Barriers to Change

Environmental Blockades as Radical Spatial Practice

by Devin Arndt

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

Abstract

Space carries a fundamental role in the pursuit of societal change. Recently, the relationship between space and change has constantly been revealed, challenged, and advanced at diverse sites of resistance. Amidst a multitude of entangled crises, faltering institutions, and a collapsing status quo, discontent and disenfranchised people generate change through radical spatial practice: occupying, appropriating, and producing space to create alternative futures.

A rapidly changing climate and rampant ecological degradation pose particularly devastating threats requiring urgent action. In response, environmental resistance increasingly coalesces around place, leveraging site-specific interventions to achieve ecological protection. In remote territories of extraction, resistance takes physical form through the blockade: an act of spatial obstruction with immediate impacts on the processes threatening local ecologies and global climate health. Blockades are uncompromising barriers towards change, actualizing demands of environmental resistance while creating social, political, and economic pressure towards broader societal reform.

This thesis examines environmental blockades as radical spatial practice. The opening chapter positions environmental blockades in relation to existing theory and action, highlighting the inextricable link between space and change as well as a need for spatial analysis beyond an urban perspective. In the second chapter, Canada's colonial extents provide a focused scope through which to examine the origins, trends, and tactics of environmental blockades as well as the countertactics weaponized against resistance. Lastly, a detailed case study of Clayoquot Sound's 1993 War in the Woods illustrates how blockades are defined by, intervene in, and redefine space and place with targeted specificity. The resulting body of work carries implications for the spatial development of environmental resistance, the corresponding role of spatial disciplines, and the widespread potential for change to be achieved through space—beginning with the blockade.

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Contemporary society faces a multitude of crises. Rising wealth inequality, institutionalized racism, political instability, and rampant ecological degradation threaten and inspire bold action towards alternative futures. Amidst these systemic and intertwined crises, continued environmental devastation accelerates disaster for life everywhere. With only ten years remaining to mitigate the most catastrophic effects of a changing climate, a lack of meaningful governmental response has ignited unprecedented environmental resistance. Unwilling to abide by a collapsing status quo, ordinary people leverage radical spatial practices in the pursuit of a just, equitable, and sustainable future.

1.1 | Towards Place

Environmental resistance increasingly coalesces around place, leveraging site-specific spatial interventions to achieve ecological protection. In Losing Ground: American Environmentalism at the Close of the Twentieth Century, journalist Mark Dowie describes the evolution of settler environmentalism. Dowie presents three waves of environmental action: its origins within wealthy conservation clubs, its development into a persuasive political movement in the 1960's, and its commodification and fade into polite, ineffectual obscurity at the turn of the century. However, released in 1995, Dowie highlighted the beginning of a new wave of environmentalism, one willing to aggressively enact the ecological protection demanded, regardless of political opinion.² In 2014, Canadian author Naomi Klein presented the outcome of this new movement, stating that young environmentalists are no longer interested in failing, top-down approaches such as "slick green groups and the big U.N. summits. Instead, they are flocking to the barricades of Blockadia."3

Blockadia is not "a specific location on a map but rather a roving transnational conflict zone that is cropping up with increasing frequency and intensity wherever extractive projects are attempting to dig and drill." By positioning against physical processes, the outposts of Blockadia are almost universally situated in remote territories of extraction and related infrastructural networks rather than conventional urban sites of protest. Blockades typically mobilize in the locations inspiring conflict, not in locations divorced from the issue at hand. Further, these blockades reject political protest as the primary path to protection, instead directly manifesting desired outcomes through spatial obstruction. Klein states that:

This is more than a change in strategy; it's a fundamental change in perspective. The collective response to the climate crisis is changing from something that primarily takes place in closed-door policy and lobbying meetings into something alive and unpredictable and very much in the streets (and mountains, and farmers' fields, and forests).⁵

Figure 1.1 (opposite top) An anti-logging blockade obstructs a logging access road in Clayoquot Sound, 1993. Photo via Clayoquot Action.

Figure 1.2 (opposite bottom) An anti-pipeline blockade occupies a rail yard in Vaughan, 2020. Photo by Jason Hargrove.





In these new territories of resistance, environmental blockades operate though place-based action. Emerging out of deep love of place, blockades embody local desires to protect land and life. Klein notes that this is visible in the people occupying the frontlines, recognizing that activists of Blockadia "do not look much like your typical activist, nor do the people in one Blockadia site resemble those in another. Rather, they each look like the places where they live." The site-specific nature of blockades extends to their spatial realization as well. Positioning, materials, and tactics are defined in relation to unique spatial contexts and ambitions of a given movement. Thus, place is both the inspiration for environmental blockades and the primary determinant of their spatial form. Radical geographer Paul Routledge maintains that despite the importance of global movement building, protests derive their primary strength by operating at the local scale.⁷ The strength of place-based resistance is in strong connections to the land, where knowledge of place inspires and mobilizes effective resistance.

The transition towards blockades is largely borne of urgency. The critical nature of the climate crisis calls for immediate action yet current power structures remain averse to instigating necessary change. Numerous legal, political, and economic mechanisms defend the status quo while dissuading, delegitimizing, and criminalizing physical displays of resistance. For environmental action, these barriers preventing change are best addressed through barriers producing change: uncompromising spatial interventions with instantaneous, tangible impacts on the destructive processes threatening local ecologies and global climate health. The blockade is a spatial assertion of alternative ideologies, values, and relations, actualizing the demands of environmental protests while creating social, political, and economic pressure towards broader societal reform.

Ultimately, this thesis sets out to examine environmental blockades as radical spatial practice, revealing how protection and change are generated through spatial production, occupation, and obstruction. By documenting and discussing environmental blockades from a spatial perspective, the resulting work carries implications for the development of environmental resistance, the corresponding role of spatial disciplines, and the continued pursuit of place-based protection.

Indigenous Land-based Resistance

While settler environmentalism has only recently realized the potential of place-based action, Indigenous peoples have long theorized and mobilized similar conceptions of resistance. In *As We Have Always Done: Indigenous Freedom Through Radical Resistance*, Nishnaabeg author Leanne Betasamosake Simpson outlines how Indigenous struggles against the violent processes of colonialism have continuously been grounded in connection to the land.⁸ The work describes a range of material and immaterial struggles to protect life, territory, resources, culture, and sovereignty. In each case, Simpson explores

Figure 1.3 (opposite top) Local grandmothers sit down and knit to prevent continued logging in Western Australia, 2020. Photo by Hazel Bradley.

Figure 1.4 (opposite bottom) A feast blocks the gate to a Trans Mountain Pipeline construction site in Burnaby, 2018. Blockades are often supported by a diverse group of people representative of the places in which they intervene. Photo via Coast Protectors.





how a guiding narrative of land as pedagogy generates specific, place-based actions and viable alternatives to the dominant narrative of capitalist extraction. Nick Estes, of the Lower Brule Sioux, expands on this idea in *Our History Is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance*. Estes records a history of land-based resistance as realized in Standing Rock's fight for water protection and Indigenous sovereignty, where an encampment blocked oil pipeline development amidst militant methods of suppression (fig. 1.5 and 1.6). Estes maintains that Indigenous relationships to the land not only inspire persistent protection but also carry a vital role in shaping holistic futures beyond our current climate catastrophe. At it's core, Indigenous land-based resistance transcends protest, opting instead to unapologetically practice protection; protection of Indigenous territory and rights to self-determination, and protection of the earth.

Land is not only the basis of Indigenous resistance but the basis of Indigenous life. If Kanahus Manuel, of the Tiny House Warriors opposing the Trans Mountain Pipeline Expansion in unceded Secwépemc territory, outlines Indigenous economy as "everything from the land, everything that flows from the land, everything that feeds us and nourishes us, clothes us and houses us, that's been able to give all of our basic human needs." Estes elaborates, highlighting how relationship with the land is not one-sided but rooted in active stewardship of the natural environment. If This way of being is in stark contrast to the ecological devastation wrought by an extraction economy, which disproportionately targets Indigenous lands and poses an existential threat for Indigenous peoples. Freda Huson, of the Unist'ot'en clan obstructing pipelines in Wet'suwet'en territory, asserts:

Our people's belief is that we are part of the land. The land is not separate from us. The land sustains us. And if we don't take care of her, she won't be able to sustain us, and we as a generation of people will die.¹⁸

Connection to the land demands protection of the land, protection vital to the very preservation of Indigenous life.

The long history of Indigenous resistance accompanies a corresponding history of settler colonialism. Indigenous life, language, and culture flow from relationships to the land, but colonialism actively undermined those relationships through disturbance, displacement, and dispossession. Within Canada, aggressive assimilation policies and appropriation of land and resources constituted cultural genocide. Forced relocation to reserves, restricted movement, treaty agreements, banned languages, prohibited cultural practices, residential schools, and institutionalized racism combined in a focused effort to eradicate Indigenous peoples as distinct groups with their own traditions, governments, and territories. Despite hollow attempts at reconciliation, the ongoing impacts of Canada's colonial

Figure 1.5 (opposite top) Water protectors establish the Oceti Sakowin Camp near the Standing Rock Sioux reservation to oppose the Dakota Access Pipeline, 2016. Photo by Scott Olson.

Figure 1.6 (opposite bottom) Police use barbed wire, water cannons, rubber bullets, and percussion grenades to keep water protectors away from the Dakota Access Pipeline, 2016. Video still via *The Guardian*.





transgressions are still felt in disproportionate poverty levels and inequitable access to clean water, housing, healthcare, education, and employment.²² Meanwhile, continued environmental violence enacted by industrial extraction and urban expansion has manifested in land trauma: mental, physical, and spiritual anguish accompanying the loss of land, livelihood, and identity.²³ Manuel remarks, "One hundred and fifty years—that's Canada's colonization bomb, and our people are just dusting off the rubble now... Now [people are] here saying, 'I am a water protector' or 'I am a land protector' because they so much want that connection to the land again."²⁴ Land-based resistance seeks to restore the deep relationships to place colonialism sought to extinguish.

Land-based resistance takes many forms. For Manuel, resistance embodies everything from picking berries and raising children to sobriety and education.²⁵ Each of these practices directly confront colonialism's legacy and each are rooted in relationships with the land. Simpson describes representation and documentation as another means of resistance through the creation of a land-use atlas for the Long Lake #58 Anishanaabeg community. The atlas was constructed through community consultation, recording Indigenous narratives of space and place in a form legible by colonial institutions. The resulting document gave the community a valuable tool for movement building and resisting ongoing dispossession.²⁶ Simpson states, "laid out in a visual way, the magnitude of the loss cannot be explained away, the strategic nature of colonialism cannot be ignored. The driving force of capitalism in our dispossession cannot be denied."²⁷

Despite the numerous forms of land-based resistance, frontline protection primarily operates through spatial intervention. The camps, occupations, and blockades that environmentalism is still discovering have been—and continue to be—a staple of Indigenous resistance. In unceded Wet'suwet'en territory, resistance camps protect environmental health by obstructing the construction of a pipeline being built without free, prior, and informed consent (fig. 1.7).²⁸ At 1492 Land Back Lane, the Six Nations of the Grand River are using blockades and occupation to prevent housing development on the site of ongoing land claims, broken treaty agreements, and delayed reparations (fig. 1.8).²⁹ Mi'kmaq fishers combat corporate exploitation, racism, and threatened treaty rights through barricades manufactured from the very lobster traps inspiring conflict. 30 These struggles are only a few of many spatial responses to Canada's colonial agenda, responses continually mischaracterized by government, industry, and media. Shiri Pasternak, research director at the Yellowhead Institute, states:

Blockades are not—as they are often portrayed in the news—symbols of past attachments to the land or signs of a backward economic outlook. They are, rather, one of the most important contemporary examples of where Canadian law meets modern Indigenous societies on the ground. When blockades disrupt

Figure 1.7 (opposite top) The Gidemten Checkpoint on unceded Wet'suwet'en territory controls access to the proposed Coastal GasLink Pipeline construction site, 2019. Photo by Michael Toledano.

Figure 1.8 (opposite bottom) Vehicles and ruptured pavement barricade the route to 1492 Land Back Lane, 2020. Photo by Evan Mitsui.

resource extraction and unauthorized development on Indigenous lands, they are the furthest things from relics of the past; they are a projection of an Indigenous future based on economic sustainability and defence of living homelands... It is what we could call a grounded authority that is not about control, but about responsibility to protect.³¹

Indigenous relationships with the land drive and inspire resistance, resistance that continues to advocate on behalf of all future life—human and otherwise—dependent on intact ecosystems and alternative ways of being. In the words of Leanne Simpson, "this is the intense love of land, of family, and of our nations that has always been the spine of Indigenous resistance."³²

1.2 | Making Space

The relationship between space and change has been extensively examined within spatial theory—at least from an urban perspective. As a concept, radical spatial practice itself is an evolution of philosopher Michel de Certeau's original observations surrounding practices of space. De Certeau emphasized spatial usage over spatial order—for example, the act of walking as opposed to the arrangement of paths. He maintains that spatial practice, not spatial discipline, is responsible for the production of space and the corresponding determination of social and political life.³³ While discipline manages the planning, arrangement and operation of space, such order is only given meaning through spatial practice. Discipline "sets up a body of possibilities and interdictions; the [practice] then actualizes some of them."³⁴ Further, de Certeau outlines that the everyday nature of spatial practices makes them impossible to fully perceive, program, or manage.³⁵ As a result, where spatial discipline attempts to control space, spatial practices are able to reveal, challenge, and redefine that spatial order through "many-sided, resilient, cunning and stubborn" procedures.³⁶ Thus, spatial practice represents a unique opportunity to intervene within spatial order and its resultant socio-political dimensions.

Radical spatial practice draws on this resistant potential, leveraging strategic physical intervention to confront dominant power structures and the established status-quo. Radical spatial practice, therefore, is: radical, in that it is "advocating or based on thorough or complete political or social change;" spatial, in in that it is "relating to or occupying space;" and practical, in that it is focused on "the actual application or use of an idea, belief, or method, as opposed to theories relating to it." Radical spatial practice tactically inhabits space with the express purpose of generating societal change.

Radical spatial practice sits within a constellation of related ideas. Architectural historian Jane Rendell proposes 'critical spatial practice' as a combination of de Certeau's practices of space and the reflective and transformative aspects of critical theory. Rendell defines critical spatial practice as an examination of the spatial particularities of interdisciplinary works that seek to both interrogate and alter the sites in which they operate. 40 'Radical geography' promotes solutions to social issues through spatial research, documentation, and representation of everyday phenomena. David Harvey, Simon Springer, and Nicholas Blomley, among others, pursue justice by creating, supporting, and theorizing viable alternatives from a spatial perspective.⁴¹ 'Activist architecture' describes a vision of architectural practice outside of its formal relationships to wealth and power, in which spatial expertise is utilized for change through advocacy, design, and intervention.⁴² Many studios are already engaging in this work through the creation of physical artefacts that support activism's spatial ambitions, such as Tools for Action's inflatable cobblestones—do-it-yourself, inflatable cubes easily maneuverable and configurable into lightweight, adaptable barricades.43

These terms, among others, demonstrate various ideations of spatial disciplines as potential generators of social progress. However, while some of these fields exist within the definition of radical spatial practice, these terms primarily describe work occurring within or on the boundary of spatial disciplines, which by nature often function as proponents of existing institutions and power structures. I hold radical spatial practice as encompassing all spatial actions intended to generate alternative futures, both those developed within spatial disciplines, and—more prominently—those emerging out of the revolutionary ambitions of everyday people in their pursuit of fundamental systemic change.

Rising Trends of Radical Spatial Practice

Spatial intervention has historically driven societal change. From the haphazard barricades of the French Revolution to the mass marches of America's Civil Rights Movement, protests, riots, and revolutions have creatively reclaimed, occupied, and altered physical space as a primary means of resistance. At the same time, institutional powers have sought to organize and regulate space to suppress, dissuade, and criminalize radical spatial practice. Hausmann's Parisian boulevards undermined the efficacy of barricades while bolstering state crackdowns. Acailly based limitations on public space were intended to prevent the emergence of the Civil Rights Movement's widespread collective action. Nevertheless, spatial mobilization has continued to prove effective in exerting social, political, and economic pressure towards change.

Recently, mounting crises and increased political disenfranchisement have inspired an unprecedented surge of spatial resistance. In the past few decades, the anti-globalization movement, Occupy movement, and Arab Spring, among others, have leveraged urban public space in opposition to corporate power, wealth inequality, and oppressive regimes, respectively. At the same time, the advent of the internet and rise of social media has transformed how collective movements organize, expand, and communicate, enabling new forms of solidarity, advocacy, and protest within digital space. Yet, despite the ease of online platforms for voicing discontent, physical action remains the tool of choice for instigating change.

In the past year alone, space has played a key role in numerous socio-political conflicts. Black Lives Matter protests activated the streets in opposition to racial inequity and targeted police brutality. Hong Kong utilized tactically distributed decentralized actions in the pursuit of democracy and political autonomy. Punjabi farmers surrounded India's capital in a record-breaking defiance of new agricultural laws and corporate exploitation. Shut Down Canada blockaded colonial infrastructure in defense of Indigenous land, territory, and rights. Extinction Rebellion mounted spatial interventions across the globe to promote immediate climate action. Worldwide, extensive protests are reaffirming the vital role of mass social movements in creating change through spatial occupation. Radical spatial practices are actively shaping our collective futures.

Necessity of Radical Spatial Practice

Rising trends of radical spatial practice can be attributed to several factors, most notably converging crises, lack of systemic response, and increasing political disenfranchisement. Each of these influences have been intensified by continued adherence to neoliberal doctrine and its underlying capitalist principles.

Capitalism's demand for continual growth makes it vulnerable to moments of crisis.⁵¹ When growth is no longer feasible—and growth is eventually capped due to the finite nature of land and resources the system collapses, affecting first and foremost the most vulnerable members of society.⁵² The multitude of contemporary crises are evident of such a collapse, and neoliberal politics have only exacerbated the situation. British journalist and author, George Monbiot, contends that by redefining citizens as consumers, increasing privatization, and envisioning competition as the highest form of liberty, neoliberalism "has played a major role in a remarkable variety of crises: the financial meltdown of 2007-8, the offshoring of wealth and power... the slow collapse of public health and education, resurgent child poverty, the epidemic of loneliness, the collapse of ecosystems."53 Naomi Klein agrees, asserting that capitalist ideologies are at the root of current environmental degradation, wealth gaps, and racial inequity.⁵⁴ In The Shock Doctrine: The Rise of Disaster Capitalism, Klein extends the critique of neoliberalism by documenting how the ideology's proponents advocate using moments of crises to pursue unpopular political policies.⁵⁵ Not only is neoliberalism complicit in causing crises, but it uses those very moments of disarray to further the political and economic agenda of a privileged minority.

Causes and remedies to many of society's current crises are well understood, yet governments seem unable—or unwilling—to respond. Scientific, legal, and moral pleas for alternative futures are consistently disregarded in favour of private, corporate interests and continued economic growth. When governments fail to act in the best interests of the citizens they claim to serve, then citizens necessarily turn to direct action on the ground and in the streets to mitigate perceived threats and demand institutional response. Creating change is less an issue of design innovation than of generating the social, political, and economic will towards already present solutions.

Democracy presents such will as being contingent on citizen votes, however, neoliberal democracy's focus on unregulated capitalism and reduced government spending unavoidably results in political disenfranchisement.⁵⁶ Neoliberal theory shifts votes to be cast through the market, through the act of buying and selling. However, as Monbiot highlights, "some have more to spend than others: in the great consumer or shareholder democracy, votes are not equally distributed."⁵⁷ Capital iniquities manifest in political iniquities, granting increased agency to corporations and economic elites while limiting the voice of common citizens—particularly those of marginalized populations. With reduced access to legislative power, discontent citizens must express dissatisfaction through collective civil disobedience. German political scientist, Margit Mayer, documents this trend in Urban Uprisings: Challenging Neoliberal Urbanism in Europe, maintaining that disenfranchisement inevitably spawns physical conflict between ordinary people and the political regimes charged with their protection.58

Henri Lefebvre, a 20th century Marxist sociologist, states that "the revolutionary solution to economic and social contradictions will only become possible when the human masses are no longer able or willing to live as before." The current climate of collective unrest is indicative of a critical tipping point; the masses are no longer willing to stand idly by amidst increasing disfranchisement, urgent existential threats, and lack of adequate systemic response. For those increasingly abandoned and exploited, radical spatial practice remains the most immediately viable site of resistance.

Sites of Resistance

Sites of resistance are the physical places hosting radical spatial practice. Within this thesis, I identify two key categories of these sites: sites of contention and sites of solidarity. Each has a unique relationship between the location activated by spatial intervention and the focus of resistance.

Sites of contention refer to spaces in which resistance directly intervenes in the process being opposed. For example, an anti-eviction protest might situate itself so it can interrogate wider practices of dispossession while also preventing the actual removal of tenants





from an accommodation. Similarly, an anti-pipeline blockade limiting construction access halts urgent environmental degradation while demonstrating against the underlying ethos behind the project. Sites of contention exemplify radical spatial practice by using space to immediately impede the focus of resistance while also advocating for the broader changes necessary to render resistance obsolete.

Sites of solidarity, in comparison, feature spatial practices removed from the process being resisted. Here, resistance is typically employed through more conventional forms of protest, using rallies, marches, and demonstrations to garner solidarity, raise visibility, and press for political action. Sites of solidarity may also utilize spatial disruption to maximize efficacy, however, the location of disruption is separate from the location of the perceived issue at hand. For example, an antieviction movement may maximize visibility by occupying city streets and interrupting traffic but doing so does not directly prevent an eviction from occurring. Similarly, an anti-pipeline movement may blockade a key port to inhibit the flow of goods but does not affect resources directly impacting pipeline construction. Although sites of solidarity do not physically obstruct their respective targets, they are vital in demonstrating the extent of resistance beyond a vocal minority and generating social, political, and economic pressure towards necessary change.

Within environmental resistance, the shift towards place-based action inherently favours sites of contention as blockades can directly produce ecological protection. However, sites of solidarity still hold a significant role. The 2019 climate strike, with over one million participating Canadians, occurred primarily at sites of solidarity within urban public space. The advantage of urban sites is in their accessibility; they present few barriers to participation for potential activists by remaining close to major populations, they are—mostly—legal, and they fall within collective opinions of 'acceptable' forms of protest. However, as mass engagement at sites of solidarity continues to be ignored, environmental blockades garner increasing support.

Certain actions may straddle both sites of resistance. For example, the wave of Wet'suwet'en solidarity blockades in early 2020 demonstrate several actions operating as both sites of contention and sites of solidarity. Emerging in reaction to ongoing pipeline construction and RCMP occupation of unceded Indigenous territory, rail blockades across the nation primarily functioned as sites of solidarity, occurring in proxy sites removed from pipeline development and affected territories. However, many of these actions represent sites of contention directly intervening in Canada's wider extraction economy and infrastructural distribution network, at times even preventing the transport of material goods destined for the pipeline work site. Further, sites of solidarity often evolve into sites of contention as activated pockets of resistance realize spatial form in relation to local conflict. In 1990, a similar series of blockades developed nationwide in support of

Figure 1.9 (opposite top) The Unistoten Checkpoint operates as a site of contention, blocking pipeline construction access on unceded Wet'suwet'en territory, 2019. Photo by subMedia.

Figure 1.10 (opposite bottom) An urban demonstration supporting Wet'suwet'en pipeline resistance exemplifies a site of solidarity at Ottawa's Parliament Hill, 2020. Photo by Andrew Meade.

Mohawk land rights and resistance against unconsented development near Oka, Quebec. One of these sites of solidarity included blockades in the Lil'wat reserve territory near Pemberton, British Columbia that quickly became independent resistance of local logging, expropriation, and resort development still occurring today.⁶¹ Resistance spreads as sites of contention inspire sites of solidarity.

The efficacy with which contemporary resistance spreads can largely be attributed to increasing digital forms of connection, documentation, and dissemination. In *Space Invaders: Radical Geographies of Protest*, author Paul Routledge notes the vital role of virtual space in forming wide ranging networks of resistance. Routledge maintains that the internet can "deploy symbolic images of places to match the interests and collective identities of other groups in other places, and thereby mobilize others in terms of a common cause. In the interest of a fast, reliable, and nearly universal link between sites of resistance, allowing movements to coordinate and mobilize across vast scales and distances. Thus, virtual space may comprise a third key site of resistance as online platforms allow movements to gain unprecedented traction and visibility. However, beyond the recognition of virtual space as facilitating radical spatial practice, examining the digital site of resistance falls outside the scope of this thesis.

Ultimately, collective action finds greater success with increased numbers, tactics, and sites of resistance. Employing spatial intervention throughout both sites of contention and sites of solidarity, therefore, is essential in building effective networks of resistance working concurrently towards the generation of systemic change.

Generating Change Through the Production of Space

Protest is inherently a geographical phenomenon; it directly responds to the physical characteristics of its spatial context. Locations of institutional targets, networks of public space, key infrastructures, and transportation systems, among other factors, determine sites of resistance. Protest then alters its context through spatial intervention. Occupation, appropriation, and transformation of the existing spatial fabric produces new spatial realities. Consequently, sites of resistance are defined by and subsequently redefine conceptions of space and place. Paul Routledge builds his analysis of protest on this spatial understanding, writing:

All protesters draw from and deploy a strategic geographical imagination that enables us to make sense of the world of protest and build effective campaigns... activists use and transform everyday landscapes, creating not only sites of resistance, but also spaces where alternative imaginaries and symbolic challenges can be made 'real.'64

The production of space has been coined and examined by Henri Lefebvre. Lefebvre contends that space is primarily a social construct emerging out of societal values and practices, in turn influencing those values and practices.⁶⁵ The production of space, therefore, is essential to the production of society; conversely, any new forms of society must be rooted in the physical production of new space.⁶⁶ Lefebvre maintains that real change cannot occur through ideas alone, writing:

'Change Life!' 'Change society!' These precepts mean nothing without the production of an appropriate space... new social relationships call for a new space, and vice versa.⁶⁷

Lefebvre presents the production of space as a necessary component of societal change, one fully realized by radical spatial practice.

The role of common citizens in the production of space, however, has been increasingly limited. Similar to de Certeau's depiction of the hegemonic potential of spatial discipline, Lefebvre notes that dominant authorities seek to control the production of space as a means of controlling societal progress and maintaining power.⁶⁸ As with Hausmann's Paris, urbanism often represents the mechanism through which control is achieved. Under capitalism, Lefebvre contended that urbanism was relegated to the realm of commodity, with spatial order, governance, and social interaction becoming exclusive goods as opposed to public assets.⁶⁹ In formulating this thesis, early explorations of Canadian cities confirmed Lefebvre's stance, revealing increasing trends of privatization and regulation over creation and occupation of urban public spaces.⁷⁰ These trends not only exclude citizens from the production of space, but criminalize spatial practices—radical or otherwise—not endorsed by political regimes or institutional power structures.

Since de Certeau outlines how spatial practice shapes social and political life, the dispossession of citizens from the production and use of space further disenfranchises them from the determination of society. Within an urban context, Lefebvre attempts to empower citizens through the right to the city, a demand "for a transformed and renewed access to urban life."71 Radical geographer David Harvey builds on Lefebvre's concept, presenting the right to the city as more than just individual access to the production of space, but as a collective means of shaping society after the will of its inhabitants.⁷² Harvey maintains that successfully reclaiming control over space requires a corresponding collective movement defending the will of the people, drawing on the Occupy and Anti-Globalization movements as examples in which this has occurred.⁷³ For Harvey, the right to the city is only a means to an end: the undermining of dominant power structures and the social iniquities they uphold.⁷⁴ Spatial and political theorist, Mark Purcell, examines the right to the city as an essential component of a functioning democracy, maintaining that such a right represents the best means to resist neoliberalism's anti-democratic trends. 75 Purcell asserts that the right to the city must afford the appropriation of space; inhabitants must be given the right "to physically access, occupy, and use urban





space."⁷⁶ Appropriation—such as through protests, occupations, and blockades—directly resists the commodification of the urban environment, transforming the city around inhabitants' collective needs and desires.⁷⁷ Ultimately, radical spatial practices are a means of realizing Lefebvre's right to the city, reclaiming, appropriating, and producing space in the pursuit of societal change.

Beyond the Urban

While this one trajectory of spatial theory clearly indicates the importance of space in mounting effective resistance, extensive research and analysis of radical spatial practice is a relatively recent phenomenon. Routledge notes that only in the past few decades have geographers begun to investigate "issues of place, spatial inequalities, networks and scale, and everyday spaces of activism."⁷⁸ Additionally, these previous readings of spatial practice as a generator of change have been almost exclusively limited to a western, urban perspective. Lefebvre even insists that any revolutionary transformation of society must be rooted in the urban environment. $^{79}\,\mathrm{The}\,\mathrm{city}\,\mathrm{contains}$ the masses of people necessary for an influential movement, the streets and public spaces to occupy, and the political, social, and economic institutions against which most resistance is targeted. Within this thesis, early examinations also focused on the city as the battleground for societal change, including a detailed case study of the spatial tools, tactics, and targets witnessed in the resurgence of Hong Kong's democracy movement in 2019 (refer to appendix). It is important to recognize, though, that this conventional urban understanding of resistance neglects to capture the full scope of diverse forms, demographics, and locations through which spatial resistance develops and operates.

Routledge's perspective on protest surpasses the typical spatial lens by moving beyond a western, urban understanding. Routledge relies heavily on case studies from the global south, remote sites of resistance, and Indigenous movements in building his argument, shifting the lens through which spatial analysis occurs toward a more comprehensive and inclusive framework. Out of this framework, two logics through which to read spatial resistance emerge: spatial strategies and sites of intervention.80 Spatial strategies depict the geographical factors driving methods and tactics of protest, while sites of intervention categorize the targets activated by intervening movements.81 Routledge's sites of intervention outline a more particular breakdown than the previously defined sites of resistance, outlining nine key sites of intervention from sites of production and destruction to sites of assumption and social reproduction.⁸² Nevertheless, Routledge's categorization shares the quality of defining sites by the spatial relationships between movements and the processes being resisted, rather than simply by the physical characteristics of a location. Routledge acknowledges the role and importance of multiple sites and scales of intervention, "in homes and factories; on the streets and in corporate offices; in cities and in the countryside."83

Figure 1.11 (opposite top) The appropriation of a parking garage during the Waterloo Climate Strike on September 27, 2019. Photo by author

Figure 1.12 (opposite bottom) The occupation of a public square during the Waterloo Climate Strike on September 27, 2019. Photo by author.

1.3 | Methodology

The identified importance of diverse sites of resistance, predominantly urban focus of spatial theory, and shift towards place-based action reveals an opportunity for a spatial reading of resistance occurring beyond the urban dimension. Environmental blockades offer a focused scope to examine contemporary forms of resistance grounded in space, place, and the pursuit of immediate ecological protection.

From the outset, this thesis has been interested in how people actively use space to create societal change. Although the final scope remained unclear for a long time, examinations along the way consistently broadened my understanding of how resistance leverages spatial intervention and how dominant powers correspondingly exert spatial control. Early explorations of urban sites of resistance presented an ease of analysis in both the architectural familiarity and wealth of available data, including the appended Hong Kong case study. However, these studies did not speak to the growing field of non-urban, place-based resistance operating outside a conventional, spatial understanding of protest.

As the thesis developed, I repeatedly struggled with my personal distance from the place-based acts of resistance I was researching. As someone who has undoubtedly gained from processes of extraction, capitalism, and colonialism, I am increasingly motivated to work towards the alternative futures embodied by these grassroots movements. However, I have not been extensively involved in this work and I am only just beginning to discover my role in these problematic processes and their eventual undoing. As I got closer to the people and places involved in this work, I constantly questioned my ability to navigate research respectfully and responsibly. Research can easily become performative and exploitative, operating as an extension of the processes, institutions, and ways of thinking that place-based resistance is actively seeking to undermine. It is my hope and intention that this thesis does not fall into this category, yet I recognize many limitations of my own trajectory and methodology, and I am surely unaware of many more.

First and foremost, I do not believe documentation of collective action is best suited to individual authorship. Within the context of an individual thesis and the isolating realities of Covid-19, this work has primarily been conducted alone, in a room, through a screen. Such a process is incredibly divorced from the actions comprising spatial resistance. Initial aspirations for interviews and personal participation to alleviate these limitations largely fell away with the onset of the global pandemic, especially for remote sites of resistance. Yet Covid-19 also brought increased learning opportunity as seminars, discussions, and presentations by environmental activists and land defenders shifted to an online format. I strongly believe spatial analysis and support of place-based resistance can offer a meaningful contribution.

However, this work must be rooted in collaboration and engagement with the people, places, and movements operating on the frontlines of resistance.

In many ways, the final thesis presented here represents the initial learning and unlearning I needed to undergo before finding other avenues towards engagement. This document may not be the most comprehensive, effective, or even accurate portrayal of environmental blockades, but I do believe it begins to depict the spatial considerations of blockades as they pursue protection and change. If for no one else, this work has been important for me as I move towards the next stage of life and consider how I too might make change by making space.

Ultimately, this thesis examines environmental blockades as radical spatial practice. Canada's colonial extents provide a focused scope through which to survey environmental resistance, illustrating the development and breadth of place-based action. Out of this survey emerges an examination of the spatial forms and tactics through which environmental blockades originate and operate, as well as the conflicting spatial mechanisms employed by state, law, and industry. Finally, a detailed case study of the old-growth logging blockades in Clayoquot Sound's 1993 War in the Woods offers specific, localized understandings of the emergence, intervention, and results of placebased resistance. This case study also serves as an early experiment in how to conduct further work beyond this thesis. The resulting body of work presents environmental blockades as a necessary and effective means of resistance, with implications for the spatial development of place-based action, role of spatial disciplines and designers, and the widespread pursuit of societal change so often rooted in space.

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- 63 Routledge, Space Invaders: Radical Geographies of Protest, 7.
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- 65 Henri Lefebvre, The Production of Space, trans. Donald Nicholson-Smith (Oxford, UK: Blackwell, 1991).
- 66 Lefebvre, The Production of Space, 59-60.
- 67 Lefebvre, The Production of Space, 59.
- de Certeau, "Practices of Space," 128-129; Lefebvre, The Production of Space, 27.
- 69 Lefebvre, The Production of Space.
- A brief study of Parliament Hill indicates permitting processes and regulatory rules that severely limit occupation and political action at Canada's seat of federal power, granting authorities the power to shut down movements that may be perceived as overstaying their welcome. In Toronto, the proliferation of Privately Owned Public Spaces has led to a network of 'public' spaces that fall under corporate control, oftentimes with additional security, surveillance, and design features that place invisible restrictions on the use of the urban environment. Throughout, heavy reliance on permits, regulations, and limitations on the use and occupation of public space dissuades spatial resistance.
 - "General Rules for the use of Parliament Hill," accessed October 22, 2019, http://hill-colline.parl.ca/pdf/CUPH-Rules-e.pdf; Nikhil Sharma, "Private Parkettes are no Substitute for Real Public Space," *Torontoist* (August 21, 2017). https://torontoist.com/2017/08/private-parkettes-no-substitute-real-public-space/.
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- 72 David Harvey, "Right to the City," New Left Review 53 (2008), 23-42.
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- 74 Harvey, Rebel Cities: From the Right to the City to the Urban Revolution, xviii.
- 75 Mark Purcell, "Excavating Lefebvre: The Right to the City and its Urban Politics of the Inhabitant," GeoJournal; an International Journal on Human Geography and Environmental Sciences 58, no. 2 (2002), 101.

- 76 Purcell, "Excavating Lefebvre: The Right to the City and its Urban Politics of the Inhabitant." 103.
- 77 Purcell, "Excavating Lefebvre: The Right to the City and its Urban Politics of the Inhabitant," 103.
- 78 Routledge, Space Invaders: Radical Geographies of Protest, 5.
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- 81 Routledge, Space Invaders: Radical Geographies of Protest, 16-23.
- 82 Routledge, Space Invaders: Radical Geographies of Protest, 18-23.
- 83 Routledge, "We Are All Space Invaders Now."





Within the deep relations and manipulative inconsistencies that exist between the map and the territory, between law and land, between image and memory of territory, between the mind and the mine of a nation's economy; lies stories, histories, prehistories, and neohistories of the states, structures, signs, systems, and scales of how Canada has become a dominant global resource empire. As a process of transfiguration then, this historical evolution away from past predatory practices and from abstractions of paper worlds, signals a transgenerational revolution in the reclaimed sovereignties and freedoms of yet unborn generations to come... If, the "main battle of imperialism' that is entrenched in systems of extraction and empire building "is over land," as political theorist Edward Said proposed in the early 1990s and iterated by Indigenous peoples time and time again, then the process of undermining those systems of domination, oppression, and violation—either by rejection, resistance, subversion, or transfiguration-must necessarily and absolutely begin from the ground up.

- Pierre Bélanger, Extraction Empire¹

Canadian ground is hotly contested. The ground contains the nation's source of economic wealth, with surface rights dictating property ownership and capital land value while mineral rights declare possession over buried resources.² However, the ground also embodies invaluable histories, cultures, and ecologies placed under immediate threat by Canada's continued territorial commodification, control, and colonization. In *Extraction Empire: Undermining the Systems, States, and Scales of Canada's Global Resource Empire*, a diverse and comprehensive collection of work outlines the conflict between these irreconcilable perspectives on land value.³ Editor Pierre Bélanger notes that from its corporate roots in the Hudson's Bay Company to its current role as a haven for transnational resource companies, Canada's imperial trajectory prioritizes economic gain over any other form of social, cultural, or environmental value.⁴

Yet, the land claimed by Canada also makes it uniquely vulnerable to place-based acts of resistance. In remote territories, the land inspires, defines, and hosts physical and ideological struggles for alternative futures. Grassroots resistance operates in defiance of both property rights and mineral rights, occupying and intervening in the land to defend against violent processes of extraction. Emerging from the ground up, place-based resistance confronts the contemporary status quo of ecological devastation, cultural eradication, and colonial dispossession posed by Canada's extractive empire. As Belanger writes, "in the future, as in the not-so distant past, the real power is land."

Figure 2.1 (opposite) Canada's wealth of land and resources centred within the vast British Empire on an 1898 postage stamp. Image via OPSYS.

2.1 | Rising Action

Settler Canadian environmentalism largely corresponds with the waves of action outlined by Mark Dowie in respect to the United States.⁶ Conservationist origins and the establishment of protected parks evolved into environmental groups pursuing legislative action, subsequently becoming formally adopted into the political landscape through international agreements and government commitments to tackling climate change. Each of these stages of environmentalism, however, largely represent continued acts of colonialism. Protected parks afforded ecological protection but further served to displace and dispossess Indigenous peoples while exerting state dominion over land and resources.⁷ Political action generated environmental successes, but only where doing so offered an advantage in future elections. And international agreements have proven ineffectual in promoting change, with the potential for Canada to simply opt out—as with the Kyoto Protocol in 2011, where the Conservative Party cited Canada being well behind targets and facing fourteen billion dollars in penalties as a primary reason for abandoning its commitment—or to co-opt such commitments into the mechanisms of its resource empire—as has been raised in regards to the proposed Bill C-15 aiming to officially adopt the United Nations Declaration of Rights of Indigenous Peoples into Canadian legislation.8 In comparison, notable acts of ecological protection within the nation have mostly emerged outside of the framework of formal environmentalism and its colonial underpinnings, operating instead through direct opposition to processes of extraction and ecological degradation.

In this thesis, an introductory survey of fifty acts of environmental resistance within Canada's colonial borders documents key acts in relation to the processes they oppose. Chosen for size, impact, and notability within the collective consciousness, the fifty movements recorded each carry environmental protection as a core tenet, although in several cases resistance is entangled in multiple, complex factors such as the overlapping defense of Indigenous land, rights, and resources. Although non-exhaustive, the survey's resulting map, timeline, and trends reveal several notable implications regarding environmental resistance within the extents of what is currently Canada.

Expanding Sacrifice Zones

The map illustrates the tendency towards remote sites of resistance (fig. 2.2). Canada's environmental movement emerges in direct response to Canada's spatial realities, notably the nation's colonial history, extraction economy, infrastructural networks, geography, and distributed population. Occasionally, urban acts emerge when sites of contention are enfolded within the city fabric, such as in 2012 in response to a proposed jet fuel pipeline through the City of Richmond or in 2015 when Montreal began diverting sewage waste directly into the St. Lawrence River. Outside of these notable exceptions, though,

the majority of resistance is rooted in remote locations targeted by extractive processes.

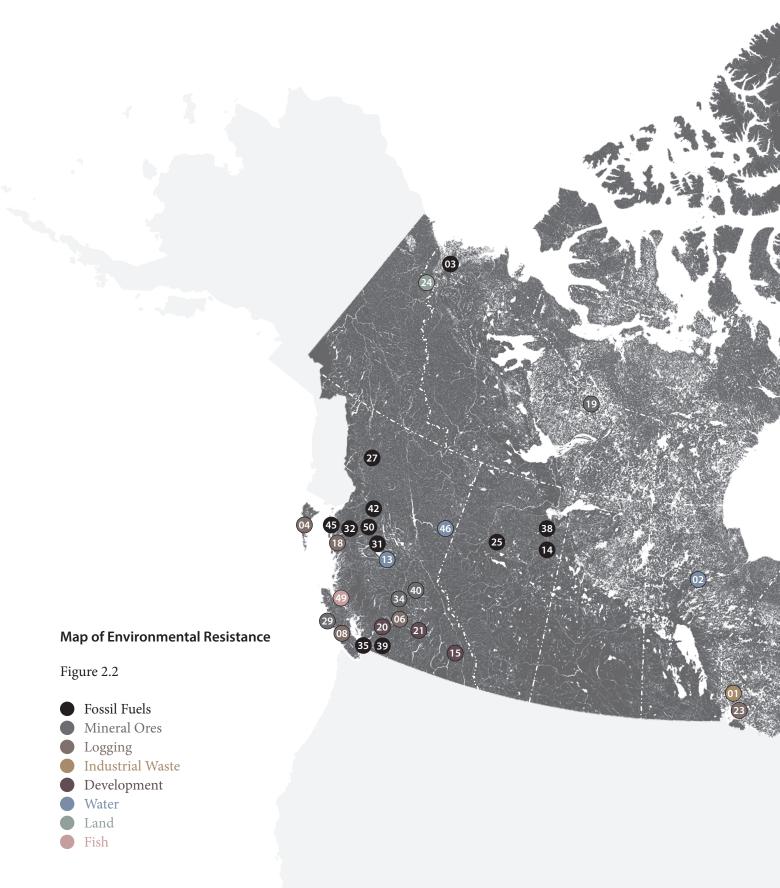
Naomi Klein describes the locations targeted by extraction as sacrifice zones, noting that these have historically been remote as threatened communities and environments could be deemed acceptable losses, safely outside the view and concern of the general public.9 As a result, previous resistance was mostly limited to the marginalized communities whose homes, health, and natural environment were placed at immediate risk. However, Klein posits that the growth of industry—both in scale and boldness—has placed an increasing number of people within expanding sacrifice zones, inciting more cases of local resistance as well as activating a latent sense of protection in the broader population over regions previously neglected. ¹⁰ Further, the rising urgency and intensity of the climate crisis has undoubtedly sparked a recognition that no one remains outside the sacrifice zone of continued environmental degradation; threats are no longer limited to local and regional extents, instead carrying potential implications for the entire world.

Trends of Resistance

Expanding sacrifice zones and growing awareness are evident in the timeline of environmental resistance (fig. 2.3), most apparently in the increasing frequency with which resistance occurs. However, there is also an observable trend in how soon opposition emerges, with later movements mounting resistance against ongoing and proposed processes much quicker than in previous decades. Early resistance was primarily responsive, only mobilizing against critical health and ecological hazards after they happen to demand restitution. By nature, responsive resistance must appeal to legal or political institutions in an attempt to receive compensation or initiate restoration; environmental damage has already been done, resistance can only seek to mitigate impact. As a result, blockades are less frequent within responsive movements. Later resistance is much more likely to be concurrent operating alongside opposed processes to limit future impact—or preventive—emerging before extractive processes even begin. The shift from responsive to preventive action is unsurprising given that within this survey-not one instance of responsive resistance has been perceived as successful, as evaluated by comparing a movement's ambitions with the resultant outcomes of resistance. The corporations and governments complicit in environmental injustices rarely face repercussions after damage has occurred, and the legal mechanisms through which to pursue resistance pose expensive, difficult, and sustained processes inaccessible or unsatisfactory for most movements. Environmental resistance requires pre-emptive action to effect meaningful results, making blockades highly effective tactics.

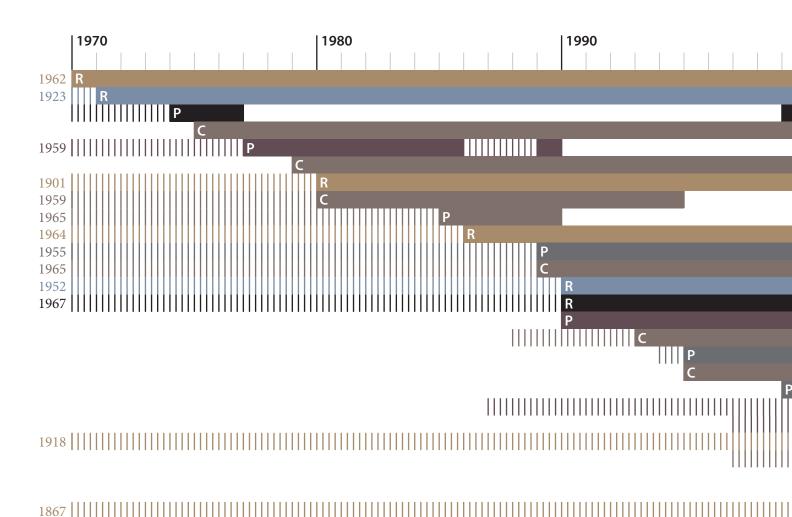
The timeline also highlights various resource periods. The initial wave of resistance was characterized by opposition to industrial waste and hydro dams, followed by a surge of logging action from the late 1970s

Figure 2.2 (next) Map of environmental resistance. Image by author.





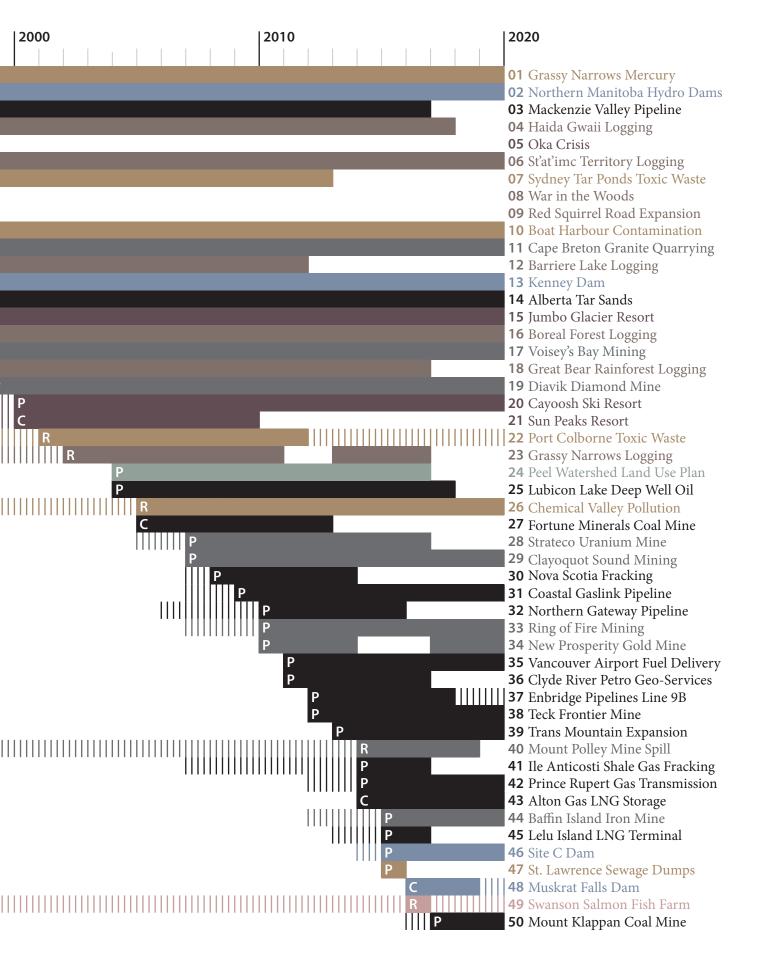
- Grassy Narrows Mercury
- Northern Manitoba Hydro Dams
- Mackenzie Valley Pipeline
- Haida Gwaii Logging
- Oka Crisis
- St'at'imc Territory Logging
- Sydney Tar Ponds Toxic Waste
- War in the Woods
- Red Squirrel Road Expansion
- Boat Harbour Contamination
- Cape Breton Granite Quarrying
- Barriere Lake Logging
- 13 Kenney Dam
- 14 Alberta Tar Sands
- 15 Jumbo Glacier Resort
- Boreal Forest Logging
- Voisey's Bay Mining
- 18 Great Bear Rainforest Logging
- 19 Diavik Diamond Mine
- 20 Cayoosh Ski Resort
- Sun Peaks Resort
- Port Colborne Toxic Waste
- Grassy Narrows Logging
- Peel Watershed Land Use Plan
- Lubicon Lake Deep Well Oil
- Chemical Valley Pollution
- Fortune Minerals Coal Mine
- Strateco Uranium Mine
- Clayoquot Sound Mining
- Nova Scotia Fracking
- Coastal Gaslink Pipeline
- Northern Gateway Pipeline
- Ring of Fire Mining
- New Prosperity Gold Mine
- Vancouver Airport Fuel Delivery
- Clyde River Petro Geo-Services
- Enbridge Pipelines Line 9B
- Teck Frontier Mine
- Trans Mountain Expansion
- Mount Polley Mine Spill
- Ile Anticosti Shale Gas Fracking
- Prince Rupert Gas Transmission
- Alton Gas LNG Storage
- Baffin Island Iron Mine
- Lelu Island LNG Terminal
- Site C Dam
- St. Lawrence Sewage Dumps
- Muskrat Falls Dam
- Swanson Salmon Fish Farm
- Mount Klappan Coal Mine



Timeline of Environmental Resistance

Figure 2.3

- | | | Process Duration **Resistance Duration** P Preventive
- R Responsive
- **C** Concurrent
- Fossil Fuels
- Mineral Ores
- Logging
- Industrial Waste
- Development
- Water
- Land
- Fish



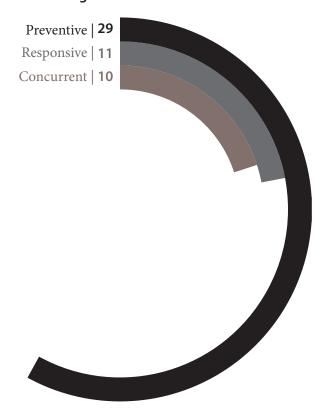
#	Process	Category	Location	Process Dates	Resistance Dates	Stage
0	Grassy Narrows Mercury	Industrial Waste	ON	1962	1970 - 2020	Responsive
02	Northern Manitoba Dams	Water Management	MB	1923	1971 - 2020	Responsive
03	MacKenzie Valley Pipeline	Fossil Fuels	NT	1970	1974 - 1977, 1999 - 2017	Preventive
04	Haida Gwaii Logging	Logging	ВС	1975	1975 - 2018	Concurrent
05	Oka Crisis	Development	QC	1959	1977 - 1986, 1990	Preventive
06	St'at'imc Territory Logging	Logging	ВС	1979	1979 - 2015	Concurrent
07	Sydney Tar Ponds Toxic Waste	Industrial Waste	NS	1901	1980 - 2013	Responsive
08	War in the Woods	Logging	ВС	1959	1980 - 1995	Concurrent
09	Red Squirrel Road Expansion	Logging	ON	1965	1985 - 1990	Preventive
1	Boat Harbour Contamination	Industrial Waste	NS	1964	1986 - 2020	Responsive
0	Cape Breton Granite Quarrying	Mineral Ore	NS	1955	1989 - 2018	Preventive
D	Barriere Lake Logging	Logging	QC	1965	1989 - 2012	Concurrent
B	Kenney Dam	Water Management	ВС	1952	1990 - 2016	Responsive
14	Alberta Tar Sands	Fossil Fuels	AB	1967	1990 - 2020	Responsive
Œ	Jumbo Glacier Resort	Development	ВС	1991	1991 - 2015	Preventive
16	Boreal Forest Logging	Logging	QC	1988	1993 - 2020	Concurrent
Ø	Voisey's Bay Mining	Mineral Ore	ON	1994	1995 - 2020	Preventive
B	Great Bear Rainforest Logging	Logging	ВС		1995 - 2017	Concurrent
1	Diavik Diamond Mine	Mineral Ore	NT	1999	1999 - 2020	Preventive
20	Cayoosh Ski Resort	Development	ВС	1987	2000 - 2020	Preventive
2	Sun Peaks Resort	Development	ВС	1997	2000 - 2010	Concurrent
22	Port Colborne Toxic Waste	Industrial Waste	ON	1918 - 1984	2001 - 2012	Responsive
23	Grassy Narrows Logging	Logging	ON	1997 - 2011	2002 - 2011, 2013 - 2017	Responsive
24	Peel Watershed Land Use Plan	Land Management	YT		2004 - 2017	Preventive
25	Lubicon Lake Deep Well Oil	Fossil Fuels	AB	2004	2004 - 2018	Preventive
26	Chemical Valley Pollution	Industrial Waste	ON	1867	2005 - 2020	Responsive
27	Fortune Minerals Coal Mine	Fossil Fuels	BC		2005 - 2015	Concurrent
28	Strateco Uranium Mine	Mineral Ore	QC	2005	2007 - 2017	Preventive
29	Clayoquot Sound Mining	Mineral Ore	BC	2007	2007 - 2020	Preventive
<u> </u>	Nova Scotia Fracking	Fossil Fuels	NS DC	2007	2008 - 2014	Preventive
9	Coastal Gaslink Pipeline	Fossil Fuels	BC	2007	2009 - 2020	Preventive
22	Northern Gateway Pipeline	Fossil Fuels	BC	2006	2010 - 2016	Preventive
33 34	Ring of Fire Mining New Prosperity Gold Mine	Mineral Ore Mineral Ore	ON BC	2007	2010 - 2020	Preventive
_	Vancouver Airport Fuel Delivery	Fossil Fuels	BC BC	2011 2020	2010 - 2014, 2017 - 2020	Preventive
35 36	Clyde River Petro Geo-Services	Fossil Fuels	NU	2011 - 2020	2011 - 2016 2011 - 2017	Preventive Preventive
3	Enbridge Pipelines Line 9B	Fossil Fuels	ON	2012	2011 - 2017	Preventive
38	Teck Frontier Mine	Fossil Fuels	AB	2012	2012 - 2017	Preventive
39	Trans Mountain Expansion	Fossil Fuels	BC	2012	2012 - 2020	Preventive
40	Mount Polley Mine Spill	Mineral Ore	BC	1996	2014 - 2019	Responsive
4	Ile Anticosti Shale Gas Fracking	Fossil Fuels	QC	2007	2014 - 2017	Preventive
42	Prince Rupert Gas Transmission	Fossil Fuels	BC	2012	2014 - 2020	Preventive
43	Alton Gas LNG Storage	Fossil Fuels	NS	2014	2014 - 2020	Concurrent
44	Baffin Island Iron Mine	Mineral Ore	NU	2012	2015 - 2020	Preventive
45	Lelu Island LNG Terminal	Fossil Fuels	ВС	2013	2015 - 2017	Preventive
46	Site C Dam	Water Management	BC	2014	2015 - 2020	Preventive
47	St. Lawrence Sewage Dumps	Industrial Waste	QC		2015	Preventive
48	Muskrat Falls Dam	Water Management	NL	2016 - 2020	2016 - 2019	Concurrent
49	Swanson Salmon Fish Farm	Fish	ВС	1989	2017 - 2018	Responsive
50	Mount Klappan Coal Mine	Fossil Fuels	ВС	2016	2017 - 2020	Preventive
_	* *					

Spatial Intervention	Target of Blockade	Indigenous Mobilization	Perceived Success
Other		Yes	Ongoing
Blockade	Access Road	Yes	Ongoing
None		Yes	Partial
Blockade	Access Road	Yes	Yes
Blockade	Access Road	Yes	Partial
Blockade	Road	Yes	Yes
Other		No	No
Blockade	Access Road	Yes	Yes
Blockade	Access Road	Yes	Yes
Other		Yes	Ongoing
Other		Yes	Ongoing
Blockade	Road	Yes	No
None		Yes	No
Other		Yes	No
Blockade	Construction Site	Yes	Yes
Blockade	Access Road	Yes	Ongoing
Blockade	Industry Facility	Yes	No
Blockade	Access Road	Yes	Yes
None		Yes	No
Blockade	Construction Site	Yes	Ongoing
Blockade	Road	Yes	No
None		No	No
Blockade	Road	Yes	Partial
None		Yes	Yes
Blockade	Access Road	Yes	No
Blockade	Railway	Yes	Ongoing
Blockade	Access Road	Yes	Ongoing
None		Yes	Yes
Other		Yes	Ongoing
Blockade	Road	Yes	Yes
Blockade	Access Road	Yes	Ongoing
Other		Yes	Yes
Blockade	Airstrip	Yes	Ongoing
Blockade	Access Road	Yes	Yes
Other		Yes	No
Blockade	Access Road	Yes	Yes
Blockade	Industry Facility	Yes	No
Blockade	Railway	Yes	Yes
Blockade	Construction Site	Yes	Ongoing
Blockade	Industry Facility	Yes	Partial
Other		No	No
Blockade	Access Road	Yes	Ongoing
Blockade	Road	Yes	Yes
None		Yes	No
Blockade	Construction Site	Yes	Yes
Blockade	Construction Site	Yes	No
Other		Yes	No
Blockade	Access Road	Yes	No
Blockade	Industry Facility	Yes	Partial
Blockade	Access Road	Yes	Ongoing

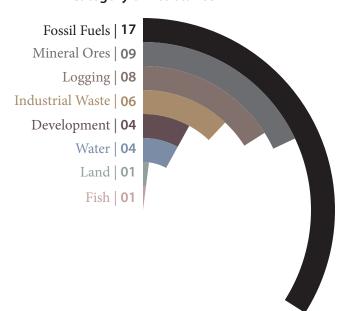
Figure 2.3 (previous) Timeline of environmental resistance. Image by author.

Figure 2.4 (opposite) Survey of environmental resistance. Image by author.

Stage of Resistance



Category of Resistance



to mid 1990s. A significant factor in the wave of logging resistance was the expansion of forestry's sacrifice zones into the most ecologically, recreationally, and culturally important forests for a wide range of stakeholders. On the west coast especially, extensive logging prior to 1970 meant the most profitable sources of timber remaining were in pockets of highly productive, old-growth rainforests, such as those of Haida Gwaii and Clayoquot Sound. While other industries continued to operate in isolated and largely disregarded regions, logging's expansion into critical ecosystems bolstered engagement with environmental activism at local sites of contention, while also activating national and international outrage over the threats posed to ancient forests.

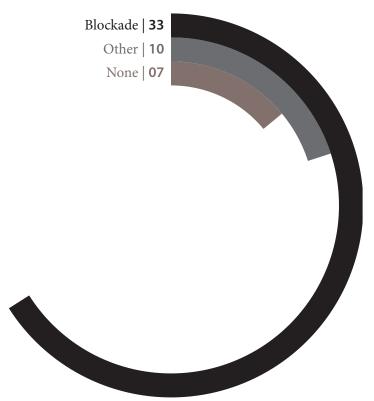
By the mid 2000s, though, growing awareness of climate change shifted focus from protecting isolated ecosystems to advocating against the broader problematic practices, namely fossil fuel exploration and development still defining environmental action today. Logging resistance primarily combatted specific methods and locations of extraction, allowing success to be found in localized protection. In contrast, the current wave of fossil fuel resistance is unsatisfied by limited victories that redirect or relocate the processes in question, instead seeking to stop similar activities in their entirety. With differing goals, each wave of resistance requires unique strategies adapted to their unique considerations. In the case of fossil fuel action, far-reaching ambitions require widespread networks of resistance more than in previous movements characterized by isolated sites of contention.¹¹ Opposition to the Coastal GasLink Pipeline, for example, is rooted in Wet's wet'en territory but is supported and extended by a host of First Nations and settler communities likewise threatened by cascading ecological effects and the far-reaching climate impacts inherent in continued fossil fuel investment. Both the map and timeline illustrate similar trends across Canada in the frequency, proximity, and intensity of fossil fuel action operating concurrently towards the same ends.

The spread of resistance contributes to the waves of environmental action identified in this survey. Patterns of resistance focused on certain environmental threats emerge as the awareness, tactics, and successes generated by one movement spawn similar movements in other locations. Further, by focusing efforts and sharing demands, resulting networks of resistance form more powerful forces for change than individual sites of contention. As acts of resistance find localized growth and success they contribute to broader shifts in environmental protection. The success of logging resistance in Haida Gwaii and Clayoquot Sound, for example, not only led to forestry restrictions within the regions but contributed to new provincial protection of oldgrowth and regulation of forestry practices applicable to future sites of contention. Waves of resistance emerge as movements inspire other movements, drawing strength from a multitude of similar actions to generate the legal, political, and economic pressure necessary for systemic change.

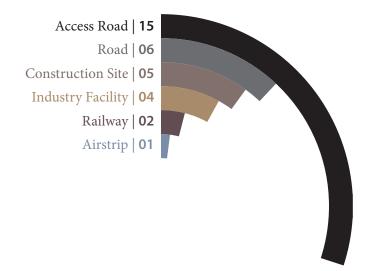
Figure 2.5 (opposite top) Stages of resistance within the survey of environmental resistance, indicating the tendency towards preventive action. Image by author.

Figure 2.6 (opposite bottom) Categories of resistance within the survey of environmental resistance, indicating the frequency of fossil fuel action. Image by author.





Target of Blockade



Spatial Intervention

All but seven surveyed movements feature spatial intervention during the course of resistance, demonstrating the tendency—or necessity for environmental action to be rooted in space. Movements that do not leverage protests, occupations, or blockades instead mobilize resistance through non-spatial tactics. Advocacy, lobbying, negotiations, lawsuits, and land claims form the basis of non-spatial resistance. Lack of spatial action, however, does not necessarily indicate a lack of perceived success. Dene opposition to the Mackenzie Valley Pipeline initiated a judicial inquiry into the cultural, environmental, and economic effects of the proposed project, concluding in a moratorium against construction until underlying conflicts could be resolved.¹² By the time the moratorium ended and construction proposals were updated the pipeline was no longer economically feasible. In the Peel Watershed, an alliance of First Nations and environmental organizations launched a legal case against the Yukon government following a land use plan favouring extractive development. The resulting 2017 Supreme Court decision represented a landmark victory for Indigenous peoples and environmental protection, forcing the planning process back to a point of negotiation with Indigenous governance.¹³ Not all non-spatial movements share similar results, though, as others considered within this survey represent an even mix of outcomes.

What does clearly emerge, however, is that spatial intervention is rarely the first form of resistance. Every surveyed movement begins with non-spatial tactics, pursuing desired change and protection through state condoned channels. Blockades follow as an evolution of resistance after the failure or delay of these 'legitimate' approaches. Blockades never predate other attempts at voicing discontent, instead operating where non-spatial methods are unable to respond to the urgency of perceived threats.

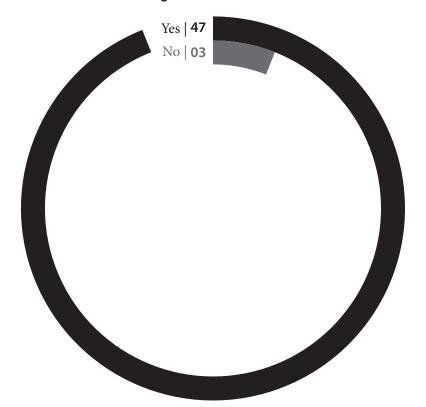
In cases of Indigenous resistance, blockades prevent continued extraction and development from undermining land claims. A lack of action against infringing processes is read as surrendering title but the state accepted method of land claims poses a lengthy legal battle. Under Canada's third party rights the Federal government will not expropriate land to settle land claims, meaning even if successful these claims can only be settled through monetary compensation rather than returned and restored territory. The *United Nations Declaration of Rights of Indigenous Peoples* recommends a moratorium on projects conflicting with ongoing land claims, a recommendation yet to be considered within Canadian legislation—even in the recently proposed Bill C-15. In the meantime, blockades offer a means of preventing processes land claims remain unable to oppose.

Within environmental resistance more generally, blockades originate to navigate the urgency of ecological destruction where continued industry action poses an imminent threat. During logging conflicts, environmentalists frequently note that long timelines surrounding

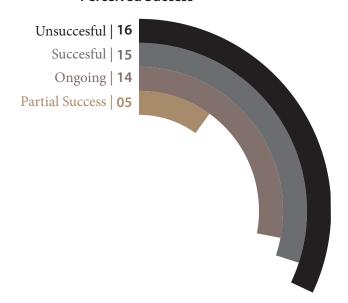
Figure 2.7 (opposite top) Spatial intervention within the survey of environmental resistance, indicating the prevalence of blockades. Image by author.

Figure 2.8 (opposite bottom) Targets of blockades within the survey of environmental resistance, indicating a propensity towards extractive infrastructure. Image by author.





Perceived Success¹



 $^{^{\}rm 1}$ As determined by the author by evaluating ambitions of a given movement against resultant outcomes of resistance.

government and court intervention mean that even if activism produced results, there would be no trees left to protect. Throughout this survey, radical spatial practices represent an escalation of conflict where non-spatial acts prove inadequate. The magnitude of spatial intervention recorded is a testament to the difficulty of other mechanisms of resistance and the failure of legal and political institutions to respond to complex territorial conflicts over environmental protection.

British Columbia as a Blockade Hotspot

The survey also illuminates British Columbia as a hotspot of environmental blockades. Hosting a wealth of natural resources and key ports for getting those resources to international markets, the province's development, infrastructure, and economy are deeply intertwined with extractive industries. However, beyond the relative abundance of extractive projects, several other factors contribute to British Columbia's blockade notoriety. A thriving outdoor recreation culture increases political importance of ecological protection and public engagement with environmental action.¹⁵ While recreational development and corresponding tourism can present ecological threats inspiring resistance in of itself—as in the case of the Jumbo Glacier Resort and Sun Peaks Resort—eco-tourism plays a significant role in linking urban populations at potential sites of solidarity to remote sites of contention by promoting connection to places otherwise off the radar. The province's geography also bolsters the effectiveness of blockades. Processes targeted by environmental resistance often occur in locations with severely limited access, increasing the efficacy of spatial intervention as rugged terrain makes alternative access expensive, difficult, and time-consuming to provide. Most notably, however, is the province's wealth of unceded territory complicating its spatial relationship with the Indigenous peoples whose presence and blockades predate its colonial borders. Indigenous blockades extend back to at least 1872, when Gitxsan chiefs blocked the Skeena River to demand compensation after mining prospectors burned village long houses.16

Indigenous Mobilization

Indigenous mobilization carries a crucial role within environmental resistance. Nearly every movement within this survey overlaps with issues of Indigenous land, territory, and rights. Indigenous groups represent key players in forty-seven of fifty recorded conflicts, more often than not as the primary leaders, organizers, and participants of resistance.

Indigenous resistance is bolstered by the nature of unceded territory. A large portion of Canada—and nearly 80% of British Columbia—is established on land never surrendered to the colonial state through war or treaty.¹⁷ In the 1997 *Delgamuukw v. British Columbia* case, the Supreme Court determined that within unceded territory Aboriginal title remained in effect and unsettled.¹⁸ The court's ruling carries

Figure 2.9 (opposite top) Indigenous mobilization within the survey of environmental resistance, indicating the vital role of Indigenous leadership and participation. Image by author

Figure 2.10 (opposite bottom) Movement's perceived success within the survey of environmental resistance, indicating a relatively even mix of outcomes. Image by author.

ramifications beyond Indigenous rights to occupy and use land and resources, questioning Crown ownership of land never officially acquired. The Delgamuukw case inspired Indigenous action, offering a legal mechanism through which to defend land, rights, and resources. However, Canadian governance has since done little to ratify the decision of the Supreme Court, driving resistance to be rooted in landbased practices as Indigenous groups seek to protect their rights as recognized by Canadian law.¹⁹

Kanahus Manuel maintains that Indigenous title, asserted through actions employed "on the ground," presents the biggest threat to Canada's extraction economy and the environmental destruction it is predicated upon.²⁰ Naomi Klein agrees, noting that most victories against extractive processes have been wrought through Indigenous struggles. Klein maintains that through these successes Indigenous resistance has impacted environmental perspectives in non-Indigenous communities, demonstrating the tools and tactics necessary for effective environmental protection, and-more importantly-beginning to shift relationships with the land beyond the extractive status quo.²¹ Further, acts of resistance rooted in Indigenous rights have brought together diverse groups fighting for environmental protection, as can be witnessed in the host of Wet'suwet'en solidarity actions against the Coastal GasLink Pipeline and related RCMP invasion of unceded territory in February, 2020. Indigenous struggles are igniting networks of resistance spanning demographics, communities, and ethnic groups across the nation.

Place Over Profit

Ultimately, the survey of environmental resistance reveals that movements emerge from connection to place rather than the protection of profit or property, a distinction extractive industries still fail to understand. Amidst ongoing Cape Breton mining resistance in 2017, companies proposed provincially regulated land swaps as a means to trade other ecologically valuable land for the ability to mine within protected areas. Such a mechanism illuminates industry's perspective on land value, accounting only for monetary worth and available resources rather than the sacred sites, unique ecologies, and deep love of place that inspired resistance. Place-based resistance poses incredible threat to extractive industries, as it cannot be deterred through financial restitution, promises of restoration, or criminalization of the spatial tactics leveraged by environmental action.

Although representing a limited sample size, the increasing frequency, spread, and preventive nature of movements identified in this survey reveals the overall growth of environmental resistance within Canada. In the 1970s, early resistance emerged occasionally against particularly egregious acts of ecological destruction, experimenting with legal, political, and spatial means of opposition. Today, the discovered tactics of those initial movements inform constant action opposing nearly every destructive process across the nation. Mounting resistance

continues to oppose Canada's extractive empire, forging new narratives of space and place through the establishment of blockades and the corresponding pursuit of ecological protection.

2.2 | Rule of Law

Often invoked against radical spatial practice, rule of law poses one of the most significant threats to environmental blockades. Within the survey of environmental resistance, injunctions and arrests were the primary mechanism through which physical action ends. Beyond dismantling blockades, rule of law is also used as rhetoric to delegitimize spatial forms of resistance, painting them as the acts of a lawless vocal minority behaving without regard for the citizens, workers, and economies they obstruct.

Given the importance of space in producing change, governing space becomes equally important in upholding the status quo. As briefly touched upon in the first chapter of this thesis, privatization and regulation have limited both acceptable forms of resistance and acceptable places for resistance, disenfranchising and disempowering average citizens. When people feel their interests are not safeguarded within the law, they necessarily turn to defying it. Even disregarding the successful history of civil disobedience in reshaping society, as lawful forms of resistance diminish in scope and efficacy movements must turn to illegal acts to combat urgent concerns and exert meaningful pressure. The powerful relations between politics, economics, law, and space necessitate resistance operate outside the bounds of legality, where the mechanisms employed through rule of law can destabilize and criminalize radical spatial practice.

In its various forms, rule of law is used to justify police response against place-based resistance. Not only do administered fines and arrests make resistance more accessible to those with wealth but the often violent methods and magnitude of police action intensifies and escalates conflict. The wave of Wet'suwet'en solidarity blockades across the nation were a direct response to the armed invasion and dismantling of pipeline blockades by the RCMP enforcing a court injunction (fig. 2.11 and 2.12). Despite the militant occupation of unceded territory resulting in a few dozen arrests, no charges were ever laid against participants detained during the raid, questioning the validity of the legal mechanisms that enabled the removal of land defenders and their spatial obstructions.²³ Shiri Pasternak notes that, "One critical feature of blockades is how they tend to provoke violent reactions from the public and police, despite the purpose of protection and land defence."24 Violent responses to blockades are often disproportionate to the motives underlying resistance. Regardless of legal legitimacy, extreme police enforcement of the rule of law only serves to dissuade grassroots resistance by creating fear surrounding authoritative retaliation.

While a full accounting of the complexities surrounding rule of law, resistance, and rights to protest is outside the scope of this





thesis, several notable aspects focus on the spatial considerations of environmental resistance. Legislation and court injunctions each enable the suppression of radical spatial practice with varying degrees of speed and oversight by placing enforceable limitations on the use of space. Alberta's *Critical Infrastructure Defence Act*—effective as of June 17, 2020—presents a particularly egregious example.²⁵ The act "protects essential infrastructure from damage or interference caused by blockades, protests or similar activities," defining essential infrastructure as ranging from pipelines and mines to railways and highways, on both public and private property.²⁶ Further, the act includes provisions to expand the definition of essential infrastructure at will, if necessary.²⁷ Here, the act has been called into question for violating Charter rights and freedoms, as essential infrastructure could be extended to legislative grounds, public spaces, and roads to suppress forms of protest not condoned by dominant powers.²⁸

Injunctions

Court mandated injunctions raise similar concerns, often being quickly administered at corporate request and not needing to pass through a democratically elected body before having effect. Injunctions form the primary mechanism through which rule of law mobilizes against placebased resistance, worth describing further for their spatial impact and frequency in relation to environmental blockades. Within Canadian law, injunctions are orders mandating or prohibiting certain actions at the court's discretion—particularly occupation and use of space.²⁹ Injunctions are not dictated by legislation derived from democratic process, but are the decision of a sole appointed judge presiding over a given complaint.³⁰ In deciding whether to grant an injunction, courts have three primary considerations, "whether there is a serious underlying issue at stake; whether irreparable harm will result if the injunction is not granted; and whether the balance of convenience favours granting an injunction."31 Although these considerations theoretically allow injunctions to operate in defense of environmental resistance, stopping imminent and irreversible ecological threats, the balance of convenience factor is biased towards third party economic interests, making it difficult to protect spaces and places involved in extractive processes.

Injunctions are not intended to pass judgement on involved parties but to prevent damaging actions while underlying legal conflicts are being settled.³² Yet, by forcing resistance to operate against judicial orders, injunctions make spatial occupation an act of defiance against the court—a non-stakeholder with no presence at the site of resistance—rather than defiance of industry and associated environmental destruction. Injunction trials become civil cases involving contempt of court, meaning companies are not required to defend their practices or even be present at proceedings.³³ Thus, injunctions do not account for the complexity of conflict or reasons for resistance, predetermining intentions and guilt of participants at blockades.³⁴ In order to justify the need for an injunction, corporate requests are often accompanied

Figure 2.11 (opposite top) RCMP invades Wet'suwet'en territory to enforce a court injunction and remove the Unist'ot'en Checkpoint, 2020. Photo by the Unist'ot'en Camp.

Figure 2.12 (opposite bottom) Armed with assault rifles, RCMP navigate and dismantle a barricade at the Gidimten Checkpoint in Wet'suwet'en territory, 2020. Photo by Amber Bracken.

by civil lawsuits that are dropped after work resumes. Regarding these lawsuits, lawyer Irina Cerić states, "for the most part, they're not real lawsuits. They're a means to an injunction... It takes what's really a public conflict and makes it a private form of conflict resolution."³⁵ The result of injunctions are laws created where there was no law, serving to uphold economic interests over issues of public concern.

The ease with which injunctions are granted presents significant contrast with the difficult, sustained legal processes through which resistance is expected to operate. Historically, courts have proven reluctant to hand out injunctions that will delay proposed projects. On the other hand, they have been quick to hand out injunctions to corporations feeling wronged by average people defending their lands and protecting place for future generations. A report by the Yellowhead Institute found that corporations filed injunctions against First Nations groups with a 76% approval rate, while injunctions filed in the opposite direction were only granted in 19% of instances.³⁶ The report states, "the courts expect First Nations to commit to lengthy, costly litigation to secure protection for their lands and waters. But companies can more or less get injunctions if there is any whiff of economic loss."37 In combatting place-based resistance, rule of law is rarely equitably and objectively applied, instead being discriminately leveraged in defense of property and industry without consideration for the entangled complexities inspiring resistance. In responding to the Wet'suwet'en solidarity blockades, Prime Minister Justin Trudeau stated:

We recognize the important democratic right—and we will always defend it—of peaceful protest. This is an important part of our democracy in Canada but we're also a country of the rule of law and we need to make sure those laws are respected... the fact remains, the barricades must now come down. The injunctions must be obeyed and the law must be upheld.³⁸

For those fighting for environmental protection, the message rings clear: the right to peaceful protest will be protected—until it impacts economic interests.

2.3 | Creating Obstruction

Environmental blockades share many similarities across sites of resistance, however, they do not share a uniform approach. A range of types are creatively composed to navigate particular places, processes, and ambitions. The diverse tactics spanning environmental blockades allow for specificity of intervention in siting, building, protecting, supporting, and sustaining resistance.

Siting the Blockade

Conventional forms of protest are typically sited to maximize visibility, targeting sites of solidarity commonly located at key public spaces and legislative buildings. Blockades, comparatively, are situated to

impact mobility of resources or people. Blockades can operate as full obstructions—indiscriminately preventing movement—or partial obstructions—only restricting specific people or goods while allowing other traffic through. In a 1996 article documenting First Nations blockades within British Columbia, author Nicolas Blomley outlines two differing intentions behind blockades and related mobility, writing:

Either the mobility of others is curtailed essentially to protest some unrelated grievance(s) or the movement into or from a traditional territory is itself at issue. In the first case, a First Nations ability to place restrictions on movement is used in an attempt to attract media and government attention and, thence, to negotiate redress; in the second, that very movement is the cause of contention.³⁹

Blomley's observations immediately illustrate the differentiation between blockades at sites of contention and sites of solidarity. Within environmental resistance, blockades inherently favour sites of contention where the obstruction of movement directly prevents the process being resisted. In this survey this is revealed in the targets of blockades, with the majority intervening in access roads and construction sites. These blockades follow a common pattern of leveraging the limitations of extractive infrastructure against extractive processes, maximizing disruption through minimal intervention at strategic pinpoints. In one instance, opposition to mining development in Ontario's very remote Ring of Fire closed off the entire region by occupying airstrips serving as industry's only access, giving the Indigenous groups responsible enormous weight in future negotiations by demonstrating the potential impact of resistance. 40 Blockades at sites of solidarity, meanwhile, are more likely to target roads or railways, restricting mobility as a means to raise awareness and demonstrate the extent of resistance to an uninvolved public. Information blockades, for example, can temporarily impede traffic to distribute educational material, such as in 1990 when the Squamish Nation blockaded Vancouver's Lions Gate Bridge, temporarily stopping passersby only to invite them to a discussion regarding the ongoing Oka Crisis.⁴¹ In all cases, blockades are intentionally sited to impact mobility in support of the specific ambitions of a given movement.

Building the Blockade

Blockades exemplify the mantra form follows function, tailored to the context, duration, and intentions of a given obstruction. Typically ad hoc in nature, blockades utilize whatever material is available. Logs, pallets, and vehicles dragged across roads and railways are common forms of blockades, typically supported by tents and ramshackle structures behind the barricade to provide shelter for frontline defenders. Environmental blockades in remote sites of resistance are rarely glamourous constructions, guided instead by effectiveness at disrupting movement through space.





In cases intended to be permanent, difficult to dismantle interventions, blockades represent significant constructions designed to restrict access as thoroughly as possible for as long as possible. In Wet'suwet'en territory, opposition to the Coastal GasLink pipeline involved felling trees, digging ditches, occupying trees, stringing barbed wire, and erecting over three kilometres of wooden barricades to stop workers from accessing and clearing a right of way.⁴² Large scale interventions such as these pose time consuming, expensive barriers to navigate, operating as effective obstructions regardless of activist presence.

In other instances, blockades represent minimal constructions ranging from branches and pallets to small structures or barricades. The actual form of these blockades often do not present a major obstacle, relying instead on inhabitation of the blockade to protect and sustain obstruction. Constructed blockades can even serve multiple purposes. The Tiny House Warriors, for example, resist pipeline development through the strategic placement of small homes, physically inhibiting pipeline construction while also providing inhabitation for families amidst a housing crisis.⁴³ At times, blockades can even operate without built artefacts, relying solely on the positioning of bodies in space to provide obstruction. While these blockades are generally impermanent interventions requiring larger numbers, they can be equally effective in preventing processes of ecological destruction.

Ultimately, the form of a blockade is dependent on the goals of a movement. Resistance can strategically construct blockades to alter media perception, public engagement, and obstructive efficacy. Additionally, blockades rarely represent static constructions, constantly shifting over time to respond to changing needs, countertactics, and contexts—spatial and otherwise.

Supporting the Blockade

Blockades can operate effectively at a variety of scales. While the efficacy of protests is inherently tied to participating numbers, blockades can adjust tactics to function as mass demonstrations or solo operations. The need for support largely depends on the nature of obstruction.

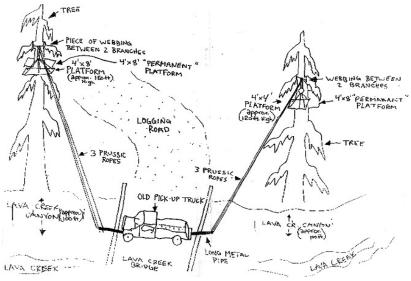
In general, the more accessible a blockade is—both in siting and tactics—the more people are required. Clayoquot Sound's 1993 War in the Woods, for example, operated solely through the positioning of bodies along a relatively easy to reach logging road. The tactic made the blockade vulnerable to removal, as police action can easily clear obstructing bodies allowing industry to resume work. As a result, the duration and impact of the blockade was directly tied to the number of participants. However, the accessible siting and form of obstruction posed few barriers to potential activists, counteracting vulnerability by increasing engagement. Similar blockades rely on movement growth to generate change rather than the obstruction itself.

In other cases, by making bodies difficult to remove blockades can rely on fewer participants. In Burnaby, opposition to the Trans Mountain

Figure 2.13 (opposite top) Trees felled across an access road disrupt pipeline development in Wet'suwet'en territory, 2020. Video still via Global News.

Figure 2.14 (opposite bottom) Pallets and people form the primary building blocks of a Wet'suwet'en solidarity blockade across rail lines near Edmonton, 2020. Photo by Jason Franson.





Pipeline Expansion used a portaledge suspended twenty metres above the ground to prevent tree clearing necessary for pipeline construction (fig. 2.15).⁴⁴ Occupying a raised platform for an extended period is a much less accessible tactic than simply standing on a road, however, the obstruction only requires one person present to prevent removal of the blockade. The solitary individual occupying the blockade is then supported by a larger camp located on the ground, providing a range of roles depending on participant comfort levels, acceptable risk, and willingness to get arrested. More complex, difficult to dismantle blockades reduce reliance on human occupation to create obstruction.

Protecting the Blockade

Environmental blockades frequently prevent obstruction from being dismantled through the strategic placement of people. Within Canada, the expectation that physical wellbeing will be protected enables activists to impede extractive processes by putting their body on the line. Remaining in the path of industry hinders work from continuing until police can remove offending parties. By locking on to structures, equipment, or each other, environmental defenders are able to further delay their removal, subsequently extending obstruction. Tree sits, similarly, prevent removal of bodies by placing them in dangerous, difficult to reach locations. In 2000, activists at the Elaho Valley logging blockade created a barricade, "designed to put people in harm's way and delay the logging for as long as possible."45 By connecting occupied platforms in the treetops to a barricade erected on a key access bridge, resistance ensured the blockade could not be removed without endangering activist lives, notifying all parties of the situation through highly visible written statements posted around the barricade (fig. 2.16).46

Unfortunately, the expectation that immediate physical well-being will be protected over corporate interests does not extend globally, with 2019 seeing a record number of environmental activists killed for their work. The Blockades, therefore, must understand the cultural, legal, and social particularities of place in order to appropriately determine tactics for obstruction. Even within Canada, reports of violence at the hands of RCMP surround extractive blockades, particularly against Indigenous land defenders. The elaborate set up in Elaho Valley became the focus of a six year legal battle after an RCMP inspector cut the ropes supporting still occupied platforms high above the forest floor. In contemporary movements, the accessibility of social media and camera phones have become vital components in protecting resistance by enabling the documentation and dissemination of violent state responses.

Sustaining the Blockade

Blockades are exhausting affairs, particularly at highly charged sites of contention where movements mount extended occupation. The global environmental movement, Extinction Rebellion, navigates exhaustion by focusing spatial resistance on two weeks of high intensity

Figure 2.15 (opposite top) The Stop TMX portaledge in Burnaby, preventing tree removal for pipeline construction with only a single occupant, 2020. Photo by Ben Nelms.

Figure 2.16 (opposite bottom) An activist's sketch of the 2000 Elaho Valley blockade set up illustrating how participant safety was directly tied to the barricaded bridge. Image via Elaho Valley Anarchist Horde.





action, followed by a period of rest, regrouping, and reflection. The movement maintains these slower phases are vital to avoiding burnout and sustaining momentum in the years to come.⁵⁰ In the case of environmental blockades mobilized against imminent ecological threats, however, resistance cannot afford to take time off.

Sustaining blockades, therefore, requires responding to the functional needs of occupation by providing shelter, warmth, and rest for those manning the barricade. Ensuring occupant comfort is not essential to creating obstruction but it is essential in maintaining obstruction through intense conflict and harsh weather. The built form of blockades is often a direct attempt to provide these factors. In the Six Nations of the Grand River struggle against housing development at 1492 Land Back Lane, an outhouse and a kitchen formed the inaugural structures with later tiny homes introducing cots and wood stoves for occupation through winter months (fig. 2.17).⁵¹ At the Unist'ot'en Camp in Wet'suwet'en territory, spatial occupation includes a bunkhouse, healing centre, garden, and homestead.⁵² Blockades are typically vernacular constructions, focused not only on creating obstruction but on sustaining that obstruction in perpetuity.

In addition to built characteristics, constant action is also required to meet base needs and sustain resistance. In conversation at the Six Nations Wet'suwet'en solidarity blockade of Ontario's Highway 6, participants noted that while constructing and manning the blockade contained one set of critical considerations, perhaps more important was the immense community effort occurring beyond the site of resistance to provide food, laundry, and clothes to frontline defenders. Continuing spatial resistance often requires more than people willing to occupy obstruction, relying on a committed community network dedicated to sustaining the blockade.

Complexity and Specificity

Ultimately, blockades are place-based acts of resistance uniquely suited to the spaces and processes in which they intervene. Tactics vary greatly, tailored to the histories, contexts, and goals of a given movement. Understanding blockades as radical spatial practice, therefore, requires a thorough understanding of the ways in which they are defined by, intervene in, and redefine space and place. Blomley notes that, "our understanding of blockades is largely framed by the media, which tend to treat each blockade as a singular and often sensational event, paying little attention to the context within which it is deployed or to its relation to similar tactics."53 Each site of resistance represents a complex and specific act of place-based intervention. In-depth case studies, therefore, are essential to revealing the underlying spatial considerations and implications of environmental blockades. The following chapter provides a methodology for such study, examining the origins, evolutions, and outcomes of an environmental blockade through its emergent, intervening, and resultant narratives of space and place.

Figure 2.17 (opposite top) Tiny homes on the site of 1492 Land Back Lane provide warmth and comfort for sustained winter occupation, 2020. Photo by Barry Gray.

Figure 2.18 (opposite bottom) A resistance camp in Wet'suwet'en territory doesn't directly obstruct pipeline construction but is essential in keeping frontline land defenders and supporters warm and fed, 2020. Photo by Dan Meeso.

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Against the early morning backdrop of the rising sun, a grainy photograph (fig. 3.1) depicts protesters gathering at the foot of a narrow bridge along a secluded Vancouver Island logging road. Pictured here, the Kennedy River Bridge is an otherwise insignificant piece of extractive infrastructure among a vast network of logging roads stretching into remote territories across the nation. In the summer of 1993, however, this unremarkable wooden bridge and its preceding patch of dirt road would become the central site of contention in a series of environmental blockades, strategically chosen for its limited access to a vast swath of old-growth temperate rainforest targeted by expanding clear-cut logging practices.¹

Looking back from the bridge, a second photograph (fig. 3.2) shows the site of contention as it would evolve over the course of a typical morning. Various stakeholders are carefully positioned relative to the invisible presence of the court governing occupation through injunction. Standing atop a red truck, an industry official announces the injunction over loudspeaker while, in the foreground, frontline activists illegally inhabit the declared injunction zone to prevent waiting logging trucks from reaching their work site. RCMP stand by in anticipation of arrests while a bus waits behind to ferry detained protesters to the nearby Ucluelet police station. Media kneels for a close shot of the day's arrestees, broadcasting to far-flung audiences. The remainder of the frame is filled with bodies attentively avoiding the road itself, providing support for those in the path of industry. There are no barricades operating as built obstructions, but the conflict centres on an act of spatial intervention: the tactical insertion of human bodies in relation to infrastructure, industry, injunction, and the forest beyond.

Known as the War in the Woods, Clayoquot Sound's clear-cut logging resistance would enact similar blockades daily, culminating in—at the time—the largest act of civil disobedience in Canadian history.² The repeated blockades would generate national and international solidarity actions, immense pressure on industry and the provincial government, and an end to clear-cut logging within Clayoquot Sound.

Ecology of Clayoquot Sound

Situated on the western coast of Vancouver Island, Clayoquot Sound is a stunning landscape composed of rocky shorelines and sandy beaches, ocean inlets and freshwater streams, lush valleys and rising alpine mountains. The varied geography hosts a diverse range of aquatic and terrestrial life—including a prominent number of rare and endangered species—but the region's defining ecology is its old-growth temperate rainforest.³ Accounting for only 2.5% of the planet's forests—a quarter of which is in British Columbia—temperate rainforests are globally rare, making Clayoquot Sound a unique ecological condition.⁴ The coastal climate enables trees to grow for hundreds of years, towering over sixty meters above the forest floor and supporting high levels

Figure 3.1 (opposite top) Protesters gather on a logging access road in front of the Kennedy River Bridge on an early summer morning, 1993. Photo by Mark van Manen.

Figure 3.2 (opposite bottom) Protesters block logging trucks, occupying the logging road in defiance of a court injunction, 1993. Photo by Chuck Stoody.





of biodiversity through undisturbed cycles of growth and decay.⁵ Immense cedars comprise the most impressive specimens, surviving for over a thousand years with trunks up to six meters in diameter.⁶

Relatively untouched by natural disaster or industrial activity, Clayoquot Sound's forests represent some of the largest intact swaths of old-growth temperate rainforest. On Vancouver Island only 20% of original old-growth remains, rendering remaining forests vital in protecting biodiversity, watershed health, livelihoods of First Nations communities, and the growing economic potential of eco-tourism—which now arguably surpasses extractive value.⁷

Clayoquot Sound's forests also carry global importance as valuable carbon bulwarks.⁸ Old-growth temperate rainforests are bastions of climate health, "storing more atmospheric carbon per hectare than almost any other forest on earth." Since industrial logging of these forests releases stored carbon as atmospheric emissions, preventing clear-cutting of old-growth could hold equal impact for British Columbia's climate response as phasing out fossil fuels. Protecting Clayoquot Sound's carbon sequestering ecosystems not only carries local cultural and ecological significance, but presents a valuable opportunity to mitigate the most devastating effects of a changing climate.

Logging Blockades in British Columbia

The War in the Woods is just one of many logging blockades in a provincial history closely intertwined with the forestry industry (fig. 3.5). As of 1993's actions, forestry represented 10% of British Columbia's GDP, and the industry's continued economic presence within the province has made political, legal, and scientific pushes for ecological protection slow to effect change, if at all. Recognizing a lack of legislative protection, the province's first logging blockade occurred in Clayoquot Sound in 1984, beginning a surge of resistance that would continue throughout the next decade. Although some reform to forestry practices, introduction of environmental regulations, and expansion of protected areas have slowed logging resistance in recent years, blockades continue to emerge in threatened pockets of oldgrowth forest to this day. Although each of these movements represent complex conflicts deserving of their own extensive study, a few key distinctions define logging blockades more generally.

Logging blockades almost always leverage the limitations of industry specific infrastructure. While a few movements have targeted railways, main traffic thoroughfares, or key industry facilities, the majority choose to directly intervene within logging road networks, taking advantage of the immediate impact these roads have on ongoing and future extractive processes. Road construction is a staple of the logging industry, necessary prior to extraction to provide equipment access and following extraction to transport harvested material—although in many cases logging relies on waterways to limit the required

Figure 3.3 (opposite top) Clayoqout Sound's wilderness landscape and lush old-growth valleys as seen from above. Photo by Wayne Barnes.

Figure 3.4 (opposite bottom) Old-growth along the Big Tree Trail on Meares Island, still standing thanks to Canada's first logging blockade in 1984. Photo by TJ Watt.

Figure 3.5 (next) Map of logging blockades in British Columbia. Image by author.

Logging Blockades in British Columbia

Figure 3.5

- Remaining Old-Growth (High Productivity)¹
- Remaining Old-Growth (Low Productivity)²
- Primary Forest Lost to Logging and Urban Development³
- # Location of Logging Blockade

#	Date	Movement	Blockade Target
01	1984	Meares Island Logging Blockade	Access Road
02	1985	Haida Campaign to Protect Lyell Island	Access Road
03	1985	Lillooet Logging Blockade	Access Road
04	1986	Deer Island Logging Blockade	Access Road
05	1988	Sulphur Pass Logging Blockade	Access Road
06	1988 - 1990	Kispiox Valley Logging Blockades	Access Road
07	1989	Gitxsan Logging Blockades	Access Road
08	1990	Tsilquot'in Logging Blockade	Access Road
09	1990	Toosey Band Logging Blockade	Road
10	1990	Fountain Logging Blockade	Road
•	1990	Nisga'a Logging Blockade	Access Road
P	1990 - 1991	Lil'wat Logging Blockades	Road
B	1991	Walbran Valley Logging Blockades	Access Road
14	1991	Bulson River Road Logging Blockade	Access Road
Œ	1991, 1994	Ure Creek Logging Blockades	Access Road
16	1992	Clayoquot Arm Bridge Logging Blockade	Access Road, Bridge
D	1992	Gitwangak Logging Blockade	Railway
18	1993	Bear Lake Logging Blockade	Railway
19	1993	Clayoquot Sound War in the Woods	Access Road, Bridge
20	1995	Nuxalk Campaign to Protect King Island	Access Road
4	1997	Great Bear Rainforest Logging Blockades	Access Road
22	1998	Save Upper Walbran Valley Blockade	Access Road
23	1999 - 2000	Elaho Valley Logging Blockades	Access Road, Bridge
24	2001	Sutikalh Logging Blockade	Road
25	2003	Elk Creek Logging Blockade	Railway
26	2003	Women in the Woods Blockade	Access Road
27	2003 - 2005	Cathedral Grove Logging Blockade	Access Road
28	2004	Ehattesaht Logging Blockade	Road
29	2005	Haida Logging Blockades	Industry Facility
30	2005	Coleman Bridge Logging Blockade	Road, Bridge
3	2006	St'at'imc Logging Blockade	Road
32	2006 - 2007	Fort Nelson Logging Blockade	Access Road
33	2012	Cortes Island Logging Blockade	Access Road
34	2018	Collision Point Logging Blockade	Access Road
35	2020	Duke Point Logging Blockade	Industry Facility
36	2020 -	Fairy Creek Logging Blockade	Access Road

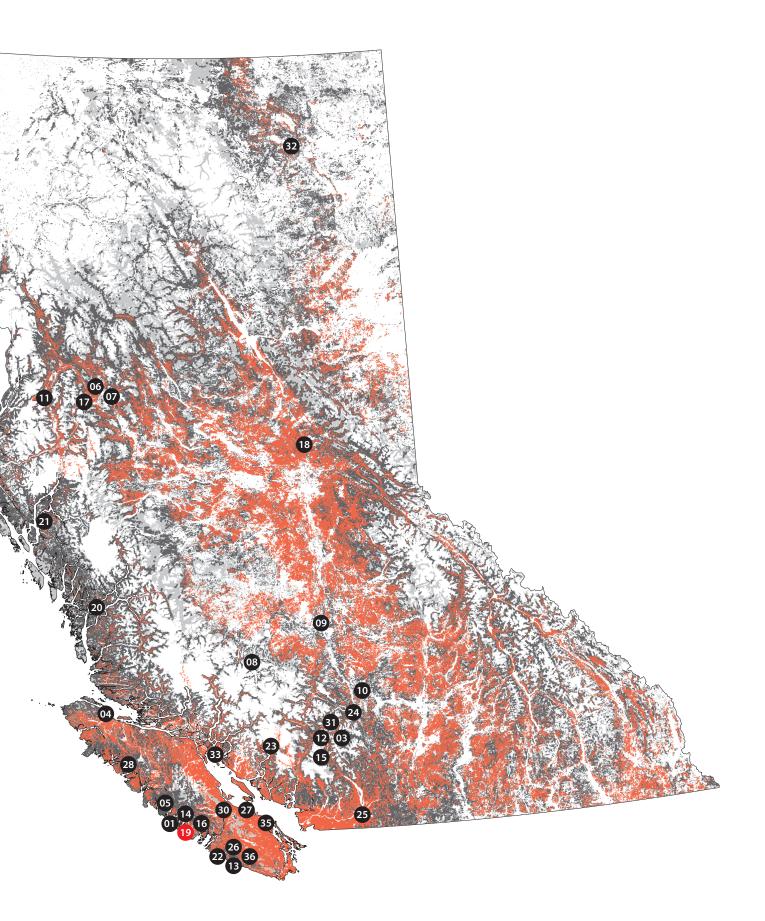
 $^{^1}$ High productivity old-growth indicated where primary species stand age is greater than 140 years and where site index is greater than 10.

 $612ac3532d55.\ Additional\ data\ retrieved\ from\ the\ Ancient\ Forest\ Alliance's\ Old-Growth\ Maps,\ https://www.ancientforestalliance.org/learn-more/before-after-old-growth-maps/.$



 $^{^2}$ Low productivity old-growth indicated where primary species stand age is greater than 140 years and where site index is less than 10.

 $^{^{\}rm 3}$ Data retrieved from the British Columbia Ministry of Forests 2019 Vegetation Resources Inventory, https://catalogue.data.gov.bc.ca/dataset/2ebb35d8-c82f-4a17-9c96-



infrastructural investment. In remote regions and rugged terrain, road construction represents a difficult, expensive undertaking, meaning it is often not possible to provide alternative access to an intended harvest area when faced with spatial resistance. Resistance, therefore, has two opportunities to physically obstruct logging practices at the site of contention: blockade key access points along established logging roads, or prevent road construction altogether by placing activist bodies in danger through tree-sits, forest occupations, or machinery lock-on tactics.

While similar tactics can be used to protect individual trees slated for harvest, once a logging road is in place such tactics only obstruct activity that would pose a threat to occupying activists, whereas strategic, centralized blockades can protect entire regions with low numbers. Both approaches to spatial resistance have seen success and failure in logging blockades throughout British Columbia, leaving it unclear whether one tactic is inherently more effective. However, more preventative actions offer increased time and opportunity for resistance to generate solidarity and address the conflict through alternative mechanisms. Further, stopping initial road construction provides greater ecological protection while limiting industry claims by reducing lost infrastructural investment.

Unlike other categories of environmental action, logging resistance rarely opposes extraction in its entirety. Most movements recognize the need for timber extraction in supporting human populations, reacting instead against particularities of targeted locations, threatened ecologies, and destructive practices. Within British Columbia, every logging blockade stems from one of three factors: protection of oldgrowth forest, issues of Indigenous rights and territory, and opposition to clear-cut practices. Old-growth inherently drives conflict, representing highly profitable sources of timber as well as important, increasingly rare ecological conditions. As a dominant method of extraction, clear-cutting threatens these vital ecosystems, impacting wildlife habitats, biodiversity, forest productivity, soil stability, and watershed health.¹² In the words Tzeporah Berman, an organizer of Clayoquot Sound's 1993 actions, "clear-cutting irreparably damages our cultural, social and ecological landscapes."13 In response, logging resistance typically operates at two scales of conflict. Sites of contention address local conflict, navigating urgent threats to specific areas of old-growth or Indigenous territory through spatial intervention. Sites of solidarity, meanwhile, advocate more generally against clearcut methods, pursuing legislation and regulation applicable to future logging conflicts. Blockades-including Clayoquot Sound's War in the Woods-operate at both scales, responding to imminent loss of vital ecologies while building a broader movement towards lasting protection.

3.1 | Emergent Narratives

Emergent narratives refer to the existing context out of which environmental blockades originate. Understanding emergent narratives is essential in recognizing blockades as part of complex histories rather than isolated moments of conflict. Emergent narratives also illuminate key elements of space and place that define siting, tactics, and forms of spatial intervention.

Indigenous Presence

Archaeological evidence indicates human inhabitation of Clayoquot Sound since over four thousand years ago, with Indigenous histories extending human presence in the region to time immemorial. While many distinct nations comprise the Nuu-chah-nulth peoples whose traditional territories encompass the west coast of Vancouver Island, three nations reside within Clayoquot Sound: the Hesquiaht, the Ahousaht, and the Tla-o-qui-aht—from which the name Clayoquot is derived. These nations thrived through deep connection to place, with oral histories and myths that continually situate people in relationship to the land. Subsistence and culture were derived from the many plants and animals of the land and water, notably the whales, salmon, and, of course, the old-growth cedars.

First contact between the Nuu-chah-nulth and European explorers occurred in the late 18th century, with subsequent interactions spurred by the highly profitable fur trade.¹⁷ Maritime trade within the region diminished until 1850, when a growing forestry industry led to the establishment of more permanent colonial settlements along the coast.¹⁸ Bolstered by a late 19th century influx of settlers following rumours of an impending road from inland Port Alberni, these settlements would expand into the current districts of Ucluelet and Tofino.

From initial contact through permanent settlement, European arrival severely impacted Nuu-chah-nulth nations. Early trade interactions decimated Indigenous populations through introduced disease, cultural turmoil, and means of warfare. Later, 20th century colonial expansion brought more intentional methods of suppression. Imposed federal governance, residential schools, and Christian conversion sought to assimilate or eradicate Nuu-chah-nulth language and culture. Despite never surrendering lands to the Canadian state, simultaneous relegation to reserve territories, hunting and fishing prohibitions, and introduction of protected national and provincial parks, among other impositions, increasingly limited Nuu-chah-nulth access to land and resources, hindering future growth. In response, fourteen nations of the Nuu-chah-nulth peoples came together in 1958 to elevate their political voice, eventually continuing operations as the Nuu-chah-nulth Tribal Council.

In relation to logging, it is important to note that the Nuu-chah-nulth Tribal Council did not oppose all development in the region but did repeatedly voice concern over the indiscriminate methods of extraction threatening their cultural, economic, and ecological stability.²³ Gisele Martin, a Tla-oh-qui-aht Tribal Park guardian and educator, notes of the Nuu-chah-nulth peoples, "our great-great grandparents didn't leave behind churches or castles. They left behind biodiversity... We don't have a word for 'wilderness' in Nuu-chah-nulth languages, the closest translation is 'home."²⁴ The Nuu-chah-nulth nations of Clayoquot Sound maintain their strong ties to place, actively resisting colonialism's ongoing impacts through reclamation of their traditional territories, stewardship of the natural environment, and negotiated control over resource extraction within the region.²⁵

The Road to Recreation

By 1955, logging rights to Clayoquot Sound's forests had been licensed to two companies, B.C. Forest Products and MacMillan Bloedel, providing economic incentive for the difficult construction of a logging route through the mountains to the coast.²⁶ Working with the province's Department of Highways, these companies would establish the long rumoured road from Port Alberni in 1959, bringing with it drastic changes to the social, economic, and ecological landscape of Clayoquot Sound.²⁷ While the new infrastructure enabled industry extraction of the region's rich old-growth forests, it also provided weekend access for recreational visitors during industry downtime. In the following decade, vacationing sightseers and the origins of Tofino's thriving surf culture would lead to the 1970 establishment of the Pacific Rim National Park, further limiting First Nation's sovereignty but beginning to solidify the region as ecologically significant. In 1972, the logging route became Highway Four—Canada's first paved access to the Pacific Coast—cementing Clayoquot Sound as a popular tourist destination.28

The transition from extractive to recreational infrastructure follows an established pattern in Canadian history. Many of the nation's roads, rails, and recreational trails are the direct result of past and present resource extraction projects. As such, extractive infrastructure not only provides strategic sites for spatial resistance, but it can also be leveraged to inspire environmental advocacy by generating connection to place. Virgin Falls, a Clayoquot Sound hiking destination made accessible to visiting tourists via the Kennedy River Bridge and logging access roads, sparked a 1990 comment by MacMillan Bloedel divisional manager, Don Dowling:

If there were 10 people in a year who came here before, I'd be very surprised. Now, we build a logging road here, we've preserved a picnic spot by the falls, and people in Tofino are saying, 'Gee, protect this whole area—it's a wonderful recreation area.' Well...²⁹

While industry officials may be upset by the irony of large-scale resistance only emerging following provision of recreational access,

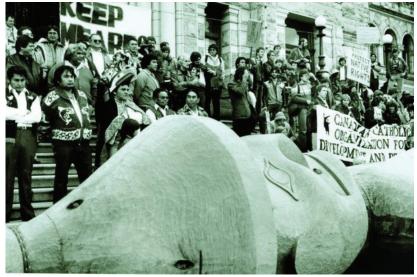
it demonstrates how people fight to protect the places they love. When sacrifice zones are located in remote territories, it is difficult to mount effective resistance beyond small local communities watching their home irreversibly damaged—particularly when these communities are in desperate need of the economic stimulus provided by extractive industries.30 However, as more people connect with these outlying places resistance grows beyond the local, inspiring advocacy and solidarity in populations removed from the immediate site of contention. Recreational tourism built on the scars of resource extraction can even transition these remote communities away from extractive economies towards alternative sources of income. 31 Tourism presents its own significant ecological challenges for Clayoquot Sound through increased traffic, impact on sensitive ecosystems, and development, but it also inspires personal connection with the natural landscape—a key factor in the widespread clear-cutting resistance of 1993.

Town Against Town

Arriving in Clayoquot Sound by vehicle, visitors are greeted by the Pacific Rim junction and an immediate choice: turn left for Ucluelet or right for Tofino. Prepared in 1988, the Tofino Regional Tourism Study indicated that at the start of the decade both choices were equally represented, but by the year of study most tourists were heading right to Tofino.³² While historically both towns have been similar in size, scale, and siting, the shift in junction destinations demonstrated a growing ideological, physical, and economic divide. At the time, Ucluelet was primarily an industry town, serving as the base of operations for logging along Clayoquot Sound's southern extents and home for most of the region's industry workers.³³ In comparison, Tofino was the site of a budding eco-tourism economy dependent on the area's natural scenery. The 1988 study notes that where Ucluelet's surrounding environment had already been extensively logged, Tofino's still pristine landscape was likely responsible for the changing tourism patterns.³⁴ With tourism traffic and subsequent income being directed towards Tofino, Ucluelet became increasingly entrenched in its extraction economy.

Reporting on rising conflict in the region, a 1990 *Maclean's* article offered the subtitle, "it is a case of economy against ecology, town against town." Tensions between the two towns were certainly high, evidenced by the combative comments contained in the article's interviews or the Pacific Rim junction graffiti directing "workers" in the direction of Ucluelet and "welfare bums" towards Tofino. However, the *Maclean's* subtitle gives the impression that ecological protection is at odds with economic potential. Instead, the battle between towns could have been characterized as economy against economy—extraction against ecotourism—with the contrasting forces behind economic development as the key driver of conflict. For Tofino, environmental preservation was vital for both present and future economic opportunity. Yet for





Ucluelet, the same level of ecological protection was viewed in direct opposition to residents' current livelihoods.

Industry itself would feed into rising tensions between Tofino and Ucluelet, with MacMillan Bloedel financially supporting grassroots advocacy of logging interests while heightening fears of impending job loss due to environmental preservation—despite that the 12% decline in logging jobs throughout the 1980's was the result of increased mechanization rather than environmental regulation.³⁷ A similar tactic can be observed during the 2020 Wet'suwet'en solidarity rail blockades, when CN Rail attributed layoffs to ongoing protests even though significant layoffs had been planned and announced months before the erection of any blockades.³⁸ Economic justifications are often leveraged against environmental resistance, but fail to account for how the irreversible destruction of place limits both long term viability of resource extraction and the future potential of alternative economies.

Early Resistance

With the establishment of a logging access road to the Pacific Coast, Clayoquot Sound became vulnerable to large-scale industrial extraction. At first, logging activity was primarily focused on the territories surrounding Ucluelet just shy of Clayoquot Sound's southern extents. By 1980, though, these zones had been extensively clear-cut and Clayoquot Sound represented one of the few remaining sources of cheap timber on Vancouver Island, prompting swift expansion north around Kennedy Lake. While opinions on acceptable levels of logging varied among those involved in Clayoquot Sound's logging blockades, there was evident consensus in opposing clear-cutting of old-growth forest.

Substantial logging resistance within Clayoquot Sound began in 1984 following a proposal to intensify logging of Meares Island.³⁹ As the primary scenic backdrop for the town of Tofino and the heart of traditional Tla-o-qui-aht territory, Meares Island sparked collaborative resistance between First Nations and non-native environmental advocacy groups. Although the Nuu-chah-nulth peoples did not oppose all logging activity in the region, they did seek "more sustainable logging practices, a greater share in management, and a share in the economic benefits of logging." Meares Island offered an opportunity to stake these claims alongside concerned settler Canadians. Both groups had previously attempted to navigate concerns with industry and the provincial government, but failures in negotiation and the immediacy of extraction instigated Canada's first logging blockade. 41

Meares Island gave Clayoquot Sound's rising logging conflict spatial form. By occupying a beach staked out as the entry for a new logging road into the island, forest defenders successfully prevented industry access.⁴² A small cabin was erected to monitor the site, trail-building actions sought to promote greater visibility and protection of Meares Island through increased recreational access, and solidarity

Figure 3.6 (opposite top) Cedar cabin built on Meares Island to monitor proposed logging road construction and support the opposing blockade, 1984. Photo by Leigh Hilbert.

Figure 3.7 (opposite bottom) Nuu-chahnulth peoples bring a carved cedar man to the steps of British Columbia's legislature to demonstrate against Meares Island logging development, 1984. Photo via Ha-Shilth-Sa.



demonstrations in Tofino and Victoria advocated for governmental protection of the island's old-growth forests. Further, the physical blockade only emerged alongside the Tla-o-qui-aht declaration of Meares Island as a Tribal Park. While the designation of Tribal Park carried no legal recognition or regulatory weight within the province of British Columbia, it asserted Tla-o-qui-aht stewardship over the territory, providing a model for sustaining Indigenous culture through sustaining the land that would continue to develop throughout Clayoquot Sound, British Columbia, and the world.⁴³ In 1985, the combined acts of spatial resistance drove an injunction against logging in the area until Tla-o-qui-aht land claims could be resolved—a rare occurrence of injunction law defending resistance interests still in effect today as land claims remain unsettled.⁴⁴ One can easily imagine the present state of Meares Island had the injunction been administered in the other direction, allowing industry to continue work while legal cases remained pending.

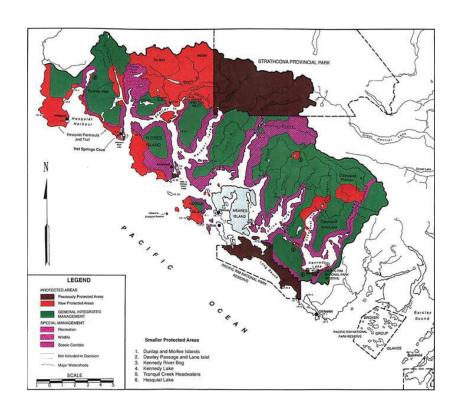
In the following years, several other sites of contention would crop up within Clayoquot Sound. In 1988, boat blockades, road blockades, and tree sits prevented the blasting necessary to construct a logging road in Sulphur Pass after industry rejected a proposed six-month moratorium to develop a sustainable development plan. An injunction was granted in favour of MacMillan Bloedel, resulting in RCMP chasing activists through the bush as they disregarded the court orders. Despite thirty-five arrests, the logging road never finished construction. 1991 and 1992 featured additional blockades and subsequent arrests at two more sites of contention, adding to the growing momentum of logging resistance in Clayoquot Sound.

Ultimately, these initial actions demonstrated the potential for a variety of direct, spatial interventions to afford protection where other mechanisms fail. However, each of these movements leveraged high risk tactics in very remote locations, many only accessible by boat. Inaccessibility limited movement growth while small scale, hardcore tactics allowed media, corporations, and government to perceive and portray resistance as a radical vocal minority. Achieved protection did not extend beyond immediate sites of contention, forming a recurring pattern in British Columbia logging resistance of small, isolated movements finding localized success through blockades but failing to effect the broader changes necessary to prevent future sites of contention. 1993's actions respond directly to the successes and limitations of these early acts of resistance, organizing spatial intervention to maximize public engagement, both at the blockade and beyond.

1993 Land Use Decision

The final factor behind Clayoquot Sound's War in the Woods came in the form of a provincial land use decision. Following repeated acts of spatial resistance and rising conflict in the region, the provincial

Figure 3.8 (opposite) Activists prevent logging road construction at Sulphur Pass by taking to the trees, 1988. Photo by Mark Hobson.



government began a series of sustainable development initiatives in 1989. The initiatives were established to pursue a "consensus-based sustainable strategy" alongside the many stakeholders present in Clayoquot Sound, with the caveat that if consensus proved impossible the government would make any final decisions.⁴⁵ Unsurprisingly, the process was unable to reconcile the diverse perspectives held by local communities, First Nations, environmentalists, affected industries, and governmental bodies. Further, just prior to the expected land use decision, the provincial government announced a purchase of \$50 million of shares in MacMillan Bloedel, making the Government of British Columbia the largest stakeholder in the company targeting Clayoquot Sound's old-growth, subsequently undermining any remaining faith in the land use decision as resolving ecological concerns. 46 The long awaited land use decision was released on April 13, 1993, immediately coming under fire for a lack of environmental protection (fig. 3.9).

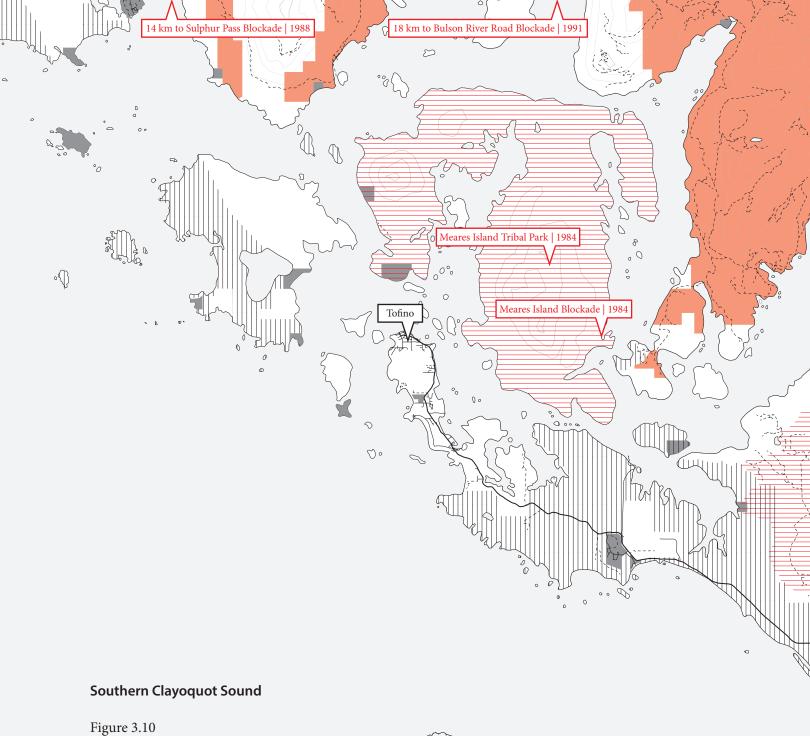
Dubbed the Clayoquot Compromise by the provincial government, the decision was perceived as upholding industry interests through spatial regulation. The decision promised to protect 33% of Clayoquot Sound, while 62% of land was left open to clear-cut logging.⁴⁷ Additionally, most of the protected areas predated the land use decision, with new areas relegated to minimally forested ecosystems rather than the lush old-growth valleys sparking conflict. Other protected zones were in the form of scenic corridors, thin strips along public thoroughfares and waterways bearing little ecological significance. Ecologist Robin Wall Kimmerer describes similar required corridors in Oregon as "protecting the public's view by federal mandate," noting that the thin strips of trees operate less as an environmental buffer and more as a visual buffer concealing the true extent of clear-cut devastation. 48 For environmentalists, however, the most apparent failure of the 1993 land use decision was that after years of intermittent blockades, protests, and negotiations the 'compromise' actually enabled increased rates of logging within Clayoquot Sound. Where industry was previously harvesting 540,000 cubic metres of rainforest per year it could now extract 600,000 cubic metres, a small increase but still solidifying government support of industry interests.⁴⁹ For those concerned by the future of Clayoquot Sound's old-growth forests, the land use decision confirmed the need for protection to be rooted in blockades, prompting a fresh wave of spatial resistance.

3.2 | Intervening Narratives

Intervening narratives explore the ways in which resistance occupies, appropriates, and alters space and place. Intervening narratives are directly defined by both the physical and ideological considerations raised by emergent histories and strategically designed to achieve specific resultant outcomes.

Figure 3.9 (opposite) Map of the 1993 Clayoquot Sound land use decision. Image by the British Columbia Forest Service.

Figure 3.10 (next) Map of southern Clayoquot sound, indicating key locations, areas, and infrastructures involved in logging resistance. Image by author.



Clayoquot Sound Boundary Obstructed Logging Land Access | 1993

| Protected Area

Tribal Park

First Nations Reserve Territory

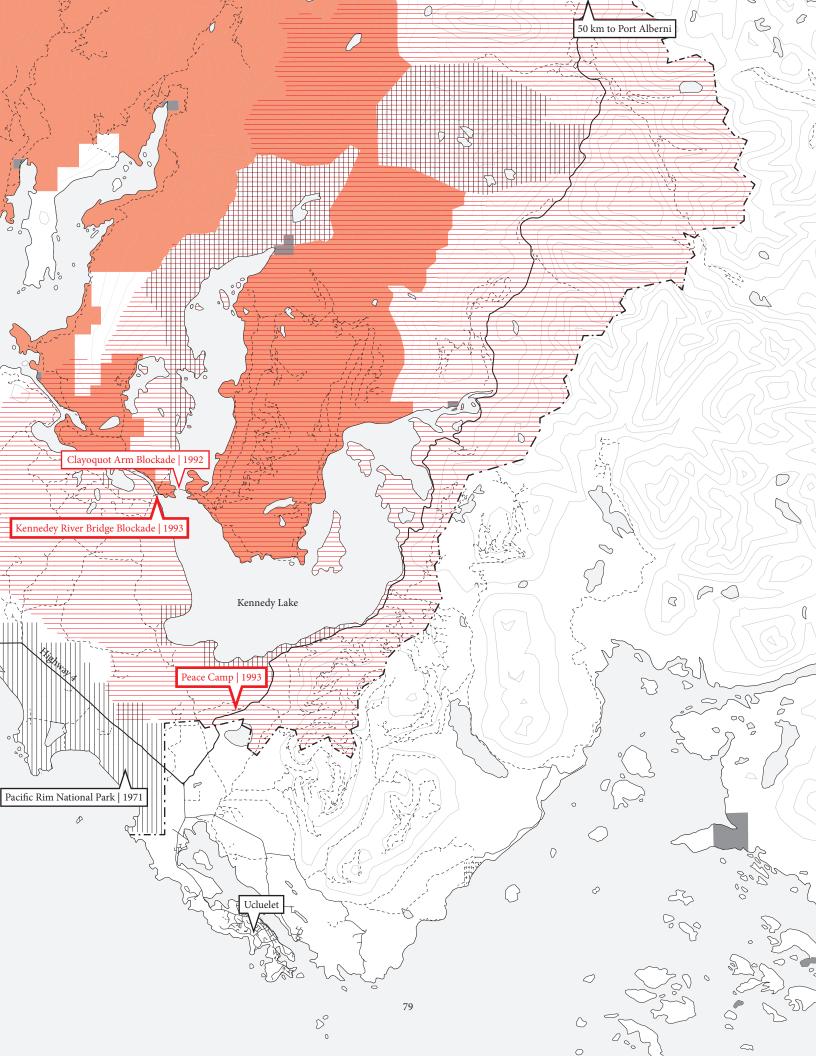
Highway 4

Road

Logging Road











The Peace Camp

Two physical outposts of resistance defined the actions of 1993's War in the Woods: the blockade at Kennedy River Bridge and the Peace Camp situated in the clear-cut 'Black Hole' along Highway Four. While Kennedy River Bridge formed the primary site of contention where temporary spatial intervention obstructed ongoing resource extraction, the Peace Camp arguably had a more substantial effect on movement building and generating lasting protection for Clayoquot Sound's old-growth forests.

The Peace Camp served as a base of operations for the summer's daily blockades and a grassroots forum for all involved. The loosely arranged cluster of tents, trailers, and vehicles accommodated travelling activists, served meals, and hosted a variety of educational workshops including lessons in non-violent civil disobedience. Entry to the camp required abiding by a shared code of conduct, ensuring all present were committed to creating a safe, open, and peaceful environment even as an estimated 12,000 people visited the camp over the course of the summer. The Peace Camp strived not only to meet the significant functional needs of an ongoing protest movement, but also to generate a real sense of community out of a diverse set of backgrounds. Of the camp's role, organizer Tzeporah Berman writes:

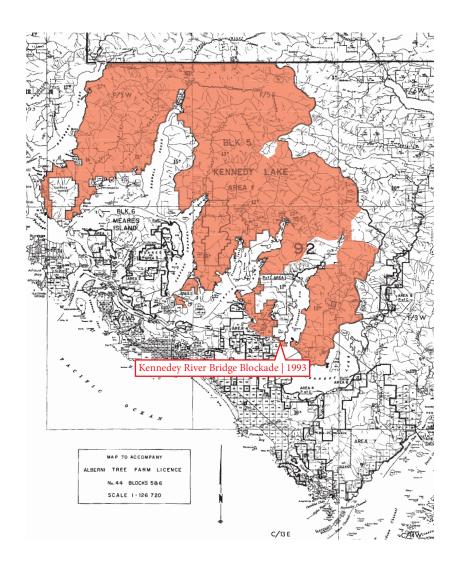
Individuals feel, and in many ways are, powerless against the state, but when we are more than individuals we can find strength, confidence and real power in working together. The success of the Peace Camp was not only in the peaceful daily blockades at the Kennedy River Bridge but the skills, knowledge and experience that thousands of individuals took back to their communities. What grew out of the 'Black Hole' was a common understanding that we have a right, indeed a responsibility, to stand up for what we believe in—and together we have the ability to do it effectively.⁵²

The Peace Camp was essential in generating shared principles, community, and solidarity outside of the intensity of the actual blockade. High stress and fatigue often accompany acts of spatial resistance, particularly those with long term ambitions. The camp sustained the blockade by providing a restorative space removed from the immediate site of contention, enabling the movement to grow while facilitating the goal of direct—but always peaceful—acts of resistance.

The siting of the Peace Camp was vital to the movement's growth. Situated within a clear-cut and charred expanse dubbed the 'Black Hole' and backgrounded by stump-ridden mountains, the Peace Camp was directly adjacent to the heavily trafficked Highway Four. About four kilometres east of the Pacific Rim junction, the camp greeted all who entered Clayoquot Sound by car with messages advocating for the

Figure 3.11 (opposite top) Entrance to the Peace Camp directly adjacent to Highway 4, 1993. Photo by Aldo de Moor.

Figure 3.12 (opposite bottom) The loose arrangement of structures forming the Peace Camp in the clear-cut Black Hole, 1993. Photo by Chip Vinai.



protection of old-growth poignantly juxtaposed against the physical reality of clear-cut logging practices. No scenic corridor protected the lost forest from the public view, allowing the Peace Camp to leverage its context in justification of resistance.

Further, the immediate proximity of the camp to Highway Four made it highly accessible to residents, visiting activists, and media as well as promoted spontaneous encounters with tourists and passersby. While previous actions and the blockade at Kennedy River Bridge were located away from primary travel corridors, the Peace Camp maximized public engagement through its strategic, highly visible siting. The Peace Camp bridged the disconnect between a more remote site of contention and potential participants by bringing a physical outpost to the region's only land access, providing an additional form of spatial occupation not utilized in previous movements.

The Blockade

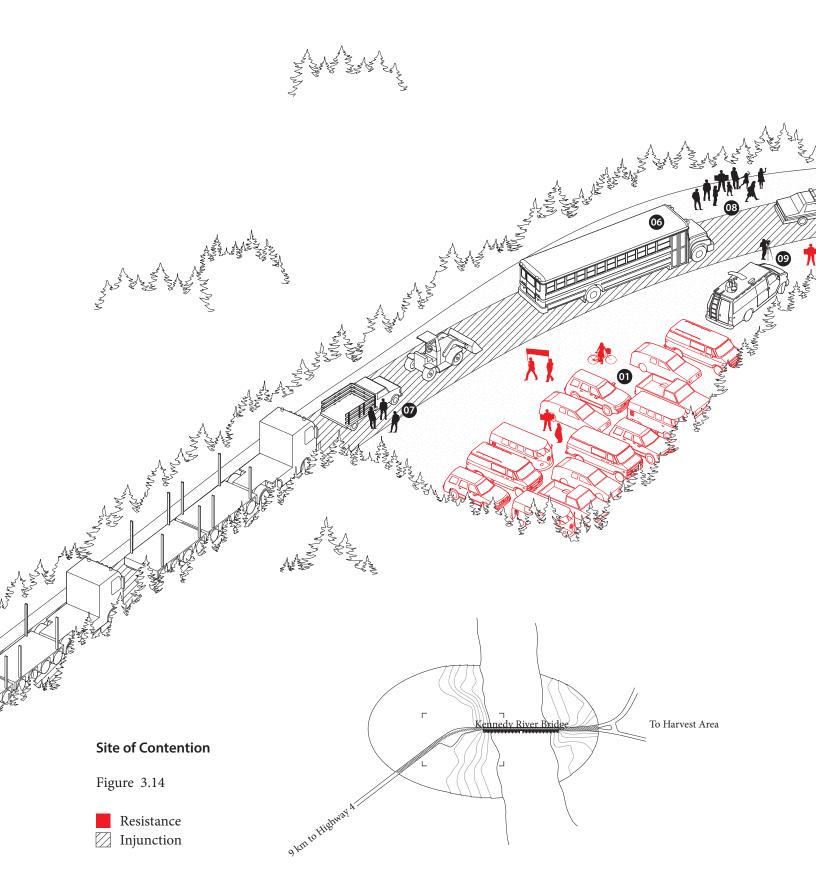
While the Peace Camp served as a permanent staging area, the blockade was a temporary outpost of resistance repeated daily through the strategic placement of bodies in relation to extractive infrastructure, injunction, and the old-growth forest presently under threat.

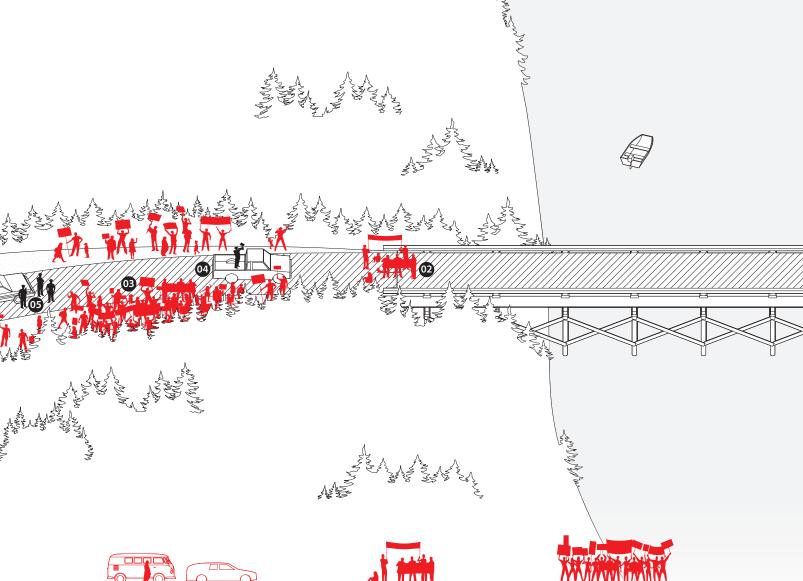
The daily blockades began every morning with a caravan of vehicles departing from the Peace Camp well before dawn. Destined for the Kennedy River Bridge, the activist convoy would head toward Tofino along Highway Four before navigating the last nine kilometres along a dusty logging road. In comparison to early acts of logging resistance within Clayoquot Sound, 1993's chosen site of contention offered improved ease of access. Where other blockades had occurred in more remote regions often inaccessible by land, the Kennedy River Bridge was navigable without boats, highly capable vehicles, or significant time investment making it much more approachable to a wider range of potential activists. The blockade also built on the established pattern of leveraging limitations of extractive infrastructure against extractive processes. The bridge represented a strategic constriction point within the region's natural geography and network of logging roads, preventing access to vast swaths of old-growth forest on industry's chopping block through a single, centralized location.⁵³

Upon reaching the site of contention, activists would gather on the logging road in front the bridge to prepare for the day's expected conflict. Prior to industry's arrival, each protester would individually decide their role for the day, choosing whether to remain on the road—risking arrest in defiance of the court injunction—or move to the sidelines—supporting those remaining by providing food, swapping contact information, and handing off car keys. Early in the summer, RCMP even spray painted lines along either side of the road so as to indicate what would be considered a violation of the injunction, clearly distinguishing legal and illegal occupation.⁵⁴ Sideline supporters were also invaluable in demonstrating the full extent of logging

Figure 3.13 (opposite) Map of Tree Farm License 44 granting MacMillan Bloedel logging rights to Clayoquot' Sound's old-growth forests. Overlay indicates allowable harvest area with land access obstructed by the Kennedy River Bridge blockade. Image by B.C. Minister of Forests with overlay by author.

Figure 3.14 (next) The site of contention at Kennedy River Bridge indicating spatial arrangement of key players in relation to the court injunction. Image by author.





01 A caravan of vehicles shuttles protesters from the Peace Camp to the Kennedy River Bridge. Protesters arrive early, before the day's logging activity begins.



O2 Protesters willing to risk arrest blockade the logging road, preventing industry access to the forest beyond. Blockades occur daily for three months.



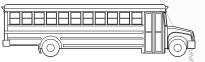
O3 Supporting protesters provide arrestees with food, contact info, vehicle care, and a watchful presence while carefully avoiding the injunction zone.



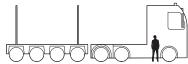
04 An industry official reads the court injunction, noting that non-compliance will be met with arrest. Blockading protesters remain on the logging road.



05 RCMP stands by while the injunction is read, following which they detain any protesters still occupying the injunction zone within the transport bus.



06 A school bus transports detained to the Ucluelet police station. One eventful day saw over 300 people arrested for occupying the injunction zone.



07 Industry workers and machinery wait for the road to be cleared, restoring access to the Kennedy River Bridge and designated cutblocks beyond.



08 Counter-protesters—primarily industry workers and their families-arrive on some days to demonstrate support for continued logging activity.



09 Media documents the site of conflict as/ it unfolds, broadcasting the blockade to far-flung audiences removed from the immediate territory in question.





opposition through sheer numbers. As industry workers, RCMP, and media made their appearance, echoed hand signals allowed for rapid communication across the growing crowd.⁵⁵ Once an industry official had announced the court injunction and potential for arrest, protesters would navigate to their predetermined positions while RCMP moved in to detain those still occupying the injunction zone. Eventually, the road would be cleared of obstructing bodies, allowing industry to continue forward while arrestees were shuttled to the Ucluelet police station. Despite the overwhelming show of resistance, industry would continue their work—albeit delayed—on all but three days over the course of the blockades.

Maximizing Growth Through Accessible Tactics

Logging companies continued work through the blockades questions the effectiveness of the movement's tactics. Other logging blockades throughout the province—both before and after 1993—typically opted for more permanent disruption through built barricades or extended tree-sit occupations. In comparison, the War in the Woods had limited capacity to prevent immediate extractive processes by leaving the blockades vulnerable to police suppression. Nevertheless, restricting spatial resistance to the positioning of grounded bodies was an intentional choice vital to the movement's broader ambitions.

While one intention of the blockades was to stop the immediate loss of old-growth forest to ongoing logging activity, another primary aim was to shift the campaign's image away from a radical, vocal minority and demonstrate the widespread extent of resistance.⁵⁶ Organizers were concerned more intense tactics would create barriers to participation while enabling government, industry, and media to invalidate the movement's actions.⁵⁷ As such—similar to the siting of the Peace Camp and the blockade—it was essential that tactics remained highly accessible to encourage engagement across a broad range of potential activists. Environmental activist and War in the Woods participant, Ken Wu, describes how the movement:

Deliberately stayed away from the hard core tactics like sitting in trees or setting up tripods and instead encouraged people to lock arms, creating a very accessible form of protest where people just stood or sat on the road... It made the protests not too far out of the comfort zone of the average Canadian.⁵⁸

These tactics proved successful. While far from diverse—at least by today's standards—the movement featured a much wider range of demographics than typical environmental blockades.⁵⁹ Further, the spatial relation to the declared injunction zone meant protesters could mitigate their own acceptable levels of risk while still being present and active in the blockades. Only a few bodies were required on the road each day to obstruct access and generate conflict, allowing protesters to self-determine the radicality of their own actions without the larger

Figure 3.15 (opposite top) Standing on the logging road presents an accessible form of blockade for a wide range of demographics, 1993. Photo by Maureen Fraser.

Figure 3.16 (opposite bottom) A packed injunction zone on August 13, 1993, when over 300 people were arrested in a single day. Photo by Maureen Fraser.

movement giving up ground within which to demonstrate resistance. As only those in violation of the injunction could be arrested, this had an added effect of sustaining the blockades across the summer by leaving other activists free to take a stand in subsequent days.

The blockades generated an extraordinarily high volume of largely favourable media coverage, even within conservative news outlets. 60 Non-radical actions placed increased emphasis on the moral imperative behind protecting Clayoquot Sound's old-growth rather than on the mode of resistance. Limited tactics of spatial intervention limited media's ability to focus on isolated moments of intensity, creating a powerful, relatable narrative for audiences far removed from the isolated site of contention. By broadcasting the stakes, demands, and non-violent acts of resistance visible at the physical blockade, media was essential in raising the external solidarity necessary for exerting political pressure. 61

Ultimately, the strategic choices surrounding spatial occupation allowed for unprecedented growth, building a large-scale movement beyond the site of contention that could strive for lasting protection of both Clayoquot Sound's vibrant forests and dwindling old-growth across the province. While more radical acts of spatial intervention may be necessary to actually prevent urgent and irreversible environmental damage, the War in the Woods demonstrates that tactics must be tailored to a movement's goals—goals that are best defined in response to the emergent narratives and intended outcomes of a given act of spatial resistance.

The site of contention would expand in size over the summer of 1993 as the movement generated increased attention and support. The first day of blockades on July 5 featured no arrests. By July 15, an estimated 5000 people were present at the Kennedy River Bridge, prompting industry to remain entirely absent. Later, in August, over 300 protesters would be arrested in a single day for refusing to step out of the path of industry, requiring the Ucluelet recreation hall to be appropriated as a makeshift jail. By the end of the blockades in November, 856 total arrests had been made at the site of contention, making the War in the Woods the largest act of civil disobedience in Canadian history until the 2010 G20 summit in Toronto.

Legal Proceedings

Following arrests and the end of blockades, a site of resistance emerged in the courtroom, where activists expected to defend their spatial intervention. Much has been written about the Clayoquot trials, depicting an avoidance of due process, confusion regarding charges levied and who served as prosecutor, and collusion between industry and law enforcement officials.⁶⁵ A thorough analysis of these issues are outside of the scope of this thesis, however, it is worth discussing how injunction law shifted the focus of legal proceedings to an issue solely of spatial positioning.

By focusing on defiance of injunction law, the court shifted the blockade from an act of civil disobedience to an act of criminal contempt of court—a much more serious and seemingly unrelated charge.66 To determine guilt in cases of criminal contempt, the court must prove a defendant intended to defy the court.⁶⁷ For most activists, though, the court had no bearing on their decision to occupy the logging road.⁶⁸ The court had no visible presence or stake at the site of contention; occupying the road was intended to intervene between industry and old-growth. Within the court proceedings, however, only two questions were raised to determine intention: "Were you on the road?—Yes. Were you aware of the injunction?—Yes. Guilty!"69 The charges laid left no room for discussion regarding the threats posed by clear-cut logging or the necessity for spatial intervention. Injunction law allowed the court to predetermine intentions, therefore, predetermining guilt. Further, one of the only pieces of evidence accepted during the trials was a map of Tree Farm License 44 (fig. 3.13), indicating that the government had sold the legal rights to log to Macmillan Bloedel.⁷⁰ Meanwhile, expert scientific testimony on the ecological importance of Clayoquot Sound's forests and alternative claims to the land were not accepted as evidence.⁷¹ Legal proceedings operated as a binary issue of spatial occupation with no consideration for whether the injunction was even valid or necessary in the first instance. Ultimately, the rule of law as exercised through injunction, arrest, and prosecution signalled the end of the blockades, but not before the repeated acts of spatial intervention had generated a widespread movement beyond the blockade.

3.3 | Resultant Narratives

Resultant narratives examine the changes in space and place generated by environmental blockades. Identifying resultant outcomes is essential in understanding how specific tactics and spatial interventions contribute to the successes and failures of a given movement.

Sites of Solidarity

As of 1993, logging resistance in British Columbia was quite extensive but had yet to achieve a watershed moment uniting sites of resistance behind a common cause.⁷² Through a focus on movement building in siting, tactics, and media attention, the blockade at Kennedy River Bridge placed Clayoquot Sound as a central conflict representing many of the same demands echoed across the province, nation, and globe. From its origins as a local movement to protect Meares Island to its continuation as an international movement after 1993, the War in the Woods continually focused on establishing alliances and maximizing engagement to expand far beyond local sites of contention.⁷³

The networks of resistance emerging out of the Kennedy River Bridge blockade and Peace Camp prompted national and international sites of solidarity. Civil disobedience training at the Peace Camp and in Vancouver's Stanley Park prepared a new wave of activists to establish





future sites of contention. Across Canada, urban demonstrations continued to pursue political protection, focusing on centers of legislative importance. These demonstrations were accompanied by Stumpy, a massive Western Cedar stump from a Clayoquot Sound clearcut that toured to provincial parliament buildings in Victoria, to the seat of federal power in Ottawa, and eventually even across the ocean to Europe. 74 Stumpy brought the power of place to distant populations, demonstrating what is at stake in the conflict over Clayoquot Sound. In addition, continued advocacy within the scientific community argued for the global ecological importance of Clayoquot Sound's old-growth in preserving biodiversity, spawning demonstrations at Canadian consulates worldwide.⁷⁵ At the same time, economic boycotts approached change within the marketplace, pressuring companies to cancel contracts with MacMillan Bloedel and inspiring forestry reform from the consumer side. Throughout, resistance never became locked in to a single strategy, instead pursuing a variety of tactics at a variety of locations to generate social, economic, and political pressure.

Generated Change

Tzeporah Berman maintains that, "Clayoquot happened because British Columbia's political system and institutions were failing to process change," change that was occurring in environmental awareness, public engagement, and tactics of resistance. The pressure created at sites of resistance forced institutions to navigate change. Industry faced a faltering public image and lost profits while the provincial government could no longer afford to avoid addressing deeper concerns over environmental protection and forestry practices.

In the aftermath of 1993, forestry in British Columbia shifted drastically. The Forest Practices Code entered legislation a few years later, carrying regulations for harvest size, road construction, and habitat preservation. A Forest Practices Board was established to regulate and monitor industry. Certified forest products became the marketplace standard for sustainably harvested timber. And protected ecosystems doubled across the province.⁷⁷ Clayoquot Sound, in particular, was placed under increased scrutiny within international environmentalism and declared a UNESCO biosphere reserve, which doesn't prevent industrial extraction within the region but solidifies its importance for global biodiversity.

Although key proponents in early acts of resistance, the Nuu-chahnulth nations were notably absent from the blockade at Kennedy River Bridge. As a result, a major criticism posed against 1993's actions is how the movement leveraged First Nations' issues to justify spatial intervention.⁷⁸ Regardless, the Nuu-chah-nulth Tribal Council used the increased attention and pressure surrounding Clayoquot Sound to gain control over resources and stewardship of their traditional territory. Interim agreements were made with the provincial government granting increased agency in land use planning and

Figure 3.17 (opposite top) Demonstration at a site of solidarity, advocating for provincial protection of Clayoquot Sound's old-growth forests in front of British Columbia 's Legislative Assembly, 1993. Photo by the Wilderness Committee.

Figure 3.18 (opposite bottom) Stumpy on tour in Victoria before heading across Canada, 1993. Photo by the Wilderness Committee.

forestry management while land claims remain unsettled, used by the Nuu-chah-nulth Tribal Council to prevent large-scale industrial clear-cuts. Further, a substantial portion of logging rights in Clayoquot Sound were granted to a new crown tenure, Iisaak Forest Resources, jointly owned by several Nuu-chah-nulth nations. However, operating as a crown tenure carries a requirement to harvest a certain amount of timber ever year, since generating additional conflict and concern over the future of Clayoqout Sound. On the future of Clayoqout Sound.

In the end, increased Indigenous control, changes in forestry regulation, and international attention have largely protected Clayoquot Sound's old-growth forests. Unfortunately, the same level of protection has not extended to the rest of the province. Clear-cutting of old-growth continues to inspire new sites of contention with new spatial forms of place-based resistance.

Impact on Environmental Resistance

The War in the Woods is no longer limited to Clayoquot Sound, with outposts of resistance adopting similar strategies across the province. Even in 2021, ongoing logging blockades at Vancouver Island's Fairy Creek leverage similar tactics to protect old-growth forest, obstructing logging roads through minimal intervention to generate awareness and political pressure. So far, however, Fairy Creek has not been able achieve the widespread attention of Clayoquot Sound despite being much closer to the urban population of Victoria. I would posit much of this has to do with the differences in siting, accessibility, and networked action, and that the Fairy Creek blockades could learn a lot from a spatial understanding of Clayoquot Sound's success.

One of the key learnings to emerge from Clayoquot Sound was the importance of movement building in expanding resistance and diversifying avenues towards change. Single, localized sites of resistance are easily dismantled and cannot hope to drive broader change, however, networks of resistance connecting sites of solidarity can generate immense pressure. For Clayoquot Sound, the growth of the movement was evidently a more important consideration than the actual effectiveness of obstruction. Future successful logging resistance in Canada has been shaped by this understanding, focusing on broader geographical scopes across multiple sites of resistance such as the Great Bear Rainforest and Boreal Forest campaigns.

More recently, pipeline resistance has been rooted in a similar strategy. Individual sites of contention largely utilize the same spatial tactics seen in logging blockades in Clayoquot Sound, but these sites no longer even attempt to operate in isolation, instead communicating across sites of resistance to find collective success. Of course, the advent of the internet has drastically changed how movement building plays out. Clayoquot Sound placed huge importance on highly visible, accessible tactics for spatial intervention. These considerations are still important—especially for urban movements where mass participation

is a primary goal such as the Burnaby's Trans Mountain Pipeline opposition—however, for more remote sites of contention virtual space has provided a host of new means to accomplish the same goals. Social media, especially, means siting immediately adjacent to a highway in a prominent tourist destination is no longer the only means of building a widespread movement and engaging a distant public. The ease and speed of mass communication allows movements to take more radical approaches in more remote locations, relying on virtual space to build solidarity, communicate updates, and provide watchful protection over spatial intervention.

Today, the old-growth rainforests of Clayoquot Sound remain largely due to the repeated acts of spatial resistance employed by thousands of dissenting citizens. As one of the first instances of widespread perceived success, the War in the Woods marked a noticeable shift in environmental resistance within Canada as the general public became engaged and defiant in ecological protection. The blockade at Kennedy River Bridge demonstrated how an unremarkable site of contention can become a large-scale movement capable of generating incredible social, political, and economic pressure. The War in the Woods may not have achieved every ambition behind opposition—as the fight for old-growth forest rages on—but it proved the potential of place-based resistance firmly grounded in space, both at the blockade and beyond.

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Space carries a fundamental role in the pursuit of societal change. In recent history, the relationship between space and change has been revealed, challenged, and advanced at diverse sites of resistance. Amidst a multitude of entangled crises, faltering institutions, and a collapsing status quo, discontent and disenfranchised people generate change through radical spatial practice: occupying, appropriating, and producing space to create alternative futures.

A rapidly changing climate and continued ecological degradation pose particularly urgent threats necessitating mass mobilization. In response, environmental resistance is increasingly rooted in place, operating through a fundamental act of spatial intervention: the blockade. Blockades are barriers towards change, using spatial obstruction to provide immediate ecological protection while generating social, economic, and political pressure towards broader, systemic reform.

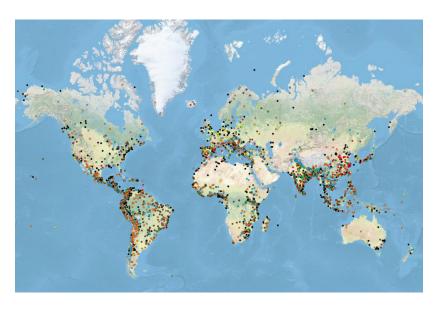
Within this thesis, an examination of environmental blockades as radical spatial practice set out to reveal the spatial implications of place-based resistance. The opening chapter positioned environmental blockades in relation to existing literature, highlighting the fundamental relationship between spatial occupation and societal generation. In the second chapter, Canada's colonial extents provided a focused scope through which to examine the origins, trends, and tactics of environmental blockades as well as the countertactics weaponized against resistance. Lastly, a detailed case study of Clayoquot Sound's 1993 War in the Woods illustrated how blockades are defined by, intervene in, and redefine space and place with targeted specificity.

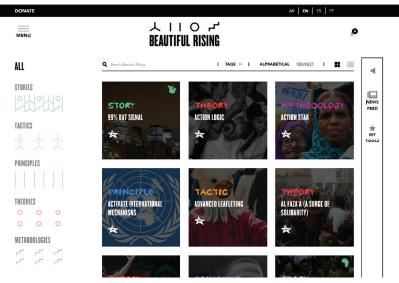
Originally, this thesis anticipated conducting multiple detailed case studies. Ultimately, only one was selected. Had I set out to only complete one case study I might have chosen a different focal point, likely a movement with more contemporary underpinnings and less extensive existing socio-political analysis as Clayoquot Sound's War in the Woods. The War in the Woods illustrated valuable spatial learnings; however, I feel the potential for this work to make a meaningful contribution is better suited to ongoing movements. As an initial experiment, though, Clayoquot Sound presented ease of documentation and analysis by remaining static. The world has changed rapidly over the course of this thesis and—by necessity—place-based resistance has changed rapidly as well. Tactics of spatial resistance have adapted to Covid-19, new legislation, state responses, and constantly evolving social, political, economic, and environmental landscapes. The changing nature of placebased resistance presents difficulty for individual, isolated study, but also exhibits the relevance and importance of similar study moving forward.

As it stands, the resulting thesis raises two key questions regarding the outcomes of a spatial understanding of environmental blockades. First, how might an improved spatial understanding help build more effective resistance, within and beyond environmental movements? Second, what role might spatial disciplines play in these movements' pursuit of change?

Figure 4.1 (opposite top) Waterloo architecture students participating in the global climate strike on September 27, 2019. Photo by

Figure 4.2 (opposite bottom) With over one million participating Canadians yet minimal perceived impact, the climate strike represents an act of resistance that could have benefited from a more targeted approach to spatial intervention. Photo by author.





Spatial Resistance

Place-based resistance requires a deep awareness of the particularities and complexities of space and place; each site of resistance finds success through highly localized, bottom-up forms of protest and land defense. Chapter 2.3 outlines several considerations for creating obstruction through blockades, applicable to other forms of resistance as well. Siting, building, supporting, protecting, and sustaining resistance represent constant spatial decisions, with the choices made carrying implications for the longevity, visibility, and efficacy of a given movement. Further, the wide range of types, locations, scales, and ambitions of place-based resistance mean these considerations are not suited to a uniform approach. The tactics of one movement may inspire and inform another, but they cannot be directly transferred without being appropriately tailored and strategically designed in relation to unique contexts. Understanding the distinct spatial considerations of environmental blockades, therefore, is essential in understanding how ecological protection can be provided through spatial intervention. Beyond environmental resistance, similar spatial understanding is vital to achieving societal progress through collective action. Organizing, mobilizing, and expanding resistance grounded in place requires spatial acuity, which could be further developed through expanded study.

In the environmental blockades examined within this thesis, spatial acuity appears in several ways. Intuition and intention are key, originating from deep connection to place and thoughtful organization, respectively. Equally important, however, is the evolving trends and tactics that ripple across networks of resistance. Place-based resistance is an iterative process, and the learnings pioneered at one site of resistance hold potential to be recontextualized and mobilized across all sites of resistance. Granted, the spatial acuity employed by successful movements does not emerge out of academic research but out of the lived experiences, local connections, and constant adaptations of actions occurring on the ground. Nevertheless, the documentation of this spatial knowledge can help inform ongoing and future resistance to strategize spatial intervention, illustrate claims and demands, garner solidarity, and legitimize the spatial tactics employed.

Several projects pursue documentation of place-based action as a means of providing educational resources, building connections, and creating toolkits for resistance. The Environmental Justice Atlas is an online database of global environmental action, intended for networking, advocacy, and strategic organization (fig. 4.3). *Beautiful Rising: Creative Resistance from the Global South seeks to document the inventive patterns of activism, collecting the stories, tactics, principles, theories, and methodologies behind resistance (fig. 4.4). *Paul Routledge's Space Invaders: Radical Geographies of Protest illustrates the spatial strategies and sites of resistance through extensive, diverse examples to inform both a spatial understanding

Figure 4.3 (opposite top) The Environmental Justice Atlas is a crowd-sourced database with over 3000 cases of environmental resistance. Screenshot by author.

Figure 4.4 (opposite bottom) Beautiful Rising is a toolkit collecting stories, tactics, and theories surrounding creative, spatial resistance. Screenshot by author.





and spatial deployment of protest.³ Extending the work of this thesis could contribute to a growing body of knowledge documenting and disseminating spatial forms of resistance. Ultimately, the ambition is to not to catalogue or collect instances of place-based action, but to inform a method of reading space and place useful for strategizing, organizing, and mobilizing effective resistance.

Spatial Disciplines

As experts in spatial considerations, spatial disciplines could play a valuable role in resistance movements. Architecture, in particular, tends to hold itself as a potential generator of change. Yet—amidst the reality of clients, contracts, and capital—the profession is often complicit in upholding dominant power structures and the status quo. Spatial disciplines must understand the spatial realities underlying and opposing resistance if they are to work towards just, equitable, and sustainable futures through professional practice. However, there is also an incredible opportunity to pursue societal change by directly engaging in place-based resistance, whether through planning and policy, research and documentation, or design and practice.

Many architects, designers, and planners are already engaging in this work. Paris based artist collective, Tools for Action, has designed an inflatable cube easily constructed and configurable into an adaptable barricade (fig. 4.5).⁴ In addition to capturing physical space within which to exercise political protest, the soft, playful cubes help to diffuse tension and protect protesters from violent state responses. Raumlabor Berlin uses a similar strategy to transform mass manufactured air cushions into lightweight, flexible seating structures and signage for protest.⁵ In London, Studio Bark gifted cutting patterns of their doit-yourself, modular U-Build system to Extinction Rebellion to create sculptural benches, stages, and barricades that could be reconfigured to meet changing needs throughout sustained demonstrations (fig. 4.6).⁶ The design and construction of physical artefacts is an immediate way that spatial disciplines can begin using their skillsets to support radical spatial practice.

Documentation can form a valuable tool as well. Pierre Belanger's *Extraction Empire*, Interboro's *Arsenal of Inclusion and Exclusion*, Theo Deutinger's *Handbook of Tyranny*, and Eyal Weizman's *Forensic Architecture* all use documentation as a means of revealing inherent spatial iniquities, challenging dominant power structures, and educating both designers and the general public on the spatial realities of socio-political processes.⁷ Similar approaches could be extremely useful for resistance movements in staking alternative claims, legitimizing spatial intervention, and highlighting key tactics for use in other contexts.

If spatial disciplines desire the changes being pioneered in grassroots sites of resistance, they must leverage their expertise to support, advocate, and engage in radical spatial practice. In light of the wealth

Figure 4.5 (opposite top) Tools for Action's inflatable cobblestones deployed as a barricade in Paris, 2015. Photo by Artúr van Balen.

Figure 4.6 (opposite bottom) Studio Bark's U-Build boxes with locked on activists forming a sculptural barricade during an Extinction Rebellion demonstration in London, 2019. Photo by Natasha Leoni.

of existential crises facing contemporary society, it is vital that now—more than ever—architects, designers, and planners participate in this critical work.

Moving Forward

I maintain that there is value in continuing the work begun in this thesis. There is value for resistance in revealing the spatial considerations necessary for effective movements, there is value for spatial disciplines in revealing their potential role in the pursuit of societal change, and there is value for the general public in revealing the necessity, complexity, and ambitions of spatial resistance. This thesis begins to realize some of this value, but in many ways is only the preliminary work I, personally, needed to undergo to achieve a baseline level of knowledge and awareness.

Moving forward, I believe the most successful realization of a focused, spatial study of environmental blockades lies in collaborative engagement across disciplines and across sites of resistance. The spatial considerations of blockades are deeply entangled in social, political, legal, and economic factors, necessitating an interdisciplinary approach. Further, the movements actively employing spatial intervention are not only the greatest resources for understanding complex narratives of space and place but are also the best suited to directing the forms, methods, and outcomes of this work towards a meaningful end. I hope that I may have a meaningful role in creating space for change, but I firmly believe this work must be rooted in active participation in the place-based movements boldly manifesting change on the ground and in the streets.

Ultimately, place is the root of environmental resistance. Place holds the land and resources creating conflict, the life and history inspiring action, and the spatial context defining tactics, siting, and forms of resistance. In fighting for ecological protection, place-based resistance continues to create space for change, beginning with the blockade.

Notes

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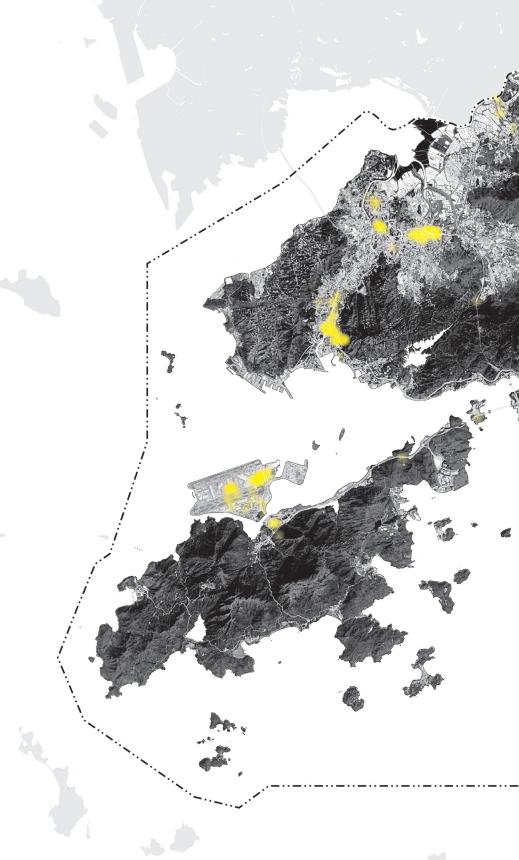


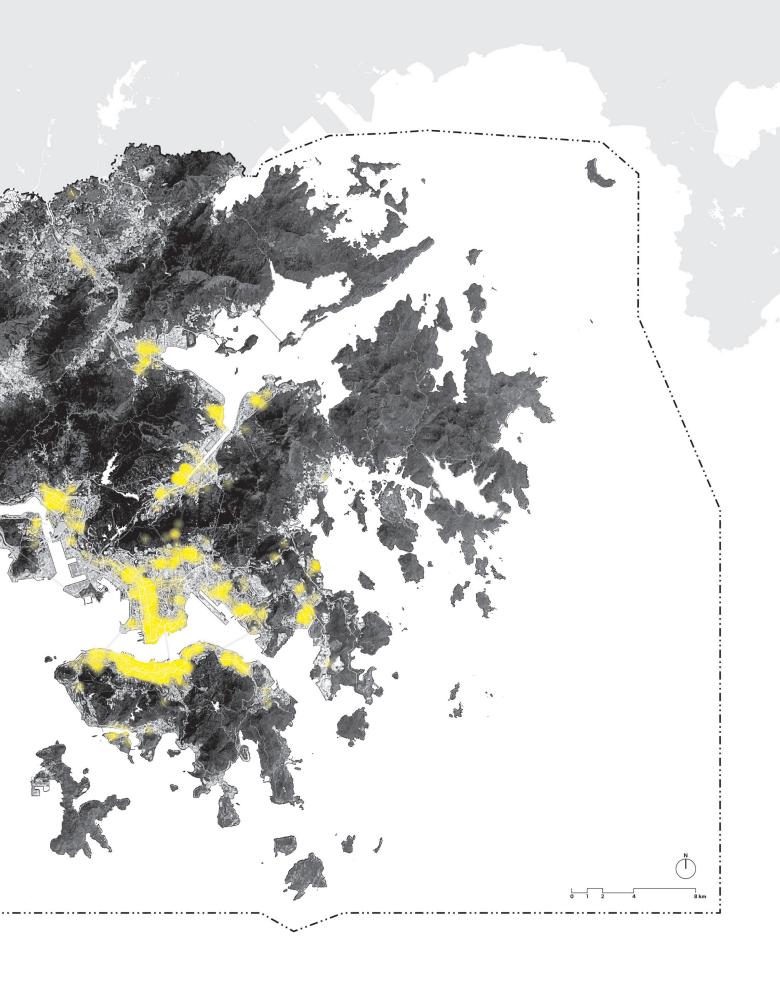
Map of Protest Activity

Figure 5.1

Hotspots of protest activity throughout Hong Kong's 2019 democracy movement.

Image by author. Activity data retrieved from http://hongkong.liveuamap.com.





Map of Protest Locations

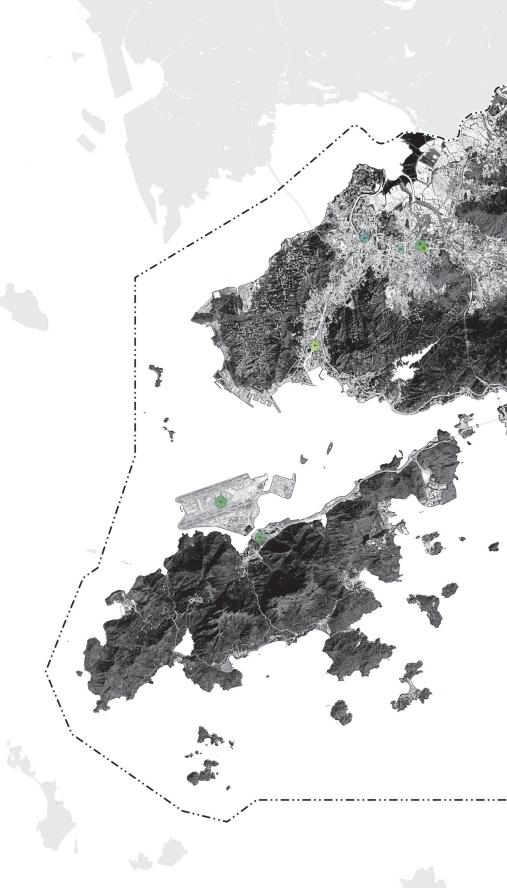
Figure 5.2

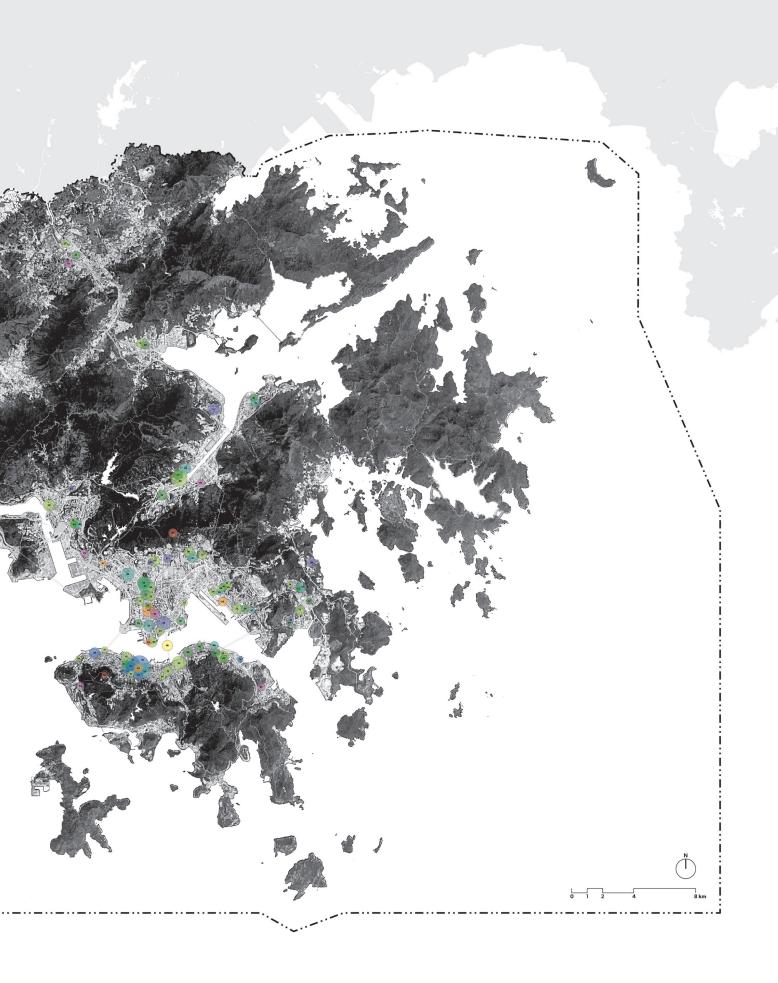
Locations of protests during Hong Kong's 2019 democracy movement. Size indicates number of demonstrations at a given location.

Image by author.



Bridge



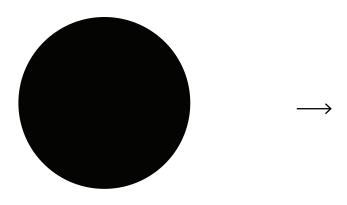


Tactics of Protests

Figure 5.3

Evolution of the spatial tactics utilized during Hong Kong's 2019 democracy movement.

Image by author.



Centralized Demonstrations

Early protests were large scale marches centred around the Legislative Council. Despite centralized locations, leadership was decentralized, adapting from the failings of 2014's Umbrella Movement which saw organizers jailed.

Tactics swite Channeling using transit

Transportat

Transportati

free movem

gathering an

Universities

Targets of Protests

Figure 5.4

Targets are the physical locations activated by protests, typically chosen for size, location, or symbolic importance.

Image by author.

Public Spaces

Public parks, squares, and plazas become key gathering points throughout the city facilitating large crowds without antagonizing opposing forces. In Hong Kong, shopping malls also function as key public gathering spaces.

Institutions

Institutions representative of the opposing power structure are regular targets of demonstrations. Government headquarters, courts, and financial institutions symbolize discontent and are typically adjacent to public gathering spaces.

Landmarks

Landmarks are symbolic locations within an urban fabric, therefore, activating landmarks grants collective movements visibility and symbolic control of the city.

Social move activism, esp authoritative

Streets

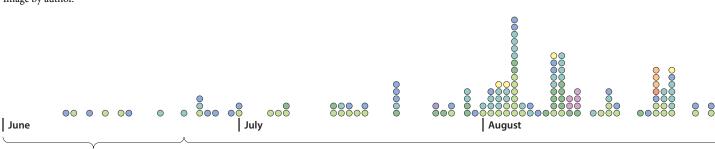
Major roady gathering sp disruption.

Timeline of Protests

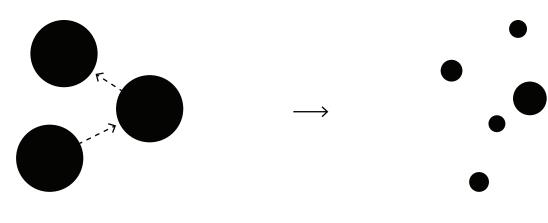
Figure 5.5

Each point represents a mass demonstration at a unique location for a given day.

Image by author.



Centralized Demonstrations



Be Water

thed to decentralized demonstrations in response to police brutality.

Bruce Lee's words, "be water," protests became mobile and responsive, to quickly shift targets around police response and current conditions.

Blossom Everywhere

Adopting the slogan, "blossom everywhere," protests shift to smaller, localized demonstrations. Local area knowledge and reduced reliance on transport improves protester safety amidst increased arrests, police violence, and transit shutdowns.

ion

on hubs provide protesters means of mass disruption by preventing ent throughout the city. However, authorities can also prevent d movement by eliminating means of transit.

Police

Police are typically responsible for maintaining order under the dominant power structure, placing them in direct opposition with protesters. Disproportionate means of control can make police targets in of themselves.



Services

Services represent essential operations within the city, rendering them typically outside the scope of conventional protests. Targetting services can apply significant pressure.



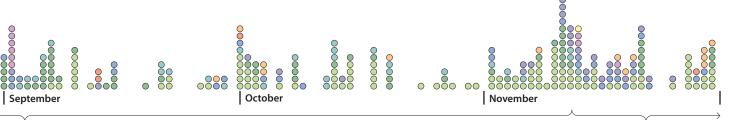
Bridges

Bridges are physical chokepoints connecting otherwise separate spaces in the city. Barricading a bridge, therefore, can control access to certain areas and disrupt conventional use of the urban environment.

secially in Hong Kong. Universities become centralized targets in attempts to quell discontent.

ments, especially more radical protests, are often rooted in student

rays facilitate mass movement throughout the city, linking public aces to other targets. Streets can also be blockaded as a means of mass



"Blossom Everywhere" "Blossom Everywhere"

Catalogue of Tools

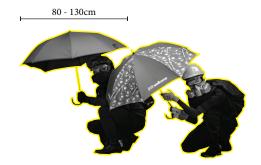
Figure 5.6

Tools are physical artefacts employed within and against protest. For police, these are designed devices of control used to hinder political action and movement through space. For protesters, these are accessible objects that can protect identity, movement, and spatial positioning.

Image by author.

01 Umbrella

Umbrellas provide privacy and protection against police projectiles. Combined, umbrellas can create barricades, impeding police movement and blocking sightlines. As a last resort, umbrellas can be used as a hand held weapon.



02 Baton

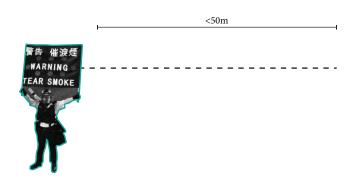
Police batons help subdue protesters, forcing dissidents to stay distant.

03

Warning Sign

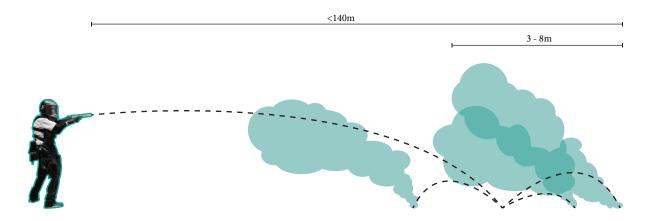
Police carry handheld signs to relieved messages to crowds and give warning prior to use of force. The typical text height used is legible from up to 50m away.





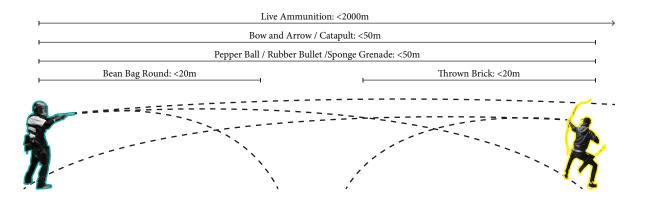
04 Tear Gas

Chemical weapon causing skin, lung, and eye irritation. Delivered from a distance to disperse gatherings and control protester movement.



05 Projectiles

Ranged weaponry intended to cause bodily harm.



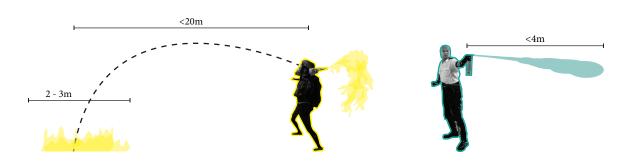
06 Petrol Bomb

Petrol bombs can be manufactured using a bottle, cloth, and any highly flammable substance. The range and spread of the resulting flames can block roads and sightlines in addition to causing damage.

07 Pepper Spray

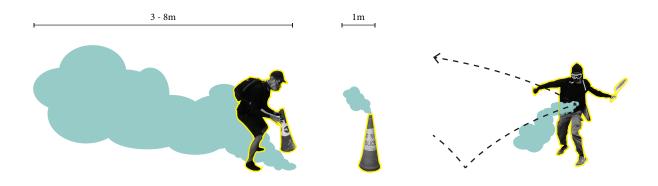
A non-lethal chemical agent causing a burning sensation in the eyes and lungs, inducing pain and temporary blindness. Canisters can be fired up to 4m, helping to

subdue protesters from a distance.



08 Anti-tear Gas

Protesters use a variety of tools to resist tear gas including traffic cones, wet rags, dry bags, and water bottles to extinguish canisters and sporting equipment such as tennis rackets and field hockey sticks to send canisters back towards police.



Catalogue of Tools (Continued)

Figure 5.7

Image by author.



Water Cannon

Water cannons are used for crowd control, delivering a high velocity stream of water from an armored vehicle with a functional range of up to 90m. Can be used in conjunction with dye to mark targets during a 'riot' event.

<90m



10 Fire Extinguisher

Fire extinguishers can be used to create visual screens, slowing police movements and assisting protesters in evading capture.



Long Range Acoustic Device

A sonic device that creates focused blasts amplified up to 160 decibels. Feelings of intense discomfort encourage those targeted to disperse.

<3.5km





Individually, riot shields provide police protection from protester tools of violence. Collectively, riot shields form mobile walls for blocking movement and capturing protesters.





Barricade

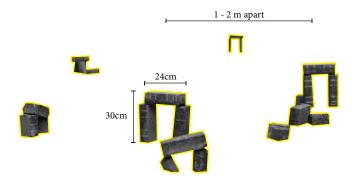
Barricades are the defining collective construction of collective political action, assisting protesters in disrupting everyday life as well as police movements. Typical construction materials include bamboo, brick, garbage, umbrellas, and metal barriers.

width of street



14 Brick

Pulled from the city fabric, bricks are useful as a barricade construction material and projectile. When stacked in an arch formation, bricks can also form fields of vehicle busting tripping hazards.



15 Phone

Mobile apps allow voting and notification of changing tactics, tracking of police activity, and proximity communication via bluetooth, negating reliance on taxed networks during large scale events.



16 Surveillance

Surveillance systems allow police to monitor protester movement and identify dissidents for future arrest. As such, anti-surveillance tactics such as wearing masks, shining laser pointers, and tearing down surveillance posts are essential for protester safety.



Mask

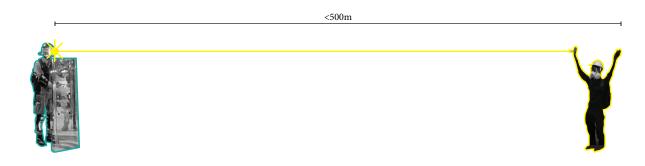
Protesters wear gas masks and goggles to maintain privacy and facilitate movement during chemical crowd control techniques.





18 Laser Pointer

Laser pointers can blind cameras and riot police from a long distance, providing protesters with privacy and protection.



Siege of Hong Kong Polytechnic

Figure 5.8

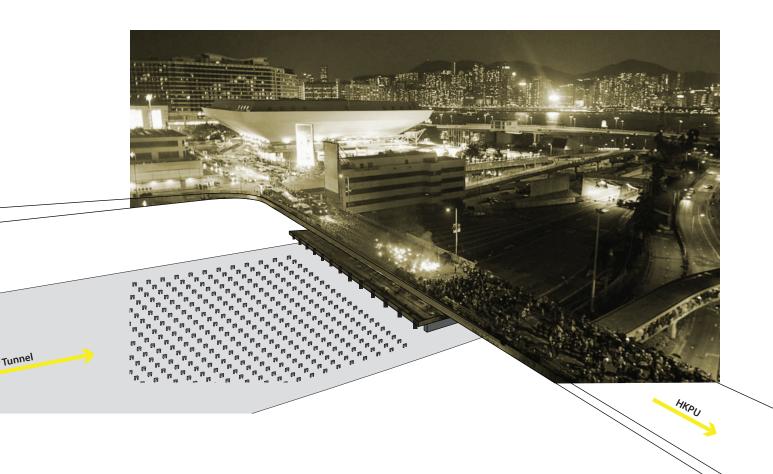
On November 18, 2019, police besieged the Hong Kong Polytechnic University after protesters fortified the campus and blocked surrounding roads, including the critical cross-harbour tunnel entrance. Experiments in representing radical spatial practice depict spatial arrangement of the conflict zone.

Image by author.

Central Harbour

Officers fire projectiles from a distance while riot police prepare to advance. Armored vehicles lead the charge towards the protesters.

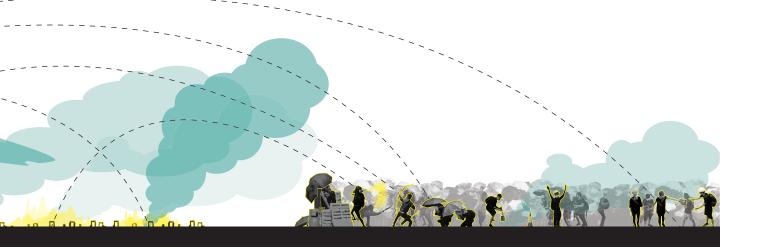
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a's Land Protesters

ed with petrol bomb fire, tear gas smoke, and s to slow police advances.

Protesters fortify the barricade, using hand signals and human supply lines to support the front lines amidst smoke, projectiles, and tear gas.



Storming the Legislative Council

Figure 5.9

On July 7, 2019, a mass demonstration evolved into an occupation of Hong Kong's seat of power. An experiment in representing radical spatial practice depicts key moments, movement, and spatial positioning over time.

Image by author.

11:00 A peaceful march continues along Hennessy Road as planned.

12:00 Some protesters continue forward while others vote to besiege the Legislative Council.

12:30 A large crowd gathers on Harcourt Road in front of the Central Government Offices.

13:00 Protesters attempt to smash into the Legislative Council.

14:00 Riot police arrive on scene and engage in a standoff.

17:00 Protesters gather under the council chambers and attempt to bthrough the glass doors.

21:00 Protesters break through the gates and flood into the council chambers.

00:00 Tear gas disperses remaining protesters.

