Little Green Dot: The Efficacy of Authoritarian Environmentalism in Singapore

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Abstract

Despite its poor natural resource endowment, Singapore has climbed the global ranks in terms of social and economic development, and the city state's sustainability is no exception. As illustrated by the extensive Singapore Green Plan 2030, Singapore has made vast efforts in the sustainability scene globally—charting ambitious targets to achieve UN's 17 SGD's and to achieve long-term net zero emissions by the second half of the century. Singapore's substantial sustainability efforts have been attributed to the top-down approach the country has taken towards environmental policy known as Authoritarian Environmentalism (AE). In our research, we evaluate the aptness of this top down approach in achieving the goal of sustainability. Although AE has its benefits of swift implementation of environmental policy, we postulate that AE might not be the best model to follow due to the government's economic pragmatism that has suffocated the participation of non-state actors and has led to the deterioration of local biodiversity. Finally, we highlight some elements of Democratic Environmentalism (DE) that have proven to be successful in Nordic countries, which ought to be adopted alongside AE to develop a more holistic and efficacious approach towards environmentalism.

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Introduction

Governance is the cornerstone of sustainable development (SD)—development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The state's competency in assessing and managing environmental challenges and the associated flow of funds, coupled with its stance towards nature, ultimately determine the sustainability of a country (Slunge, 2016). Despite priding itself on its high levels of sustainability, Singapore has been ranked near the bottom in the protection of natural habitats categories while carbon emissions have reached a record high. The application of Authoritative Environmentalism in Singapore has yielded some success in the domain of sustainability, but ultimately limits the state's ability to approach environmentalism holistically. Hence, we propose the adoption of certain elements of Democratic Environmentalism (DE) that have proven to be successful in Nordic countries, which should be employed alongside environmental policies of AE, to develop a more holistic and efficacious approach towards environmentalism.

1.1 Defining Authoritarian Environmentalism (AE)

Singapore's government adopts a top-down approach towards environmentalism known as Authoritarian Environmentalism (Han, 2016). AE emerged as a theoretical framework being defined as "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). AE was originally built on the closed and extremely authoritarian regimes of countries such as China, Iran and Egypt. These countries, having strict governmental regulations and an entirely top-down approach to governance/policy making, see a translation of their environmental policies being handled in a similar vein, where their respective governments take full control of policies pertaining to the environment with limited civil participation.

AE also serves as an essential driving force for the Singapore government's sustainability efforts. Singapore has emerged as a regional leader in environmental sustainability through its efficient resource management and extensive approach in addressing environmental issues.

1.2 Singapore's Masterplans (Green Plan 2012, 2030) and Strengths of AE

To ensure the feasibility of achieving these goals, the government established basic infrastructure to meet its environmental needs, such as the removal of solid waste, as early as the 1980s to support the implementation of the SGP 2012 (Han, 2016). Evidently, while the goals set out were crucial to propel Singapore forward in their sustainability journey, it should be noted that all of these targets were top-down in nature, requiring governmental effort via legislation and policies and ultimately serving as a manifestation of Authoritative Environmentalism. With little to no action required by the locals or community groups, the

government was effortlessly able to achieve these targets. For instance, the National Biodiversity Reference Centre was set up in 2006 after extensive funding granted by the government. Additionally, Singapore also recorded the lowest level of water pollution in Asia in 2005 (Sonnenfeld & Mol, 2006, pp. 119–120). Overall, Singapore's sustainability efforts as observed in the SGP 2012 led the country to be ranked 12th in the world in the Living Planet Report by the World Wide Fund for Nature (WWF); ultimately being a testament to the strengths of the AE model that Singapore adopts in their journey to achieve environmental sustainability.

After a successful implementation and accomplishment of the Green Plan 2012, the Singapore government set their eyes on the future, and rolled out a Green Plan 2030 - a national sustainability movement which seeks to rally bold and collective action to tackle climate change. Focusing on renewable energy and reforestation, the SGP 2030 aims to cut down carbon emissions and move towards a greener economy and future. Employing a combined effort by the various ministries (MoE, MND, MSE, MTI and MoT), the SGP can be seen as a manifestation of Authoritative Environmentalism due to the government and technocratic driven process of achieving the goals. The targets established primarily require governmental efforts and development of infrastructure, with the only individual effort being the providing of funding via taxes. Hence, the government continues to take an authoritative and heavily concentrated top-down approach by developing infrastructure and restructuring the economy to achieve these targets, lacking much individual ground-up effort. This ultimately fuels the potential of the SGP 2030 to be achieved due to the strong political will of the Singapore government.

Ostensibly, Singapore's top-down, managerial approach towards environmentalism has resulted in swift and efficient implementation of environmental policy compared to her democratic counterparts in the west, especially in the domains of reducing pollution and improving waste management, as well as increasing green spaces through the construction of parks. However, Singapore's AE approach is inherently limited by the fact that local sustainability initiatives are driven by the government's desire to reap economic benefits as opposed to being undergirded by a genuine intention of alleviating environmental degradation. The integrity of environmental initiatives in this case becomes problematic, especially given the nature of AE that (i) under-emphasises community education and (ii) suppresses and suffocates public opinion and rhetoric. Together, both (i) and (ii) contribute to an insidious socio-political environment in which citizens are either too environmentally apathetic and uninformed to be able to check against the initiatives imposed by the government or are unable to raise their concerns on matters concerning the environment due to the absence of genuine feedback channels or forums. Instead, Singapore observes the marginalisation of locals as policy targets rather than policy shapers.

Hence, we propose certain elements of Democratic Environmentalism (DE) that have proven to be successful in Nordic countries which ought to be adopted alongside AE to develop a more holistic and efficacious approach towards environmentalism.

Defining Democratic Environmentalism (DE)

Democratic Environmentalism offers an alternative to Authoritarian Environmental governance. At its crux, Democratic Environmentalism is a public policy model that extends authority across multiple tiers and agencies of government, including, but not limited to, representative legislatures, and encourages direct public participation from a wide cross-section of society (Holden 2002, Humphrey 2007) hence being more forward looking in its sustainability. In particular, the aforementioned extrinsic involvement and participation from non-governmental parties is garnered and applied to the policy-making process and the formal implementation of sustainability initiatives. It is observed that the model emulates values of active community involvement at all stages of the policy process including identification, formulation and implementation (Birkland 2005). The same philosophy is applied to the level of participation of national initiatives, from being targets of state propaganda and attending informational meetings - to policy activism and protest and legally-binding deliberative forums, (Arnstein 1969, Plummer and Taylor, 2004). Participants may include individual citizens, civil society, NGOs and schools (Baum, 2004). Together, the convergence of these two dimensions allows Democratic Environmentalism to serve as a more liberal and community centric environmental governance model that has proven successful in effectively achieving sustainability goals, particularly in Norway.

2.1 The Government's Utilitarian Stance towards Environmentalism

The integrity of Singapore's environmental model is limited by the government's utilitarian, economically-driven stance towards environmental development. Consequently, genuine but unprofitable environmental concerns, such as the protection of local biodiversity, are neglected in the process. This often relegates environmental development to a secondary status. The development-oriented agencies have maintained greater bureaucratic power over the central environmental agency given the country's core concern on development. For example, the building of industrial and residential infrastructure often trumps nature conservation, with the state having absolute authority to exploit the land.

When the state does engage in environmental development, asymmetric attention is paid to development that yields financial gains. This can be clearly seen in the nation's pursuit of the "Garden City" vision. The government had seen this move essential in creating a conducive working environment for its citizens while facilitating Singapore's transition from a third-world country to a first-world country, improving business sentiments and encouraging the flow of foreign capital into the rapidly industrialising country so as to provide a 'healthy and economically productive workforce' (Savage, 1998). While this undoubtedly has had environmental benefits, such as significantly reducing the impacts of the urban heat island effect, absorbing pollutants and being a key asset in stormwater management, it is not a substitute for the failure of the government to conserve primary forests. Beyond their contribution as a significant carbon sink, primary forests are also integral to the survival of local flora and fauna. By 1990, over 99% of the original primary forests had been cleared, occupying a measly 0.28% of Singapore's total landmass as of 2010 (Yee, 2011). Consequently, Singapore lost over two-thirds of its plants and animals over the last two

centuries, with more than half of remaining biodiversity being constrained to small-scale reserves, such as the Bukit Timah Nature Reserve and the Central Catchment reserve.

As such, it can be observed that the Singaporean government has and continues to subscribe to ecological modernisation (Han, 2016), which can be defined as 'the discourse that recognizes the structural character of the environmental problematique but nonetheless assumes that existing political, economic, and social institutions can internalize the care for the environment" (Hajer, 1995) Simply put, the Singaporean government's motivations for environmental development stems from the belief that the economy benefits from moves towards environmentalism. This is not to be conflated with sustainable development which places environmental sustainability as a necessary precondition for equity between generations. According to the World Commission on Environment and Development, "At a minimum, sustainable development must not endanger the natural systems that support life on Earth: the atmosphere, the waters, the soils, and the living beings".

The fundamental incompatibility of these two schools of thought is demonstrated in Singapore's level of sustainability, which is exceptionally skewed. In the 2020 Environmental Performance Index (EPI) comparing 180 countries, Singapore ranks 5th in waste management and 1st in both wastewater treatment and sanitation while being placed near the bottom in the protection of natural habitats and relatively low in climate change, two categories that do not provide significant tangible benefits to the economy. As such, Singapore stands at 39th place globally, substantially lower than other first world countries the globe over such as France (5th) and Norway (9th) and Japan (12th). This calls Singapore's level of sustainability into question, given the nature of sustainability development which requires broad-based and holistic action. Hence, the integration of state control in environmental development characteristic of AE has permitted the developmental state's purely instrumental appraisal of the environment to permeate through its policies unencumbered, leading to unsustainable development under the guise of sustainability, engendering the phenomenon of greenwashing, or 'sustainability smokescreen', on a national scale.

Reinforcing Mechanisms

3.1 Issues in Environmental Education

The government's approach towards environmentalism was facilitated by environmental education in Singapore, educating the people to accept the 'state-directed utilitarian discourse that nature needs to be utilized for economic and human needs' (Han, 2016), promoting complacency and inaction, subsequently engendering a lack of individual participation in the nation's sustainability efforts. A 2003 study that analysed Singapore's environmental education in primary and secondary educational institutions found that the curriculum was initially created as a pragmatic response to the impact of environmental deterioration on the people as creators and builders of the state rather than from any general ethical, or deep-ecological, concern with nature and conservation. (F. Wong Bing Kwan & P. Stimpson, 2003) While Singapore touted a non-domestic recycling rate exceeding

70% in the last 3 years, 2020 saw domestic recycling rates fall to a 10 years low at 13%. This elucidates a low level of sensitivity to environmental issues in individuals/households, where there is apathy towards adopting minor lifestyle changes in favouring greater sustainability. While it would be myopic to claim that the Singaporean government neglects environmental education as a whole, it is observed that national education and campaigns on the matter are sorely lacking. This may largely be attributed towards the stance of the government that more heavily emphasises structural and institutional reforms as opposed to seeing the value in a community centric approach.

In stark contrast, democratic environmentalism is most notably characterised by its bottom-up approach that ascribes an equal amount of importance to community efforts just as it does to larger governmental policy changes. To cultivate an environment that allows for effective contributions from all tiers of society, countries that adopt this approach observe the prioritisation of community education on environmental and sustainability matters so as to improve the knowledge base for environmental policy and raise the general level of environmental awareness amongst its citizens (Norwegian Ministry of the Environment, 2005).

Democratic Environmentalism operates on the recognition that sustainability measures will be haphazard and limited in effectiveness if an informational gap exists between that of the state that implements such initiatives and the people who merely accept policy changes idly (Norwegian Ministry of the Environment, 2005). Ultimately, the effort of the larger community in making practical changes is just as crucial as large structural changes in ameliorating an issue as extensive as climate change. With this goal in mind, Norway has placed a particular emphasis on community education. In Norway, environmental education has been part of schools' curricula since the 1970s. (Sætre, 2016) The form that it takes is largely activity-based and hands-on as schools organise frequent learning activities that empower students to realise they hold a stake in solving the climate crisis. This consequently cultivates in students positive social and ethical attitudes towards the issue. For instance, all schools in the municipality of Bergen have introduced a programme on waste disposal and waste handling, for which the schools collaborate with waste management companies, green agencies on water resources, and various other large companies to learn how such firms can solve environmental issues.

As such, Singapore could, perhaps, explore the possibility of incorporating a similar hands-on environmental curriculum into local education institutions. This will allow students to gain a deeper understanding of the urgency of climate issues as well as the importance of environmental sustainability. In turn, dry academic information that is typically perceived as dry becomes more relevant to students as they are able to recognise the applicability of their newfound knowledge to critical problems in the real-world context. Schools could also consider providing more opportunities to enable students to work firsthand with firms or organisations on relevant issues as this would allow them to feel a stronger sense of involvement in practical efforts to improve the climate situation, and as a result, help them to grow to become more environmentally responsible individuals who are willing to take action believing they can make a difference.

3.2 Suppression of ENGOs

Environmental non-governmental organisations (ENGOs) are integral catalysts of environmental reformation in their respective states, serving to complement government efforts in ameliorating environmental degradation. In Singapore however, the top-down environmental approach adopted by the local government does not only suffocate societal participation, but the autonomy of ENGOs to enact tangible change is also limited. As a result, both non-governmental organisations and individuals are marginalised as policy targets as opposed to policy shapers or contributors. This is evidenced by the development of Senoko, an important nesting site for over 180 bird species, including 19 locally endangered species, its high ecological value making it a five-star conservation area in NSS'[1](Nature Society Singapore) Master Plan. Though the Urban Development Authority initially promised to preserve the area in 1992, just a year later the government announced a plan to clear the nesting site for residential purposes in order to meet rising local demand for housing. Subsequent efforts to persuade the government against redeveloping Senoko proved futile, with the appeal letter mobilizing over 25,000 individuals under the name 'Friends of Senoko' failing to prevent the area's subsequent urbanisation. The concentration of power within the state has also led to environmentally undesirable outcomes in more recent times. For example, the Cross Island MRT Line, which directly runs under primary and secondary forests in the Central Catchment Nature Reserve, has faced little to no resistance from members of the public or ENGOs despite the obvious environmental destruction the project entails. This clearly shows how AE grants the state absolute authority, silencing non-state actors, undermining and impeding ground up environmental efforts.

On the other hand, Democratic Environmentalism actively encourages societal engagement at both the policy formulation and participation stages. The model is based on the principle that better cooperation between the non-state actors and central authorities encourages good environmental practices and develops environmentally sound policies. This is achieved through responding to feedback channels that are built on the municipal authorities' close links with the local population, local businesses and local NGOs. For instance, in Norway, individual municipalities are encouraged to make full use of the freedom of action they have in the field of environmental policy, and exchange best practices with one another. With their close links to community, the municipal authorities are granted a greater capacity to consider the specific sentiments and ideas from the ground up and incorporate them into the environmental plans for their towns. Individuals - acting either alone or as part of community groups - thus exert a greater influence on environmental policies. As a result, the integrity and genuinity of the policies can be guaranteed as the investment of the public will better ensure that such government plans are designed solely to improve environmental sustainability, and not motivated by top-down governmental aims.

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[1] NSS is a non-government, non-profit organisation focused on the preservation of Singapore's natural heritage, its Master Plan recommending multiple sites for conservation by providing an environmental impact assessment for development.

3.3 Harnessing the Local Grassroots System

In considering the potential for Singapore to replicate the approach adopted by Norwegian municipalities, it would seem a natural path to engage the local Grassroots system, given the structural similarities both entities share. Singapore's established Grassroots system observes individual town councils operating as autonomous legal entities, under the management of elected Ministers of Parliament who are responsible for managing the public housing estates in the given constituency. The Ministry of National Development[2] (MND) asserts that residents are an integral part of the individual town's decision-making processes, where community participation effectively contributes to the distinctive character and identity of each area. The feasibility of applying the Norwegian municipality feedback channels to Singapore's town council system is highly probable given their similarities in foundation and structure. Moreover , it is seen that the Singapore system holds the value of encouraging community engagement within each constituency (MND, 2016). Having said that, tangible efforts to actively reach out to constituents with regards to sustainability and environmental concerns is presently lacking. To improve, town councils must consider incorporating the environmental planning and administration of each constituency into the scope of the town councils' autonomous management. If successfully implemented, this could lead to paramount improvements in the level of broad-based participation present in Singapore's environmental planning and, hence, sustainability.

Conclusion

Ostensibly, while AE has prompted the rapid execution of green policies in Singapore, it has created an environmentally apathetic community where citizens are simply unbothered by initiatives imposed by the government. Additionally, the absence of legitimate feedback channels or forums for non-state actors or individuals to raise their concerns on environmental issues ameliorates the lack of public participation in governing in the environmental domain, instead heavily focusing on a top-down model.

Democractic Environmentalism that places greater emphasis on civil participation should be considered to fill these gaps, namely in improving environmental education and empowering ENGOs to develop more environmentally sound policies and improve implementation on an individual level. DE has the capacity to guide our country towards a greener future, placing Singapore at the forefront of battling the climate crisis.

[2] The body of government that overlooks the local town council system in Singapore.

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