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Singapore's Grassroots Environmental Movement: Modes of Representation in the Garden City

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ABSTRACT

Singapore's model of illiberal democracy has translated into a style of environmental governance that scholars describe as 'authoritarian environmentalism' (AE) for its top-down, non-participatory nature. AE in Singapore has given rise to a manicured, cosmeticized landscape in which nature is selectively integrated into urbanity to offer outside observers the impression of a 'Garden City'.

A gap in the literature exists regarding the response the grassroots environmental movement in Singapore has mounted to AE. This paper contends that the movement seeks to restore individuals' personal connections to the land, both in its undamaged state and current degradation, in a bid to appreciate nature from whichever baseline one can remember. As a guiding structure, the paper references a framework developed by sociologist Kate O'Neill and identifies local examples of the variables 'formal representation' and 'informal channels'. The former variable refers to movement participation in formal negotiations and policymaking. The latter variable describes solidarity-building with the aim of cultivating an organic, just transition to a green Singapore.

This paper argues that Singapore's illiberal mode of governance limits the environmental movement's access to channels of formal representation, compelling it to rely heavily on informal representation to achieve environmental change. This paper recommends a hybrid model of formal and informal representation as key to the success of the movement. For its emphasis on the influence of a country's political context on its present-day environmental governance, this paper has utility as a reference point for other developmental states which exhibit interventionist, utilitarian policymaking.

Introduction

Authoritarian environmentalism (AE) is "a public policy model that concentrates authority in a few executive agencies manned by capable and uncorrupt elites seeking to improve environmental outcomes" (Gilley, 2012, p. 288). Environmental decision making authority is concentrated around executive agencies and there is selective inclusion of environmental organizations which bolster the state's legitimacy. Albeit an efficient producer of strong policy, AE is fundamentally nonparticipatory and top-down in nature. AE is commonly applied to "closed regimes such as China, Iran and Egypt", but has demonstrated utility in analyzing the environmental governance of democratic states. In particular, studies have been conducted on AE as Singapore's mode of environmental governance (Han, 2017).

This paper evaluates the response the environmental movement has mounted to AE in Singapore. An environmental movement is defined as "a broad network of people and organizations engaged in collective action in pursuit of environmental benefits" (Rootes, 1999, p. 1). This paper acknowledges that the boundaries of the grassroots environmental movement in Singapore cannot be delineated with perfect clarity; nor can it be determined with total certainty whether individuals consider themselves part of the movement to

begin with. Involvement in environmental activism is a fluid concept whose boundaries will continue to fluctuate as discourse around advocacy in Singapore evolves. The term 'movement' is used in the looser sense to encompass the environmentally aware Singaporean public.

As a guiding structure, the paper utilizes select components of a framework developed by Kate O'Neill (2012), an internationally renowned professor of global environmental politics and governance at UC Berkeley. In her work, she has illuminated the inequities inherent to international environmental regulations, particularly in the area of waste trading (O'Neill, 2000). O'Neill's framework for movement analysis borrows heavily from social movement theory to pre-empt users from writing overly descriptive accounts of their chosen movement (2012).

I concentrate on the 'Political contexts and opportunities' (O'Neill, 2012) component of O'Neill's framework, which evaluates a state's capacity for civil repression by examining the nature of the regime, opportunities for citizens to contribute to political processes, and state receptiveness to public feedback. This paper focuses on the variables of 'formal representation' and 'informal channels' (O'Neill, 2012), which examine two contrasting forms of movement advocacy. Occasionally, other areas of the framework are drawn on to contextualize Singapore's environmental movement. These areas will be explained as and when they are referenced in this paper.

This paper begins by describing the conditions of illiberal democracy in Singapore and how they translate into the country's nonparticipatory environmental governance. It then outlines counteracting tactics adopted by the environmental movement, beginning with efforts in the area of formal representation and why this is challenging to achieve. The paper then discusses reasons for the movement's relative success in the realm of informal representation. The discussion section recommends a hybrid model of formal and informal representation as key to the success of the environmental movement in Singapore and suggests ways for this model to be realized. The concluding section discusses the paper's utility as a reference point for other environmental movements, as well as highlighting the influence of a country's developmental trajectory on its present-day environmental policies.

There are several observations that this paper makes. Firstly, under an illiberal regime which may abruptly introduce or overhaul policies to constrict movement activities, environmental activists should be flexible and adaptable. Secondly, the creation of environmental memories is key to deconstructing state narratives of the environment. All in all, this paper argues that Singapore's illiberal mode of governance compels its populace to lean heavily on informal channels of advocacy to achieve environmental change.

I make this argument using data on the environmental movement in Singapore, including publicly available information about two grassroots environmental organizations. The first is the youth-led Speak for Climate (S4C). The group was founded to inform public response to a public consultation on the state's climate change policies. S4C has since expanded its focus to empowering civic participation in all environmental public consultations; increasing the accessibility of climate information to the public; and calling for climate policy which enacts structural change (Speak for Climate, 2023).

The second organization of the paper's focus is Singapore Climate Rally (SGCR). This was formed to organize the nation's first-ever climate rally in September 2019 in solidarity with a global youth climate movement spearheaded by Greta Thunberg. "It felt like the actions we were taking today [to approach the environment] were not enough," said one co-founder (SG Climate Rally, 2020b). The rally sought to shift mentalities from overemphasizing individual action to indicting a global economic system which pursues material wealth over environmental concerns. The group's current principles are giving power to the people; undergoing a green and just recovery; and redefining Singapore's narrow pursuit of exponential economic growth (SG Climate Rally, 2015).

Illiberal Democracy in Singapore

Singapore is an island of 660 square kilometers on the southern tip of Malaysia. Founded by Sir Stamford Raffles in 1819 and made a Crown Colony thereafter, it became independent in 1959, was merged into the Malaysian Federation in 1963, and broke away in 1965 to become a sovereign state (Han, 2017). O'Neill's variable 'Nature of regime' will be referenced in this section. The variable examines a spectrum of governance from democratic to authoritarian and contextualises how free or unfree Singapore is in comparison to other nations.

Singapore is widely considered an illiberal democracy in that it allows "some scope for procedural democratic norms to function" (Mutalib, 2000, p. 318), including popular representation, popular selection, political equality and majority rule. However, the state "deprives its citizens of basic rights and liberties" (Dozier, 2016) and tolerates opposition parties insofar as they do not present a threat to state stability.

The hegemonic nature of Singaporean governance originated from the country's exit from the Malaysian Federation. Singapore's new ruling party, the People's Action Party (PAP), saw in the country "systemic vulnerabilities" (Oliver & Ostwald, 2018, p. 136) including scarce natural resources, a small land area, a public skeptical of the state, and a vociferous opposition. The PAP harnessed this survivalist narrative to tout Singapore's need for "interventionist, centrally coordinated and paternalistic" (Mutalib, 2000, p. 316) governance, justifying its primacy in the domestic political landscape for the next six decades. In that time, conceiving of Singapore's long-term national interest in primarily economic terms, the country underwent rapid, comprehensive and pragmatic modernization and industrialization (Toa, 2019), emerging as one of the world's most affluent states.

The PAP has not shied away from acknowledging Singapore's odds with Western liberal democracy. Former Prime Minister Lee Kuan Yew once said, "What Asians value may not necessarily be what Americans or Europeans value. Westerners value the freedoms and liberties of the individual. As an Asian…my values are for a government which is…effective and efficient" (Lee, 1992, p. 15). The PAP has issued cautionary tales of liberalism in Western countries, commenting that political pluralism there has created deep divisions, polarization and dysfunctionality.

The state insists upon going unchallenged (Mutalib, 2000) from not only without, but within. In its eyes, civil society is incapable (Williams, 2013) of understanding the sophistication of governance. It is unwilling to prioritize long-term interests, whether that be economic growth or climate action (Toa, 2019), over immediate concerns about convenience. Instead, the state positions its technocratic elite as the chief architects of the country and the "vigilant guardians of the collective interest" (Chua, 2003, p. 160) who "know what is best for the people and environment" (Williams, 2013, p. 3). It therefore demands a strong election mandate from voters (Tang, 2022). One headline in *The Straits Times*, the national newspaper, ran: "S'poreans cannot have it both ways – more opposition MPs but also effective PAP govt' (Baharudin, 2022).

Consequently, depoliticization of the citizenry has escalated, with the government's will automatically assumed to be in the public interest (Han, 2017). The phenomenon known locally as *kiasu* sums up Singaporeans' inclination towards conforming to the state for fear of 'losing out'" (Sriramesh & Rivera-Sánchez, 2006, p. 723).

Environmental Governance in Singapore: Cultivating A Garden City

The PAP's controlling and meticulous approach to development is matched by its approach to the environment (Han, 2017). Early into its incumbency, it established a vision of Singapore as a 'Garden City', beautified "with flowers and trees, without waste and as neat and orderly as possible" (The Straits Times, 1967, p. 4). Laws were introduced to curb the disposal of rubbish on the street; citizens, politicians, bureaucrats, students and grassroots leaders alike were mobilized in the planting of 55,000 trees (Alonso, 2021); the polluted Singapore River was thoroughly purified (Centre for Liveable Cities Singapore, 2019); the Garden City Action Committee was launched to foster cross-agency collaboration; and Asia's second-ever environmental ministry was established.

Singapore's environmental governance has earned it effusive praise from observers. The Asian Green City Index (ACGI) noted, "Singapore appears to have found a successful formula. It is the only city in the Index to rank well above average overall, and it shows consistently strong results across all individual categories, performing especially well for its policies to maintain and improve the urban environment" (Economist Intelligence Unit, 2011, p. 104). Former Prime Minister Lee openly noted Singapore's verdance was no accident of nature. Instead, as the ACGI states, it is a "legacy of its history" (Economist Intelligence Unit, 2011, p. 104).

Characteristic of the state's environmental efforts is that they are limited to areas of economic utility and are considered secondary to development needs. In his memoir, Lee stated candidly that a green Singapore would encourage "businessmen and tourists [to] make [Singapore] a base for their business and tours of the region" (Lee, 2015, p. 200). Conservation sites are chosen on the basis that they do not interfere with nearby developments and have recreational, educational or scientific potential. The premise of safeguarding biodiversity is lent comparatively little concern. This value hierarchy has manifested itself in various state agencies being "granted the authority to exploit nature for military training grounds, public housing, industrial development, infrastructure, and recreation facilities" (Han, 2017, p. 9). Broadly speaking, environmental preservation is sought insofar as it improves "material living conditions" (Toa, 2019) and therefore commonly takes the forms of water treatment, green infrastructure or pollution control. Areas such as ecological conservation and climate change, which generate less visible and immediate outcomes, are consistently neglected (Toa, 2019). This asymmetry is evident in the 2022 Environmental Performance Index, which ranked Singapore first globally in water treatment but near-last in biodiversity protection (Yale Center for Environmental Law & Policy et al., 2022).

The ACGI exemplifies further Singaporean excellence in quantifiable metrics. The AGCI selected 22 major Asian cities, either capital cities or leading business capitals. Data was collected between April and June 2010 from "publicly available official sources, such as national offices and environmental ministries" (Economist Intelligence Unit, 2011). Cities were scored across eight categories and 29 individual indicators, 14 being quantitative assessments of cities' current performances and 15 being qualitative assessments of cities' future policies, plans and commitments (Table 1).

Examples of the disproportionate emphasis the Singaporean state has placed on quantitative target-setting are its goals of becoming completely self-sufficient in water resources by 2061 and having desalination meet at least 30% of domestic water needs by 2060 (Economist Intelligence Unit, 2011). Less interested is the state in "any qualitative evaluation of what counts as 'authentic' or 'ethical' development" (Neo, 2007, p. 188).

Table 1. Quantitative indicators of Singapore's sustainability policies, plans, and commitments. Source: Economist Intelligence Unit, 2011.

	Quantitative indicator	**Definition**	**Average**	**Singapore**
Energy and CO2	CO_2 emissions per person (tonnes/person)	Total annual carbon dioxide emissions generated by the city from total energy consumption.	4.6	7.4
	Energy consumption per US$ GDP (MJ/US$)	Total annual energy consumed by the city, in megajoules per unit of GDP.	6.0	2.9
Land use and buildings	Population density (persons/km^2)	Self-explanatory.	8,228.8	7,025.2
	Green spaces per person (m^2/person)	Sum of all public parks, recreation areas, greenways, waterways, and other protected	38.6	66.2

		areas accessible to the public.		
Transport	Superior public transport network (km/km^2)	Total length of all superior modes of public transport, ie BRT, tram, light rail and subway, measured in terms of the area of the city.	0.17	0.21
Waste	Share of waste collected and adequately disposed (%)	Share of waste collected by the city and adequately disposed either in sanitary landfills, incineration sites or in regulated recycling facilities. Expressed in terms of the total volume of waste generated by the city.	82.8	100.0
	Waste generated per person (kg/person/year)	Total annual volume of waste generated by the city, including waste not officially collected and disposed.	375.2	306.6
Water	Water consumption per person (litres per person per day)	Total water consumed by the city, on a daily basis.	277.6	308.5
	Water system leakages (%)	Share of water lost in transmission between supplier and end user, excluding illegally sourced water or on-site leakages, expressed in terms of total water supplied.	22.2	4.6
Sanitation	Population with access to sanitation (%)	Share of the total population either with direct connections to sewerage, or access to improved on-site sources such as septic tanks and improved latrines that are not accessible to the public. This figure excludes open public latrines or sewers and other shared facilities.	70.1	100.0
	Share of wastewater treated (%)	Share of wastewater produced by the city that is collected and treated to at least a basic/primary level.	59.9	100.0
Air quality	Daily nitrogen dioxide levels (µg/m^3)	Annual daily mean of NO_2 concentrations.	46.7	22.0
	Daily sulphur dioxide levels (µg/m^3)	Annual daily mean of SO_2 concentrations.	22.5	9.0
	Daily suspended particulate matter levels (µg/m^3)	Annual daily mean of PM_{10} concentrations.	107.8	56.0

Activists have described the Singaporean landscape as deeply artificial and synthetic. One article likens it to a garden of plastic flowers, "a place where the gentle curves of nature are replaced by the sharp edges of trimmed hedges and overpriced gift shops. A garden where stray branches and unsightly weeds do not belong" (Lee, 2016). Under the state's instrumental and anthropocentric approach, nature is seen as "an object to be controlled and managed by rational and scientific technocrats" (Han, 2017, p. 10). Singapore's most defining images are those of "the aesthetics of nature alongside the infrastructure of modernization: concrete pylons with photovoltaic panels entwined with epiphytes and other trailing plants, or forestscapes enclosed in climate controlled glass domes often with enormous water features built to mimic waterfalls" (Wee, 2016, p. 67).

This aligns with the tenets of the ecological modernization theory, which stipulates that advanced market capitalism and techno-fixes are capable of addressing environmental issues, thereby enabling environmental protection and economic development in tandem (Wong, 2012). The Singaporean state's adherence to this theory is illustrated by its responses to concerns raised about Singapore's Long-Term Low Emissions Development Strategy: "Pursuing economic growth and reducing carbon emissions are not necessarily mutually exclusive, and could potentially be reinforcing. In an increasingly carbon-constrained world, the efficient use of carbon resources can in fact improve our economic competitiveness and enable sustainable economic growth" (National Climate Change Secretariat, 2020, p. 81). In reality, "Singapore's vision of the 'garden city' must be understood not as some biophilic end goal, but rather a part of a broader economic project" (Toa, 2019). As Lim Weida of the Ministry of Sustainability and the Environment expressed, "environmentalism is never just about the environment" (Weida, 2009).

It is in this context that the environmental movement in Singapore has burgeoned. Accordingly, the movement has sought to restore individual connections with nature that do not bear the identifying marks of overbearing governance, as well as account for state-sanctioned "disappearance, destruction, dispossession and depletion" (Elliott, 2018, p. 304) of the environment and frontline communities. Fundamentally, it challenges the state to reconsider Singapore's anthropocentric national priorities (Teo, 2021).

The movement's efforts have taken two forms: formal representation and informal representation. I elaborate on each of these in the two sections that follow.

Formal Representation

Colin Hickey of the Climate Futures Initiative defines formal representation as "access to and participation in formal negotiations, lawmaking, and policymaking", or giving the climate vulnerable "a seat at the table" (Hickey, 2022). However, the Singaporean state heavily limits formal representation of the nation's environmental movement.

Public Consultations

One mode of formal representation is public consultations, during which the state invites the public to feedback on guiding questions on a particular topic. However, opportunities to engage with the consultative process are limited. Consultations are not mandated by law and therefore do not occur routinely (Woo, 2022). The National Climate Change Secretariat (NCCS), Singapore's official body for tackling climate change, has held only six public consultations since its establishment in 2010 (National Climate Change Secretariat, n.d.). Furthermore, the typical window for public response stands at a paltry 3 weeks, making it "a struggle even for environmentalists to grasp the various reading materials, research and to formulate a constructive train of thought" (Woo, 2022). In addition, a lack of publicity around consultations leads to low citizen awareness and participation (Sriramesh & Rivera-Sánchez, 2006). Activists have said this renders the consultative process tokenistic, one-way (Teo, 2021) and "not representative of what people feel about [the] issue" (Woo, 2022) at hand.

Those who manage to parse the given materials and submit feedback on time have raised a further issue: namely, the state's attitude towards consultations being one of reticence towards following through meaningfully on feedback received. Some cite the public consultation NCCS held on Singapore's long-term emissions strategy in 2019 (Table 2), recalling, "Responses were already set in frameworks decided beforehand by NCCS; there was no opportunity for dialogue or debate between NCCS and citizens" (Teo, 2021).

The state defended its existing environmental approach, such as its carbon tax level of $5/tCO2e, and refused to renege on its commitment to maintaining Singapore's "economic competitiveness" (National Climate Change Secretariat, 2020). It also demonstrated reluctance to phase out fossil fuels, instead touting investments in emerging low carbon technologies and efficiency improvements to energy plants. This disproportionate focus on adaptation over mitigation fails to address one of climate change's root causes: the energy-demanding nature of industry.

In response to the public's suggestion of mandating the sustainably sourced concrete in buildings, the state exhibited a clear preference for a gradualist green transition. It suggested "encouraging companies to select recyclable materials" (National Climate Change Secretariat, 2020) rather than eliminating environmentally damaging concrete entirely. In summary, Singapore's business-as-usual agenda of continued economic growth (Teo, 2021) went largely unchallenged.

Table 2. Public suggestions and state responses during the public consultation on Singapore's Long-Term Low Emissions Development Strategy (Source: Author, data from National Climate Change Secretariat, 2020).

Suggestion from the public	**State response**
Amend Singapore's building codes to mandate the use of sustainably sourced concrete.	Currently, Singapore's building codes does not mandate the use of sustainably sourced concrete. There are many considerations in Singapore's building codes, including safety requirements, building needs, etc. Therefore, rather than mandating sources of building materials, construction companies [are encouraged] to select recyclable and reusable construction materials where non-structural concrete needs to be used.
The current price of $5/tCO2e is too low to encourage the decarbonisation required. The International Energy Agency (IEA)'s Sustainable Development Scenario suggests carbon prices between US$43/tonne and US$140/tonne.	Singapore's initial carbon tax rate of $5/tCO2e is for a transition period of 5 years to give companies time to adjust to the impact of the tax and implement EE measures. The Government intends to increase the carbon tax rate to between $10/tCO2e and $15/tCO2e by 2030. The carbon tax should be calibrated to foster sustainable economic development and maintain international competitiveness. We will take into account international developments, the progress of our emissions mitigation efforts, and our economic competitiveness.
Singapore is already a trading hub for many different commodities. With this strong history, there is an opportunity to build on this and become a trading hub for carbon abatement.	Singapore recognises the potential of the carbon market to drive greater climate action, and will continue to study the potential of becoming a carbon services hub.

Ban/reduce single-use plastics or switch to more sustainable options at F&B and grocery stores, public events, government venues, restaurants.	The Government is taking a long-term, holistic approach to tackle excessive consumption of disposables, including single-use plastics.
Develop a strategic plan to shift the economy away from petrochemical, oil and gas and other emissions-intensive industries, as well as fossil fuel projects.	"Emerging low carbon technologies such as CCUS and use of hydrogen", not phasing out fossil fuels, are key to "enabling" the decarbonisation of Singapore's energy and chemicals sector.
The latest expansion of Jurong Island renders individual environmental protection efforts negligible and commits Singapore to more carbon intensive infrastructure while creating more stranded assets.	Rather than shutting down energy plants, "upgrade them over time in order to meet future environmental regulations", with the aim of "contributing towards the demand for cleaner fuels. We are ensuring existing industrial facilities improve their energy efficiency by mandating the implementation of energy management systems, and periodic energy audits."

The state's practice of feigning interest in "actively engaging [its] citizenry" (Sriramesh & Rivera-Sánchez, 2006, p. 720) without ceding any power to them can be summed up as 'two-way asymmetrical communication'. The state utilizes public consultations to buttress the validity of its existing policies, rather than seriously looking to amend them in line with public feedback.

Political Representation

Another avenue of formal representation lies in electing political representatives who endorse the movement's views. Research conducted by Greenwatch, an environmental watchdog formed by S4C and SGCR, shows that the environmental movement's demands are best represented by opposition parties. Greenwatch scored three political parties in Singapore based on their "capacity for [environmental] action" (SG Climate Rally, 2020a). The parties in question were the PAP, the Workers' Party (WP), and the Singapore Democratic Party (SDP).

The scorecard's criteria was developed based on IPCC recommendations (see Figure 1). Broadly, the criteria emphasized the need for a green transition which recognized the climate crisis' roots in extraction from land and marginalized peoples alike and sought to rectify such injustices "equitably, collaboratively and compassionately" (SG Climate Rally, 2020a). This would require more diverse and inclusive citizen engagement and a more accessible policymaking process. Nonhuman entities, including natural spaces, ecosystems, and individual species, would need to be included in the transition.

On a scale of -90 to +90, a positive score corresponded to the party meeting Greenwatch's criteria, a score of NA insufficient information to make a judgment, and a negative score one of two things: the party making positive commitments of questionable legitimacy or endorsing policies that would exacerbate the climate crisis. The PAP was scored on its policies implemented while in power, the Workers' Party (WP) on its Parliamentary speeches and questions, and the Singapore Democratic Party (SDP), which had the opportunity for neither, on its 40-page climate policy paper. The WP scored +13 and the SDP +16, comparatively higher than the PAP's +8 (SG Climate Rally, 2020a).

Table 3. Greenwatch's scorecard. Source: SG Climate Rally, 2020.

	PAP	**WP**	**SDP**

Climate Ambition	+2	NA	NA
Equity	-1	+2	+3
Energy	-2	+1	+3
Carbon Pricing	+1	-2	-2
Industry	-2	-1	+2
Adaptation	+3	+1	NA
Transport	+4	+4	+2
Collective Action	-1	+4	+5
Nature	-2	+2	+1
Waste	+3	+3	+1
Buildings	+3	NA	+1
Total [-90 to +90]	+8 (1 NA)	+14 (16 NA)	+16 (14 NA)

Having established that it is the WP and SDP whose representation in government is most important to furthering the movement's aims (SG Climate Rally, 2020a), Singapore's electoral system can be said to stunt the movement's ability to register its grievances in the political arena. The electoral system has been deemed "neither free nor fair" (ASEAN Parliamentarians for Human Rights, 2020) by independent observers for several reasons.

Firstly, the country's Elections Department reports to the Prime Minister, making it vulnerable to "direct political manipulation" (ASEAN Parliamentarians for Human Rights, 2020, p. 5). The Prime Minister is also accorded the discretion to call for an election, placing the opposition at a significant disadvantage in anticipating election dates and making campaign plans, fielding candidates and building rapport with voters.

Secondly, many electoral divisions in Singapore require a team of candidates and exorbitant registration fees to run in, posing difficulties for the resource-scarce opposition. In the likely event that the opposition fails to register a team for that division, the PAP team enters Parliament unopposed. Such 'walkovers' have occurred in all elections in Singapore prior to 2015. It is no surprise that since its inception, the PAP has won all such divisions with the exception of one (ASEAN Parliamentarians for Human Rights, 2020, p. 10).

For these reasons, the electoral system "entrenches structural barriers that favour the incumbent" (Toa, 2019) and systematically compromises opposition parties' capacity to contest the PAP, whose popular mandate has never fallen below 60% (ASEAN Parliamentarians for Human Rights, 2020, p. 5).

In sum, it is challenging for the environmental movement to mobilize the critical mass it requires to enact structural change via formal representation. The state consigns the movement to policy targets which must complement, not challenge, the state's vision (Han, 2017).

Informal Representation

Informal means of movement representation have proven to be more successful in the Singaporean context. They are grassroots, bottom-up, lateral and horizontal in nature and seek to amplify the interests of structurally disenfranchised, most climate-threatened stakeholders. I identify six forms that informal representation of the environmental movement in Singapore takes.

Civil Disobedience

The Speaker's Corner in Hong Lim Park is the single designated space in Singapore where protests may legally be held without a permit (Young & Mohan, 2022). The movement has used this to great effect, such as when SGCR organized Singapore's first climate rally in 2019. They called for the government to "face the truth about the climate emergency, combat the crisis with a national climate mitigation plan, and engage the people on the climate crisis." (SG Climate Rally, 2015). Over 2,000 rallygoers called on the government to reduce greenhouse gas emissions and raised placards bearing slogans such as "no planet B', "raise your voice, not the sea level" and "I stand for what I stand on" (Tan & Fogarty, 2019). They also staged a die-in to emphasize the existential threat presented by climate change.

Protests such as this are physical, visible manifestations of movement demands that highlight the "dramatic urgency and stakes confronting the climate vulnerable" (Hickey, 2022). They gain attention from media outlets and the state, raising the profile of the movement and the causes it represents.

Climate Literacy

It is the movement's belief that "meaningful participation [in environmental advocacy] begins from understanding the issue" (Speak for Climate, 2023). Accordingly, it has established independent platforms for journalistic commentary on the climate crisis. State-backed media platforms are not utilized often, owing to their being owned by state-linked companies and consequently being government-friendly (Lee, 2010). While individuals may pen letters to the editor to be published in such newspapers (Sriramesh & Rivera-Sánchez, 2006), the degree of dissent they dare voice is limited.

The movement's journalism "injects the plight of the climate vulnerable into public discourse" (Hickey, 2022) by connecting personal stories about the climate crisis to broader systems of injustice. Often, such journalism has an agenda-setting and proprietary function, as when SGCR collated Singaporeans' visions of a sustainable 2050 in the #TakeBack2050 campaign (SG Climate Rally, 2020c). Issues which receive less coverage by mainstream media are also highlighted, such as an incident involving three workers' injuries from exposure to hydrogen sulfide while preparing a pipeline on Jurong Island (Sun, 2020). SGCR penned an op-ed in which they attributed the incident to the state's inadequate protection of workers, writing, "We should reflect on how we are compensating our workers for their labour…Fossil fuel workers must be supported and empowered as we shift into a decarbonised world" (SG Climate Rally, 2021b). The implication was that the state had not designated its workers morally deserving (Elliott, 2018) of dignity.

Climate literacy is also furthered by synthesizing the overwhelming plurality of climate information available into Linktrees (Speak for Climate, 2021). Informative Instagram posts clarify environmental jargon for the layman, which can be a significant barrier for those seeking to formulate informed opinions on Singapore's climate policies.

Artistic Spaces

The movement harnesses the imaginative power of climate action through "symbol, allegory, metaphor, humor, and other creative devices" (Hickey, 2022). Embracing speculation and fiction enables "different ways of seeing

and knowing" (Leow et al., 2021) the environment. "I am not bogged [down by] historical leftovers and residues," artist ila said. "Because of that, it creates gaps for me to enter the way I want to. I am liberated to depict [these processes] the way I want to" (Leow et al., 2021).

Members of the movement occasionally collaborate on essay anthologies. Examples include the books 'Making Kin: Ecofeminist Essays from Singapore' (Vincent & Poon, 2022) and 'Eating Chili Crab in the Anthropocene: Environmental Perspectives on Life in Singapore', the latter of which described the environment's intersection with everyday life in areas as varied as "transportation to taxes, work to love, cities to cuisine" (Schneider-Mayerson, 2020).

The stage is another well-utilized mode of artistic expression. The play 'Pulau Ujong' (Wild Rice, 2022), developed by Singaporean playwright Alfian Sa'at, explores Singaporeans' doubts and hopes for a sustainable future through a series of vignettes, each told from a different perspective. Those featured range from botanists to businessmen to orangutans.

Others engage in environmental photography. In a photograph by ila titled 'Tanjong Uma', the Singaporean skyline is hazily visible from nearby Batam, Indonesia (Figure 2). A sand dredger is barely visible on the water, prompting viewers to recall the cause of coastal degradation in Singapore. Such "traces of violent upheaval" (Leow et al., 2021) are still present in coastal ecologies today. Thus, a haunted view is produced. In comparison to the coastline, the distant Singaporean skyline seems almost "unreal in its progress" (Leow et al., 2021), not dissimilar to other activists' description of the nation as a 'mirage'.

ila emphasizes that her photograph is generative and open to interpretation. The state has a proclivity towards negatively-valenced discourse about Singapore's rural past, such as by describing it as the unhygienic, "bad old days" (Williams, 2013, p. 4). Many defy this perception by reconnecting with elements of nostalgia and heritage.

Figure 1. From Toramae, J. (2021). *Tanjong Uma* [Photograph]. Field Notes, Fluidities, and Fictional Archives: Transmedial Photography and Singapore's Altered Coastlines. *Trans Asia Photography*, *11*(1). https://doi.org/10.1215/215820251_11-1-104

Petitions

The movement seeks to highlight other civil injustices alongside climate justice, with all considered injustices against humanity. It combines its priorities with those of communities that do not explicitly identify as climate activists (Elliott, 2018) through petitions. For example, a petition started by SGCR to end a state-introduced petrol hike garnered 2,189 signatures from food delivery riders and climate justice activists alike. The former questioned "why they had to pay for the government's goal to achieve full electric vehicle usage by 2040" (SG Climate Rally, 2021a) rather than introducing a wealth tax, suggesting concerns around sustaining livelihoods. The latter declared "there is no justice without labour justice" (SG Climate Rally, 2021a).

In emphasizing that a warming world imperils all futures, the movement activates an 'accidental climate public' (Elliott, 2018, p. 314). This is where members are coincidentally, rather than principally, in pursuit of climate solutions because such solutions form the basis of their survival.

Reconnecting with Nature and Uncovering Loss

Singapore's exterior is glittering and cosmopolitan, consisting of a "meticulously planned city center, manicured bay-side gardens, and orderly public housing blocks" (Leow et al., 2021). The road leading to the country's airport is lined with shrubbery, bracketing arrivals and departures with the perception of Singapore being 'clean and green'. The country is a "spectacle made to be photographed" (Leow et al., 2021) to further perceptions of Singapore as a postcolonial success story.

In reality, this exterior is a 'mirage' (Leow et al., 2021) which conceals from the public eye environmental losses inflicted on the land. "I have lost my country to images," playwright Alfian Sa'at wrote (Sa'at, 2014). Opaque supply chains abstract products from their sources, "hiding the base fact that every dollar starts in [planetary] death" (Demuth, 2019, p. 30) and distancing individuals from the environmentally destructive roots of their consumption. As S4C wrote in an op-ed, "Our understanding has its limitations. Much of our food is readily available on abundantly packed supermarket shelves… making it difficult for us to connect with those who labour and care for the soil" (Ng et al., 2021). In another case of concealment, Singapore's only landfill is strategically located 8km offshore, "out of sight, out of mind" (Omar, 2016). Singapore's rapacious land reclamation is similarly cloaked in secrecy and "not documented", with "no casual images circulating, no access, no visual memory of development" (Leow et al., 2021).

This concealment renders environmental losses difficult to identify and critique. "It's really hard to talk about [it]," artist Robert Zhao Renhui noted (Leow et al., 2021). Many Singaporeans have forgotten "how [their] high-rise buildings came to be" and "how the land [they stand] on was built" (Ng et al., 2021). Natural landscapes in their unspoiled state have been "forgotten in the popular imaginary" (Fredriksen, 2021). This phenomenon is known as the shifting baseline syndrome or environmental generational amnesia; the environment individuals encounter as children becomes a baseline against which they measure degradation as they grow older. In other words, "the less nature you experience when you're a child, the less nature you'll come to expect" (Fredriksen, 2021; Gan, 2020). An 'extinction of experiences' (Krasny, 2015) of nature has taken place. Zhao reflected: "There is a lot we might miss looking back fifty years or eighty years [from now]" (Leow et al., 2021).

The movement encourages individuals to uncover, recall and document their personal, everyday connections with nature, in doing so filling the "gap in [their] memories of what has happened" (Leow et al., 2021) in the past. Where the state offers no images of the past, the movement "makes its own collection of images" (Chua, n.d.). This is challenging for those whose memories have "disintegrated and declined" (Leow et al., 2021) in the face of state narratives.

Nature Watch, the official magazine of Nature Society Singapore, has documented several cases of Singaporeans drawing on environmental memory. One example is fishermen reflecting on increasingly rare sightings of horseshoe crabs in Singapore, a result of the degradation of Singapore's coastlines (Cartwright-Taylor, 2009). The fishermen contrast the "abundance of a recent past" with "a diminished mid-century present"

(Fredriksen, 2021). The missing crabs "leave gaps in the ecologies with which they once lived: ghostly footprints" (Tsing et al., 2017, p. 65). The past haunts the present-day environment, disallowing individuals from forgettance.

In another edition of *Nature Watch*, a father writes a letter to his son, recalling a walk through the wetlands of Chek Jawa. "For a moment, I felt immortality and that we could walk on in time eternal," he reflected. "I wrote this so that the memory will stay with you forever" (Lai, 2001, p. 10). He sees the past "in his mind's nostalgic eye" (Fredriksen, 2021). A memory of the past is preserved, serving as "a carrier of environmental understanding" (Hartman, 2017) that may stimulate environmental action.

This story also exemplifies the importance the movement affords to the emotional dimension of interactions with nature, which the state rarely takes into account in its policymaking. 'Place attachment' describes the intangible "individual and collective identity, social networks and emotional bonds" (Elliott, 2018, p. 311) associated with a particular place. The disruption of those connections owing to the destruction of that place is termed 'solastalgia' (Elliott, 2018). The movement encourages tapping into both processes, arguing that Singapore's orientation towards economic losses fails to quantify "losses of life, health, displacement and human mobility, territory, cultural heritage, indigenous/local knowledge, biodiversity and ecosystem services" (Fankhauser et al., 2014, p. 4). This is deeply selfish in its implication that climate change's "ultimate concern is not physical effects, but the impact [it] has on people" (Fankhauser et al., 2014, p. 9), reducing nature's intrinsic value to its barest utilitarian functions. The movement advocates for "different registers of worth and value" (Elliott, 2018, p. 321).

In this way, the movement creates robust, shared narratives that defy the state's anthropocentric view of history, instead bearing witness to more-than-human, ecological losses. The living and dying of nonhuman organisms in the Anthropocene is centered (Fredriksen, 2021) and public discourse on environmental loss invigorated.

As individuals discover their connections to nature and feel greater impetus to protect it, public solidarity is cultivated from the bottom-up and an intrinsic stewardship felt (Bratman, 2014; Brown, 2017). Crucially, past, present and future are viewed as relational rather than linear (Tsing et al., 2017). Thus, recalling fragments of the past inherently allows "potential futures" (Fredriksen, 2021) to be glimpsed and measures addressing environmental degradation to be ideated.

Orienting Individuals Towards Healthier Assemblages of Being and Relating

Households produced a mere 6.7% of Singapore's primary and secondary emissions in 2019 compared to industry's 60.4% (National Climate Change Secretariat, 2018). Still, the state heavily "favours the individualizing of responsibility" (Speak for Climate, 2023). The National Environment Agency (NEA)'s website encourages households to reduce their energy consumption while making no mention of the same importance for industry emissions, instead promoting business-as-usual aside from improving their energy efficiency (National Environment Agency, n.d.). Greenwashing by big oil companies, who "post green slogans while also running ads urging customers to 'fill up [their tanks]'" (The Straits Times, 2022), reinforces the state's denial of corporate responsibility for the climate crisis. The movement counters that "driving low-carbon solutions at the producer level would be more effective than at the consumer level" (350 Singapore, 2019, p. 4).

Accordingly, the movement seeks to emphasize that the system's default is environmentally destructive and inherently "designed to work against those trying to live a lower impact life" (Woo, 2021). During Plastic Free July, for example, "not everyone has the luxury to be constantly thinking about reducing plastic waste" (Woo, 2021). The abandoning of environmentally destructive habits, or the "unmaking of unsustainability" (Elliott, 2018, p. 324), is not fully within individuals' control and sovereignty. The menu of sustainable choices available is constrained by external and institutional circumstances. The power to defect from the default, therefore, is less a function of an individual's willpower and "quick lifestyle fixes" (Woo, 2021) than

overhauling the system itself. The movement therefore encourages people to alleviate guilt for the climate crisis and get comfortable with 'imperfect environmentalism'. This is the notion of processes of resurrection and disappearance coexisting and unfolding asymmetrically (Elliott, 2018), or the concept of taking one step forward and two steps back throughout one's sustainability journey.

Furthermore, work should not "revert to capitalist ideals of constant production and ever-increasing efficiency" (SG Climate Rally, 2022b). Value is derived less from the productivity of conversations than from taking the time to have them at all - to bear witness, listen and build empathy. Even when conversations are circling in nature and do not reach definitive conclusions, these contexts are where people feel valued, visible, and acknowledged, and what ultimately sustains the movement.

Taking the time to care for one's mental and physical wellbeing and exhibit "laziness" (SG Climate Rally, 2022a), not for the purpose of achieving greater productivity but as "a worthy end in itself", is considered a form of resistance. Some cite the words of author Bayo Akomolafe: "The way that we respond to the crisis is part of the crisis" (Akomolafe, n.d.). Energizers and check-in questions, such as "What is one thing you are looking forward to this week?", are common features of movement work.

The above forms of informal representation share the common quality of celebrating individuals' humanity and vulnerability and acknowledging the diverse range of roles that exist within the activist ecosystem. There exist tremendously varied possibilities for the involvement of all skillsets and energies.

Discussion

This paper sheds light on the response of Singaporean civil society to the state's authoritarian environmentalism. It finds that in illiberal democracies, formal channels of public representation are fraught with inconsistency, inauthenticity and potential backlash, making them unsuitable means of voicing environmental concerns. Instead, informal channels of representation, which embed movement critiques within artistic works and memories of the natural world, are the movement's primary means of advocacy.

The question which emerges is therefore which mode of advocacy would be best for the movement to adopt. For one, establishing formal modes of representation as the sole locus of decision making may not be ideal. Peace and conflict studies scholar John Paul Lederach warns of two disadvantages. Firstly, formal representation is constrained by time and resources and reduces entire communities to a select few representatives, relegating many of "those whose lives have been intimately affected" (Hickey, 2022) to the sidelines. In this way, formal representation may yield elitist solutions that do not secure widespread conviction, making it difficult to "transition from negotiated accords to implementation" (Hickey, 2022). Secondly, in centering the prose of commitments or accords, formal negotiations are distanced from lived experiences and the emotions of living with a changing climate.

Informal representation has various advantages over formal representation. Firstly, it exists on a spectrum which accommodates many types of activists, locations, timescales and levels of involvement. Some will be climate-specific, others will be part of the accidental climate public. Some will "function at the level of policymaking, others at community building or meaning making" (Hickey, 2022). The heterogeneity of possibilities serves to build a well-rounded movement. Secondly, informal representation extends far beyond the domain of scientists and technocrats and humanizes the lives of those affected. It activates the moral imaginations of the people in ideating climate solutions. In centering rest and healing, it supports members in working through burnout healthily.

Ultimately, informal representation reinforces the movement from the ground up and premises it on the hopes and memories of individual members. This is a more self-sufficient and motivated model than one furnished with a top-down strategy, which is typically the result of structures of formal representation.

However, this does not mean that formal representation ought to be abandoned as a movement strategy. Firstly, public consultations can be modified to reduce the power imbalance between the state and respondents,

as well as take place regularly to restore public trust in them as routine outlets of feedback. Secondly, the movement's political representation in government can be improved by the democratizing of political processes and developing a "culture of civic participation" (Sriramesh & Rivera-Sánchez, 2006, p. 726). This could include creating public spaces for unfettered political discourse, amending the electoral system to allow voters to express their political will freely and ensure election results accurately "fulfil their aspirations" (Hickey, 2022), involving independent academics in policymaking, and increasing the transparency of policy information to the public (SG Climate Rally, 2015). It also requires the elimination of an environment of fear, including dropping politically-motivated charges against opposition candidates and removing barriers to peaceful assembly and online speech.

This paper concludes that neither form of representation should replace the other. Instead, both can coexist and correct for the other's problematic aspects. Informal representation creates "connections between different nodes of the [environmental movement]" (Hickey, 2022), increasing exposure to ideas and fostering creativity and innovation in recombining them for the betterment of the environment. The liquidity of such a network allows information to spread between groups and the movement to flexibly adapt to evolving political circumstances. Outcomes are more intangible than formal means of representation, including "consciousness raising, expressions of solidarity and indignation, articulations of moral values, and calls to responsibility and action" (Hickey, 2022). Formal representation is useful once the movement has formulated a series of demands, decided upon collectively by aforementioned processes of informal representation.

Conclusion

This study of Singapore's grassroots environmental movement provides other movements in illiberal contexts with a reference point for successful tactics to adopt: a hybrid model of formal and informal representation.

This paper also emphasizes the strong connection which exists between political context and movement trajectory. This connection can be extended to other developmental states which exhibit "state-centric policy making, managerial orientation, utilitarian perspectives, and marginalization of civil society" (Han, 2017, p. 20), including Japan, South Korea and Taiwan (Williams, 2013).

In Singapore, just as the state's environmental governance is the manifestation of carefully choreographed planning, so too is the movement's response of deliberately crafting counter-memories. Narratives are constructions which, as rigid as they may seem, can be dismantled and reconstructed alternatively. As Amy Tan writes in The Bonesetter's Daughter, a novel about intergenerational loss and the preservation of memory, "What is the past but what we choose to remember?" (Tan, 2002, p. 338)

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