fascism.

Many of us occupy institutions where racist, colonial harm has been facilitated and justified over time through corporate maneuvering and systematic dispossession and where the taming of movements in the 1960s and 1970s through the creation of programs that promise to invest in equity and liberation ultimately disappointed hopeful freedom dreamers with the institutional grind of inclusive instrumentalization and diversity politics (Baldwin 2021; Ferguson 2012).

4.3 | Daniela Maldonado's Teachings: Militant Research is Necessarily Care-Centered, Anti-Imperialist, and Abolitionist

Daniela Maldonado has been a key teacher of reparative science as a street-level, abolitionist, and anti-imperial approach to directly confronting the violence of the police state. Daniela Maldonado, as a previous director and founding member of *La Red Comunitaria Trans*, leads at the frontlines of social justice battles against policing and prisons, denouncing the history of her movement sisters' murders in the streets at the hands of the police, which we documented together in a research initiative about the systematic practice of erasure of trans bodies in the streets, taking place since the 1970s in major Colombian cities. We have conspired for many years in both university and movement classrooms and other more radical movement spaces (such as solidarity encampments, street-level workshops, and so on), in academic writing (Blandón et al. 2019; Correa-Salazar et al. 2022) and as we dream up arts-driven research initiatives together against global accounts of state violence in general and police brutality in Colombia in particular.

Maldonado drives important data collection that supports justice-seeking in her community, involving subsequent

organizing to generate consciousness and demand repair for violence against her community; however, perhaps even more importantly, she also models research decision-making that is anti-colonial, in that she refuses to engage with researchers or university-connected folks that she finds to be extractive or unethical. The Trans Community Network for many years has received a large influx of university students doing internships or theses, and I have witnessed Maldonado learn and demand substantive contributions to justice-building from the students and other researchers who want to work with her community.

In one of the more recent radical pedagogical spaces we shared at UCLA, I had the honor of simultaneously interpreting Maldonado's talk in solidarity with a student movement on campus and felt alive again on a university campus as I experienced the thrill of figuring out how to interpret "*todos los policías son una gonorrea—toloposungu*" (all cops are a gonorrhea) for a majority English-speaking radical audience. It is in these shared moments of learning from radical research initiatives and sharing crucial lessons from the streets of the global South with new generations of freedom fighters that I fully believe in the possibility of a reparative science. As I witnessed Maldonado sharing her wisdom with students recovering from university-power induced police brutality, after being dragged across a courtyard and brutally transitioned into carceral space... Beyond these more structured moments in university spaces that renew and give substance to what I dream a reparative science could be on what is left of the college campus in this age of emboldened fascism, I also understand reparative science as the in-between spaces of joy, community-building and friendship that I share with *maestres* and comrades such as Restrepo and Maldonado—those moments in-between the formal collective writing, or the well-attended talks, the organizing Zoom calls or sharing spaces in protests or arts-driven street performative work.

These moments are the intimate spaces of holding each other's soul as we process the many ways over the years that structures of oppression (upheld by the police state in universities, street and family spaces) try to break us down. Over the years in my relationship with Maldonado, these in-between spaces have sustained me in moments when I felt misunderstood in so many spaces in my life. I only hope I have been the same source of strength for Maldonado. In a similar context of paramilitary violence that Restrepo has miraculously survived in Colombia, Maldonado has also survived years of death threats from right-wing militant groups who see her ability to move the masses as a threat to social order in the country. After a more recent wave of death threats, we worked with a number of colleagues and supportive institutes throughout the University of California system to support Maldonado's visit to Santa Barbara and Los Angeles campuses. During this visit, it was in-between her powerful talks before students and other comrades that we had time to sit and process, to process the betrayal and fear she felt (not only in the midst of death threats but also in the midst of movement transitions and conflict). I did my best, although terribly broken myself given the moment at our university, to carve out spaces for our healing. It was joyful laughter and tequila on the beach as we cried and laughed and danced and strategized for hours about her plan to move from the city and find refuge away from risk, violence, and movement betrayal. It was about sharing warm meals and dreaming about what the future holds for

our organizing (both together and in our multiple movement spaces). And in the midst of these more recent moments sharing spaces (of which there are so many over the years, mostly in Bogotá-based movement work), we also discovered that Maldonado used to climb my maternal grandmother's avocado tree and that we would have grown up in Ibagué, Tolima as neighbors, just a few steps away from one another. What would our lives have looked like if Maldonado had not been banished from the city and ventured to Bogotá and I had not been stolen from Colombia? Dreaming about this together, as we drove in the car together between Santa Barbara and Los Angeles and continued on the beach, was a space where I felt my heart open to the possibilities of justice, as I sat with one of my dearest friends and *maestres*, processing the moments that could have broken us and uplifting each other as we dreamed about how to organize moving forward. This to me felt like a reparative science, learning together as we fight, and opening up spaces for pain, injustice and extractive logics to be actively countered through love, collective care, and freedom dreaming about the contours of our organizing moving forward.

It was Maldonado who accompanied me, with a handful of close movement comrades, former students and colleagues in Bogotá, as I stood in protest in June of 2025 outside of the orphanage that sold me to the United States in the 1980s. Earlier that afternoon, I accompanied Maldonado to a talk she was giving at the national museum in Bogotá with incarcerated comrades. In the evening, we stood together, illuminated with the flames of our candles and our struggle, as we spoke out against the trend of governments in the global South selling children to the global North, as we spoke against the criminalization of poor and racialized mothers. Our candlelight vigil was abolitionist (with signs stating, "The state abandoned us first") and anti-imperialist (with signs stating "Transnational adoption is colonialism, white supremacy, and white saviorism"). Our vigil, thanks to Maldonado, was also centered on practices of collective care. Maldonado told me to bring flowers, chalk, and candles and when we arrived at the street corner outside of the adoption house, we made a heart out of the flowers and tealight candles. And her company, and that of my other comrades, made me feel held in the space that holds so much harm in my first family's story in Colombia. It is here in the act of resignifying this space of violence, in the loving company of movement family that made me believe that reparative justice is possible.

To trace back to the first days of our friendship in Bogotá when I first met Maldonado in 2009, we were also dancing. I was a doctoral student at the time and later worked as a professor at an elite university in Bogotá, doing years of movement work throughout Colombia before leaving the country in the midst of persecution and starting at UCLA. During a meeting at a local NGO where I was volunteering as a student (Fundación Procrear, notorious for extractivist and classist practices), I was invited by various movement leaders to join a dance group that functioned somewhat independently from the organization. It was a space of resistance to the forms of oppression reproduced in the organization and centered dance as a means of expression, and ultimately, a space of mourning after the tragic assassination of trans social leader Wanda Fox. Here I learned how dance can function as a mode of creative expression that responds to and proposes a possible

pathway of healing from violence and persecution. When words of mourning fall short, bodies in motion, against the police state, gathering strength in the poetics of sharing space in silence, or accompanied by music, is one pathway forward that my comrades illuminated and shared with me. They welcomed me with so much love and care into this community of struggle and after years of feeling displaced from Colombia, I swiftly joined the ranks of this movement family that has taught me everything I know about confronting the police and carceral state.

I have worked collectively with Maldonado on multiple PAR initiatives over the years and this work has led us to several collective conclusions. We conclude that the fight against the police state should begin from two basic starting points: anti-imperialism and abolitionist organizing principles. In this particular project, anti-imperialism became a central principle after finishing our report and street art campaign on the history of violent practices and discourses of policing in Colombia. In an international working group we formed along with other comrades from the fine arts sector and street-level organizers, we began to imagine a manifesto against police violence in Colombia in dialogue with comrades in other Colombian cities and in Los Angeles.

Maldonado and comrades first uttered the term *Toloposungo* as the guiding concept of what we started initially as an international working group on abolition during the pandemic. Maldonado has described the importance of the term *Toloposungo* as the Latin American version of ACAB (US-based acronym standing for “all cops are bastards”), loosely translated, as I mentioned above, to “all cops are a gonorrhea.” Maldonado explains that *Toloposungo* upholds the structural critique of ACAB but rejects the misogynist insults implicit in the US-based abolitionist movement acronym which discursively assigns responsibility to birthing people for birthing beings who espouse violence. She proposes instead to use a term, gonorrhea—that characterizes police violence as a public health and structural crisis, as something unbearable and abominable (to replace the simplistic and misogynistic insult of “bastard”). The name embraces street-level, movement-driven discourses against policing and police brutality. The framing and fight of *Toloposungo* is anti-imperialist, in that it seeks to contextualize the fight against policing and for abolition from within the context of social movements in the global South that fight for a trans-feminist pathway toward liberation in the streets. During our meeting with the international working group, we discussed core principles and praxis of abolition, as this was not a political concept grounded or deemed relevant in Colombian movement spaces previously. As abolitionist principles seeped into the discourses of the movement, Maldonado and other movement leaders began to imagine how to perform the principles and praxis of abolition in an embodied sense, in the streets where they experience so much violence at the hands of the police.

The abolitionist manifesto reads:

<i>To-lo-po-sungo,</i> <i>toloposungo</i>	<i>To-lo-po-sungo, toloposungo</i>
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<i>To-lo-po-sungo,</i> <i>toloposungo</i>	<i>To-lo-po-sungo, toloposungo</i>
<i>Todos los policías son una</i> <i>gonorrea</i>	<i>All cops are a gonorrhea</i>
<i>Yo generalizo porque los</i> <i>veo dando piso</i>	<i>I generalize because I see them</i> <i>taking everything down</i>
<i>Yo generalizo porque</i> <i>andan armados</i> <i>uniformados!</i>	<i>I generalize because they're</i> <i>all armed, uniformed!</i>
<i>Yo generalizo porque no te</i> <i>he visto de este lado</i>	<i>I generalize because I haven't</i> <i>seen you on this side</i>
<i>Sino matando y arrestando</i> <i>a tu sangre, tu vecino</i>	<i>But instead arresting</i> <i>and killing your own</i> <i>blood, your neighbor</i>
<i>To-lo-po-sungo,</i> <i>toloposungo</i>	<i>To-lo-po-sungo, toloposungo</i>
<i>To-lo-po-sungo,</i> <i>toloposungo</i>	<i>To-lo-po-sungo, toloposungo</i>
<i>Todos los policías son una</i> <i>gonorrea</i>	<i>All cops are a gonorrhea</i>
<i>La violencia, la policía no</i> <i>va a solucionar</i>	<i>Violence, the police will</i> <i>not solve [our problems]</i>
<i>Porque la policía es la</i> <i>fuerza fatal del estado</i> <i>criminal</i>	<i>Because the police are a fatal</i> <i>force of the criminal state</i>
<i>La seguridad se hace</i> <i>dando oportunidad</i>	<i>Safety is created when</i> <i>opportunity is given</i>
<i>A todas las personas su</i> <i>dignidad por igual</i>	<i>To everyone, with</i> <i>equal dignity</i>
<i>Si el cuidado es lo que te</i> <i>preocupa</i>	<i>If care is what you're</i> <i>concerned about</i>
<i>Sé tú misma la que se</i> <i>ocupa</i>	<i>Be the one to take</i> <i>care of it yourself</i>
<i>Porque cuidar no es vigilar</i>	<i>Because caring is</i> <i>not surveillance</i>
<i>Es estar ahí para todas</i> <i>triunfar</i>	<i>It's being there for</i> <i>everyone to succeed</i>

Toloposungo, catalyzed by Maldonado, comrades from the Trans Community Network⁹ and other radical organizations such as House of Tupumaras (*Las Tupumaras*),¹⁰ emerged as a dance group charging through the streets, chanting and performing profoundly messaged choreography in attire that directly invokes the Colombian national police uniforms and color schemes. The dance embodies the political refusal of trans organizers and artists occupying and reclaiming urban space, particularly relevant in the capital city of Bogotá, where they have been brutalized by the police for decades. The *Toloposungo* movement has also spread to other Colombian cities and throughout Latin America. This movement illustrates the power of the arts against violence, revolutionizing the concept of militancy through trans-feminist

and queer rebellion. It is the combination of radical movement and dance attire that at once mocks the masculinized, rigid power of the typical street-based police patrol officer. The coordinated voguing-marching through the streets in ranks of electric neon green demonstrates, through an arts-driven occupation of some of Bogotá's most violent street corners and protest pathways, that these organizers are not afraid of the police state and that their power is in their life-affirming occupation of the streets.

Although we have never published collectively from this work, the *Toloposungo* movement emerges from the fury in the findings, from research we led with Maldonado and other movement comrades that demonstrates the violent tactics police officers have employed to terrorize trans communities in the streets of Colombia. Dance occupation of public space, through *Toloposungo*, embodies a radicalized, trans-feminist reframe of Fals Borda's discussion of militant research: a strategy against state violence that centers bodies in resistant meaning-making through movement. Bodies that are often denied or dehumanized affirm life in the face of police and assert their collective power in the strength of their voguing-marching together.

Maldonado and her comrades have occupied a metaphorical frontline for decades of struggle against these same forces, not guided by militancies that are learned through glorified media representations of struggle against the police state, but rather through a set of praxis that connect strongly with place-based healing as a central pillar of justice-seeking work. Through her place-specific praxis of collective care and healing of people *in* places where they experienced significant harm and persecution, such as the candlelight vigil I described earlier, Maldonado shows us how "freedom is a place," echoing the teachings of Ruth Wilson Gilmore (2022, 474) on abolition geography. Maldonado's "radical consciousness in action," or consciousness of violence coupled with an active political reimagining of urban systems of care, "resolves into liberated life-ways" that open and brighten the space they were once denied in the streets, alongside her sisters and comrades (Gilmore 2017, 227–228). Liberation, understood in the framework of abolition geography, is a way of living outside of the constraints of violent policing and the criminalization of poverty.

Our reparative science with Maldonado conceptualizes these "life-ways" in the ways we take care of one another and create new systems of community defense through daily care-centered militancies, through a radical performative geography, dancing, pedagogies, and through the gathering and sharing of stories-knowledges that denounce violence and propel us toward the world within which we unfold our collectively imagined futures.

What Maldonado brings to reparative science, this reimagined framing of *ciencia popular*, is that research is necessarily action toward liberation. She models the PAR teachings that many of us cannot live up to, as she lives and breathes the hyphen of Fals Borda's "*investigación-acción*." She occupies the point of encounter between organized action and scholarship that is so often contemplated within our community of radical geographers. Maldonado's everyday actions set forth what the first steps of a reparative science could look like: she does not sit still or beside rapidly accumulating *testimonios* of violence experienced by

her comrades, but rather takes her rage—through contact with these stories—to the streets, to enact immediate action with her body, in community with her comrades, against the perpetrator. I have learned so much about radical accompaniment as I have stood with Maldonado over the years and fought by her side.

The urgency of research is no longer only documenting but rather is about the crucial, life-affirming stage of research that is creating spaces of reaction to violence in the very places where this violence occurred. When it comes to researching violence, our responsibility does not end when our papers are published. This is as much a message for academics publishing scholarly articles as it is for nonprofit affiliates publishing human rights reports or reporting to their funders or donors. In a praxis that revolutionizes the intellectual rhetoric of Fals Borda's notions of *investigación-acción*, Maldonado models a radical accountability to her comrades through embodied confrontation with the structures of oppression that reproduce violence against them.

Through her actions on the frontlines, Maldonado models an accountability framework from which academics might learn. I admire that Fals Borda quit his university post and explored mechanisms to effect change outside of universities; however, I also believe that as long as we remain part of the higher education system, accountability from within universities is way overdue. Repair and a framework of reparations are a necessary first step for us to think about in the short term. The extractivist history of the neoliberal academy cannot be erased, but we do have the power to shape our actions in the future. I propose here then that a participatory science not only does the bare minimum work of recognition and participation, but also makes intentional and central the work of repairing harm and building alternatives to the current structures that constrain and oppress us, from our positions of power in the academy.

Maldonado and movement family heal together and reclaim the places where pain and violence were inscribed, at the scale of their bodies and on the street corners where their comrades have been murdered. A care-centered and performative militant research, as demonstrated by Maldonado and movement family, is deeply connected to the struggle for freedom in particular places, in street spaces. In other words, part of the Fals Bordian *causa popular* we are fighting for is intrinsically *spatial*—it is situated, surrounded, invoked, and inspired by place-memories of violence and our radical hope for how these places can be transformed.

5 | Discussion: Beyond Ciencia Popular, Beyond Universities, Toward Care-Centered Militant Research-Repair

One important lesson that I have learned through collective work with Jhon Restrepo and Daniela Maldonado is that we still lack grounded resources for navigating the uncertain terrain between organizing and scholarship. Let us imagine this terrain as the wind-torn landscape of this imagined hyphen (in its different formulations across literatures and disciplines as community-based research, activist-scholar, participatory action-research, participatory research, and so on). We pass through this terrain, together, as the forceful winds of the academic industrial

complex (AIC) and the nonprofit industrial complex (NPIC) attempt to tear us away from one another. It feels like these winds are at work daily to sever our hands, but our commitment and intentions remain intact through the persevering grip of our friendship and collective care. In each context globally, where and when do these terms emerge? Who claims the title of organizer and who claims the title of scholar, if these terms, when placed together, take on new meaning for a science centered on liberation? Can we get to the place where movement-based and academic identity politics can no longer be neatly reduced to the imagined hyphen imposed on activist-scholarship? Where can the collective spatialities of the work of liberation actually grow and thrive? If we cannot imagine and begin to build this place from within the academy, what is at stake here for our permanence in the neoliberal university as we know it? Downtrodden with the frustration of these unanswered questions and resisting paralysis in increasingly violent and repressive times, I dream of a reparative science, a care-centered, militant version of *ciencia popular*.

In Fals Borda's writing, this uncertainty appears in the format of the hyphen in *investigación-acción* (action-research), a term he employs throughout his works to present the central PAR argument that all research must be connected to transformative action (Fals Borda 1979, 1985, 1991, 2001). Within literatures across subfields of geography, it is difficult to find practical guidance on how to navigate this terrain of uncertainty. We need guidance about how to repel the overwhelming currents of the nonprofit industrial complex (NPIC) and academic industrial complex (AIC) (INCITE! 2007), about how to remain useful for liberation in both worlds without losing ourselves or surrendering our principles to the daily constraints of commercialized activism and research. As Halvorsen (2015) notes, it is not about uncritically uplifting movement practice but including a critique of the movement spaces we occupy or accompany, including radically honest self-reflection and offering generative feedback about the cooptation and commercialization of movement spaces that we witness. The engagement of critique about ruptures in our movements but also, most importantly, about the "public" institutions we occupy, is wildly unpopular and often met with gendered and racialized consequences (Wright 2008). When fucked up things happen in academic spaces, in organizing spaces, and in the uncertain hyphenated space beyond these realms, it is important to name what is fucked up, to dwell in the tension, until a healing, or at least a short-term reparative solution, can be collectively identified.

Accountability in these circumstances is a key first step, meaning that those who have caused harm need to take a central role in listening, acknowledging harm, devising a plan for reparation in the short-term and subsequent, long-term rebuilding of organizing and academic structures. We must not side-step the uncomfortable conversations about racialized, classed, and gendered privileges that are so often the silences in activist-scholarship. Here, we can follow the lead of feminist movements in the global South, such as the *Colectivo Miradas Críticas del Territorio desde el Feminismo* (Collective of Critical Territory Looks from a Feminist Lens), who teach us that feminist praxis of insurgency is not about resistance at the frontlines, but rather the building, weaving, life-affirming work of remaining in these bordered territories between care and

justice-fighting (a feminist front of counterpower to the racist, extractivist, patriarchal, colonialist forces of oppression that we are up against) (Cruz Hernández 2020). Is there a space beyond the patriarchal constraints of this hyphenation, a "third space" between the academy and organizing, "where neither site, role or representation holds sway ... [nor] continually subverts the meaning of the other" (Routledge 1996, 400)? The participatory turn in geography may be misleading us through an analytical fixation on participation in research rather than increased attention to *how* science contributes to liberation, through both material and affective gains from within and beyond the academy. I agree with provocations that on the individual scale, this means "walking your talk" (Pickerill 2008, 486) and doing the daily work of liberation behind the scenes, in the scarcely visible spaces of collective care as we organize for justice and repair in and beyond university spaces. We need less talk of accompaniment and more learning shared widely about how organizers, scholars and the in-betweens can actually, in the daily, walk our radical discourses into being: into the relationships of care we build in the academy, with our students, with our movement colleagues and *maestres*, to work against the structures that make both the academy and organizing unbearable for so many. As Mitchell (2008, 450) notes, perhaps we can conceptualize the meeting point of organizing and academic work as bringing together "different aspects of revolutionary praxis." What does this mean, then, moving forward? What aspects of revolutionary praxis may still live on in the academy to support the work of collective liberation?

6 | Conclusion

In this paper, I have argued that it is imperative to share widely, from louder platforms, how much we learn from our movement teachers that we accompany on our collective pathways to liberation. I bring key movement *maestres* to the forefront of my writing on PAR and honor their teachings that call for a reparative science that might guide us forward in troubling times. While Fals Borda brings the notion of *ciencia popular* and the importance of recognizing the knowledge of grassroots movements in the global South, Restrepo and Maldonado teach us through their daily actions how to center care, reparation, and art, *sin pelos en la lengua* ("without diluting the power or transparency"), in the embodied militancies that constitute our daily work toward liberation. Reparative science involves three key praxis including a repositioning of canonical scholars, collective knowledge gathering, sharing and writing against imperial and carceral structures, and a generative focus on building daily praxis that center the relationship between liberation and science in our daily actions within and outside university and movement spaces.

Reparative science, as taught by Restrepo and Maldonado, urges us to imagine what the elimination of the neoliberal academy, the academy as we know it, actually looks like. What does an academy that gains strength, instead of power, in distance from the NPIC and the AIC look like? How do we support protections against the threats of both police and paramilitary without compromising a commitment to a care-centered militancy, as Restrepo and Maldonado bravely model for us? The question that I will leave us with centers on with whom and where to

take up the work of reparative science. “Who?” should be pretty straightforward. Who are the people who hold your soul in unbearable and repressive times, give you strength and hope to keep researching and organizing for justice, and stand with you in struggle against the structures that try to break us? It is those people that you should be organizing with, researching with and creating strategies of repair with... And “where” can we do this work? Wherever you can do this work safely and not place anyone in dangerous proximity to the police state and other structures of oppression. Our universities, especially in the United States, feel particularly unfitting to this description at the moment. Our work in the coming times is for each of us to keep organizing forward and to find a place for our reparative science, which may well be unique to each one of us.

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Conflicts of Interest

The author declares no conflicts of interest.

Endnotes

¹ This term defies translation. The word *ciencia* means science, whereas the word *popular* is much more difficult to interpret. It does not literally mean “popular,” nor do words like “public,” “community,” or other hollow-sounding jargon capture the radical essence of the term *popular* in Spanish. “Grassroots” is often used, but also seems to be missing the political contours of “*popular*.”

² Colombia's paramilitary apparatus historically allied with state militarized security forces.

³ *Maestres* are teachers, expressed in Spanish without a binary discursive formulation.

⁴ Excerpt interpreted by the author from the book *Ante la crisis del país: Ideas-acción para el cambio* (Fals Borda 2003). This statement excerpt is part of a transcription of Fals Borda's keynote address at the International Conference of Geography Students, National University, held in the Camilo Torres Auditorium in Bogotá on October 24, 2002.

⁵ The 1972 piece on “*ciencia popular*” was authored by all founding members of “La Rosca” with the exception of their comrade, Jorge Ucrós, who was killed in a tragic accident (Rappaport 2020).

⁶ For more material on abolitionist organizing and transformative justice, see Mariame Kaba's resource hub: <https://transformharm.org/>.

⁷ See <https://scienceforthepeople.org/> for additional resources and alternatives to traditional knowledge-building and dissemination practices.

⁸ A legal term in the framework of war reparations that adds discursive precision to the notion of “hate” crimes, specifically related to violence perpetrated against LGBTQ communities.

⁹ A recent documentary traces the history the work of the Trans Community Network and also discusses the *Toloposungo* movement: <https://rtvcplay.co/peliculas-documentales/la-red>.

¹⁰ See <https://www.tupamaras.com/info/>.

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