




Essay

Research-as-Solidarity, with Youth Leading the Way

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Abstract: Through the lens of youth engaged in the grassroots network Research for the Front Lines (R4FL) in Turtle Island, this essay explores how youth use research as a form of solidarity with marginalized communities in the context of escalating crises, ranging from climate change to systemic inequities. R4FL supports Indigenous, Black, and marginalized groups facing disproportionate impacts from environmental and climate changes. Drawing on the experiences of a diverse group of youth researchers, we examine the barriers posed by traditional academic structures and advocate for a research paradigm that prioritizes community needs, transparency, and accountability. Our discussions highlight how youth leverage our knowledge and research skills in service of social justice and environmental equity.

Keywords: youth; research; activism; Indigenous solidarity; climate justice; higher education



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1. Introduction

Mounting crises demand radical and new approaches to research. Youth are especially experiencing greater instability due to compounding crises, including the climate crisis (Katwak et al., 2024). These crises are rooted in the legacy and institutionalization of Western and colonial social structures (Sultana, 2022). To many of us, our activist lives and our research lives can feel very separate. Taking classes and doing academic research, as co-author Jaimie Vincent put it, “can [feel] draining, futile, and meaningless given the urgency of the societal changes needed to address the climate crisis”. As youth, we recognize that the crises we are experiencing and the monopolization of knowledge production by Western colonial constructs are interconnected (Wynter, 2003). Through research-as-solidarity (RS), we conduct research to support communities and movements leading transformative efforts on the ground, both confronting these crises and developing research practices accountable to marginalized communities most impacted by Western hegemonic control over knowledge production.

This essay examines how youth volunteers with Research for the Front Lines (R4FL) explore research-as-solidarity. R4FL is a grassroots network based in Turtle Island, or “so-called Canada”, a term used by decolonial activists and Indigenous communities to reject the settler–colonial nation-making histories of “Canada” (see [Lindamood, 2023](#)). R4FL supports the research needs of Indigenous and other impacted communities and movements fighting for environmental and climate justice. We serve Indigenous, Black, racialized, and economically marginalized peoples, who are disproportionately impacted by climate change, as well as the systems and industries causing it. While these communities are on the frontlines of compounding crises, the research resources remain limited and are often directed toward academic interests rather than addressing urgent community needs ([Pulido, 2008](#)).

R4FL offers various forms of support, including funding for community research expenses and volunteer research labor. Projects begin when frontline communities request support. Research requests are managed by coordinators, who disseminate them to a network of almost 300 researchers from universities across Canada, including undergraduate students, graduate students, postdoctoral researchers, and professors with diverse qualitative and quantitative skills. R4FL has made it a priority to support youth activist researchers by providing opportunities to build their skills, including online training sessions, project mentorship, and flexible time commitments. This model supports youth to grow as researchers and builds a pool of potential life-long solidarity researchers. Working independently of any university, R4FL members leverage academic tools and resources to support community-driven movements fighting against colonial capitalism, while building and defending alternatives.

In this essay, we build on scholarship critiquing the fallacy of objective science and argue that research-as-solidarity enables youth to confront compounding crises while challenging dominant research norms. Unlike participatory research, which often remains researcher-guided, or individual activism, which centers personal agency, RS shifts authority to frontline communities and social movements. Researchers serve as skilled volunteers, contributing expertise without claiming ownership or authority. These communities set research objectives and methodologies, shape the interpretation and dissemination of findings, and retain intellectual property rights. By centering accountable and reflexive relationships over conventional academic hierarchies, RS challenges the dominance of Western colonial research paradigms that detach scientific inquiry from social context, instead advancing a research model grounded in lived experience and relational accountability.

What Other Scholars Have to Say

Scholars have critically examined the colonial and capitalist domination of academic research, as well as ways in which research can function as a tool for resistance. [Luchies \(2015\)](#), for example, emphasizes how capitalist liberalism hinders the implementation of social justice and shapes academic norms that marginalize engaged research on social movements. Luchies instead advocates for research ethics that resist these dynamics—ethics that challenge the extractive imperatives of historically rooted truth-making, oppose its neutral and disengaged tendencies, and reject its hierarchical and exclusionary mode of authority. Similarly, [Thambinathan and Kinsella \(2021\)](#) show how traditional research methodologies have often reproduced colonization by exploiting, marginalizing, and objectifying the knowledge, cultures, and experiences of Indigenous peoples. Decolonial researchers advocate for numerous practices to counter these historical injustices in research, centering a critique of Western research paradigms and decolonizing research practices through approaches grounded in critical reflexivity, reciprocity, and transformational praxis,

among others. They advocate for a recognition of Indigenous knowledge systems and the use of research as an instrument for resistance and empowerment.

The concepts of resistance and empowerment are central to decolonial counter-hegemonic research, which at its core questions knowledge production by questioning “who is entitled to create meanings about the world; how some meanings and not others are accorded the status of knowledge”, and how this unfolds along identity lines (Strega & Brown, 2015, p. 1). These approaches seek to address what Haraway has called the “god trick”, where knowledge is produced from an eye that sees “everything from nowhere” (Haraway, 1988, p. 581). Liboiron’s work is instructive in how to not be “unattached” and “unaccountable” in research (Liboiron, 2021, p. 52). Liboiron, alongside other decolonial scholars such as Kim TallBear, encourages conducting research while maintaining “good relation” (Liboiron, 2021, p. 25). This orientation foregrounds the importance of being able to trace power and violent relations to mobilize such knowledge to hold colonial–capitalist entities accountable. Similarly, the scholarship on research supporting social movements for socio-ecological justice underscores the necessity for researchers to be engaged in a reflexive process that is accountable to these movements (Bevington & Dixon, 2005).

Recent studies have explored the intersections between youth activism, colonialism, and capitalism, highlighting themes such as intergenerational solidarity, decolonial research practices, the influence of neoliberal governmentality on youth participation in activism, and how youth challenge human rights frameworks in neoliberal colonial states (Goessling, 2017; Lam & Trott, 2024; Lee & Allweiss, 2023). However, while we acknowledge the important work on why and how to hold colonial and capitalist entities accountable and youth activism, there remains a gap in the literature regarding the perspective of young people from diverse backgrounds and positions. Specifically, there is limited research on how youth reflect on research-as-solidarity and how practices of resistance, empowerment, and accountability can be developed to better serve marginalized communities impacted by the production of Western hegemonic knowledge.

2. How We Approached This Collective, Youth-Led Essay

This essay is co-authored by 13 people involved with R4FL. Twelve of us are youth (under 35 years old). One of us is middle-aged, the founder of R4FL, who supported the co-authoring process but did not provide content for this essay. We are Indigenous researchers, researchers of color, and White settlers who dedicate time to supporting frontline communities’ research needs.

This essay is a result of a collective reflexive praxis (England, 1994; Rose, 1997). Through structured dialogue and collective reflection, we engaged in conscious reflexivity (England, 1994) and critically examined how our individual positionalities and systems of oppression have shaped our understanding and practice of research-as-solidarity.

The structured dialogical process (Madison, 2005) took place in November of 2024. We shared our reflections and insights on six key questions, which we co-developed beforehand:

- In what ways are each of us, and other youth, engaging in research as a form of activism and/or solidarity? What can this form of activism be like?
- Why are we engaging in research as a form of activism and/or solidarity?
- What can research-as-activism do/accomplish/make happen? To what ends are we doing this?
- How can we do this well?
- What is the specific role of youth in redefining and reshaping what research is? What/who is this research for?
- Are there barriers to youth engaging in research as a form of activism? If so, what are they, and how might they be addressed?

Our methodological approach ensured reflexive praxis through multiple stages: individual written reflection, collective dialogue, and collaborative writing. This multimodal process allowed us to consider how our training in academic institutions and varied positionalities influenced our approach to solidarity research. We especially prioritized Indigenous and racialized perspectives to shape our collective understanding. Following [Rose's \(1997\)](#) framework for reflexive praxis, we engaged in both inward reflection on researcher identity and an outward analysis of power relations in research. This is reflected in our decision to foreground co-authors' perspectives throughout the text through direct quotes, including our names. We do this to connect each of our contributions in this essay with our respective perspectives as youth from diverse backgrounds and positionalities.

Following data collection, which consisted of individual written responses and a transcript of the collective dialogue, the first author cleaned the transcript and immersed herself in the data. She developed initial codes by iteratively going through the data and identifying important concepts as per reflexive thematic analyses ([Braun & Clarke, 2021](#)). A thematic analysis is a broad term for analyzing qualitative data but the first author used an inductive process within an interpretive paradigmatic framework, which was informed by her position as an R4FL researcher and a graduate student in science and technology studies (STS). The first author then identified themes that were further refined in small teams through a collaborative writing process that reflected on the collective discussion and individual reflexive experience. Such an approach allowed for interpretations that remained faithful to the discussants' perspectives while enabling reflexive engagement with the data.

3. Research as Interested Activity: Towards a Relationship-Centric View

Conventional research presents many problems, including but not limited to its tendency to operate in ways that reinforce capitalist, extractivist, and hegemonic power ([Liboiron, 2021](#)). It tends to favor detached methodologies that prioritize contributions to a body of knowledge over driving transformative change, all while failing to remain accountable to the communities it affects ([Tuck & Yang, 2014](#)). As a result, youth research activists are increasingly turning to solidarity research as a pathway to address the compounding crises we face ([Gobby, 2020](#)). Approaches such as that which R4FL propose for conducting research and reimagining the role of the researcher arise from deep feelings of discontent and frustration within traditional research spaces. In this section, we highlight the irreconcilable tensions that we, as youth research activists, have identified concerning the conventional research approaches. We then discuss how we are engaging in solidarity research as a counter-response.

3.1. Researchers and Their Subjects

Many of us use our academic training when we contribute to research for R4FL, although the academy often maintains a positivist perspective that science and research are objective and neutral endeavors that are distinct from interested activities such as activism. For example, Sarah Marquis observed an intentional and reinforced division between "doing science" and "doing activism" in her interdisciplinary department. In her program, there was "a lot of pushback against activism and academics and science being grouped together, there was a lot of pushback against activist science in general". Sarah attributed this resistance to the department's strong belief in "the idea that science had to be objective and unbiased". For Sarah research-as-solidarity became "a form of resistance to [...] traditional academic ideas of what is good science". She explains, "I'm frustrated with [the] idea that all science has to be this pure space [where] you're not thinking about the political and economic context". Much research in the academy, especially in scientific

disciplines, is validated through claims of objectivity. However, feminist and Indigenous scholars in STS have long contested these claims of scientific objectivity, arguing that they obscure the social origins of scientific knowledge production (Haraway, 1988; Harding, 1991; Latour, 1987; Liboiron, 2021). The academy, as an institution of power, determines what counts as valid knowledge not through intrinsic truth but through power relations that privilege certain forms of knowledge while delegitimizing others (Foucault, 1980).

Many of us have first-hand experience of the discrediting of critical research approaches. Katherine Robitaille recalls an emblematic experience,

“I [have been] personally told that, because I adopt a critical perspective, I am pedantic and tautological, sometimes in front of hundreds of people. These are heavy, symbolically violent, and overly complex words, used solely to discredit these approaches. This criticism ignores the fact that feminist, post-colonial, decolonial, Indigenous, and anti-racist approaches, among others, have a long history of research and knowledge, not only in academic literature but also in society.”

Yet as youth experiencing compounding crises, we are driven to conduct research that responds directly to the needs we witness in our communities and approach inquiry through relationships of care and responsibility rather than detached observation. As Sadie Quinn observes, traditional academia often produces research that is constrained in its applicability, and “isolated from the outside world [. . .]. Classic academic research does not have an immediate impact towards creating the change I want to see in the world”. Instead, it aims primarily to contribute to the existing academic literature rather than drive real-world transformation. Though academic research has its own merits, R4FL researchers seek to contribute to research that directly supports grassroots fights led by frontline communities. Still, the abstract organizing principle of academic research raises important questions about the purpose of research, who ultimately benefits from it, and how it is funded.

3.2. *Research and Its Social Context*

Drawing on her background in STEM research, Jaimie highlights how even what is construed as “objective and neutral” scientific research—often upheld as the “ultimate truth of everything”—is shaped by “external factors that influence how [research] is funded and interpreted”. By tracing private sector influences within universities (Hiltner et al., 2024; Morris & Jacquet, 2024), reflects Jensine Raihan, it becomes clear how research is done to “entrench their power”. In this same line of thought, Katherine highlights that much of conventional academic research processes and outputs contribute to sustaining “systems of oppression, (re)producing power relations and inequalities”, thereby hindering social transformation (McHugh, 2014). Indeed, scientific research funding follows political priorities (Lave, 2012; Mirowski, 2011; Blume, 1984; Hess, 2016; Levins & Lewontin, 1985). While scholars have established that even seemingly objective sciences such as physics depend on socially determined paradigms and political priorities (Kuhn, 1962; Keller, 1985; Barad, 2007), such investigations are still recognized as legitimate science and indeed produce reliable knowledge about the world. Still, they remain, as Harding (1991) argues, inherently *interested* research activities. The conventional research approaches rarely critically examine how their inquiries are shaped by political priorities and social norms, thereby obscuring their relationships with power and structures of oppression.

3.3. *Researcher Subjectivity and Responsibility*

Conventional academic research often fosters a researcher subjectivity oriented more toward funding interests and personal curiosity than toward addressing community needs.

Sadie described this as an unsettling feeling that comes with doing research: “[M]aybe this is interesting to me, but I don’t know if I’m actually doing anything to help the world in any real way”. Conventional academic research can carry the expectation of being conducted at arm’s length, detached from practical or immediate applications. With mounting crises around us, this approach can feel deeply unfulfilling. Jaimie recounted the frustration of working on a particular research project and realizing that it would not be immediately relevant to anyone beyond the academy: “I was like, ‘What do you mean there’s nobody that’s going to use this right now?!’ I was trying to find people that I could share it with, and people that would care about it and could use it. And I was like, what am I doing?” At that time, she began to critically evaluate what doing research meant to her. While conventional research approaches promote a researcher subjectivity that is individualist and interested in pursuing unaccountable, personal curiosities, research-as-solidarity promotes a relational subjectivity, contending with one’s impact and engaged in the society one inhabits.

At the heart of this tension is how conventional research implicates and impacts communities while research processes and deliverables often fail to foster meaningful connections, relationships, and, importantly, accountability to those communities (Strega & Brown, 2015). Jensine underscores this dynamic by reflecting on the tension they experienced entering graduate school as a community organizer. As an organizer, Jensine emphasized, “you do everything because of your accountability, your relationship to your membership in the organization”. However, once in graduate school, Jensine noticed a stark inversion: “you are the researcher, so you are driving everything [...] it didn’t really feel like you were really accountable to anybody”. This lack of accountability deeply troubled Jensine: “given institutional implications that research has, there are epistemic, hegemonic powers that particular research has in the ways in which we organize institutions, develop policy, organize education, organize knowledge production. All of this has huge implications”. Despite the potentially far-reaching impacts of research, Jensine lamented that “it’s not accountable to people that it’s affecting”.

In response to the problems with traditional research, youth are engaging in research-as-solidarity. Given the unequal power dynamics within academic institutions that persist in the backdrop of activist research, and youth activism in academia more broadly (Richter et al., 2020), we emphasize the importance of transparency in the research process. Thus, solidarity research must be accountable to the communities it serves. Mary Stuart argues that though RS can be critiqued for lacking objectivity, it in fact “just makes its biases and . . . positionality quite clear in a way that [conventional] research often doesn’t. And so in that sense, it can be a lot more transparent”. In other words, it is precisely RS’s lack of “objectivity” and recognition of this impossibility that makes it more honest and accountable to the communities it serves.

The transformation in how we understand research encompasses both purpose and process; frontline communities determine research goals while the practice itself embodies principles of solidarity. As youth solidarity researchers, we challenge conventional research models that fail to prioritize accountability and relevance beyond the academy. Solidarity research offers a relationship-centric approach that recognizes the inherently social nature of all research endeavors.

4. Components of Research-as-Solidarity: Community-Directed Research and Researcher Relations

While many forms of community-oriented research approaches exist, participatory methods such as community-based participatory research and youth participatory action research feature most prominently in the literature (Wallerstein & Duran, 2010; Ozer, 2017). These approaches, however, still preserve the central role of the researcher in leading

research inquiries. Research-as-solidarity, in contrast, fundamentally shifts this dynamic by placing frontline communities and social movements in control of research entirely while researchers maintain accountable relationships with these communities.

4.1. From Community-Engaged to Community-Led Research

Many of us organize our academic research to advance frontline communities' interests, similar to participatory approaches. Mary's master's research at the University of Victoria examines anti-climate organizing "to support movements for social-ecological justice in better understanding how counter-movements operate". Similarly, Katherine advocates for research approaches where the people most impacted by challenges are involved throughout the process, emphasizing collaborative knowledge development, reflexivity, and actionable outcomes tailored to specific community contexts.

While these approaches align research with community needs, RS goes further by conducting research under complete community direction based on grassroots fights. For instance, Sarah reflects on community-led investigations on polluting corporations that many of us are involved in:

"[This investigative work is] a way to unveil corporate power and draw attention to it. That feels like important activism—unveiling corporate practices so that communities that are being marginalized by these corporations can fight back against them. And I think that there's a lot of science in academia that entrench [corporate] power, or science done in the private sector that's used to entrench [corporate] power. And so I think this is an underused form of activism, uncovering these things can then lead to change."

R4FL's support of land defender Molly Murphy's research to investigate the RCMP's Community-Industry Response Group (C-IRG) exemplifies RS in practice. Led by frontline needs and direction, this research used a combination of access to information requests, interviews, and document analyses to expose state mechanisms of resource extraction enforcement (Murphy & Research for the Front Lines, 2021, 2022, 2024). Three articles were published based on this research, the first of which explained that nearly \$19 million in taxpayer funds were spent between 2018 and 2021 solely on enforcing one company's injunction against Wet'suwet'en land defenders. (Wet'suwet'en land defenders have been occupying their traditional territories in efforts to stop Coastal GasLink's pipeline construction). The research documented specific C-IRG tactics such as "stimming"—using noise and light to psychologically distress protesters—and exposed how C-IRG training reproduces colonial narratives by framing Indigenous land defenders as "professional protesters" funded by U.S. corporations. This research also made clear the links between police violence and climate injustice. One of the articles, entitled *Real Climate Action Means Defunding the Police*, argued that:

"Environmentalists need to connect the dots between the climate crisis and the policing of land defense—and begin fighting to defund and dismantle policing organizations like the C-IRG. Without police enforcement and the injunction system, many of these fossil fuel extraction and transportation projects, dams, mines, and old-growth logging projects would simply not happen. What we have in Canada is a government-sanctioned, unaccountable armed force dedicated to enforcing climate collapse. With a portion of each and every Canadian tax dollar, the Canadian government has been bankrolling climate disaster, as well as the continued genocide of Indigenous communities". (Murphy & Research for the Front Lines, 2024)

By responding directly to frontline communities' need to understand the forces they face, this youth-supported research project made visible the relationships between state

power, corporate interests, and environmental destruction while providing tactical knowledge for front line-led resistance movements. Although RS flips the power dynamics between researchers and frontline communities, the efficacy of this kind of research approach requires specific researcher praxis.

4.2. Challenges and Principles of Solidarity Research Relations

Fundamentally, research-as-solidarity requires decentering ourselves and following frontline direction. As R4FL researcher Jaimie says:

“I am part of a research team where the research question, methodology development, data gathering, analysis, dissemination, and everything else, including intellectual property, is decided by the movement that I am working with/for. . . . As a researcher who is doing research as a form of solidarity, it’s very much about following the lead and contributing to the momentum that’s already there, and just stepping in when I’m asked to do certain parts of the research. If you’re a classic academic, you’re the center of the research question, the research world, you’re the boss. . . .and everything revolves around what you want to do. [With RS] it’s about contributing in ways that are needed and wanted. I am using the skills that I have to contribute to the momentum of the existing movements fighting for a more just world.”

Since RS inverts conventional academic power dynamics, it requires continuous practice. Through collective reflection, we identified four key challenges in implementing solidarity research. First, researchers must be transparent about capacity and timelines, which often extend longer than initially anticipated due to limited resources and competing commitments. Second, researchers must honor our commitments as frontline communities depend on this work for our efforts on the ground.

These two challenges are particularly significant for graduate students, who make up most research volunteers in R4FL. They face enormous demands on their schedules and often cannot align this work to fulfill their program requirements. Moreover, common research needs such as corporate investigations require developing new skills, and even then, information can be difficult to find. This demands significant time that must be carefully managed.

Third, an important tension emerges as community members direct the research while managing urgent frontline work, requiring researchers to balance independent progress with accountability to community guidance. Fourth, RS demands different researcher subjectivities than traditional academic approaches; it requires attentive, reflexive, and accountable ways of working that prioritize relationship-building with frontline communities, co-researchers, and ourselves. These relationships need ongoing maintenance and reflection, creating both challenges and opportunities for meaningful solidarity work.

4.3. The Importance of Research-as-Solidarity and Climate or Environmental Justice

The work that we do as a collective takes on more vital importance when placed into conversation with ongoing questions of climate and environmental justice. Much ink has been spilled on the links between colonialism, racism, extractive industry, and anthropogenic climate change (Todd, 2017; Whyte, 2017; Sultana, 2022; O’Leary et al., 2023; Estes, 2024), to say nothing of the very real lived experiences and impacts that Indigenous and other marginalized communities encounter daily. Our work with communities, therefore, often focuses on relationships between communities and lands, waters, and other environmental spaces in one way, shape, or form.

Returning to Liboiron (2021), anthropogenic environmental change can—and is often directly attributable to—‘bad’ relations with land. The same can be said about climate

change (Whyte, 2017). One constant among the communities and movements we support is that they often seek to maintain or restore positive relations with the land. This informs the way that we pursue research-as-solidarity. We work to practice self-reflexivity in remembering that the folks we support, and their desired outcomes are at the heart of the work we do. We use our institutional privilege (which some of us possess more of than others) to work towards desirable climate and environmental futures for these collaborators, wherever and whenever we can. However, it is easy to use these terms in the abstract, and when the rubber hits the road, to speak colloquially, what does this mean? What does self-reflexivity look like in our work?

4.4. Reflexive Praxis Around Positionality

Taking leadership from frontline communities demands not just accountability but also reflexive praxis, critically examining both our privileged positions and the norms of knowledge production. Katherine shared her experiences with this process as a White settler:

“I ask myself a lot of questions about how I act. I’m constantly and actively asking myself how I can amplify the knowledge, struggles, and plural actions to combat the climate crisis, without taking over. I’m wondering how I can occupy the university space to burst or deconstruct this very rigid box [which] is wrongly considered to be [the] only way of creating knowledge, but also how to create space for the diversity of knowledge. I wonder how, from my position, I can contribute to repairing past and present injustices.”

Research-as-solidarity, and particularly reflexive praxis as exemplified by Katherine, provides an analytical and practical orientation that transcends conventional science’s limitations in examining how social contexts shape scientific observation (Harding, 1991; Latour & Woolgar, 1979). By recognizing the social context that produces both researchers and objects of investigation, reflexive praxis decenters colonial paradigms of knowledge production that obscure how our positionalities shape our concerns and observations and instead encourage unconventional and diverse forms of knowledge production.

This praxis also grapples with researchers’ social responsibility given our privileged access to academic resources. As Stephanie Eccles notes, “There’s a huge privilege that comes with being paid as a researcher. There’s a lot of resources that become available to you, and I think that it’s our responsibility to find ways to make them useful outside of the institution”. Katherine builds on this, arguing that “with great privilege comes great power, but also, and above all, great responsibility to do research that contributes to actively deconstructing systems of oppression and power relations”. Through reflexive praxis, we recognize our power to either reinforce or challenge structures of oppression, underscoring the importance of maintaining accountable relations with frontline communities in RS.

Reflexive praxis further supports us to more broadly reflect on how research tangibly serves frontline communities. Deondre Smiles, who is a citizen of the Leech Lake Band of Ojibwe, demonstrates this reflective inquiry:

“The research that I do is always done in support of my own people. It’s actually one of the things I always ask myself before I do any kind of work at all in my job, which is, does my community support this? Would it support my community or a community that’s in need? I think that direct action is great, and I think there’s a need for direct action. But there’s also a lot of work that goes on behind the scenes, which I think that Research for the Front Lines is about—us doing the work in order to empower people that are out there on the ground doing the direct action.”

Research-as-solidarity enables youth researchers to reflexively engage with our social responsibility to the planet and historically marginalized communities. By placing

frontline movements in control of research and demanding reflexive, accountable practices from researchers, RS offers an approach fundamentally distinct from conventional academic training.

5. The Academy: Fundamental Barrier to Research-as-Solidarity

5.1. Restricted Access

While RS offers an important way for young people to engage with communities and respond to the compounding crises we experience, there are also institutional barriers to doing this kind of research. Participating in this form of solidarity requires access to research skills, which poses a barrier because these skills are often obtained through higher education. Melissa Spiridigliozzi reinforced the importance of being affiliated with a university for success in solidarity research: “If I was not a student at Concordia, or if I had not been given the opportunities to hone skills and research, then I wouldn’t be able to be a part of this form of activism”. There are also practical barriers to entering this university. As Sadie said, “it is cost-prohibitive for a lot of people” and “might not work for a variety of other accessibility reasons, including learning styles, neurodiversity, abilities, and disabilities”. Riwitika Banerjee also mentioned “academic language and jargon”, as well as paywalls, as factors that limit access to research produced in institutions of higher education.

5.2. Domination of Western, Colonial Constructs

Even if one does have the opportunity to gain research skills in a university setting, Western academic institutions train their students in a way that may not be compatible with the ways of knowing valued by frontline communities, especially Indigenous communities. Melissa highlighted this, stating that “ways of knowing and seeking knowledge, and what is knowledge, [have] been largely approached through predominantly Western-centric and colonial models”. In a similar sense, Annie McQuarrie stressed that Western scientific academia often excludes valuable knowledge systems, such as Indigenous perspectives and practices, that can help transform society. Indeed, Katherine added that “conventional academic research is colonial, capitalist, extractivist, and hierarchical, while so many other forms of knowledge and research exist and are much more in phase with taking care of ourselves, taking care of the territory, supporting ourselves collectively to face multiple crises”. Jensine explains that this colonial system makes it difficult to “recognize and promote Indigenous knowledge production” and conduct research “in a way that honors the [...] requests and demands of these communities”.

Deondre also discussed the tokenism and resistance that can occur in universities when it comes to embodying principles related to solidarity research:

“I’m the only Indigenous person in my department, and I’m told to teach about decolonization and Indigenization. But yet, when it comes down to actually embodying these things, I’m always getting my hands slapped and told, ‘No, you can’t do that. No, this isn’t right. This makes us look bad’. Maybe you should worry about looking bad when you’re doing retaliatory things against your Indigenous faculty or trying to harm students.”

5.3. Structural Constraints in Participation

Besides their emphasis on Western modes of knowledge production, the structure of academic institutions discourages RS. Sarah mentioned constraints including the “academic pressures to build a reputation, author papers, and spend all your time working on projects that will be visible on your resume”, as opposed to ones that help frontline communities. Mary discussed the particular pressures affecting youth: “While established academics

can (and need to) establish long term partnerships with Indigenous groups and other communities, students are on a short time frame dependent on resources". Jaimie reflected on the challenges within STEM fields specifically, where external influences, including political goals, are seen as conflicting with the objectivity of the research. Because of this assumption, Jaimie explained, there are very few networks of STEM researchers involved in RS, meaning many youth do not have a clear picture of what it might mean to be a scientist-activist. Jaimie stated that we need to "broaden the scope of what it means to be a STEM researcher in different contexts, especially knowing that the majority of graduates will not pursue academia".

Thus, RS remains challenging for youth because of barriers to and within institutions of higher education, which are built on Western-centric knowledge production. As such, they often do not hold space, deliberately or structurally, for research based on non-Western ways of knowing and solidarity praxis.

6. Our Final Thoughts

Youth today face compounding crises, from economic instability to the ongoing impacts of COVID-19 and climate change. In response, they are interrogating social structures and institutions, including academia, that are founded upon dominant colonial-capitalist ideologies. Traditional scholarship and science, rooted in White supremacy (Tate & Page, 2018), provide inadequate mechanisms to address the needs of frontline and marginalized communities.

R4FL offers youth a space to practice scholarship in solidarity with frontline communities, operating outside academia while leveraging academic skills in service to Indigenous, Black, racialized, and economically marginalized communities. While community-oriented research has emerged in academic spaces (Strand et al., 2003), R4FL's research-as-solidarity is distinct; frontline communities and social movements direct research that advances their social transformation work and researchers take on supportive roles. RS relies primarily on volunteer labor, avoiding complex funding mechanisms. Additionally, Mary notes that since R4FL's RS resides outside the academy, it avoids the "tensions and disconnects between academic demands and timelines versus on-the-ground timelines". These factors, combined with the dominance of conventional research approaches in academia incoherent with principles of solidarity, position R4FL advantageously to organize RS.

As youth, we see research as a tool to advance community resistance to the crises we are collectively facing. By engaging in solidarity research, we embrace the inherently political nature of knowledge production. Academia provides significant privilege and access to substantial resources; researchers have the responsibility to ensure these resources are leveraged to create meaningful impacts beyond the confines of the institutions, especially considering the role of hegemonic knowledge production in reinforcing systems of oppression. Moreover, as Melissa notes, traditional academic approaches often reduce community engagement to surface-level consultation. In contrast, frontline communities in RS direct and own all aspects of the research process. Importantly, the principles of accountability, transparency, and reflexivity guide relationships between frontline communities and researchers to support this critical approach.

We see RS as crucial to resisting dominant research paradigms and addressing contemporary crises. As Jaimie said, "It is for our future. We [youth] will live the majority of our lives in the climate chaos caused by the previous generations. We have a real stake/skin in the game when it comes to the societal changes we need to happen". However, youth need more support to engage in solidarity research. Economic constraints make volunteer work challenging, and they require training and mentorship that organizations such as R4FL can provide. Youth also need empowerment beyond what the academy offers, where,

as Mary observes, “it’s easiest to go along with the status quo and it can be very difficult to break away from”. We view our work as directly tied to pursuing climate justice with our collaborators, as ultimately, anthropogenic change will affect us all; it does not respect national boundaries or societal positions. Conversely, climate justice will benefit us all—the ultimate intrinsic reward for doing good work.

This collaborative reflexive essay offers a critical perspective on conventional academic research traditions, enumerating their inadequacy in addressing overlapping crises. Research-as-solidarity provides a mechanism for conducting research that is led by those most impacted by ongoing crises and their social movements. RS supports frontline communities in their resistance to hegemonic power structures while challenging conventional knowledge production. Through RS, youth can respond meaningfully to the crises we experience and practice research that honor our responsibilities to Indigenous communities and social justice movements—opportunities traditional academia struggles to provide.

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References

- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.
- Bevington, D., & Dixon, C. (2005). Movement-relevant theory: Rethinking social movement scholarship and activism. *Social Movement Studies*, 4(3), 185–208. [CrossRef]
- Blume, S. (1984). Research funding and the power of supply and demand. In M. Gibbons, P. Gummett, & B. Udgaonkar (Eds.), *Science and technology policy in the 1980s and beyond* (pp. 165–189). Longman.
- Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352. [CrossRef]
- England, K. V. (1994). Getting personal: Reflexivity, positionality, and feminist research. *The Professional Geographer*, 46(1), 80–89. [CrossRef]
- Estes, N. (2024). *Our history is the future: Standing rock versus the dakota access pipeline, and the long tradition of Indigenous resistance*. Haymarket Books.
- Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings by Michel Foucault, 1972–1977* (C. Gordon, Ed.). Harvester Press.
- Gobby, J. (2020). *More powerful together: Conversations with climate activists and Indigenous land defenders*. Fernwood Publishing.
- Goessling, K. P. (2017). Resisting and reinforcing neoliberalism: Youth activist organizations and youth participation in the contemporary Canadian context. *Mind, Culture, and Activity*, 24(3), 199–216. [CrossRef]
- Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14(3), 575–599. [CrossRef]
- Harding, S. (1991). *Whose science? Whose knowledge? Thinking from women’s lives*. Cornell University Press.
- Hess, D. J. (2016). *Undone science: Social movements, mobilized publics, and industrial transitions*. MIT Press.
- Hiltner, S., Eaton, E., Healy, N., Scerri, A., Stephens, J. C., & Supran, G. (2024). Fossil fuel industry influence in higher education: A review and research agenda. *WIREs Climate Change*, 15(6), e904. [CrossRef]
- Kaławak, W., Weziak-Białowolska, D., Wendołowska, A., Bonarska, K., Sitnik-Warchulska, K., Bańbura, A., Czyżowska, D., Gruszka, A., Opoczyńska-Morasiewicz, M., & Izydorczyk, B. (2024). Young adults from disadvantaged groups experience more stress and deterioration in mental health associated with polycrisis. *Scientific Reports*, 14(1), 8757. [CrossRef] [PubMed]
- Keller, E. F. (1985). *Reflections on gender and science*. Yale University Press.
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. University of Chicago Press.

- Lam, S., & Trott, C. D. (2024). Intergenerational solidarities for climate healing: The case for critical methodologies and decolonial research practices. *Children's Geographies*, 1–10. [CrossRef]
- Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Harvard University Press.
- Latour, B., & Woolgar, S. (1979). *Laboratory life: The construction of scientific facts*. Princeton University Press.
- Lave, R. (2012). Bridging political ecology and STS: A field analysis of the Rosgen Wars. *Annals of the Association of American Geographers*, 102(2), 366–382. [CrossRef]
- Lee, J. S., & Allweiss, A. (2023). 'The right not to live in fear': Youth, rights, and relationality in the neoliberal colonial state. *Globalisation, Societies and Education*, 1–14. [CrossRef]
- Levins, R., & Lewontin, R. (1985). *The dialectical biologist*. Harvard University Press.
- Liboiron, M. (2021). *Pollution is Colonialism*. Duke University Press.
- Lindamood, D. (2023, September 19). What's up with "So-called Canada"? *Water watchers*. Available online: https://www.waterwatchers.ca/what_s_up_with_so_called_canada (accessed on 18 February 2025).
- Luchies, T. (2015). Towards an insurrectionary power/knowledge: Movement-relevance, anti-oppression, prefiguration. *Social Movement Studies*, 14(5), 523–538. [CrossRef]
- Madison, D. S. (2005). *Critical ethnography: Method, ethics, and performance*. SAGE Publications.
- McHugh, M. C. (2014). Feminist qualitative research: Toward transformation of science and society. In P. Leavy (Ed.), *The oxford handbook of qualitative research* (pp. 137–164). Oxford University Press.
- Mirowski, P. (2011). *Science-mart: Privatizing American science*. Harvard University Press.
- Morris, V., & Jacquet, J. (2024). The animal agriculture industry, US universities, and the obstruction of climate understanding and policy. *Climate Change*, 177(3), e41. [CrossRef]
- Murphy, M., & Research for the Front Lines. (2021, November 3). Real climate action means defunding the police. *Briarpatch Magazine*. Available online: <https://briarpatchmagazine.com/articles/view/climate-action-defunding-police-CIRG-RCMP-Fairy-Creek> (accessed on 18 February 2025).
- Murphy, M., & Research for the Front Lines. (2022, January 5). The C-IRG: The resource extraction industry's best ally. *Briarpatch Magazine*. Available online: <https://briarpatchmagazine.com/articles/view/the-c-irg-the-resource-extraction-industrys-best-ally> (accessed on 18 February 2025).
- Murphy, M., & Research for the Front Lines. (2024, July 24). Weaponizing words: How the RCMP uses press releases to reconstruct the narrative at Fairy Creek and Wet'suwet'en. *Briarpatch Magazine*. Available online: <https://briarpatchmagazine.com/articles/view/weaponizing-words> (accessed on 18 February 2025).
- O'Leary, H., Smiles, D., Parr, S., & El-Sayed, M. M. (2023). "I can't breathe:" The invisible slow violence of breathing politics in minneapolis. *Society & Natural Resources*, 36(9), 1098–1118.
- Ozer, E. J. (2017). Youth-led participatory action research: Overview and potential for enhancing adolescent development. *Child Development Perspectives*, 11(3), 173–177. [CrossRef]
- Pulido, L. (2008). FAQs: Frequently (un)asked questions about being a scholar activist. In C. R. Hale (Ed.), *Engaging contradictions: Theory, politics, and methods of activist scholarship* (pp. 341–366). University of California Press.
- Richter, J., Faragó, F., Swadener, B. B., Roca-Servat, D., & Eversman, K. A. (2020). Tempered radicalism and intersectionality: Scholar-activism in the neoliberal university. *Journal of Social Issues*, 76(4), 1014–1035. [CrossRef]
- Rose, G. (1997). Situated knowledges: Positionality, reflexivities, and other tactics. *Progress in Human Geography*, 21(3), 305–320. [CrossRef]
- Strand, K., Marullo, S., Cutforth, N., Stoecker, R., & Donohue, P. (2003). *Community-based research and higher education: Principles and practices*. Wiley and Jossey-Bass.
- Strega, S., & Brown, L. (2015). Introduction: From resistance to resurgence. In S. Strega, & L. Brown (Eds.), *Research as resistance: Revisiting critical, indigenous, and anti-oppressive approaches* (pp. 1–16). Canadian Scholars' Press Inc.
- Sultana, F. (2022). The unbearable heaviness of climate coloniality. *Political Geography*, 99, 102638. [CrossRef]
- Tate, S. A., & Page, D. (2018). Whiteness and institutional racism: Hiding behind (un)conscious bias. *Ethics and Education*, 13(1), 141–155. [CrossRef]
- Thambinathan, V., & Kinsella, E. A. (2021). Decolonizing methodologies in qualitative research: Creating spaces for transformative praxis. *International Journal of Qualitative Methods*, 20, 16094069211014766. [CrossRef]
- Todd, Z. (2017). Fish, kin and hope: Tending to water violations in Amiskwaciwâskahikan and Treaty Six Territory. *Afterall: A Journal of Art, Context and Enquiry*, 43(1), 102–107. [CrossRef]
- Tuck, E., & Yang, K. W. (2014). R-words: Refusing research. In D. Paris, & M. T. Winn (Eds.), *Humanizing research: Decolonizing qualitative inquiry with youth and communities* (pp. 223–248). Sage Publications.
- Wallerstein, N., & Duran, B. (2010). Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity. *American Journal of Public Health*, 100(S1), S40–S46. [CrossRef] [PubMed]

- Whyte, K. P. (2017). Our ancestors' dystopia now: Indigenous conservation and the anthropocene. In *The Routledge companion to the environmental humanities* (pp. 222–231). Routledge.
- Wynter, S. (2003). Unsettling the coloniality of being/power/truth/freedom: Towards the human, after man, its overrepresentation—An argument. *The New Centennial Review*, 3(3), 257–337. [[CrossRef](#)]

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